REPUTATION AND SELF-REGULATION IN SECURITIES MARKETS: A STUDY OF THE LONDON STOCK EXCHANGE'S ALTERNATIVE INVESTMENT MARKET (AIM)

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ABSTRACT

The continual debate over the appropriateness of self-regulation in securities markets has largely focused on North American self-regulatory organizations (SROs). Proponents and detractors typically advocate for more or less ‘regulation’, which is taken to mean legislation or administrative agency rule-making backed by public enforcement. This thesis adds to the debate by conducting a case study of an often-overlooked securities market, AIM, which began in 1995 as the Alternative Investment Market of the London Stock Exchange. This thesis conducts a holistic analysis of AIM. It begins with an analysis of black-letter law and legally enforceable regulation, but it does not end there. It continues by gathering evidence of market practice, regulation ‘off the books’, and how private rule-making on AIM has evolved over time, bringing to light how AIM has significantly changed since its 2007 heyday.

The main contribution of this thesis is to provide empirical evidence and analysis of 25 years of self-regulation on AIM, which is operated and regulated by the London Stock Exchange plc (Exchange). AIM, despite boasts as ‘the world’s largest growth market’, has received little serious legal scholarly treatment in the past decade. A second contribution is to demonstrate how reputational incentives and informal regulation, such as norms and unwritten rules that are imposed by both local market participants and the Exchange as private regulator, constitute an integral part of securities regulation and profoundly influence market conduct. Taken as a whole, this thesis seeks to shift the focus from calls for more or less regulation, and instead emphasizes the need for contextual inquiry of how reputation and informal regulatory mechanisms contribute to self-regulation in any securities market, given its public regulatory environment and private rule-making incentives.

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ADAC	AIM Disciplinary Appeals Committee
ADC	AIM Disciplinary Committee
AEP	AIM Executive Panel
AEAP	AIM Executive Appeals Panel
ADRI	Anti-Director Rights Index
AIM	Alternative Investment Market of the London Stock Exchange
AIM Rules	AIM Rules for Companies, AIM Rules for Nominated Advisers, AIM Disciplinary Procedures and Appeals Handbook, and the AIM Notes for Mining, Oil and Gas Companies and Investing Companies
ATS	alternative trading system
BIAL	Birmingham International Airport Limited
CA 2006	Companies Act 2006
CEO	chief executive officer
DTRs	Disclosure Guidance and Transparency Rules sourcebook of the FCA Handbook
EASDAQ	European Association of Securities Dealers Automated Quotation
ECNs	electronic communication networks
EIS	enterprise investment scheme
Exchange	London Stock Exchange plc
FCA	Financial Conduct Authority
FRC	Financial Reporting Council
FSA	Financial Services Authority
FSMA	Financial Services and Markets Act 2000
GDP	gross domestic product
HFTs	high-frequency traders
HRA 1998	Human Rights Act 1998
IPO	initial public offering
IOSCO	International Organization of Securities Commissions

ISAs	individual savings accounts
LSE	London Stock Exchange (as a market or trading venue)
LSEG	London Stock Exchange Group
MAR	Regulation (EU) No 596/2014 on market abuse (Market Abuse Regulation)
MiFID I	Directive 2004/39/EC on markets in financial instruments
MiFID II	Directive 2014/65/EU on markets in financial instruments
MiFIR	Regulation (EU) No 600/2014 on markets in financial instruments
MTF	multilateral trading facility
Nomad	nominated adviser
NPO	*Norwich Pharmacal* order
NYSE	New York Stock Exchange
OECD	Organisation for Economic Co-operation and Development
OTC	over the counter
OTF	organised trading facility
PBR	principles-based regulation
QE	qualified executive
RBR	rules-based regulation
RIE	recognised investment exchange
SEC	U.S. Securities and Exchange Commission
SMEs	small and medium-sized enterprises
SRO	self-regulatory organization
Takeover Panel	Panel on Takeovers and Mergers
Takeover Code	City Code on Takeovers and Mergers
TASE	Tel Aviv Stock Exchange
QCA	Quoted Companies Alliance
UKLA	UK Listing Authority
USM	Unlisted Securities Market
VCT	venture capital trust
WEF	World Economic Forum

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CHAPTER ONE

INTRODUCTION

Reputation and self-regulation in securities markets have historically gone hand in hand. Securities have been traded in London since the 16th century, where well-to-do shareholders met privately to buy and sell shares in joint-stock companies.[1] As the volume of trade increased, so did the need for intermediaries and communal gathering places for trade. There were established locations in London for securities trading by the 1690s, such as the Royal Exchange, and a new class of professionals known as 'stockbrokers' facilitated trade by connecting buyers and sellers.[2] Trading spilled over into streets and coffee houses near the Royal Exchange, and a 'Stock Exchange' building was erected in 1773 by a group of stockbrokers attempting to centralize trade.[3] As the market for securities grew, new stockbrokers arrived 'who were unwilling to abide by accepted customs', and the owners of the Stock Exchange building were powerless to discipline brokers and 'jobbers' (dealers) who defaulted on transactions.[4] In 1801, the owners decided that the solution to this discipline problem was to limit membership by turning the Stock Exchange building into a 'Stock Subscription Room', where paying subscribers gained access to the market and were subject to the newly formed regulations and disciplinary measures created to govern the market,

[1] Ranald Michie, *The London Stock Exchange: A History* (Oxford University Press 1999) 15.

[2] ibid 20.

[3] ibid 31–32. In his definitive history of the London Stock Exchange, Michie does not date the origins of the LSE to the establishment of the Stock Exchange building in 1773, but to the later conversion of the Stock Exchange building into a Subscription Room in 1801. The Stock Exchange building 'replaced Jonathan's [coffee house] to become an important centre for securities trading' in 1773, but trading remained de-centralized and took places among other locations that did not charge stockbrokers admission, such as the Rotunda of the Bank of England.

[4] ibid 34.

including the possibility of exclusion.[5] The purpose of the Exchange's membership policy, which required members to re-apply every year for admission, was 'to exclude those who were untrustworthy, because of past actions or present reputation, or created risks for other members'.[6] Reputation has been a foremost feature of the LSE's self-regulation since the very beginning.[7] The London Stock Exchange was born with reputational sensitivity in its DNA.

Trust was no less fundamental to trading in securities markets outside of London. The 'rail promotion booms' of the 1830s and 40s led to eighteen provincial stock exchanges forming across the British Isles, from Dublin to Aberdeen to Birmingham.[8] For domestic companies, these smaller exchanges were as economically significant as the LSE in the second half of the 1800s.[9] The LSE and provincial exchanges did not require prospectuses until 1928,[10] and in the context of minimal formal investor protection,[11] investors in provincial securities markets often relied on 'local

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[5] ibid 35–36. Robert Sobel describes the founding of the New York Stock Exchange in similar club-like terms, where members 'would trade only with one another, exclude outsiders, and agree to charge specified rates for services.' Misbehaviour by members on the NYSE 'would result in immediate expulsion, not only from the financial community, but from the social life of the city.' Robert Sobel, *Inside Wall Street: Continuity and Change in the Financial District* (Norton 1977) 26–27.

[6] Michie (n 1) 38.

[7] ibid. Michie writes that 'Clearly a trustworthy reputation was the principal criterion for admission in the early years of the Stock Exchange…'

[8] Meeghan Rogers, Gareth Campbell and John Turner, 'From Complementary to Competitive: The London and U.K. Provincial Stock Markets' (2020) 80 The Journal of Economic History 501, 506.

[9] Rogers and others' analysis of historic trading data suggests that the provincial exchanges, which 'were at their height' before 1900, 'offered superior liquidity than the London market until the 1920s.' ibid 522–523, 525. In 1869, the LSE only had 241 domestic companies, whereas 332 domestic companies listed on the provincial exchanges. ibid 508. *Phillips' Investors Manual* of 1885 stated that 'The provincial exchanges are of almost greater importance in relation to home securities than London.' See Julian Franks, Colin Mayer and Stefano Rossi, 'Ownership: Evolution and Regulation' (2009) 22 The Review of Financial Studies 4009, 4017–4018.

[10] Franks, Mayer and Rossi (n 9) 4014.

[11] 'From 1862 to 1899, there were few legal restrictions imposed on companies in terms of shareholder protections, but the exchanges could impose their own requirements.' Prior to 1900, by some measures of shareholder protection (e.g., audited accounts, access to the company's books, limits on director borrowing), companies listed on provincial

knowledge' of the 'business reputation of the vendor'.[12] Provincial stock exchanges allowed investors to buy and sell securities of locally headquartered companies with individuals in their own communities, relying more on relationships and trust than formal regulation to overcome information barriers and facilitate trade.[13] The membership rules for brokers in the provincial exchanges relied on the threats of fine and exclusion from the club, and members were forced to settle disputes internally, as 'resort to the courts was prohibited under threat of expulsion, and defaulters were not allowed to make private compositions with creditors.'[14] The provincial exchanges sought to avoid encroachments on their self-regulatory jurisdiction, and relied on informal mechanisms such as trust and the threat of expulsion to keep the market in line.

The Alternative Investment Market of the London Stock Exchange, now simply known as 'AIM',[15] bears similarities with the smaller provincial exchanges scattered throughout the British

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exchanges had more shareholder protective articles of association than those listed on the LSE. In the 1900s, the provincial exchanges copied the LSE's listing requirements.

[12] F Lavington, *The English Capital Market* (Methuen & Co Ltd 1921) 208. See also the discussion of Lavington in Franks, Mayer and Rossi (n 9) 4018.

[13] See Franks, Mayer and Rossi (n 9) 4040–4041. Franks and others suggest that the 'local nature of stock exchanges played an important role in the development of trust between directors and investors.' To provide indirect evidence of trust, Franks and others measure the geographic proximity of a company's city of incorporation to its shareholders' addresses. Of the companies in their sample in 1900, a majority of shareholders lived less than six miles away from the firm's city of incorporation. Shareholders became more dispersed in the following decades, as the mean distance between shareholders and firms' headquarters increased nearly ten-fold between 1920 and 1950. Additionally, most companies in the provinces exclusively listed on their regional stock exchange. In Rogers and others' sample of provincially listed companies from 1869-1929, the authors write that '81 percent of companies with regional headquarters were chiefly traded on the provincial markets and 66 percent exclusively so.' Rogers, Campbell and Turner (n 8) 510.

[14] JR Killick and WA Thomas, 'The Provincial Stock Exchanges, 1830—1870' (1970) 23 The Economic History Review 96, 108.

[15] AIM is pronounced monosyllabically: "ready, *aim*, fire!" instead of "A-I-M". The name 'Alternative Investment Market', according to a recent history of AIM, was conceived while 'sketching on a flip-chart' by Theresa Wallis, a former Head of AIM, and two colleagues. The exchange is now nearly exclusively referred to as 'AIM', the original acronym coming from Michael Lawrence, a former CEO of the London Stock Exchange. See Philip Roscoe, 'The Rise and Fall of the Penny-Share Offer: A Historical Sociology of London's Smaller Company Markets' (2017) 53 <https://research-repository.st-andrews.ac.uk/handle/10023/11688>.

Isles. AIM is a public listing and trading venue for small and medium sized enterprises (SMEs), one the LSE boasts is 'the world's most successful growth market'.[16] Provincial stock exchanges similarly formed to provide capital and liquidity for high growth businesses, the booming railway companies which created an investment frenzy in the 1830s and 40s.[17] What distinguishes AIM from the provincial exchanges of the past, and indeed other junior exchanges and growth markets of the present, is that AIM is not focused on a single sector or region. AIM has a diverse company base across industries and countries of incorporation. Another similarity is that both AIM and the provincial exchanges have relied upon high degrees of trust between market participants and informal club-like governance that leverages the threat of exclusion to restrict access to the market. In both environments, the rules became more formalized over time as the market expanded. AIM and the provincial exchanges have tried to confine disputes to their internal disciplinary procedures rather than the courts, maximising the amount of private ordering in the market and minimising judicial engagement. However, self-regulation in contemporary securities markets differs from the past because of the rising tide of public regulation and legislation, which narrow the scope for private rule-making for exchanges. And the fate of all stock exchanges in the UK is and has been intricately tied with the LSE, whether as a protective rule-maker and enforcer in the case of AIM, or as a behemoth competitor and vanquisher in the case of the provincial exchanges. Reputation and repeated interactions within a localized community played an important role in the self-regulation of securities markets of the past, and as we will see, continue to play an important role in the present.

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[16] London Stock Exchange, 'The World's Most Successful Growth Market' (2020) <https://www.londonstockexchange.com/raise-finance/equity/aim> accessed November 2020.

[17] Killick and Thomas (n 14) 110.

An accurate picture of contemporary UK capital markets cannot be painted without a robust account of AIM. Companies have raised over £115 billion on AIM since its founding in June 1995, and more than 3,800 companies have been quoted on AIM over the past 25 years.[18] AIM companies have been estimated to provide employment for 430,000 individuals.[19] The traditional narrative is that AIM allows SMEs to tap the markets for capital at a growth stage not yet ready for the enhanced governance requirements and higher compliance costs of larger markets such as the LSE's Main Market.[20] This picture is less accurate today, as will be discussed, because AIM has matured significantly in the second half of its history, and now plays host to fewer, larger companies.

AIM is a self-regulatory stock exchange that is operated and regulated by the London Stock Exchange plc (the Exchange).[21] The self-regulatory character of AIM stems from the fact that the Exchange writes and enforces the AIM Rules which govern the market. The core piece of the AIM

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[18] London Stock Exchange (n 16).

[19] See also Grant Thornton UK LLP, 'Economic Impact of AIM' (April 2015), 3 <http://www.londonstockexchange.com/companies-and-advisors/aim/publications/documents/gteconomicimpactofaim2015.pdf> accessed December 2018.

[20] The LSE, for example, describes AIM as playing a 'bridging' role for companies that have outgrown the funding capacity of initial investors (e.g., 'friends and family, and angel investors'), but are 'not necessarily ready for a traditional listing' to provide capital market financing and liquidity. See London Stock Exchange, 'A Guide to AIM' (2015) 6 <https://www.lseg.com/documents/guide-aim-2015-pdf> accessed November 2020. See also London Stock Exchange, 'Discussion Paper: AIM Rules Review (July 2017)' 5 <https://docs.londonstockexchange.com/sites/default/files/documents/aim-discussion-paper-july-2017.pdf> accessed November 2020: '[AIM] primarily caters for equity securities of small and medium sized growth companies that may have less diversified business models or may not yet have the track record to qualify for the Main Market.'

[21] The term 'stock exchange' is sometimes applied to AIM to capture its essence as a public listing and trading venue. Chapters Two and Four discuss the differences between 'regulated markets' and 'recognised exchanges' such as the LSE (equivalent to 'stock exchanges' in the US), and multilateral trading facilities such as AIM (equivalent to alternative trading systems in the US).

The abbreviation LSE is used throughout to refer to the LSE as a market or trading venue, whereas 'Exchange' is used to refer to the legal entity (London Stock Exchange plc) which operates and regulates AIM. This usage is consistent with the definition of 'Exchange' under the AIM Rules. AIM has no separate legal existence from the Exchange, and both belong to the London Stock Exchange Group plc (LSEG). LSEG is publicly listed on the LSE.

Rules is the *AIM Rules for Companies*, which are the listing rules companies must abide by to gain admission to the market and maintain a public listing.[22] The AIM Rules also include the *AIM Rules for Nominated Advisers,* the *Disciplinary Procedures and Appeals Handbook*, and the additional rules for resource companies and investment companies contained in the *AIM Note for Mining, Oil and Gas Companies* and *AIM Note for Investing Companies.* Private rule-making and enforcement of the AIM Rules stands in contrast to the Main Market of the LSE, whose listing rules have for two decades been written and enforced by a public body, currently the Financial Conduct Authority (FCA), and formerly administered by the Financial Services Authority (FSA) from 2000 to 2013. The listing rules of the LSE Main Market are contained in the FCA Handbook.

A defining feature of AIM's principles-based regulation, if not *the* defining feature of the market, is that companies must have a 'nominated adviser' at all times to advise on compliance with the AIM Rules. The Exchange relies on these advisers, known as 'Nomads', to assess the suitability of companies to join the market and to act as regulatory middlemen and police that monitor companies, advise on rule compliance, and report wrongdoing to the Exchange. In addition to their regulatory responsibilities, Nomads typically act as AIM companies' brokers and underwriters. Firms must be approved as nominated advisers by the LSE depending on the firm's transactional experience and the number of experienced corporate finance employees. Outside of their AIM regulatory function, Nomads would be recognised as investment banks, accounting firms, or other corporate finance firms.[23] Nomads prepare companies for floatation by conducting

[22] This does not mean the Exchange is the sole regulator for all issuer conduct on AIM. For example, if an AIM company breaches the Market Abuse Regulation by inappropriately delaying ad hoc disclosure, the FCA is the responsible disciplinary authority. The Exchange's jurisdiction is limited to enforcing the AIM Rules.

[23] See London Stock Exchange (n 20) 12. A very small number of Nomads could be described as independent regulatory advisory firms.

due diligence and assisting with the admission document, and in their capacity as brokers generate investor demand by marketing and selling the company's securities. Once companies have joined the market, Nomads advise on required disclosures and other continuing obligations under the AIM Rules, and help companies grow through further fundraisings. Since Nomads are 'responsible to the Exchange for assessing the appropriateness of an applicant for AIM', as well as notifying the Exchange when they believe a company 'is no longer appropriate for AIM', Nomads act as gatekeepers vital to the integrity of AIM's self-regulatory system.[24]

Although Nomads' obligations under the AIM Rules are owed 'solely to the Exchange',[25] it is their AIM company clients that pay the bills, raising the question of how faithfully Nomads can serve two masters. An inherent conflict of interest is built into their dual roles as regulatory advisers/monitors and corporate fundraisers, since preventing and reporting rule breaches requires Nomads to bite the hand that feeds them. This inherent conflict requires Nomads to strictly segregate information between the regulatory and broking sides of the business, and their dual roles assume that ethical walls will sufficiently prevent the broking side from acting upon insider information, and the regulatory side from compromising its monitoring or advising responsibilities to benefit the broker placing securities, such as in the timing of a news release.

The success or failure of AIM self-regulation depends on the quality of its gatekeepers, on whether Nomads have incentives to perform their dual roles with honesty and vigilance or to succumb to conflicted interests. Nomads are reminiscent of the 'issuing houses' of old, the 'highly reputable firms such as Rothschild' who sold securities to investors on the LSE and provincial

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[24] AIM Rules for Nominated Advisers (July 2018) rule 14.

[25] ibid 2 (Introduction).

exchanges.[26] Investors could trust the quality of securities sold by reputable issuing houses, however the self-interest of these intermediaries to conduct business honestly was limited 'in so far as they have a reputation to lose, only in so far as their reputation and therefore their power to make future profits is dependent on their honest dealing.'[27] In the context of AIM, can reputational incentives temper Nomads' conflict of interest and contribute to high standards of self-regulation? Understanding how reputation and self-regulation interact on AIM is the focus and unifying inquiry of this dissertation.

Chapter Two sets the stage for the main inquiry. It provides necessary background to the dissertation and begins with the role of stock exchanges within global securities markets. Chapter Two describes the increasing competition stock exchanges face in their economic functions as providers of liquidity, reputational signalling, standard form contracts, and market monitoring. It also discusses the significance of changing business models that rely less on listing fees and more on the sale of data, arguing that exchanges are still incentivised to police market misconduct vigilantly in order to uphold the quality and informativeness of the data for sale. Chapter Two then analyses two questions that are often overlooked in the field of securities regulation: *What constitutes 'regulation' and 'self-regulation'?* Ascertaining precise, analytically useful meanings of these terms can prove more difficult than expected, leading Lord Donaldson to remark that: '"Self-regulation" is an emotive term. It is also ambiguous.'[28] Chapter Two argues that a valid conception of 'regulation' goes beyond government-enforced rules and extends to non-legally

[26] Lavington (n 12) 183–184. Lavington writes that '… having a reputation to lose, they [issuing houses] give the public some measure of assurance of the worth of their issues.'

[27] ibid 191.

[28] *R v Panel on Takeovers and Mergers, ex p Datafin Plc* [1987] QB 815, [1987] 2 WLR 699, 826.

binding obligations, such as written soft law or unwritten norms, when there is empirical support for their existence and influence on behaviour. What is at stake in a wider conception of 'regulation' is the inclusion of reputational incentives, market practices, and other forms of 'informal regulation' as constituting valid terrain for the study of securities regulation. Similar nuance is brought to the discussion of what constitutes self-regulation, which is not taken to imply a complete absence of government regulation, but to indicate different types of governmental relations to a private group's rule-making or enforcement.

While the inquiry into self-regulation and reputation on AIM begins with black-letter law, it does not end there. Indeed, a variety of methodologies will be needed to generate reliable data and produce rigorous analysis. Chapter Three describes the multimethod research design of this dissertation, which relies on both qualitative and quantitative data. This chapter explains why certain research methods are adopted – whether it be conventional legal doctrinal methods, law and economics analysis, the case study method, or a 'leximetric' approach – and justifies why each methodological choice relates to the narrower research questions posed in the following chapters.

Chapter Four parses through the morass of domestic statutes, European financial regulation, and English case law to determine whether elements of AIM self-regulation could be characterised as public law. This investigation is important for understanding whether, for the purposes of the dissertation, AIM is an appropriate and illustrative case of *private* ordering. This also has important jurisprudential ramifications, since no English court has definitively ruled on whether AIM decisions have a sufficiently public nature to be subject to judicial review and whether the Exchange owes public law procedural fairness obligations in its operation of AIM. Chapter Four also advances broader arguments about the relationship between public law and private ordering, suggesting that uncertainty over the applicability of judicial review undermines

ex ante bargaining and contracting. Private actors such as the LSE respond to public law uncertainty by drafting longer and more procedurally complex contracts to minimise the likelihood of a successful judicial review claim. This over-compliance is undesirable because it creates unnecessary transaction costs without guaranteeing meaningful increases in procedural protections.

Chapter Five addresses a commonly bandied critique that AIM is the 'wild west' and proof that self-regulation cannot be trusted. While commentators often seize on isolated stories to present AIM as a scandal or success, Chapter Five gathers the widest range of evidence of which the author is aware to understand how the market has evolved and whether AIM really is an example of self-regulation that leads to deteriorating regulatory quality over time. According to a former director of the LSE, 'When you run a stock exchange… you have two rulebooks. One is the written rulebook and the other is the unwritten rulebook.'[29] Bearing this reality in mind, this chapter investigates the written and unwritten inner workings of AIM self-regulation. How do the reputational incentives of Nomads and other key players contribute to self-regulation in the market? Can reputational incentives overcome the conflict of interest inherent in AIM's delegated gatekeeper regulatory model, and prevent the integrity of a market with a relatively thin-rule book from racing to the bottom?

Chapter Six considers the other side of running a stock exchange, the written rulebook, and examines the how the AIM Rules evolve from a system-wide perspective. This chapter seeks to understand the dynamics of how rules evolve in self-regulatory environments, and to do so it creates and analyses a database of every material revision to the AIM Rules from inception in June

[29] Giles Vardey, former LSE Director of Market Development and LSE Board Member from 1992 – 1997. See Roscoe (n 15) 57.

1995 to June 2020. The intuition underlying the study Chapter Six is that observing how rules are revised over a long period reveals valuable information about the rule-making incentives of the Exchange as a self-regulator. Does the Exchange revise the AIM Rules steadily and consistently, or does rule evolution occur in short bursts followed by long periods of inactivity? To explain why rules change in self-regulatory environments, Chapter Six puts forth a reactive theory of rule evolution that it considers in light of the revisions to the AIM Rules.

Chapter Seven concludes by considering the implications of this dissertation for AIM and other self-regulatory markets. Do the findings on reputation and rule evolution suggest policy changes to the Exchange's regulation of AIM? And what generalizable lessons can be learned from the example of AIM as a cautionary tale or exemplar of self-regulation in securities markets?

Regulators are evaluated on the attainment of their policy objectives, so it is only fair that researchers and academics receive altogether similar treatment. The primary goal of this dissertation is to provide new evidence and balanced analysis of 25 years of self-regulation on AIM, which has received little serious legal scholarly treatment in the past decade. The secondary goal is to provide an example of how reputational incentives and other informal regulatory and market features form an integral part of securities regulation. In doing so, this dissertation seeks to shift the focus of the debate away from unilateral calls for more or less regulation, and emphasize the need for contextual inquiry of how self-regulation works in a particular market given its public regulatory environment and private rule-making and enforcement incentives.

CHAPTER TWO

BACKGROUND ON SELF-REGULATION IN SECURITIES MARKETS

Chapter Two brings together and analyses a diverse set of literature, from the narrow subjects of stock exchanges and securities regulation to the broader discipline of regulatory studies, in order to provide the necessary background to this dissertation. Section I presents a law and economics perspective on the role of stock exchanges within global securities markets. It contextualises stock exchanges as but one form of trading venue for securities, emphasizing that exchanges face increasing competition in the markets for providing liquidity, reputational signalling, standard form contracts, and market monitoring. Section II investigates the meta-question 'What is regulation?' and outlines the diverse perspectives of regulation scholars. It lays the foundation for the 'empirical' approach to regulation adopted in the dissertation whereby in addition to hard law rules, securities 'regulation' includes soft law and certain empirically observable forms of social practice intended to influence market behaviour. Section III presents a variety of conceptions of self-regulation, based on the nature of the group's relationship to public authority. It conducts a nuanced analysis of self-regulation and private ordering, suggesting that the two can be understood in tandem but are not synonymous. Section IV synthesizes the above topics, presenting different objectives of securities regulation and arguments for and against self-regulation in securities markets. Section V concludes.

SECTION I The role of stock exchanges within global securities markets

A. *Exchanges are one form of trading venue in increasingly fragmented financial markets*

Stock exchanges are a form of marketplace to buy and sell securities.[1] Exchanges provide a venue for buyers and sellers of securities (i.e., traders) such as brokers, dealers, or proprietary traders to transact.[2] The role of exchanges was initially to provide a physical venue to facilitate trading. The stockbrokers that would go on to form the London Stock Exchange (LSE) initially met in coffee houses and gathered together on cobbled streets in the 17th century,[3] and trading was floor-based prior to the development of technology allowing traders to buy and sell without physically being at the exchange.[4] Now, exchanges provide a venue to trade securities primarily (and in most cases exclusively) through electronic trading systems, although trading is typically restricted to members of the exchange.[5]

Stock exchanges now face strong competition from other venues to facilitate the purchase and sale of securities.[6] Securities may be traded 'off-exchange' in other marketplaces such as

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[1] A lengthy discussion of what types of financial instruments constitute 'securities' is outside the scope of this dissertation. Unlike the *Howey* test in the US to identify 'investment contracts', in the UK the definition of 'transferable securities' are primarily statutorily derived. The definition of 'transferable securities' in Article 4(44) of the *Directive 2014/65/EU on markets in financial instruments* (MiFID II) is adopted for the purposes of the Companies Act 2006 as well as the Financial Services and Markets Act 2000 (with a minor exclusion for short-term money market instruments – see FSMA 2000, s 102A(3)). Furthermore, as Philipp Maume and Mathias Fromberger note in an August 2018 paper, 'there has not been a single decision of the Court of Justice of the European Union regarding the definition of securities in general.' See Philipp Maume and Mathias Fromberger, 'Regulation of Initial Coin Offerings: Reconciling US and EU Securities Laws' (2018) 29 <https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3200037>.

[2] For useful definitions of the 'players' trading on exchanges, see Larry Harris, *Trading and Exchanges: Market Microstructure for Practitioners* (Oxford University Press 2003) 32–36.

[3] Ranald Michie, *The London Stock Exchange: A History* (Oxford University Press 1999) 20–21. See also Edward Stringham, 'The Emergence of the London Stock Exchange as a Self-Policing Club' (2002) 17 The Journal of Private Enterprise 1, 5; Larry Neal and Lance Davis, 'The Evolution of the Rules and Regulations of the First Emerging Markets: The London, New York and Paris Stock Exchanges, 1792–1914' (2005) 45 The Quarterly Review of Economics and Finance 296, 299–300.

multilateral trading facilities (MTFs) or by 'investment firms' who internalise or internally cross their clients' orders.[7] MTFs, known as alternative trading systems (ATSs) under the US regulatory regime, functionally resemble stock exchanges (i.e., 'regulated markets') and provide non-discretionary order-matching systems to arrange trades. Although ATSs and MTFs are regulated differently than exchanges their functional role is hard to distinguish from exchanges.[8] This much is evident from the 'closely aligned' definitions of MTFs and regulated markets under MiFID II, which were expressly designed 'to reflect the fact that they represent effectively the same organised trading functionality.'[9] Investment firms, known as broker-dealers in US regulatory

[4] James J Angel, Lawrence E Harris and Chester S Spatt, 'Equity Trading in the 21st Century' (2011) 01 Quarterly Journal of Finance 1, 24. Angel and others describe how off-floor trading was permitted by 'telegraphs, then telephones, and now over computer linkages', and how further technological advances (ticker tapes and quotation feeds) encouraged off-floor trading by 'allow[ing] remote traders to determine whether brokers and dealers were handling their orders fairly…'

[5] Harris (n 2) 34.

[6] The increase in competition that exchanges face to capture trading is due in large part to regulatory developments such as Regulation National Market System (NMS) (introduced in 2005 in the US) or MiFID I (introduced in 2007 in the EU). Rule 610(a) of Regulation NMS 'precludes exchanges from restricting access to trading on their facilities', and MiFID I removed a rule 'that allowed EU member countries to require investment firms to route equity orders only to stock exchanges'. On Regulation NMS, see Merritt B Fox, Lawrence R Glosten and Gabriel V. Rauterberg, 'The New Stock Market: Sense and Nonsense' (2015) 65 Duke Law Journal 191, 200, 231. On MiFID I, see OECD, 'Changing Business Models of Stock Exchanges and Stock Market Fragmentation', *OECD Business and Finance Outlook 2016* (OECD Publishing 2016) 24.

[7] Investment firms are defined under MiFID II as legal persons providing 'investment services to third parties' and/or performing 'investment activities on a professional basis'. The list of investment services and activities includes executing client orders in financial instruments, dealing in the firm's own account, underwriting securities, providing investment advice, and operating an MTF. See MiFID II, Article 4 and Annex I, Section A. I
For discussion on broker-dealers internally crossing clients' orders, see Harris (n 2) 514.

[8] ibid 93. Merritt Fox and Gabriel Rauterberg identify electronic communication networks (ECNs) and dark pools as the types of ATSs. ECNs publish their quotations and dark pools do not (and can limit access to the trading venue). See Merritt Fox and Gabriel Rauterberg, 'Stock Market Futurism' (2017) 42 The Journal of Corporation Law 794, 800.

[9] This explanation of the functional similarity between MTFs and regulated markets comes from Recital 7 of the Regulation (EU) No 600/214 on markets in financial instruments (MiFIR). A key difference between the definitions is that MTF operators are 'investment firms' under MiFID II, whereas operators of regulated markets are not and must comply with a different set of regulations. See Danny Busch, 'MiFID II and MiFIR: Stricter Rules for the EU Financial Markets' (2017) 11 Law and Financial Markets Review 126, 126–127.

parlance, can execute a client's order by taking the other side of the trade. Through internalising the client's order, the investment firm (acting as a dealer) hopes to find a third party at a later date to buy the client's securities, now owned by the firm, at a higher price or sell the securities at a lower price.[10] This creates an inherent short-term conflict of interest.[11] Internal crossing occurs when the investment firm (acting as a broker) connects its own clients seeking to buy and sell the same securities. The broker facilitates the trade internally 'on a bilateral basis within the internal trading system of the firm…',[12] obviating the need for an exchange or MTS/ATS as intermediary between buyer and seller. Investment firms which internalise client orders on a 'frequent systematic and substantial basis' are deemed to be 'systematic internalisers' under MiFID II and subject to pre- and post-trade transparency requirements.[13]

Finally, investment firms and individuals may trade securities in over the counter (OTC) markets by arranging the trade themselves (e.g., over the phone, by email, through a dealer, etc.). OTC markets are the least regulated form of securities trading. In order to bring more OTC trading under its regulatory purview, MiFID II created the category of 'organised trading facility' (OTF) for trade execution carried out on a 'discretionary basis' in non-equity financial instruments such as bonds, derivatives, and other structured products not falling under the definitions of regulated markets and MTFs.[14]

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[10] Broking can be understood as trading securities on behalf of one's client 'as an agent', whereas dealing is trading securities on one's own account 'as a principal'. Fox and Rauterberg (n 8) 800.

[11] Harris (n 2) 161.

[12] OECD (n 6) 123–124.

[13] MiFID II, Article 4(20). See also Busch (n 9) 129.

[14] MiFIR, Recitals 8 and 9. Unlike non-discretionary order matching rules in regulated markets and MTFs, OTFs should execute trades on a discretionary basis. Some forms of trading are excluded from the definition of OTFs

A consequence of the proliferation of trading venues is market fragmentation.[15] Securities markets are now highly fragmented: recent data suggests that approximately 30% of trading in the US occurs off-exchange, and approximately 50% of trade volume in Europe occurs off-exchange.[16] The New York Stock Exchange (NYSE) provides an illustrative case: in 1990, only 17% of the trading volume in NYSE-listed shares occurred off-exchange, a figure that 'remained stable until 2005', when it started to increase.[17] Fast forward to 2015, where more than two-thirds of the trading volume in NYSE-listed shares occurs off of the exchange.[18]

In addition to the distinction between exchange and non-exchange traded securities, it is helpful to conceptualise the distinction between 'lit' and 'dark' trading.[19] Exchanges are 'lit' trading venues because pre-trade information such as order size, price, and in some cases type of order are visible to buyers and sellers prior to executing the trade. Conversely, pre-trade information is not visible to all traders in 'dark' trading venues. The most prolific dark trading venues are known as 'dark pools', a form of MTF (or ATS) which institutional traders use 'to trade large blocks of stock without causing markets to move against them' since trader identity and

('where there is no genuine trade execution or arranging taking place in the system'), such as bulletin boards and 'electronic post-trade confirmation services'. See also ibid 127–129.

[15] Maureen O'Hara and Mao Ye find that 'fragmentation does not have detrimental effects on market quality…', whereas Degryse and others suggest that market fragmentation lowers spreads and increases liquidity on lit markets with pre-trade price transparency, yet it 'harms overall spreads' and has a negative effect on liquidity in dark markets. See Maureen O'Hara and Mao Ye, 'Is Market Fragmentation Harming Market Quality?' (2011) 100 Journal of Financial Economics 459, 461. See also Hans Degryse, Frank De Jong and Vincent Van Kervel, 'The Impact of Dark Trading and Visible Fragmentation on Market Quality' (2015) 19 Review of Finance 1587, 1590.

[16] OECD (n 6) 139.

[17] ibid 125.

[18] ibid.

[19] See ibid 123.

certain order information is concealed prior to the trade.[20] Some leading scholars oppose the term 'dark pools' because such venues do in fact publish post-trade information, and because 'lit' venues do not always publish order type information; instead, the term 'limited display venues' is preferred.[21] Under MiFID II in the EU and regulations pursuant to the Securities Exchange Act of 1934 in the US, dark trading venues must publish certain post-trade price information. Furthermore, *Regulation (EU) No 600/214 on markets in financial instruments* (MiFIR) implements a 'double volume cap mechanism' that effectively limits the amount of trading of equity instruments in European dark pools.[22] In Europe, between 35% to 48% of trading in shares occurs on dark trading venues, and the comparable figure of dark trading is 42% in the US.[23]

B. *Exchanges earn revenue by providing a trading market and services to facilitate trading*

The core business of stock exchanges is to provide a public listing and trading venue for companies. However, market fragmentation has eliminated the largest exchanges' monopoly on trading, and the business models of many stock exchanges have shifted towards generating fees

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[20] Luis A Aguilar, 'Shedding Light on Dark Pools' (*US Securities and Exchange Commission*, 2015) <https://www.sec.gov/news/statement/shedding-light-on-dark-pools.html>.

[21] James J Angel, Lawrence E Harris and Chester S Spatt, 'Equity Trading in the 21st Century: An Update' (2013) 29 <http://www.q-group.org/wp-content/uploads/2014/01/Equity-Trading-in-the-21st-Century-An-Update-FINAL.pdf>. Angel and others write '[t]he phrase "dark pool" is not completely accurate as all trades that result from such trading platforms are required to be reported immediately after a trade. Also, so-called "lit" exchange markets are not totally transparent since most support hidden order types. We prefer the phrase "limited display venues" as more accurate and less pejorative than the phrase "dark pools".'

[22] MiFIR sets out pre-trade transparency requirements regarding the information that 'market operators and investment firms operating a trading venue' must publish (art 3(1)). In certain instances, market operators and investment firms may apply to their competent authority for waivers of these pre-trade transparency requirements. MiFIR limits the amount of trading under these waivers by instituting a double volume cap mechanism: only 4% of the total trading volume in a financial instrument over a 12 month period may occur pursuant to these waivers on a single European dark pool, and only 8% of this trading volume may occur across all European dark pools. See MiFIR, arts 4-5.

[23] OECD (n 6) 120.

through the sale of trading and market data.[24] In Europe, the LSE and 'virtually all of the major exchanges' sell direct data feeds to customers,[25] whereas in the US market data is sold through three consolidated data feeds to paying subscribers, with revenues shared between the exchanges.[26] Exchanges complement their core services of listing and trading by selling technology services to listed companies, traders and information vendors (e.g., co-location), as well as post-trade services such as clearing and settlement.

An OECD study based on revenue data from 18 stock exchanges reveals that, on average, exchanges earn the lion's share of their revenue (48%) from trading in equities, derivatives, and OTC financial instruments.[27] The proportion of revenue that exchanges earn from listing and issuer services (e.g., listing fees) decreased from 14% in 2004 to only 8% in 2014.[28] However, recent data from the London Stock Exchange Group (LSEG), which owns the LSE and AIM, paint a different picture. LSEG's financial reporting suggests that the bulk of stock exchange revenue (nearly 80% of £2.3 billion in total income) comes from providing information services (e.g., price and trading data) and post trade services (e.g., clearing and settlement of trades).

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[24] See e.g., Sean Foley, 'What's in a Price? Measuring the Value of Exchange Data Fees', *3rd Financial Management & Corporate Governance Conference 2012* (2012) 4 <10.2139/ssrn.1972645>.'The fragmentation of the Canadian equities market, beginning in 2007, coincides with an increase in data fees that has totalled more than 100% in the four years to 2011…'

[25] David Easley, Maureen O'Hara and Liyan Yang, 'Differential Access to Price Information in Financial Markets' (2017) 1 <https://ssrn.com/abstract=1787029>.

[26] Cecilia Caglio and Stewart Mayhew, 'Equity Trading and the Allocation of Market Data Revenue' (2016) 62 Journal of Banking & Finance 97, 97–98.

[27] The OECD study does not reveal which stock exchanges are included or the methodology of calculating its revenue figures.

[28] See OECD (n 6) 123.

TABLE 1.1: LSEG REVENUES IN 2019

LSEG income segment	Revenue generating activities	% of total revenues in 2019
'Information services'[29]	Includes fees earned for providing 'real time price and trading data', fees for 'data and analytic services', and 'asset linked fees' for passive funds and indexes. Information is provided directly to firms or through third party providers such as Bloomberg or Thomson Reuters.	39%
'Post trade services'[30]	Includes fees earned for 'trades or contracts cleared and Central Counterparty (CCP) services provided' and 'OTC derivative clearing', as well as fees 'managing non-cash collateral and compression services'.	40%
'Capital markets'[31]	Includes listing fees (for IPOs or secondary fundraisings) and trading fees (for primary and secondary market trading).	18%
'Technology services'[32]	Includes income earned from selling software (e.g., 'trading, market surveillance and post trade systems') as well as fees for 'network connections, server hosting and systems'.	3%

Although the LSEG's revenues from listing and trading fees are small relative to its data and information services fees, the value of the data the Exchange sells is dependent on both trading volume and price accuracy and informativeness. More trading generates more demand for trading data, which in turn must be accurate and informative to be useful to market participants purchasing the data. High quality, investor-protecting listing rules serve to attract blue-chip and other well-

[29] London Stock Exchange Group, 'Annual Report' (2019) 12 <https://www.lseg.com/investor-relations/overview-group-activities/annual-report-2019>.

[30] ibid 12–13. This figure captures all of LSEG's post trade services, combing its 'LCH' and 'CC&G and Monte Titoli' business segments, which are grouped in the same business division though reported separately.

[31] ibid 13. LSEG does not publish disaggregated data on listing v. trading revenues, but separates 'Capital markets' revenue into revenue earned from primary markets (listing and trading fees) and revenue from secondary markets (fees from the value or number of trades on the MTFs that LSEG owns).

[32] ibid.

capitalized companies to the LSE, ensuring high trading volumes. Thus, the Exchange is not incentivised to overlook the quality of its listing or trading rules and is incentivised to prioritise market integrity, because trading in listed companies is instrumental to the revenue it earns by selling data, post-trade and technology services.

In addition to an exchange's primary role acting as an intermediary between buyers and sellers of securities, an exchange's secondary role is to provide pre- and post-trade services to facilitate an efficient marketplace. The high proportion of revenues LSEG earns from information and post trade services, and relatively low proportion of income from listing and trading fees, is consistent with increased market fragmentation. LSEG's revenue comes largely from pre- and post-trade service provision because less trading occurs on exchanges than previously due to competition with alternative trading venues. While historically exchanges' income was 'about equal' between revenue earned from listing fees and from providing data, '[n]owadays, data fees dominate.'[33] However, this does not mean the Exchange has weakened self-regulatory incentives to attend to market integrity, since the quality of its core functions of listing and trading are instrumental to the other revenue it earns.

C. *A law and economics perspective on the role of stock exchanges*

From a law and economics perspective, the core economic functions that stock exchanges perform are to provide liquidity, to provide a reputational bonding mechanism (through listing), and to supply standard form contracts to reduce transaction costs (listing rules and trading rules).[34] A

[33] Joel Hasbrouck, 'Securities Trading: Principles and Procedures' (2017) Version 12 152. Hasbrouck's conclusion is consistent with LSEG's revenue reporting, but differs from the revenue reporting of the OECD study (which likely includes many smaller exchanges).

[34] John Armour and others, *Principles of Financial Regulation* (OUP 2016) 147–148.

related function of exchanges is to maintain the efficient operation of securities markets by monitoring trading activity, enforcing compliance with the listing rules, and providing trading and analytics data to the market. Stock exchanges also contribute to an important 'social function' in the wider economy by facilitating the efficient allocation of capital among firms and between households and enterprise over time, i.e., distributing the capital of savers to those who can most productively use it, which efficiently distributes resources in the economy between present and future time periods.[35]

i. *Liquidity*

Providing liquidity is historically the core function of stock exchanges.[36] Liquidity can be understood as 'the ability to trade a large amount of a financial instrument in a short amount of time at close to the current price.'[37] Exchanges provide liquidity by 'offering (for a fee) the advantage of a continuous, two-way market for the shares listed on the exchange.'[38] The greater the ease with which buyers and sellers can find a counterparty to trade with at a price they seek to trade at, the greater the efficiency of the market. Trading volume increases and bid-ask spreads

[35] Fox et al. suggest that liquidity and price accuracy are 'useful proxies' for the broader social function of efficiently allocating capital between firms and investors over time. See Merritt B Fox, Lawrence R Glosten and Gabriel V Rauterberg, 'Stock Market Manipulation and Its Regulation' (2018) 35 Yale Journal on Regulation 67, 72, 80.

[36] Paul Mahoney writes: 'An exchange is a firm that sells a specific product: liquidity.' See Paul G Mahoney, 'The Exchange As Regulator' (1997) 83 Virginia Law Review 1453, 1479.

[37] Charles M Jones, 'What Do We Know about High-Frequency Trading?' (2013) 11 <https://ccl.yale.edu/sites/default/files/files/jones_ssrn.pdf>. Jones therefore identifies 'three dimensions to liquidity: price, size, and time.'

[38] Jonathan Macey and Maureen O'Hara, 'Regulating Exchanges and Alternative Trading Systems: A Law and Economics Perspective' (1999) 28 Journal of Legal Studies 17, 38.

decrease, lowering firms' cost of capital.[39] Higher trading volume generates more information, which creates a positive network externality by lowering traders' informational costs, attracting in turn more traders to the exchange.[40] High-frequency traders (HFTs) have replaced traditional 'market makers' as the main providers of liquidity and higher trading volume in today's capital markets.[41,42] More trading generates more profit for the exchange, allowing it to decrease fees and thereby attract even more trading, amplifying this positive network externality.[43] However, exchanges no longer have a monopoly on providing liquidity because of the plethora of alternative trading venues mentioned at Section I(A).

ii. *Reputational bonding and signalling*

Listing on an exchange with strong investor-protecting rules and enforcement is a reputational bonding mechanism for issuers. Exchanges have a 'reputational brand',[44] and listing on an exchange with a strong reputational brand provides a credible 'signalling' mechanism to investors

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[39] Smaller bid-ask spreads lower the transaction costs of investing. This increases the present value of the shares, thereby lowering firms' cost of capital. See Jones (n 37) 14.

[40] Yesha Yadav, 'Dark Pools and the Decline of Market Governance' (2017) 17 <https://ssrn.com/abstract=2754786>.

[41] Jones (n 37) 6–7. Market makers 'simultaneously post limit orders on both sides of the electronic limit order book…aim[ing] to buy at the bid price and sell at the ask price, thereby earning the bid-ask spread.' In addition to market making, HFTs pursue arbitrage and directional trading strategies (e.g., trading before prices in one market get updated in another, and trading based on rapid incorporation of news or other information such as order flow).

[42] HFTs increase liquidity through 'persistently quot[ing] two-sided markets', although concerns have been raised that HFTs provide 'less valuable liquidity (in terms of size and duration), and increase the difficulty of trading for non-HFT participants.' See Elvis Jarnecic and Mark Snape, 'The Provision of Liquidity by High-Frequency Participants' (2014) 49 Financial Review 371, 388. Jarnecic and Snape's study of high frequency trading (HFT) on the LSE, as well their survey of the literature on HFT in global securities markets, suggest that HFT benefits liquidity and increases trading volume. See ibid 390–391.

[43] Yadav (n 40) 17.

[44] John C Jr Coffee, 'Racing Towards the Top: The Impact of Cross-Listing and Stock Market Competition on International Corporate Governance' (2002) 102 Columbia Law Review 1757, 1815–16.

that the issuer's securities are of a high quality. A high-quality listing provides information to prospective purchasers about the issuer's securities, and this signal helps reduce the information problem that investors and issuers face. An information asymmetry arises because investors know less about the quality of the firm's securities than the firm itself, creating a 'hidden type' adverse selection problem.[45] Issuers (agents) incur 'bonding costs' by listing on a exchange with a strong reputation – the costs of agreeing to refrain from actions 'which would harm the principal' (shareholders),[46] which in practice means agreeing to comply with the exchange's listing rules – because the benefits of a positive signalling mechanism due to the exchange's reputation outweigh the issuer's bonding costs. The benefits of listing on an exchange with good governance include increased demand and higher valuation of the issuer's securities. As Jack Coffee suggests, shares of firms on 'high quality, high disclosure' exchanges are worth more than identical firms listed on an exchange with lower quality governance rules because these firms' shares 'trade at less of a discount to reflect the lesser prospect of expropriation by controlling shareholders.'[47] Exchanges face greater competition in their reputational intermediary function than in the past. There is in fact much stronger international competition among stock exchanges than in the past, and other

[45] See generally George A Akerlof, 'The Market for 'Lemons': Quality Uncertainty and the Market Mechanism' (1970) 84 The Quarterly Journal of Economics 488.

[46] Michael C Jensen and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3 Journal of Financial Economics 305, 308.

[47] Coffee (n 44) 1813–1815.

intermediaries such as investment banks, financial analysts, and institutional investors (e.g., venture capital or private equity firms) also provide reputation and signalling functions.[48]

iii. *Standard form contracts*

Listing rules – taken to include the total of an exchange's rules on listing, trading, discipline, information dissemination, etc. – can be conceived of as a standard form contract between issuers and traders and the exchange.[49] Standardising the rules across all issuers and traders lowers the transaction costs of trading by removing the need to individually negotiate the terms of each trade.[50] Because high-quality listing rules can ensure issuers are 'sufficiently creditworthy' and 'protect market participants' property rights',[51] listing rules also lower transaction costs by reducing investors' need to conduct certain aspects of due diligence on the issuer (e.g., on creditworthiness or corporate governance).

Standard form contracts on the exchange 'may also generate significant network benefits' that serve to increase demand for the exchange's services.[52] The value of exchange rules, similarly to default corporate law rules, may increase when adopted by more parties because of positive network externalities.[53] However, exchanges face competition from regulators to provide

[48] Jonathan R Macey and Maureen O'Hara, 'From Markets to Venues: Securities Regulation in an Evolving World' (2005) 58 Stanford Law Review 563, 569.

[49] Listing rules also regulate the relationship between members and traders with the exchange.

[50] Armour and others (n 34) 148.

[51] ibid.

[52] ibid.

[53] See Michael Klausner's discussion of network benefits in corporate governance arrangements. Michael Klausner, 'Fact and Fiction in Corporate Law and Governance' (2013) 65 Stanford Law Review 1325, 1339. In the stock exchange context, network benefits of adopting exchange rules could include greater availability of advisory services or the benefit of more judicial decisions interpreting the rules.

governance rules. Jonathan Macey and Maureen O'Hara, commenting on US securities regulation, note that '[t]he SEC has thus effectively displaced the NYSE as a source of rules of corporate governance, depriving that exchange of an important source of demand for its services.'[54]

iv. *Supplying market information and monitoring*

Exchanges monitor market activity and pursue enforcement action against rule violators to 'make credible commitments to investors that insider trading and manipulation will be eliminated.'[55] The exchange lowers monitoring costs for investors by reducing the time and expenditure investors (principals) must monitor issuers (agents) and other traders to prevent market manipulation and other actions harmful to their interests. Furthermore, exchanges provide valuable trading and market data that investors rely upon to make informed decisions about whether to buy or sell securities. The quality and informativeness of this information is dependent on rigorous enforcement of market manipulation and other market misconduct by the stock exchange. Trading and market data are crucial to the operation of an efficient marketplace, both by enhancing liquidity (through greater transparency around trading price and volume), and by facilitating external monitoring by investors and regulators.

v. *Takeaways on the economic function of exchanges*

The economic function of exchanges has evolved over time in response to competitive pressures: Merritt Fox and Gabriel Rauterberg note that stock exchanges in the US increasingly perform the functions of broker-dealers, such as 'figuring out strategies for getting a customer's purchase or

[54] Macey and O'Hara (n 48) 565.

[55] Macey and O'Hara (n 38) 38.

sale order filled at [the] most advantageous average price…'[56] As a consequence of this development, exchanges now face greater competition in each of the roles they provide: there are 'close substitutes' for providing liquidity, reputational signalling, standard form contracts and market monitoring.[57] Some of the competitors pose threats to the profitability of exchanges, which over time may erode how well exchanges are able to perform their core functions. For example, Jack Coffee suggests that alternative trading venues 'erode the incentive for an exchange to invest in reputational capital or to maintain high listing standards if the exchange cannot fully capture the trading in that security.'[58]

In addition to understanding the economic functions of exchanges from the perspective of issuers and investors, their economic functions can also be understood as relating to the agency relationship between issuers (as principals) and investors (as agents).[59] Providing liquidity facilitates the separation of ownership from control, which allows for allocative efficiency as principals' capital is put to its most productive purposes. Reputational signalling represents a form of bonding cost that aligns the welfare payoffs of principals with agents'. Standard form contracts reduce transaction costs. Market monitoring and providing trading data lowers agents' monitoring costs. Exchanges thus serve to lower the agency costs of trade, leading to more welfare generated between buyers and sellers of securities.

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[56] Fox and Rauterberg (n 8) 803–804.

[57] Macey and O'Hara (n 38).

[58] Coffee (n 44) 1818.

[59] Agency costs are defined by Michael Jensen and William Meckling as 'the sum of: (1) the monitoring expenditures by the principal, (2) the bonding expenditures by the agent, (3) the residual loss.' Residual loss represents the loss when agents make decisions which do not maximise the principal's welfare. See Jensen and Meckling (n 46) 308.

SECTION II Different conceptions of 'regulation'

In exploring different conceptions of what constitutes 'regulation', the aim of this section is to contextualise securities regulation within its broader public law umbrella by presenting a variety of plausible understandings of regulatory law. This analysis lays the foundation for the discussion in Chapter Five of the salience of norms and market practices to securities regulation. Section II begins by asking the meta-question: *What is 'regulation'?* It canvasses various approaches to regulation and suggests that a complete picture of 'regulation' provides understanding that it is more than rules alone. Section II then outlines the empirical approach adopted in this dissertation. Regulation includes hard law rules but, when empirically observed through qualitative data, can also extend to soft law forms of social practice intended to influence other market participants' behaviour toward identifiable outcomes.

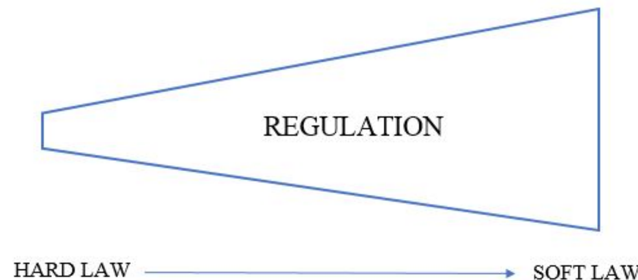
A. *Regulation is more than 'rules'*

An answer to the question 'What is regulation?' is heavily influenced by one's academic discipline. Legal academics often focus on hard law and state-enforced rules. Globalization scholars highlight the role of non-state actors and institutions. Sociologists tend to emphasize unwritten social practices or other forms of social control.[60] This section does not seek to exhaustively describe all of these perspectives; rather, it suggests that these perspectives differ by the amount of soft law (non-legally binding obligations) included in the definition of regulation, and that various conceptions of regulation can be understood as ranging on a scale from narrow (regulation that is

[60] See David Levi-Faur, 'Regulation & Regulatory Governance' (2010) 1 4 <http://regulation.huji.ac.il/papers/jp1.pdf>. Levi-Faur keenly illustrates the difference in what constitutes 'regulation' between disciplines: 'For criminologists, policemen are the regulators; for public administration scholars regulators are employees of regulatory agencies; for socio-legal scholars we are all regulators.' See ibid 10.

limited to codified, binding legal obligations) to wide (regulation that includes soft law).[61] This range of definitions is depicted in FIGURE 2.1 below.

FIGURE 2.1: NARROW TO WIDE CONCEPTIONS OF REGULATION



The prevailing conception of regulation has been, until recent decades, one of 'command and control' whereby the state devises and enforces legal rules.[62] This is a narrow definition of regulation: regulation as limited to hard law. This perspective is visually depicted in the left end FIGURE 2.1, where the volume of regulation is smallest. At the other end of the diagram, the widest

[61] The hard v. soft law debate concerns the 'famed gap between law on the books and law in action.' Soft law has 'open-ended, non-binding, non-justiciable qualities', whereas hard law imposes sanctions and non-compliance can be challenged in court. See David M Trubek and Louise G Trubek, 'Hard and Soft Law in the Construction of Social Europe: The Role of the Open Method of Co-Ordination' (2005) 11 European Law Journal 343, 344, 361. Although soft law lacks the definitional clarity of hard law (i.e., codified and binding legal obligations), it may be helpfully understood as a 'residual category' and 'is most commonly defined to include hortatory, rather than legally binding, obligations.' See Andrew T Guzman and Timothy L Meyer, 'International Soft Law' (2010) 2 Journal of Legal Analysis 171, 3. However, even hard law can be relatively 'soft' when not actively enforced. Soft law definitions vary from the immensely wide (non-state actors develop ever-changing 'interwoven rules of conduct, established and enforced within the private realm') to relatively narrower (norms generated by state and non-state actors, upheld within the context of authoritative legal regimes). See Orly Lobel, 'The Renew Deal: The Fall of Regulation and the Rise of Governance in Contemporary Leal Thought' (2004) 89 Minnesota Law Review 342, 389–390. One advantage of soft law, according to Professor Lobel, is that it can have different levels of authority (e.g., guidance documents, communiqués, etc.) to allow for 'regulatory flexibility'. See ibid 390–392.

[62] Julia Black, 'Critical Reflections on Regulation' (2002) 2 <https://www.lse.ac.uk/accounting/Assets/CARR/documents/D-P/Disspaper4.pdf>.

definition of regulation would include all forms of social practice such as norms or customs, regardless of whether they were legally binding.[63]

The traditional command and control model presents a 'centered' conception of regulation – where regulation is focused around the state – and contrasts with a 'decentered' conception focused on dynamic or complex interactions between state and non-state actors. State-centric conceptions of regulation assume a hierarchy between the state and civil society whereby the state is 'capable of intervening in civil society and of effectively steering public and private bodies in order to achieve certain pre-defined goals.'[64] Critiques of state-centred conceptions of regulation argue that 'clear demarcation lines between states and markets are disappearing.'[65] Decentred conceptions reject a binary public v. private distinction and recognise a 'fragmentation of power and control' between actors.[66] A decentred conception posits that regulation is 'more than law' rather than 'less than law'.[67] In other words, one moves away from a narrow, state-centric definition of regulation if one accepts that soft law may be as influential as hard law on the behaviour of regulated actors. For example, Margit Cohn observes that rules contained in policy statements, voluntary codes, and other forms of private ordering are 'indirectly binding' rather

[63] 'A wider definition of regulation that captures regulation as soft law would suggest that regulation encompasses "all mechanisms of social control" including unintentional and non-state processes.' See Levi-Faur (n 60) 8.

[64] Bettina Lange, 'Understanding Regulatory Law: Empirical Versus Systems-Theoretical Approaches?' (1998) 18 Oxford Journal of Legal Studies 449, 450.

[65] Bettina Lange, 'Regulatory Spaces and Interactions: An Introduction' (2003) 12 Social & Legal Studies 411, 420.

[66] Black, 'Critical Reflections on Regulation' (n 62) 3–6.

[67] ibid 23–26.

than legally binding because of 'strong persuasive force that may, and often does, shape the behavior of participants in the regulation game.'[68]

If regulation may constitute more than state-enforced rules, what else does it include? One answer is that regulation includes some degree of social practice: empirical perspectives of regulatory law study both 'legal requirements' and 'social practices' between regulators and the regulated.[69] A relevant example of regulation constituting more than hard law, and therefore including social practice, is the UK Takeover Panel (the 'Panel') prior to its legislative basis in the Companies Act 2006.[70] The Panel interpreted and enforced the City Code on Takeovers and Mergers ('Takeover Code'), which was then a non-legally binding set of self-enforced rules. The Panel itself had no legal authority to impose sanctions but could call upon its members to discipline firms for violating the Takeover Code (e.g., the London Stock Exchange could prevent Code violating companies from listing). The adverse business consequences of non-compliance with the Panel were significant given its members: the chairman was appointed by the Governor of the Bank of England, and its members included the Council of The Stock Exchange, merchant bank trade groups, and significant financial institutions such as the Board of Trade who controlled the licensing of share dealers.[71] Sir John Donaldson MR, commenting on the Takeover Panel in the 1986 decision *R v Panel on Takeovers and Mergers Ex p. Datafin Plc* ('*Datafin*'), remarked that the self-regulatory Panel lacked de jure authority – the Panel then possessed 'no statutory,

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[68] Margit Cohn, 'Law and Regulation: The Role, Form and Choice of Legal Rules' in David Levi-Faur (ed), *Handbook on the Politics of Regulation* (Edward Elgar 2011) 188–189.

[69] Lange (n 64) 450.

[70] Part 28 of the CA 2006 implemented the Takeover Directive and sets out the Panel's statutory functions.

[71] John Armour and David A Jr Skeel, 'Who Writes the Rules for Hostile Takeovers, and Why - The Peculiar Divergence of U.S. and U.K. Takeover Regulation' (2006) 95 Georgetown Law Journal 1727, 1761–1762.

prerogative or common law powers', nor was in a contractual relationship with the companies it regulated – and yet 'exercises immense power de facto' by applying the Code.[72] The Takeover Code, prior to *Datafin* and its subsequent statutory authority in the Companies Act 2006, would not have been considered 'regulation' under a state-centric conception of regulation as state-enforced rules.[73] The Takeover Code was clearly a pillar of UK securities regulation despite its reliance on persuasion, norms, and social practice rather than a legislative (public law) or contractual (private law) basis. *Datafin* presents a limited departure from a narrow definition of regulation: although the Takeover Code lacked binding legal authority, it was codified 'soft law' and had centralized enforcement via the Panel. *Datafin* is a reminder of the importance of soft law to scholars of securities regulation who may prefer a narrow definition of regulation.[74]

Given the possible breadth of what constitutes 'regulation', it is helpful to consider how leading regulation scholars have defined the term prior to adopting a narrow or wide conception. Some regulation scholars, such as David Levi-Faur, define regulation in terms of administrative rather than legislative or judicial rule-making: regulation entails the production of 'prescriptive rules' by business, political, and social actors, who then monitor and enforce these rules between

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[72] *R v Panel on Takeovers and Mergers Ex p. Datafin Plc* [1987] QB 815, [1987] 2 WLR 699, 825-826 ('*Datafin*'). The implications of the *Datafin* case to AIM are discussed at length in Chapter Four.

[73] Prior to the Takeover Panel's authority in the Companies Act 2006, a breach of the Takeover Code (as determined by the Panel) was 'ipso facto an act of misconduct by a member of the Stock Exchange… [and] the admission of shares to the Official List may be withheld in the event of such a breach.' *Datafin* (n 72) 835. Sir John Donaldson MR wrote that the Panel's 'source of power is only partly based upon moral persuasion and the assent of institutions and their members, the bottom line being the statutory powers exercised by the Department of Trade and Industry and the Bank of England.' *Datafin* (n 722) 838.

[74] In his study of self-regulatory futures markets in the early 1990s, Neil Gunningham found that 'informal mechanisms of social control' were more important than formal rules in influencing traders' behavior. These informal mechanisms included 'Peer group pressure, fear of being ostracized, the leverage of large institutional clients, the transparency of certain market dealings and the opportunities this provides for "pay back" between "repeat players"'... See Neil Gunningham, 'Private Ordering, Self-Regulation and Futures Markets: A Comparative Study of Informal Social Control' (1991) 13 Law & Policy 297, 317.

themselves.[75] A wider conception of regulation can be found in Ayres and Braithwaite's seminal work on 'responsive regulation', which proposed (among other ideas) that regulation included persuasion (e.g., dialogue) and the threat of intervention, rather than simply punitive rules.[76] Ayres and Braithwaite built upon the work of prior scholars such as Philip Selznick, whose conception of regulation, while consistent with traditional command and control models, recognised regulation as a form of social control.[77] For Selznick, 'In its central meaning *regulation* refers to sustained and focused control exercised by a public agency over activities that are valued by a community.'[78] Selznick's definition is one of the most frequently cited in the literature on regulation and identifies regulation with 'public agency' and 'thus excludes business-to-business regulation as well as civil regulation.'[79]

The influence of Selznick's seminal definition can be seen in the decentred definition of regulation put forth by Julia Black. Black's definition is also frequently cited and represents the wide end of the spectrum:

> regulation is the sustained and focused attempt to alter the behaviour of others according to defined standards or purposes with the intention of producing a

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[75] Levi-Faur (n 60) 9. For Levi-Faur, regulation thus concerns 'the triplet of rule-making, monitoring and enforcement'. See ibid 25.

[76] Ian Ayres and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (Oxford University Press 1995). See discussion of 'tit-for-tat' enforcement at ibid 19–20. See also the discussion of responsive regulation's pyramid strategies (beginning with persuasion and escalating in response to wrongdoing towards more serious degrees of punishment) at ibid 35–40.

[77] Noting how easily 'legal interventions can flop', Robert Ellickson writes that 'legal instrumentalists would be wise to deepen their understanding of the nonlegal components of the system of social control.' See Robert Ellickson, *Order Without Law: How Neighbors Settle Disputes* (Harvard University Press 1991) 282.

[78] Philip Selznick, 'Focusing Organizational Research on Regulation' in Roger G Noll (ed), *Regulatory Policy and the Social Sciences* (University of California Press 1985) 363.

[79] Levi-Faur (n 60) 7–8. Civil regulation refers to the 'the creation of private (non-state) forms of regulation intended to govern markets and firms' by civil actors such as NGOs, professional bodies, etc. See ibid 25.

> broadly identified outcome or outcomes, which may involve mechanisms of standard-setting, information-gathering and behaviour-modification.[80]

Black's definition cannot be faulted for under-inclusion. Its purpose is not to lend immediate analytical clarity to understanding 'regulation' in any particular market, but to account for the multiplicity of ways that regulation may occur in substance as opposed to simply in form. Black criticizes both 'functional' definitions of regulation (e.g., regulation performs X economic function) and broad 'essentialist' definitions (e.g., regulation *is* conceptually XYZ) as 'de-contextualised, generalised abstractions'.[81]

B. *The empirical approach to 'regulation' adopted in this dissertation*

This dissertation adopts an empirical approach whereby regulation – in a wider sense including forms of social practice intended to influence other market participants' behaviour toward identifiable outcomes – can be objectively known through the careful observation of qualitative and quantitative data.[82] This empirical approach assumes that decentred, soft law forms of regulation may be objectively knowable through reliable observation and data gathering. Empirical approaches to regulation can be contrasted with systems theory approaches which deny the

[80] Black, 'Critical Reflections on Regulation' (n 62) 20. Professor Black admits that the definition is 'essentialist' (and therefore falling into the category of generalised abstraction), however she advocates for this definition in 'distinguishing regulation from any system of social control on the one hand, and extending it beyond state activity… on the other'.

[81] ibid 18–19. Black gives an example of an 'essentialist' definition based upon 'analytic conditions': 'regulation is a form of institutionalized norm enforcement'. Black also identifies a third 'conventionalist' method of defining regulation, whereby regulation is defined by its conventional use in practice (e.g., the academic community defines regulation as X, or police officers identify regulation as Y). For an example of how other financial regulation academics have used Julia Black's definition, see Cristie Ford, *Innovation and the State: Finance, Regulation, and Justice* (Cambridge University Press 2017) 10.

[82] This does not suggest the social reality of regulation can be perfectly known, given the researcher's own bias and limitations. However, an empirical approach does suggest that there is 'a single valid social reality', disagreeing with the systems theory perspective. See Lange (n 64) 469. Furthermore, this dissertation does not consider post-structuralist accounts of regulation whereby the very existence of regulation or regulatory actors is questioned.

researcher's ability to observe and articulate an objective social reality, including hard and soft forms of regulation, outside his or her subjective perspective.

The debate between systems theory and empirical approaches to regulation is related to one's epistemology ('How can we derive knowledge about regulation?') and ontology ('Does regulation exist?').[83] Systems theorists suggest 'meaning is internal to systems' and deny 'objective social reality' because the observer is limited to his or her own 'system of reference.'[84] Systems theory approaches to regulation posit 'the system as the basis of social order.'[85] The theory suggests that society is comprised of systems (e.g., political, legal, economic), each having 'common characteristics'.[86] The legal system, for example, 'is defined as consisting of all social communications which are formulated with reference to law', thus including both positive law and activity aimed at skirting the law (e.g., illegal activity).[87] However, systems theory does not suggest that the law includes social practice. Law is 'not defined by reference to external criteria but self-referentially constituted', meaning that social practice does not change what constitutes 'law' but can affect 'the self-constituting processes inside the system'.[88] Under a systems theory approach, social practices do not affect the content of regulatory law, whereas an empirical

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[83] The ideological underpinnings of the research (i.e., ontological and epistemological orientation) are discussed in Chapter Three, Section I.

[84] Lange (n 64) 470.

[85] ibid 454.

[86] ibid.

[87] ibid. See Lange's discussion (at footnote 21 of the page) on the differences between how some of the founders of systems theory – Niklas Luhmann, Günther Teubner, and Helmut Willke – define systems and their separation.

[88] ibid 455. The self-constituting element of a system is known as *autopoiesis*.

approach studies both legal requirements and social practice (e.g., relationships, norms) to understand regulatory law and 'the social basis of law'.[89]

The empirical approach to regulation adopted in this dissertation posits that observable forms of soft law (e.g., norms or market practices) whose existence can be empirically supported may constitute regulation in addition to binding hard law such as the AIM Rules (containing enforceable contractual obligations) and relevant legislation. This approach is not dependent on a singular definition of regulation. It is dependent, however, on the assumption that some forms of soft law (e.g., the pre-*Datafin* Takeover Code) may validly comprise securities regulation because of their influence on market behaviour. The relevance of this wider approach to regulation is explored in Chapter Five, where it is argued that influential forms of market practice and unwritten rules enforced by the Exchange are forms of regulation on AIM.

The research question of this dissertation examines how reputation and self-regulation interact on AIM. This necessarily includes examination of hard law (legally binding obligations) and soft law (codified or uncodified obligations that are not legally binding). Forms of hard law to be examined include AIM's listing rules and their enforcement, as well as applicable company and securities laws. Forms of soft law to be examined include AIM notices published by the Exchange such as disciplinary notices, guidance documents, rule consultations, and official statements. Finally, regulation on AIM may include non-codified soft law such as norms or social practices intended to influence market behaviour and achieve certain outcomes if they are observed and empirically supported by the researcher.

[89] ibid 452–453.

An empirical approach to regulation on AIM allows for the possibility of soft law regulation without insisting a priori that it exists. On AIM, the Exchange is the primary rule-maker and enforcer, and listed issuers are also formally subject to the authority of nominated advisers (Nomads), the Financial Conduct Authority (FCA) (in some circumstances), and the state (ultimately). However, it is possible that issuers' behaviour may be influenced by soft law considerations, such as the willingness of institutional investors to buy securities or impose reputational sanctions depending on social and market practice. An empirical approach to regulation allows for a holistic understanding of how securities market regulation operates in practice.

SECTION III Self-regulation and private ordering

Having considered different conceptions of regulation in Section II, the initial inquiry in this section asks *What is 'self-regulation'?* It begins by presenting various classifications of self-regulation based on the nature and degree of government involvement in order to demonstrate that self-regulation does not imply the complement absence of public rule-making. Section III then turns to the relationship between private ordering and self-regulation, arguing that they are related but not identical concepts. AIM can be understood as a type of 'mandated self-regulation' where private rule-making and enforcement are government sanctioned and monitored, and private ordering in this context best explains how voluntary cooperation in the group occurs.

A. *Defining self-regulation by the nature and degree of government involvement*

Self-regulation, at its most basic level, involves individuals or groups creating or enforcing rules and standards.[90] Individual self-regulation concerns individual firms or actors whereas group self-regulation concerns collections of firms (e.g., an industry-level organisation) that choose to cooperate.[91] Group self-regulation may be understood as a 'process of collective government', whereby the 'self' in self-regulation refers to a 'collective'.[92] Self-regulation of financial markets – the focus of this dissertation – is thus a form of group or collective self-regulation.

It is possible to distinguish between different forms of self-regulation by focusing on the nature and degree of government involvement in the relation to the group or collective.[93] Julia Black distinguishes between four types of self-regulation based on the relation of the group or collective to government.[94]

1. *Mandated* self-regulation: self-regulation is *mandated* when government establishes a framework and requires the group to make and enforce its own rules and norms within this framework.

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[90] Neil Gunningham and Joseph Rees, 'Industry Self-Regulation: An Institutional Perspective' (1997) 19 Law & Policy 363, 364.

[91] ibid 364–365. Gunningham and Rees define industry self-regulation, a common form of group regulation, as 'a regulatory process whereby an industry-level (as opposed to a governmental or firm-level) organization sets rules and standards (codes of practice) relating to the conduct of firms in the industry.'

[92] Julia Black, 'Constitutionalising Self-Regulation' (1996) 59 The Modern Law Review 24, 27.

[93] After reviewing more than two decades of scholarly definitions of self-regulation, Ian Bartle and Peter Vass conclude that 'most appropriate way of conceptualizing new trends in self-regulation is in terms of their relationship with the state and state regulation.' However, Bartle and Vass emphasize that the dynamics of self-regulation have evolved due to the increasingly 'decentred' nature of regulation (as opposed to regulation that was formerly characterized as state-centric and hierarchical). Ian Bartle and Peter Vass, 'Self-Regulation Within the Regulatory State: Towards a New Regulatory Paradigm' (2007) 85 Public Administration 885, 890.

[94] Black, 'Constitutionalising Self-Regulation' (n 92) 27.

2. *Sanctioned* self-regulation: self-regulation is *sanctioned* when government permits a group to create its own governing rules, which must then be approved by government.
3. *Coerced* self-regulation: self-regulation is *coerced* when government threatens statutory regulation unless a group effectively governs itself.
4. *Voluntary* self-regulation: self-regulation is *voluntary* when government is hands-off and the group's desire to make and enforce its own rules and norms is entirely without government coercion.

In a similar vein, Joseph Rees identifies three types of self-regulation ranging from having the lowest to having the highest degree of government involvement.[95]

1. *Voluntary* self-regulation: self-regulation is *voluntary* when the group creates and enforces its own rules without direct government intervention.
2. *Mandated* self-regulation: self-regulation is *mandated* when private rule-making and enforcement are sanctioned and monitored by government.
3. *Mandated partial* self-regulation: self-regulation is *partially mandated* when a group is responsible for private rule-making or enforcement, but not both. Government may enforce rules written by the group or require the group to enforce public rules that are legislated or made by an administrative body.

The conceptions of self-regulation articulated by Rees and Black map closely onto each other: Black places government sanctioned self-regulation into a separate category from government mandated self-regulation, and Rees suggests that self-regulation is only partial when the private

[95] Joseph Rees, *Reforming the Workplace: A Study of Self-Regulation in Occupational Safety* (University of Pennsylvania Press 1988) 10–11. See also Gunningham and Rees (n 90) 365.

rule-maker does not have government sanctioned enforcement powers. Other regulatory scholars, such as Ian Bartle and Peter Vass, extend the definition of mandated self-regulation into further categories including *delegated* and *devolved*, [96] and suggest that voluntary self-regulation is but one form of 'non-mandated' self-regulation, alongside *facilitated* and *tacitly-supported* self-regulation.[97]

Taking a step back from the array of different self-regulatory classifications, Anthony Ogus identifies three variables that aid the understanding of the nature of self-regulation:[98]

1. autonomy (how much is the self-regulatory organisation (SRO) subjected to public regulatory oversight?);
2. legal force (how binding is the SRO's regulation?);
3. monopoly power (is the SRO the only 'regulatory supplier'?).

Ogus suggests these variables could produce a spectrum of self-regulation 'containing different degrees of legislative constraints, outsider participation in relation to rule formulation or enforcement (or both), and external control and accountability'.[99] This understanding is clearly preferable to a binary model of 'self-' versus 'public' regulation,[100] and in the decades following Ogus' seminal work it has become widely acknowledged that characterising self-regulation versus

[96] Governments delegate responsibility for implementing statutory objectives to the self-regulatory body under the former, whereas under the latter governments play a more active role in establishing a detailed self-regulatory scheme pursuant to statute. See Bartle and Vass (n 93) 891–892.

[97] For Bartle and Vass, *facilitated* self-regulation is 'explicitly and pro-actively supported by the state but the scheme itself is not backed by statute', whereas *tacitly-supported* self-regulation is not explicitly supported by the government and 'close to "pure" self-regulation.' See ibid 891, 894–896.

[98] Anthony Ogus, 'Rethinking Self-Regulation' (1995) 15 Oxford Journal of Legal Studies 97, 99–100.

[99] ibid 100.

[100] ibid.

government regulation is a 'false dichotomy'.[101] Self-regulation does not mean the complete absence of government involvement in regulation. Rather, as these definitions suggest, many types of groups can be 'self-regulatory' with a high degree of government involvement in sanctioning or facilitating private rule-making and enforcement. Self-regulation should therefore not be confused with de-regulation, since 'Self-regulation implies decentralization but not disconnection from the regulatory state.'[102]

Focusing on stock exchanges in particular, as opposed to self-regulation in all contexts, Stavros Gadinis and Howell Jackson distinguish between three models of securities self-regulation based on a functional approach to regulatory oversight. In 'government-led' models, stock exchanges and other market institutions are only delegated 'issue-specific' regulatory authority by government authorities (e.g., regulating trading processes) and public regulatory agencies are subjected to close oversight by the central government.[103] 'Flexibility' models also grant market institutions issue-specific regulatory authority, but market and industry actors play a more active role in policymaking and enforcement.[104] Administrative agencies and market institutions have more independence from central government, resulting in a more flexible sharing of regulatory responsibilities (e.g., the government regulator is 'nonintrusive' and often issues guidance instead of rules).[105] Despite differences in the centrality of government involvement in securities regulation, what government-led and flexibility models have in common is delegating regulatory

[101] Bartle and Vass (n 93) 888.

[102] ibid 897.

[103] Stavros Gadinis and Howell E Jackson, 'Markets as Regulators: A Survey' (2007) 80 Southern California Law Review 1239, 1271–1272.

[104] ibid 1279–1280.

[105] ibid 1281–1287.

authority to stock exchanges in four key areas: prospectus disclosure, listing eligibility requirements and continuing disclosure, trading rules, and rules on clearing and settlement.[106] In 'cooperation' models such as Canada and the US, market institutions have a 'pervasive' role and are involved 'in almost all aspects of securities markets regulation'.[107] Cooperation models are highly self-regulatory, and regulatory responsibility is not necessarily clearly or neatly delineated between market institutions and government agencies. In reality, stock exchanges and other SROs share jurisdiction and cooperate with administrative agencies when it comes to rule-making, monitoring, and enforcement.[108]

AIM constitutes a form of *mandated* self-regulation under both Black and Rees' definitions because the Exchange's private rule-making and enforcement occur within a government established framework. AIM is also an example of the *cooperation model* under Gadinis and Jackson's classifications.[109] The Exchange has been granted statutory authority as a 'Recognised Investment Exchange' to regulate AIM as a 'prescribed market' under the *Financial Services and*

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[106] ibid 1281. Examples of government-led models include France, Japan, and Germany, and examples of flexibility models include Australia and Hong Kong. The UK exemplifies the flexibility model with respect to the Main Market of the LSE. However, the Exchange only has regulatory responsibilities for one of the four key areas (trading rules). The UK is closer to a cooperation model with respect to AIM, as discussed at note 109 below.

[107] ibid 1290.

[108] ibid 1291–1292. SROs and government agencies not only cooperate but also compete (by demonstrating the efficacy of their regulation) in order to avoid losing regulatory authority to administrative agencies. See ibid 1295–1296.

[109] AIM does not fit within the flexibility model, because flexibility jurisdictions 'hardly ever exercise direct rulemaking powers' whereas the Exchange actively makes the listing rules on AIM. However, there are significant differences between AIM and other cooperation models. Unlike other cooperation model jurisdictions, the LSE is only responsible for monitoring and enforcing the AIM Rules, and *not* other securities laws applicable to AIM companies. Additionally, SRO rule-making in cooperation model jurisdictions requires government agency approval, whereas the Exchange's rule-making on AIM does not require government approval. See Gadinis and Jackson (n 103) 1291, 1295.

Markets Act 2000 (*FSMA 2000*).[110] The Exchange creates and enforces the listing rules on AIM, while AIM companies are still subject to public enforcement of company and securities law violations (e.g., for market abuse). Black even identifies the LSE as a form of *mandated* self-regulation.[111] Drawing on Ogus' self-regulatory variables, the Exchange has greater self-regulatory autonomy to regulate AIM than the Main Market. Whilst the listing rules of the LSE Main Market are issued and enforced by the FCA in its capacity as UK Listing Authority, AIM's listing rules are written by the Exchange and self-enforced. On this basis it is fair to conclude that AIM has a more self-regulatory character than the Main Market of the LSE. AIM's self-regulatory character can be differentiated from the stock exchanges of the past, which historically had mutual membership structures where members set the rules for themselves.[112] Instead, AIM derives its self-regulatory character from its private rule-making and enforcement authority that market participants accept to join and partake in the market.[113]

[110] A 'prescribed market' is a market 'established under the rules of a UK recognised investment exchange' such as the LSE plc. See FSMA 2000 (Prescribed Markets and Qualifying Investments) Order 2001. The importance of this designation is that Part VIII of the FSMA 2000, which sets out the provisions on market abuse, apply to prescribed markets. A 'recognised investment exchange' is an investment exchange that the appropriate regulator (i.e., the FCA) has declared meets the recognition requirements contained in Part VXIII of the FSMA 2000, The Financial Services and Markets Act 2000 (Recognition Requirements for Investment Exchanges and Clearing Houses) Regulations 2001, and the FCA Handbook, REC 2 <https://www.handbook.fca.org.uk/handbook/REC.pdf>.

[111] Black, 'Constitutionalising Self-Regulation' (n 92) 27, at footnote 18.

[112] Stock exchanges' historic mutual membership structure falls under the classic definition of industry self-regulation described at n 91. For a table setting out the global trend of stock exchange demutualization, see Gadinis and Jackson (n 103) 1257.

[113] Black defines self-regulation as 'the situation of a group of persons or bodies, acting together, performing a regulatory function in respect of themselves and others who accept their authority.' The participants who accept the group's regulatory authority may be members of the group or outsiders. See Black, 'Constitutionalising Self-Regulation' (n 92) 27–28.

B. *A law and economics justification for self-regulation*

Self-regulation is conventionally framed in the economics literature as a trade-off between having more information and less incentive compatibility: self-regulated parties have superior information than public authorities about the market and their own activities, allowing for the design of more efficient rules, but when compared to public authorities they may have weaker incentives to make rules that are aligned with the public's regulatory goals.[114]

From a regulatory cost perspective, in some contexts it may be cheaper for the state to 'subcontract' a degree of regulatory rules and enforcement to private institutions rather than produce these themselves.[115] The underlying intuition is Coasian – just as firms produce when the costs of production are cheaper within the firm than through contracting with external parties, governments produce regulation and public goods when it is cheaper to do so internally rather than through contracting with external parties.[116] Self-regulating groups are willing to produce and enforce rules when they perceive the costs of self-regulation to be lower than the costs of more direct government regulation.[117]

[114] As Braithwaite observes, 'We have seen that corporations may be more capable than the government of regulating their business activities. But if they are more capable, they are not necessarily more willing to regulate effectively. This is the fundamental weakness of voluntary self-regulation.' See John Braithwaite, 'Enforced Self-Regulation: A New Strategy for Corporate Crime Control' (1982) 80 Michigan Law Review 1466, 1469. See also Baldwin et al., who write that 'the case for self-regulation… rests principally on considerations of expertise and efficiency.' Robert Baldwin, Martin Cave and Martin Lodge, *Understanding Regulation: Theory, Strategy, and Practice* (2nd edn, Oxford University Press 2012) 139.

[115] Ayres and Braithwaite (n 76) 103.

[116] ibid 102–103.

[117] CFA Institute, 'Self-Regulation in Today's Securities Markets: Outdated System or Work in Progress?' (2007) 4 <https://www.cfainstitute.org/-/media/documents/article/position-paper/self-regulation-in-todays-securities-markets-outdated-system-or-work-in-progress.ashx>.

Self-regulation may be justifiable from a public interest perspective when (1) market failure results from an activity, (2) the resulting market failure cannot be adequately corrected through private law instruments, and (3) self-regulation is a more cost-effective solution than public regulation.[118, 119]

C. *Private ordering best explains 'how' self-regulation occurs, rather than 'if' self-regulation occurs*

Having moved away from a linear scale of 'more v. less' self-regulation toward an understanding of different types of self-regulation depending on the nature and degree of government involvement, it is now suggested that 'more v. less' private ordering does not equate to 'more v. less' self-regulation. Rather, private ordering is better understood as a variable influencing the type of group self-regulation and providing insight into how rule-making and enforcement occurs in practice. Since there is no pure private ordering in modern financial markets (i.e., a complete absence of public coercion, whether by establishment of a legislative framework or recourse to courts), understanding private ordering as synonymous with self-regulation would fail to accurately capture the predominant form of self-regulation in securities markets, namely *mandated* self-regulation.

Scholars have defined private ordering in different ways. Steven Schwarcz conceives of private ordering as the 'sharing of regulatory authority with private actors'.[120] This view most

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[118] Ogus, 'Rethinking Self-Regulation' (n 98) 97.

[119] Bartle and Vass note that while 'the public interest can be derived from assessment of market failure' under rational choice theory approaches, 'a legitimate public interest might also be based on public concerns, public opinion or that which is politically and socially workable.' See Bartle and Vass (n 93) 902. See also discussion of economic and non-economic rationales for regulation at Section IV(B) of this chapter.

[120] Steven L Schwarcz, 'Private Ordering' (2002) 97 Northwestern Journal of International Law & Business 319, 319.

accords with the classifications of self-regulation set out above – private ordering, like self-regulation, will depend on the nature and extent of how regulatory authority is shared between public and private actors.

Barak Richman suggests that private ordering involves a 'self-enforcing contractual regime'.[121] Richman observes that much of the private ordering literature focuses on 'merchant communities enforc[ing] agreements without relying on state-sponsored courts.'[122] Richman's clear analysis helps delineate public from private ordering. Public ordering, he writes, 'enjoys the backing of state-sponsored coercion' and relies upon public enforcement to settle disputes.[123] On the other hand, private ordering 'requires voluntary cooperation by participating merchants', where the only punishment for failure to adhere to the rules is the exclusion of future business.[124] Upon Richman's observation private ordering is therefore based upon 'reputation mechanisms' to incentivise compliance. Outside formal enforcement by the state, the only incentive to comply with the rules or contractual commitments in a system of private ordering is the desire to be

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[121] Barak D Richman, 'Firms, Courts, and Reputation Mechanisms: Towards a Positive Theory of Private Ordering' (2004) 104 Columbia Law Review 2328, 2332.

[122] ibid 2338. Consider also Avner Greif's seminal discussion of how the 11th century trading coalitions of Maghribi merchants and agents formed a type of '"private order" economic institution'. Maghribi trading coalitions were upheld by reputation mechanisms whereby honest dealings provide higher long-term payoffs than short-term malfeasance, allowing for ex ante credible commitments to honest trading in a context where legal systems could not adequately organize agency relationships. See Avner Greif, 'Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders' (1989) 49 The Journal of Economic History 857, 866–867. See also Milgrom et al.'s discussion of how the lex mercatoria upheld a reputational system of private enforcement amongst merchants in Western Europe in the 12th and 13th centuries. Paul R Milgrom, Douglass C North and Barry R Weingast, 'The Role of Institutions in the Revival of Trade: The Law Merchant, Private Judges, and the Champagne Fairs' (1990) 2 Economics & Politics 1.

[123] Richman (n 121) 2338.

[124] ibid 2338–2339. Richman writes that in private ordering 'prospects for future transactions induc[e] compliance with current contractual obligations…'

included in future business dealings within the community.[125] Pure private ordering therefore occurs in the context of voluntary group cooperation in the absence of any public coercion. In pure private ordering, all regulatory authority is vested in the group, whereas in public ordering regulatory authority is vested with the government. Pure private ordering does not occur in modern financial markets because there is always a degree of public regulatory authority and coercion. All private actors operate within the framework of legislative rules and disputes can be brought before courts or public administrative bodies.[126] Instead of viewing securities markets as being more or less self-regulatory based on the degree of private ordering, it is better to view private ordering (i.e., voluntary cooperation without public coercion) in securities markets as explaining how (if at all) self-regulation occurs, rather than equating more or less private ordering to more or less self-regulation.

D. *How private ordering further differs from self-regulation*

This section outlines a view in the literature that contract law is a form of regulation because it expresses normative standards. Rather than endorsing a particular view on the normative character of private law, this discussion cautions juxtaposing contractual private ordering against regulation because private ordering may express normative standards and constitute a form of 'regulation'.

Hugh Collins argues that the private law of contract *is* a form of regulation. Private law can be conceived of as a 'regulatory technique' that is both responsive (or 'reflexive') and self-

[125] ibid 2339–2340. Richman notes that '[i]n theory, private ordering means nothing more than employing extralegal mechanisms to induce compliance, and reputation mechanisms are only a subset of private enforcement mechanisms.' Richman cites Curtis Milhaupt & Mark West who write on the use of violence as an extralegal mechanism of compliance. See Curtis J Milhaupt and Mark D West, 'The Dark Side of Private Ordering: An Institutional and Empirical Analysis of Organized Crime' (2000) 67 The University of Chicago Law Review 41.

[126] Even disputes settled via private arbitration rely on legislation such as the Arbitration Act 1996.

regulatory because parties can modify contractual rules to their needs and have discretion to seek judicial enforcement of private law regulation.[127] Rather than the state merely supporting private ordering, private law is 'an instrument of the state for controlling and shaping private ordering according to a variety of competing policy objectives.'[128] Collins rejects the assumption that private law permits complete freedom of contract (i.e., that markets without formal business regulation are 'unregulated'), and identifies private law rules that remedy market failure or redistribute wealth similarly to business regulation (e.g., rules on misrepresentation or duress).[129]

Collins recognises a 'normative complexity' in the law of contract. Positive statements of private law 'express interpretations and decisions about fundamental normative standards appropriate for the law of contract.'[130] Under this view the content of contract law is dependent on normative standards from both within the legal system (e.g., doctrinal integrity) and outside the legal system (e.g., theories of political obligation and market convention).[131]

This position can be contrasted with Anthony Ogus' argument that 'private law is predominantly facilitative in character.'[132] A facilitative view of private law assumes that rules

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[127] Hugh Collins, *Regulating Contracts* (Oxford University Press 1999) 66–67.

[128] ibid 58.

[129] ibid 59. Collins recognises that contract law as a form of regulation has a higher degree of generality than specific business regulation, both in terms of the more general content of contract law and the less specialised enforcement of contract law (courts as opposed to specialised agencies).

[130] ibid 33. Collins suggests these are the three 'crucial sources' of normative standards that are translated into private law by legal writers, judges and lawmakers.

[131] ibid.

[132] Anthony I Ogus, 'The Context of Regulation: The Market and Private Law', *Regulation: Legal Form and Economic Theory* (1st edn, Hart Publishing 1994) 26 <http://www.bloomsburycollections.com/book/regulation-legal-form-and-economic-theory/ch2-the-context-of-regulation-the-market-and-private-law/>.

‘are not designed instrumentally to achieve particular social goals’.[133] If ‘regulatory law aims to achieve substantive standards’, the question of whether contract law and other areas of private law are distinct from regulatory law is dependent on one’s view of whether contract law is purely facilitative or expresses interpretations of normative standards.[134] Ogus advances a law and economics view of regulation that conceives of regulatory law as distinct from contract law. Where market failure cannot be remedied by private law (i.e., ‘“market failure” is accompanied by “private law failure”’), Ogus argues in favour of a prima facie need for public regulation.[135]

To summarise thus far, private law may constitute regulatory law depending on one’s view of its normative character. If contractual private ordering expresses normative content and is not purely facilitative, it may be within the realm of regulatory law; if so, more private ordering does not necessarily equal less regulation in a wider (non-state centric) sense.

E. *Private ordering relies on norms (as opposed to contracts) in its purest form, unlike self-regulation*

Private ordering is not synonymous with self-regulation because self-regulation is not more or less voluntary depending on whether group cooperation occurs via norms or contract. The literature on private ordering emphasises the importance and coercive power of norms. Robert Ellickson, in his now classic study of Shasta County landowners, suggests that ‘members of a close-knit group tend to develop informal norms’ and rely on these norms rather than law.[136] Group members only

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[133] ibid.

[134] See Bettina Lange’s discussion of private facilitative law. Lange (n 64) 451.

[135] Anthony Ogus, ‘Public Interest Grounds for Regulation’, *Regulation: Legal Form and Economic Theory* (Hart Publishing 1994) 30.

[136] Ellickson (n 77) 283. Ellickson also discusses reasons to prefer law to norms, which include: 1) despite maximising welfare, norms may not further distributive justice; 2) in-group norms do not consider the welfare of

relying on norms and customs as opposed to private law or contracts represent the purest form of private ordering on Richman's definition, because relying solely on norms has the highest degree of voluntary cooperation (no contractual penalties or legal incentives to cooperate) and the lowest degree of state coercion (no recourse to courts for contractual enforcement).

In-group members rely on norms, Ellickson argues, 'not only because custom tends to be administratively cheaper but also because the substantive content of customary rules is more likely to be welfare maximizing.'[137] Lawrence Lessig adds nuance to the discussion of norms, arguing that the social meaning behind norms and rules can change.[138] Lessig provides a clear example of how the meaning behind norms is not static:

> When norm violation increases, however, the meaning of obeying the norm changes. At some point, when everyone else is violating a norm – when everyone else is evading their taxes – obeying the norm makes one a 'chump'.[139]

The cost of complying with rules depends not only on the content of the rule, but on the contextual, social meaning of compliance. It may therefore be inefficient in some contexts to impose legal regimes that prevent groups from adhering to norms or 'purely extralegal agreements' as a form of private ordering.[140]

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out-group members; and 3) the content of norms 'predicts nothing about the nature of a society's foundational entitlements.' See ibid 283–284.

[137] Ellickson (n 77) 283.

[138] Lawrence Lessig, 'Social Meaning and Social Norms' (1996) 144 University of Pennsylvania Law Review 2181, 2183.

[139] ibid 2185.

[140] Lisa Bernstein discusses how the Uniform Commercial Code 'may impose an efficiency loss' to groups like the National Grain and Feed Association by 'bring[ing] a substantial portion of the extralegal realm of contractual relationships within the purview of legal enforceability'. See Lisa Bernstein, 'Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms' (1996) 144 University of Pennsylvania Law Review

F. *Analysing contracts alone cannot provide a complete picture of private ordering in a group or market*

If private ordering refers to voluntary cooperation without public coercion and extends beyond unfettered contractual freedom to include reliance on group norms and customs, then analysing contracts alone without observing norms and customs cannot, in practice, provide a complete picture of private ordering. Conversely, it is not necessary to observe norms or customs to determine whether a group is self-regulatory or not – self-regulatory classifications (e.g., mandated, sanctioned, voluntary, etc.) can be accurately made solely based on the nature and degree of government involvement.

Some scholars, such as David Snyder, distinguish between private ordering and private lawmaking, since the former often focuses on the persuasive power of norms and extra-legal enforcement. For Snyder, private lawmaking '[is] not the result of bargaining over contract terms'; rather, it describes the phenomenon of private bodies creating 'law' through standard-form contracting 'in which uniform rules are incorporated across countless transactions, binding millions of parties, a tiny fraction of whom have any practical or moral responsibility for the making of those rules.'[141] On this definition, Snyder describes the NYSE and NASDAQ as 'private lawmakers' rather than SROs.[142] The Exchange is a private lawmaker in some respects – AIM-listed companies have no choice but to agree to the standard form contracts provided in the form

1765, 1794–1795. See also Robert D Cooter, 'Decentralized Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant' (1996) 144 University of Pennsylvania Law Review 1643, 1678.

[141] David V Snyder, 'Private Lawmaking' (2003) 64 Ohio State Law Journal 371, 404, 448. Snyder relies on Oliver Wendell Holmes Jr.'s definition of law: 'the law is simply a prediction about what a court will do'. Snyder also suggests that private lawmaking can be implemented via legislatures or judges adopting privately made law. See ibid 382, 404.

[142] See Snyder's discussion of 'the self-regulatory misnomer'. Snyder (n 141) 387–388. Snyder wrote prior to the demutualisation of the NYSE, but many of his reasons for viewing the NYSE as a private lawmaker are equally applicable.

of listing rules. However, the Exchange consults with issuers and other stakeholders on amendments to the AIM listing rules, often taking into account their views, which represents a degree of bargaining on the part of the Exchange that is not exhibited by private lawmakers such as the NYSE, whose rule amendments are subject only to the approval of a public regulator. Furthermore, it is not possible to fully determine the extent of private ordering on AIM, or in any self-regulatory context, by analysing contracts or private lawmaking without reference to how bargaining and cooperation may be occurring through group norms and customs.

SECTION IV Objectives of securities regulation

This section explores why it is necessary to regulate financial markets. It identifies a range of economic rationales and normative or rights-based rationales for intervening in markets. This section contextualises the discussion analysing the Exchange's regulatory goals for AIM in Chapters Five and Six. The dissertation does not endorse one regulatory goal over any other, but maintains a 'regulatory agnostic' perspective whereby the success of a regulatory regime should be judged by the degree to which the regulator achieves its stated objectives, however they may be prioritized. Section IV then briefly considers different types of regulatory models, such as compliance-based and deterrence-based models, before focusing on the strengths and weaknesses of stock exchange self-regulation. The dissertation does not embrace a pro- or anti- stock exchange self-regulation position in the abstract. It does however suggest that stock exchanges face inherent conflicts of interest that effective self-regulation must address, and highlights the risk of a race to the bottom in governance quality.

A. *The need for securities markets*

Do securities markets matter? To begin with, they create social value by facilitating 'more efficient use of the economy's existing productive capacity so as to maximize the value of the goods and

services that it yields.'[143] Securities markets 'serve as a mechanism for the transformation of savings into financing for the real sector', allowing surplus capital to be put to productive economic use and reducing reliance on bank lending.[144] Securities markets are an effective means of pricing real assets; though information about prices 'is dispersed among many people', the 'marvel' of markets. F.A. Hayek observes that markets' system of price discovery creates a solution that 'might have been arrived at by one single mind possessing all the information which is in fact dispersed among all the people involved in the process.'[145] Securities markets allow for the transfer and diversification of risk.[146] This allows for more efficient management of risk, more efficient financial markets, and greater economic activity.[147] If securities markets are important to the economy, it follows that the regulation of these markets – the subject of this dissertation – also matters.[148]

B. *There are market and non-market rationales for all regulation*

There are a host of rationales for regulating markets. Some rationales are based on economic arguments: regulation is justified on the basis of reducing market failures, i.e., non-efficient market

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[143] Merritt B Fox and Kevin S Haeberle, 'Evaluating Stock-Trading Practices and Their Regulation' (2018) 42 The Journal of Corporation law 889, 889.

[144] Jennifer A Elliott and Ana Carvajal, 'Strengths and Weaknesses in Securities Market Regulation: A Global Analysis (IMF Working Paper)' (2007) WP/07/259 4.

[145] FA Hayek, 'The Use of Knowledge in Society' (1945) 35 The American Economic Review 519, 526–527.

[146] See e.g., Harry Markowitz's seminal paper on modern portfolio theory demonstrating how diversification increases risk-adjusted return on equity. Harry Markowitz, 'Portfolio Selection' (1952) 7 The Journal of Finance 77.

[147] Elliott and Carvajal (n 144) 4.

[148] As Christopher Green and others suggest, 'regulatory policy has a direct impact on stock market efficiency in that trading arrangements, costs and taxes may produce too little or too much trading, and thus cause inefficiency.' See Christopher J Green, Paolo Maggioni and Victor Murinde, 'Regulatory Lessons for Emerging Stock Markets from a Century of Evidence on Transactions Costs and Share Price Volatility in the London Stock Exchange' (2000) 24 Journal of Banking and Finance 577, 578.

outcomes that fail to maximise consumer and producer welfare. For example, in *Understanding Regulation*, a well-known text, Robert Baldwin, Martin Cave and Martin Lodge identify the predominant market failure rationales for regulation:[149]

- preventing anti-competitive outcomes of monopolies, natural monopolies, or predatory pricing;
- reducing windfall profits or economic rents;
- eliminating externalities, or causing producers to internalise the societal costs of production;
- alleviating information asymmetries;
- ensuring 'socially desired levels of continuity and availability of service' in the market;
- providing public goods;
- allocating scarce commodities;
- coordinating production because of high transaction costs;
- preventing free-riding.

There are also strong non-market based or non-economic rationales. Baldwin et al. identify these as 'social' or 'rights-based' rationales, borrowing heavily on the work of Tony Prosser.[150] Prosser argues that the rationales of 'individual rights' and 'social solidarity' can justify regulation.[151] Prosser helpfully identifies that while market failure can provide a normative justification for regulation, normative justifications are not mutually exclusive and regulation can be justified on

[149] Baldwin, Cave and Lodge (n 114) 15–22.

[150] ibid 22–23.

[151] Tony Prosser, 'Regulation and Social Solidarity' (2006) 33 Journal of Law and Society 364, 365.

the basis of multiple rationales.[152] The non-exclusivity of economic and social rationales can be seen in Prosser's social solidarity rationale, which seeks 'to provide the essential social underpinning of mutual trust and expectation which is necessary for markets to function… [and] to prevent or limit the socially fragmenting role of markets.'[153] Proponents of rights-based or social solidarity rationales would therefore take issue with the narrower law and economics perspective that '[r]egulation is necessary if complete contracting is too costly'.[154] If, as some suggest, economic markets are fundamentally social, then rationales for regulatory intervention should defy the economic v. social dichotomy and focus on incentives, power, behaviour, and networks.[155] Legal academics such as Julia Black have criticised the approach of justifying regulation primarily on the basis of market failure 'with the occasional nod to distributional or other ancillary aims', and highlighted the importance of considering goals such as access to justice, legitimacy, and achieving social justice goals.[156]

C. *The rationales for securities regulation*

The host of aforementioned rationales for regulation also apply to regulating securities markets. The International Organization of Securities Commissions (IOSCO), comprised of national securities regulators, government agencies, stock exchanges, and similarly interested organisations

[152] ibid.

[153] ibid 382.

[154] Macey and O'Hara (n 38) 23.

[155] Julia Black, 'Reconceiving Financial Markets — From the Economic to the Social' (2013) 13 Journal of Corporate Law Studies 401, 402. In Black's social conception of markets, 'markets are conceptualised as mechanisms by which, or places in which, boundedly rational, cognitively biased individuals interact in a context of legal and non-legal rules and norms, where social interactions and institutional structures shape how those actors interpret their own interactions and those of others in the markets in which they both participate and observe.' See ibid 436.

[156] Black, 'Critical Reflections on Regulation' (n 62) 7.

from over 115 jurisdictions,[157] sets forth three 'objectives of securities regulation': 'protecting investors; ensuring that markets are fair, efficient and transparent; and reducing systemic risk.'[158]

A brief glance at the objectives of global securities regulators reveals that IOSCO's list is not exhaustive. The FCA, whose objectives are derived from the *FSMA 2000* as amended by the *Financial Services Act 2012*, is tasked with one 'strategic objective' and three 'operational objectives'. The FCA's strategic objective is to 'ensure that the relevant markets work well', and its operational objectives are to 'secure an appropriate degree of protection for consumers', 'protect and enhance the integrity of the UK financial system', and 'promote effective competition in the interests of consumers.'[159] Both IOSCO and the FCA's regulatory objectives include investor protection and market integrity,[160] but they differ on the inclusion of promoting competition and reducing systemic risk.

The list of conceivable goals for regulating financial markets goes on. In Howell Jackson's catalogue of the goals of financial services regulation, Jackson identifies the following regulatory goals, of which the latter three are not prioritised by IOSCO or the FCA:

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[157] International Organization of Securities Commissions, 'Fact Sheet' (2018) 2 <https://www.iosco.org/about/pdf/IOSCO-Fact-Sheet.pdf>.

[158] International Organization of Securities Commissions, 'Objectives and Principles of Securities Regulation (IOSCO)' (2017) 3 <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD154.pdf>. Commentators have pointed out that IOSCO's policy statement 'appears to be heavily influenced by U.S. securities regulators'. See Janet Austin, 'What Exactly Is Market Integrity: An Analysis of One of the Core Objectives of Securities Regulation' (2017) 8 William & Mary Law Review 215, 224.

[159] Financial Conduct Authority, 'The FCA's Approach to Advancing Its Objectives' (2015) 7 <https://www.fca.org.uk/news/news-stories/fca's-approach-advancing-its-objectives>.

[160] Janet Austin emphasises 'a degree of fluidity between regulators in declaring that their mission is to promote market fairness, market integrity, or market confidence…', and notes that market fairness and market integrity 'may be equivalent'. In Austin's view, both require: (1) the elimination of market abuse activities… (2) non-discriminatory access to the market for all those wishing to participate; (3) transparent and accurate information about the prices of securities available to all participants at the same time; and (4) accurate information about issuers of securities available to all participants at the same time.' See Austin (n 158) 229–30, 235, 239–40.

- 'Protection of General Public' (i.e., consumer protection);
- 'Elimination of Negative Externalities from Financial Failures' (i.e., preventing systemic risk);
- 'Advancing Various Equitable and Redistributive Goals';
- 'Promoting Certain Aspects of Political Economy' (e.g., 'Longstanding barriers to the geographic expansion of banks'); and
- 'the elimination of financial crime and international terrorism'.[161]

It is difficult, if not impossible, to conduct accurate quantitative cost-benefit analyses of these regulatory goals.[162] Given the variety of objectives in regulating financial markets, the difficulty in comparing the costs and benefits of these objectives, and the context-specific needs and preferences of regulators, this dissertation does not endorse certain goals over others. Legal academics within the law and economics tradition have tended to focus on the objective of market efficiency, arguing that because of the importance of share price accuracy to efficient resource allocation, the main goal of securities regulation should be to ensure that share prices are as informative as possible.[163] In light of the discussion above, price accuracy and market efficiency

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[161] Howell E Jackson, 'Variation in the Intensity of Financial Regulation: Preliminary Evidence and Potential Implications' (2007) 24 Yale Journal on Regulation 253, 258–259.

[162] ibid 260. See also Yoon-Ho Alex Lee, 'The Efficiency Criterion For Securities Regulation: Investor Welfare or Total Surplus?' (2015) 57 Arizona Law Review 85, 88–89. Lee argues that the SEC should not justify rule-making on the basis of cost-benefit analysis (CBA) when pursuing a regulatory goal other than efficiency (e.g., distributive justice). Instead, regulatory agencies should justify 'the compelling public need' and seek to achieve it as cost-effectively as possible, which leaves a role for CBA while recognising the non-quantifiable nature of objectives such as distributive justice.

[163] Marcel Kahan defines 'one principal goal of securities laws' as 'to create stock markets in which the market price of a stock corresponds to its fundamental value.' See Marcel Kahan, 'Securities Laws and the Social Costs of "Inaccurate" Stock Prices' (1992) 41 Duke Law Journal 977, 979. Zohar Goshen and Gideon Parchomovsky contend that 'the essential role of securities regulation is to facilitate and maintain a competitive market for information traders.' Information traders are those who, unlike noise traders, conduct accurate firm-specific research on the basis of publicly available information, and contribute to share price accuracy through their trades. See Zohar Goshen and Gideon Parchomovsky, 'The Essential Role of Securities Regulation' (2006) 55 Duke Law Journal 711,

can be understood as a vital but not supreme regulatory objective. To summarise, regulators and academics often cite the following (non-exhaustive) principal objectives of securities regulation:

1. Investor protection;
2. Market efficiency (including market fairness and transparency);
3. Financial stability/minimising systemic risk;
4. Preventing financial crime;
5. Distributional and social goals.[164]

D. *Regulators must choose between objectives because trade-offs are sometimes required*

Regulators must prioritise objectives in situations where conflict exists between regulatory goals, and where trade-offs may be required to achieve different objectives. The FCA acknowledges the potential conflict between regulatory goals, writing in a policy document that:

> We expect that our objectives will not normally conflict, and for the most part are mutually supportive…. Should tensions arise between our objectives, we will decide based on what is most compatible with our strategic objective in the circumstances.[165]

This does not mean that achieving regulatory goals is always a zero sum pursuit – e.g., the FCA emphasises that the goal of promoting effective competition typically furthers the aims of

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781. Kevin Haeberle argues that because informed traders are frequently excluded from off-exchange trading venues, they are forced to trade on stock exchanges (with a relatively higher proportion of other informed traders), preventing them from fully capturing the benefits of their superior information (which is costly to acquire). This may lead to a less than socially optimal level of information production and share price correction. See Kevin Haeberle, 'Stock Market Law and the Accuracy of Public Companies ' Stock Prices' (2015) 1 Columbia Business Law Review 121, 124–125.

[164] For a list of the 'social goals' underlying the regulation of secondary trading markets, see Fox, Glosten and Rauterberg (n 6) 222. Fox et al. identify social goals such as the efficient allocation of capital (between investors and across time periods), efficient allocation of risk, fairness, minimizing regulatory costs, and stimulating innovation.

[165] Financial Conduct Authority (n 159) 9–10.

consumer protection.[166] Given the diversity of possible regulatory goals and the tension therein, the success or failure of a regulatory regime, and assessments of the 'quality of regulation', should be judged based on how well the regulator achieves its stated goals. Evaluating all regulatory regimes from the perspective of how one thinks goals should be prioritised, rather than from the perspective of the regulator's stated or statutory priorities of the particular jurisdiction, is effectively a form of regulatory paternalism.

E. *Achieving regulatory objectives through deterrence and compliance-based models*

Regulatory models can be distinguished between those based on 'deterrence' and those based on 'compliance'.[167] Deterrence models are based on punishment, on the premise that regulated actors are law-breaking. Compliance models are based on persuasion, on the premise that regulated actors are law-abiding. Assuming equal efficacy in achieving regulatory goals between the two, compliance models are less costly.[168]

Ayres and Braithwaite's discussion of 'enforced self-regulation' is significant in the literature on self-regulation.[169] Enforced self-regulation permits a firm 'to propose its own regulatory standards if it is to avoid harsher (and less tailored) standards imposed by the state.'[170] Firms are given the opportunity to write rules which correspond well to their needs and the market's. The regulator then approves or modifies these rules. Other persons and organisations

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[166] ibid 9.

[167] Ayres and Braithwaite (n 76).

[168] ibid 19–20.

[169] See e.g., Ayres and Braithwaite (n 76); Black, 'Constitutionalising Self-Regulation' (n 92).

[170] Ayres and Braithwaite (n 76) 101. John Armour and David Skeel argue that the UK Takeover Panel was an example of 'coerced' or 'enforced' self-regulation because it emerged 'under a clear governmental threat of intervention.' See Armour and Skeel (n 71) 1764.

with an interest in the rules have the opportunity to comment. Finally the firm supervises its own compliance by creating an independent group within the firm that is ultimately supervised by the regulator.[171]

Why do firms comply with regulation? Regulatory scholars have presented taxonomies dividing firms into 'amoral calculators' or 'economic actors' who comply only out of profit-seeking self-interest, 'political citizens' who generally wish to comply, and 'incompetent organisations' who lack the technical know-how or institutional capacity to comply.[172] For example, in Ayres and Braithwaite's responsive regulation framework, regulators should begin with a cooperative approach relying on persuasion and education.[173] If cooperation fails, the 'motivational assumption' should change from the firm being a virtuous actor to a rational actor. Regulators should then turn to a deterrence approach relying on reward (rather than voluntary compliance) and punishment. If punishment fails to achieve compliance, the firm is an 'incompetent or irrational actor' and regulators should prevent the firm from operating.[174]

The virtuous to rational to incompetent actor taxonomy may not be fully satisfactory; it relies on assumptions such as calculable cost-benefits of compliance, and the notion that some firms behave as political citizens. Julia Black suggests that 'how people respond to regulation is more complex than a binary "comply" or "not comply" response'; instead, individuals and

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[171] Braithwaite (n 114) 1470–1471.

[172] Robert A Kagan and John Scholz, 'The Criminology of the Corporation and Regulatory Enforcement Styles' in K Hawkins and JM Thomas (eds), *Enforcing Regulation* (Kluwer-Nijhoff 1984). For helpful presentations of Kagan and Scholz's arguments, see Tetty Havinga, 'Private Regulation of Food Safety by Supermarkets' (2006) 28 Law and Policy 515, 520. See also Neil Gunningham and Robert A Kagan, 'Regulation and Business Behavior' (2005) 27 Law and Policy 213, 213.

[173] John Braithwaite, 'Rewards and Regulation' (2002) 29 Journal of Law and Society 12, 20.

[174] ibid 21.

institutions respond to regulation based on a web of factors including expected profit, normative values, social network and peer expectations, perceived fairness and experience of the process of interacting with the regulator, and capacity to adhere to the rules.[175]

The ability of securities regulators to implement compliance or deterrence-based models is dependent to a significant degree on regulatory resources. Howell Jackson and Mark Roe have demonstrated that public enforcement (i.e., the amount of budgetary resources by GDP and staffing levels per million of the population) significantly correlates with the size of capital markets and volume of trading.[176] Stronger public enforcement allows regulators to write more tailored rules and more actively monitor the market, and to more thoroughly investigate misconduct and initiate enforcement actions in response to rule violations.[177] For example, studies have shown that increases to the SEC's budget lead to increases in the compliance of market participants.[178] Budgetary resources and staffing can therefore have an influence on the achievement of regulatory objectives and the type of regulatory model. For example, securities regulators in civil law jurisdictions tend to rely on bright-line, ex ante rules, which may be related to lower budgets and staffing levels (reducing the need for high ex post enforcement).[179] Conversely, the relatively higher reliance on ex post rules in common law jurisdictions may result from the higher budgets

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[175] Black, 'Reconceiving Financial Markets — From the Economic to the Social' (n 155) 416.

[176] Howell E Jackson and Mark J Roe, 'Public and Private Enforcement of Securities Laws: Resource-Based Evidence' (2009) 93 Journal of Financial Economics 207, 237.

[177] ibid 209. There is an established literature on the merits of private v. public enforcement in securities markets. See e.g., Howell E Jackson and Jeffery Y Zhang, 'Private and Public Enforcement of Securities Regulation' in Jeffrey N Gordon and Wolf-Georg Ringe (eds), *The Oxford Handbook of Corporate Law and Governance* (Oxford University Press 2018).

[178] Tim Lohse, Razvan Pascalau and Christian Thomann, 'Public Enforcement of Securities Market Rules: Resource-Based Evidence from the Securities and Exchange Commission' (2014) 106 Journal of Economic Behavior & Organization 197, 198.

[179] Jackson and Roe (n 176) 235.

and staffing, which are needed to support the increased levels of ex post public enforcement and rule adjudication.[180]

F. *Advantages and disadvantages of self-regulation in securities markets*

Are stock exchanges better suited than governments to regulate secondary trading markets? In the context of private ordering in financial markets, entrusting stock exchanges with authority to make and enforce rules concerning the public interest gives rise to important considerations of public policy, notable among them is whether exchanges have appropriate incentives or face conflicts of interest that hinder the purpose of delegating authority to them in the first instance.[181] The answer to the question on whether exchanges are better suited than governments to regulate depends on the stance taken in regard to the trade-off between greater information and regulatory capacity (expertise, responsiveness, etc.) versus incentive compatibility. Academics have suggested additional 'possible advantages' of exchanges over governments as regulators such as: incentives, flexibility, expertise, and lower regulatory costs.[182] Stock exchanges, and all SROs, possess better information about their activities and the particular needs of the market than public regulators. Exchanges can create and revise rules more quickly than governments, and may also possess superior expertise because they have better information and understanding of the market.[183]

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[180] ibid.

[181] Gadinis and Jackson describe potential conflicts of interest as 'the major weakness of the [stock exchange] self-regulatory model…' See Gadinis and Jackson (n 103) 1252–1253. See also Macey and O'Hara (n 38); Mahoney (n 36); Paul G Mahoney, 'Public and Private Rule Making in Securities Markets' (2003); Chris Brummer, 'Stock Exchanges and the New Markets for Securities Laws' (2008) 75 University of Chicago Law Review 1435.

[182] Robert B Thompson, 'Collaborative Corporate Governance: Listing Standards, State Law, and Federal Regulation' (2003) 38 Wake Forest Law Review 961, 972–973.

[183] Self-regulatory exchanges face fewer procedural constraints than government regulators when making rules. Additionally, SROs can engage in more varied forms of rule-making than government regulators, such as 'enforcing legal standards [and] establishing ethical standards and best practice principles.' See Gadinis and Jackson (n 103) 1251–1252.

Assuming there is no incentive compatibility problem, delegating rule-making authority, supervision and enforcement to stock exchanges results in a lower cost to the public than government regulation.[184] The main area of the debate, however, is still unsettled and concerns whether exchanges have superior incentives than governments to create and enforce listing rules.

The strongest argument for stock exchange regulation has been advanced by Paul Mahoney, who argues that exchanges possess 'superior incentives' to government bodies when it comes to regulating corporate governance rules, disclosure, as well as the broader set of exchange rules and standards.[185] Mahoney argues that regulatory competition between stock exchanges for listings provides exchanges with the strongest incentives to create efficient rules up to the point where the marginal benefit to investors of the rules equals the marginal cost to the exchange of supplying the rules.[186] Exchanges are incentivised to create efficient rules because these rules will maximise trading and listings revenue for the exchange and its owners, and because of this Mahoney argues that 'exchanges should be the primary writers and enforcers of rules relating to disclosure by listed companies, standards of conduct for member broker-dealers, and market structure.'[187] An additional argument in favour of exchange regulation is that governments have a

[184] This is because self-regulation is financed by the self-regulating group, as opposed to taxpayers. However, a purported lower cost assumes that there is no incentive compatibility issue. If government regulation is more costly to make and enforce, but the risk of systemic economic harm is lower, then the true regulatory cost of government regulation may be lower than exchange self-regulation.

[185] Mahoney (n 181) 1.

[186] Mahoney (n 36) 1459. In the researcher's view, this perspective unreasonably assumes that exchanges fully internalise all of the costs of rule production. For example, whereas governments may be able to internalise the costs of systemic harm resulting from lax rules, exchanges (and their shareholders) cannot internalise the costs of systemic harm.

[187] ibid 1455.

monopoly on the provision of securities regulation which may reduce public incentives to supply ideal regulation.[188]

Other scholars have raised issues with the premise that exchanges possess superior regulatory incentives, suggesting that competitive pressures with other trading venues weaken exchanges' incentives to enforce rules in the public interest.[189] The essence of this critique is that regardless of whether exchanges are incentivised to *create* efficient rules, they may not be incentivised to *enforce* them. The main enforcement tools exchanges possess are relatively heavy handed – suspending trading or de-listing a stock – and both of these actions reduce trading revenues for the exchange. Empirical studies have shown that the two main stock exchanges in the US rarely de-list firms for rule violations, and almost all de-listings are because issuers' share price drops too low, their market capitalisation is too low, their net assets are too low, or bankruptcy.[190] For this reason, Macey, O'Hara and Pompilio suggest that exchanges should not have broad discretion over delisting since delisting harms firms and investors while benefiting exchanges in the case of poorly performing firms.[191] Macey and O'Hara also think that exchanges should not regulate listing rules and trading rules because they may not possess strong incentives to enforce these rules, but that in the realm of market manipulation and insider trading, as well as

[188] See e.g., Roberta Romano, 'Empowering Investors: A Market Approach to Securities Regulation' (1998) 107 Yale Law Journal 2359.

[189] Jonathan R Macey, *Corporate Governance: Promises Kept, Promises Broken* (Princeton University Press 2008) 112. See also Macey and O'Hara (n 48) 580. '…self-regulation in today's environment is systemically dysfunctional. The SEC is pressuring the exchanges to engage in self-regulation… This phenomenon exhibits some of the characteristics of a 'race to the bottom' or a 'competition in laxity' in which competitive conditions provide incentives for exchanges to refrain from enforcing their own investor-protection rules for fear of losing market share.'

[190] See Jonathan Macey, Maureen O'Hara and David Pompilio, 'Down and Out in the Stock Market: The Law and Economics of the Delisting Process' (2008) 51 The Journal of Law and Economics 683.

[191] ibid 684.

technological rules relating to 'operational efficiency of trade processing and trading capacity', exchanges have the right incentives to regulate.[192]

Furthermore, exchanges (and all private SROs), unlike government regulators, do not possess the strongest possible enforcement mechanism: criminal sanctions.[193] Marcel Kahan notes that because more enforcement 'increases the likelihood of detecting violations', which harms the reputational image of the exchange, exchanges may be incentivized *not* to detect misconduct.[194]

An additional reason exchanges may not have superior incentives to regulate – and perhaps the most important – is because of conflicts of interest. Most leading exchanges around the world have 'demutualised' since the late 1990s, leaving behind their historical non-profit mutual membership structures in favour of for-profit, publicly-listed corporate structures.[195] Demutualisation has increased competition between stock exchanges, 'enshrining profit maximization as the top priority of modern exchanges' and raising questions of how compatible shareholder interests' are with the public interest, and whether competition leads to 'anticompetitive behavior' (vis-à-vis brokers and competing trading venues) and laxity of enforcement.[196] Macey and O'Hara point out that exchanges face more frequent conflicts of

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[192] Macey and O'Hara, 2005, 583-590.

[193] Marcel Kahan, 'Some Problems with Stock Exchange-Based Securities Regulation' (1997) 83 Virginia Law and Business Review 1509, 1517. See also ibid.

[194] Kahan (n 193) 1518. Kahan writes: 'From the perspective of an exchange, the optimal image to convey to the public is that no violations of its rules occur, an image that is blunted by the discovery of violations, even if the violator is found and punished.'

[195] Gadinis and Jackson (n 103) 1257–1258. As a result of the potential conflicts of interest caused by demutualization, structural reform proposals have suggested increased separation of regulatory responsibilities from market operation, such as placing the regulatory branch of the stock exchange in a separate subsidiary corporation. See ibid 1263–1266.

[196] Gadinis and Jackson (n 103) 1259. Gadinis and Jackson note that while stock exchanges formerly prioritized the interests of their members, demutualized exchanges now prioritize shareholder interests. Shareholders 'have more

interests than regulators because so many of their rules influence competitors.[197] Roberta Karmel suggests that exchanges face conflicts of interest with the issuers they regulate, such as 'entering into a joint venture with a listed company' and then not enforcing its regulations, or that exchanges may 'behave in a discriminatory way toward a competitor.'[198] Karmel, writing prior to the NYSE and Nasdaq becoming publicly owned corporations, hypothesizes that demutualised exchanges would *not* have reduced incentives to 'police their markets for manipulation' because ownership would extend 'beyond those concerned with making markets.'[199] Fox and Rauterberg point out further conflicts of interest stemming from US stock exchanges being tasked with creating Regulation NMS plans concerning the public dissemination of quotations. This arrangement creates 'intractable' conflicts of interests given that exchanges benefit economically from these rules, since Regulation NMS plans are also vitally important to the broker-dealers with whom stock exchanges compete.[200]

In sum, the heart of the 'superior incentives' inquiry revolves around the effects of cross-exchange regulatory competition, and whether competitive pressures to attract trading and listings strengthen or weaken exchanges' incentives to create efficient and investor protecting rules. If the

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leverage of an exchange they own than exchange members have traditionally had' because they can sell their shares when displeased, which may place more acute financial pressure on the exchange. Member-owned stock exchanges may have had an advantage resisting short-term pressure to maximise revenues or capitulate to the requests of listed companies because 'their future was tied with the future of the exchange' – members, unlike shareholders who can sell at any time, possessed strong incentives to uphold the long-term reputation of the exchange. See ibid 1259–1260.

[197] Macey and O'Hara, 2005, 582-583.

[198] Roberta S Karmel, 'Turning Seats Into Shares: Cause and Implications of Demutualization of Stock and Futures Exchange' (2002) 53 has 367, 422.

[199] ibid 423.

[200] 'The conflicts of interest resulting from exchanges' dual roles as regulators and profit-making businesses that interact with those they regulate are both many and intractable.' See Fox and Rauterberg (n 8) 802.

quality of investor protecting rule-making and supervision diminishes in the absence of public body oversight, more government regulation is warranted.

G. *How regulatory competition can lead to a race to the bottom*

If stock exchanges do not possess appropriate incentives to create regulation that achieves the desired regulatory goal, private ordering in exchanges could theoretically lead to a 'race to the bottom', which is a 'movement toward the least common denominator' of regulatory standards.[201] William Cary, describing regulatory competition in the US between states for incorporations, suggested that Delaware exemplified a race to the bottom because it adopted lax corporate charter requirements in order to attract incorporations and increase revenue.[202] Cary advocated federal rule-making as the solution to preventing a race to the bottom between states. Some scholars, such as Ralph Winter, an early critic who contested Cary's portrayal of a race to the bottom in the market for corporate charters, would assert that a race to the bottom is not inherently undesirable because 'a "lax" legal system is neither intuitively nor empirically inferior to a stringent one' since regulation imposes transaction costs on the regulated parties.[203]

The competition for listings on an exchange is analogous in some respects to interstate competition for corporate charters.[204] One perspective is that competition in the market for listings

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[201] See W Cary, 'Federalism and Corporate Law: Reflections Upon Delaware' (1974) 83 Yale LJ 663 at 663. One of the first to explore the notion of a race to the bottom in the context of regulatory standards Richard Revesz. See Richard Revesz, 'Rehabilitating Interstate Competition: Rethinking the Race-to-the-Bottom Rationale for Federal Environmental Regulation' (1992) 67 New York University Law Review 1210.

[202] Cary at 684.

[203] RK Winter, 'State Law, Shareholder Protection and the Theory of the Corporation' (1977) 6 J of Legal Studies 251 at 258; see also R Romano, The Genius of American Corporate Law (OUP 1993) 14-31.

[204] Kahan (n 193) 1511. Kahan writes: 'Thus, the question of whether companies will list their stock on the exchange that adopts securities regulations that maximize the value of the stock resembles the question of whether companies will choose a state of incorporation and adopt charter provisions that maximize the value of the stock.'

would increase, not decrease the quality of regulation on exchanges, resulting in a race to the top. Drawing on the corporate charter competition literature, Roberta Romano advocates a 'market approach to securities regulation' whereby US states compete for securities listings regimes (e.g., registration, continuous disclosure rules, antifraud rules), and this competition results in a race to the top.[205] Regulatory competition is driven by investor preference, the assumption being investors are informed and can discount the price of their investment to compensate for less investor protection.[206] Romano suggests that if there was investor demand for more disclosure information, this demand would be 'matched by a supply of, mandated disclosure regulation in a regime of state competition for securities regulation'.[207] To the extent that competition between stock exchanges for listing regimes resembles inter-state competition for securities regulation, unfettered exchange rule-making could result in a race to the top regardless of whether the rules become stricter or more lax because rule supply matched by investor demand is presumed to be efficient.

Alternatively, competition in the market for listing could lead to a race to the bottom and decline in regulatory standards. Amir Licht conducts an insightful study of stock exchange competition and a race to the bottom on the Tel Aviv Stock Exchange (TASE). Licht suggests that because the TASE is a 'regulatory price-taker', it could not raise standards beyond the comparatively lax disclosure and governance rules for foreign issuers on NYSE and NASDAQ ('regulatory price-setters') in order to attract listed Israeli companies to cross-list on the TASE.

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[205] Romano (n 188) 2361. Romano advocates for regulatory diversity, and writes that 'it only makes sense to advocate a policy of regulatory diversity if the competition results in regimes that benefit investors (that is, it is a race for the top)'. See ibid 2425. Romano does not suggest that state competition should extended to regulating market professionals.

[206] Romano (n 188) 2366. This results in higher costs of capital for issuers incorporated in the jurisdiction with lax investor protection.

[207] ibid 2368.

Licht concludes that the TASE had no option but to 'piggyback' on lax US securities rules for foreign issuers, and that this led to a 'ride to the bottom'.[208] A race to the bottom theory on AIM would predict that in the face of competition with other exchanges, the quality of regulation on AIM would decline over time: e.g., continuous disclosure rules on AIM might become less informationally demanding to attract listings from issuers seeking a lower cost regulatory regime. This inquiry – has AIM avoided a race to the bottom in the quality of regulation? – is taken up later in the dissertation and forms part of the principal analysis of Chapter Five.

SECTION V Conclusion

Public equity markets have evolved considerably since the launch of AIM 25 years ago. Companies have more choice to list on stock exchanges or 'regulated markets' like the LSE, or to obtain admission to trading on MTFs or ATSs like AIM, and their securities are traded in an ever-increasing number of lit and dark trading venues. In this environment of increased market fragmentation, stock exchanges rely more on data and information fees and less on listing and trading fees for revenue. However, their core business remains providing listing and trading services to issuers, since the value of the data stock exchanges sell depends on the integrity of their markets and the quality of their core listing and trading services. Stepping back to frame the role of stock exchanges within global securities markets, exchanges' primary economic functions are to provide liquidity, act as a reputational bonding mechanism to the companies that list, reduce the transaction costs of trade through standard form contracts, and monitor the market.

This chapter has analysed in detail an important preliminary question that is often overlooked in the field of securities regulation: *What is regulation?* If securities regulation only

[208] Amir Licht, 'David's Dilemma: A Case Study of Securities Regulation in a Small Open Market' (2001) 2 Theoretical Inquiries in Law 1, 3–4.

consists of codified legally binding obligations, there is little need to observe market practice beyond formal compliance with the law. On the other hand, this chapter has suggested that another valid conception of securities regulation includes both codified non-legally binding obligations (e.g., soft law guidance documents) as well as norms and other forms of market practice when there is empirical support for their existence and influence. This discussion is integral to the investigation of how norms and reputational incentives contribute to AIM self-regulation in Chapter Five.

Finally, this chapter has parsed the nuances between different forms of self-regulation – e.g., whether private rule-making and enforcement is mandated or coerced by government, or whether it is wholly voluntary. In contexts like AIM where extensive private rule-making occurs in a framework of government monitoring and sanctioning, private ordering is not 'pure' (in the Maghribi traders' sense), but the form of private ordering helps understand the nature of self-regulation and how it occurs. Governments allow self-regulation to remedy market failures and when the cost of public regulation is high, although there is a risk that the private self-regulator may not have incentives to act in the public regulatory interest, which typically includes investor protection, market efficiency, and minimising systemic risk. It is possible that competition between securities trading venues in the market for listings may align self-regulatory incentives with the public interest, but it is also possible that a race to the bottom in regulatory quality may result. This inquiry, as played out on AIM, remains the focus of the following chapters.

CHAPTER THREE

METHODOLOGY

Chapter Three describes the design of the multimethod research in the core chapters of this dissertation and justifies the focus on AIM as a single-case study that can yield insightful and generalizable findings about self-regulation in securities markets. This chapter's main goal is to provide the necessary background to understand *why* certain research approaches are adopted in the dissertation – such as why conducting qualitative interviews has been integral to a fuller understanding of securities regulation – as well as *how* the data in each chapter were gathered.[1] An additional goal of this chapter is to link more conventional doctrinal research with other methods to achieve a broader understanding of what may constitute 'regulation' in the context of AIM.

The chapter proceeds as follows. Section I discusses the epistemology underlying the research methods utilised, in order to understand the design of the study and identify its strengths and limitations. Multimethod research involving case studies is then briefly described, highlighting why the methods chosen are appropriate to answer the overarching research question. Section I concludes with a table summarising, for each chapter, the sub-research questions, methods, and data relied upon. Sections II, III, and IV describe the research methods employed in the core chapters of the dissertation in greater detail. The review in Chapter Two identifies seminal

[1] There is less emphasis on research methods in law than in other social sciences. This may stem from the debate within the legal academy on whether doctrinal legal scholarship constitutes a separate method. As Richard Posner suggested: 'Suppose law really is not a field with a distinctive methodology but is instead, as it appears to be, a mixture of applied logic, rhetoric, moral and political philosophy, economics, and familiarity with a specialized vocabulary and a particular body of texts, practices, and institutions. Why should this cause rational distress to anyone?' Richard A Posner, 'Conventionalism: The Key to Law as an Autonomous Discipline?' (1988) 38 University of Toronto Law Journal 333, 345. This chapter does not engage with the debate on the diminished importance of methodology in law, whether for better (because superfluous) or worse (less rigour and replicability).

literature using a snowball method, Chapter Four relies on conventional doctrinal legal analysis, Chapter Five employs qualitative interviews and a case study method to identify norms and reputational incentives that help to informally regulate the market, and Chapter Six adopts a leximetric approach, which allows for quantitative analysis of qualitative legal documents. Chapter Six requires the greatest degree of methodological detail because of the method's newness and how it has been adapted to the study. While most leximetric studies code legal rules into variables and analyse snapshots in time, this study is one of the first to code revisions to rules over time in order to understand the dynamics of how rule change occurs. Section V concludes by describing some of the methodological challenges faced by the researcher. The research context – including the extreme reticence of interview participants to speak with the researcher, the need to amend ethics forms to appear less daunting, and the challenge of reviewing hundreds of rules over more than two decades – influenced the study design in unexpected ways.

SECTION I Research ideology, methods, and questions

A. *Ideology and methods*

Research methodology is a consequence of one's *ontology* (what is the nature of reality?) and *epistemology* (how can this reality be known?).[2] In the context of this dissertation, these questions could be framed as 'What are law and regulation?', and 'How can the researcher acquire knowledge of law and regulation?' Prior to identifying a research *method*, the ideology underlying the inquiry should be set out.[3] The intuition is that legal research, like other forms of research,

[2] See W Lawrence Neuman, *Social Research Methods: Qualitative and Quantitative Approaches* (7 ed, Pearson Education 2014) 93. For a discussion of 'legal epistemology', which concerns 'what it is to have knowledge of law', see Geoffrey Samuel, *Epistemology and Method in Law* (Taylor & Francis Group 2003) 13.

[3] There are differing perspectives on the role of theory in research. Andrew Sayer's foundational work challenged the supposedly clear distinction between theory and fact. Empirical testing is 'theory-laden' because theory influences observations, and 'naïve objectivism' accepts facts uncritically as speaking for themselves. See Andrew

begins with 'ideological preconceptions' whether or not these are explicitly mentioned or assumed.[4] Without wading into the debate between legal formalism (judges rationally arrive at a predictable and correct decision) and legal realism (judges base decisions on ad hoc facts and unstated normative preferences),[5] the author takes the position that law develops in value-laden contexts and that identifying theoretical presuppositions helps others to interpret one's work.

Rather than fully adopting positivism (reality is objective and empirically testable) or a relativist perspective such as constructivism (reality is socially constructed and only subjectively knowable), regulation scholars are increasingly turning to 'critical realism' as a theoretical rationale that can account for both objective and subjective knowledge.[6] Critical realism not only recognises that subjective theory and concepts are required to understand reality, but that reality is objective and exists independently. Theories have explanatory and predictive power, while some are more fallible than others, and all theories arise within perceptions of understood reality.[7] It is not necessary for the purposes of this dissertation to examine critical realism at length, but it should

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Sayer, *Method in Social Science:* (2nd edn, Taylor & Francis Group 1992) 45–46. Positivism holds that 'the role of theory is to order, explain and predict facts', in which case they can be conclusively tested, whereby constructivism holds that theory is a construction 'creating imagined relations between phenomena.' Critical realism holds that 'reality has an *objective existence* but that our knowledge of it is conceptually mediated: facts are theory-*dependent* but they are not theory-*determined*.' Berth Danermark and others, *Explaining Society: An Introduction to Critical Realism in the Social Sciences* (Taylor & Francis Group 2001) 15, 116. Humorously, the renowned late legal philosopher (and legal realist) Felix Cohen remarked that 'prejudice… is the term we use to describe our opponent's facts; fact is the term we use to describe our own prejudices.' Grant Gilmore, 'Legal Realism: Its Cause and Cure' (1961) 70 The Yale Law Journal 1037, 1038.

[4] Rob van Gestel and Hans-Wolfgang Micklitz, 'Why Methods Matter in European Legal Scholarship' (2014) 20 European Law Journal 292, 313.

[5] Gilmore (n 3) 1037–1038; Brian Leiter, 'Legal Formalism and Legal Realism: What Is the Issue?' (2010) 16 Legal Theory 111, 111–112.

[6] Ibolya Losoncz, 'Methodological Approaches and Considerations in Regulatory Research' in Peter Drahos (ed), *Regulatory Theory: Foundations and Applications2* (ANU Press 2017) 81–82.

[7] Danermark and others (n 3) 116–117.

be noted that the researcher adopts a critical realist theory perspective valuing objective knowledge (e.g., using quantitative financial data to assess market health) and subjective knowledge (e.g., obtaining interviewees' perceptions of market health).

B. *Multimethod research*

Research methods flow from theoretical presuppositions,[8] and a 'multimethod' approach integrating quantitative and qualitative methods naturally results from both critical realism and the interdisciplinary nature of law and economics. *Multimethod* can be distinguished from *mixed methods* approaches, despite a lack of terminological clarity and the absence of accepted definitions in the literature.[9] Multimethod research refers to the use of multiple research approaches 'in parallel or sequence [which] are not integrated until inferences are being made.'[10] It is the umbrella term to describe when multiple qualitative methods, quantitative methods, or a mixture of both are employed. In contrast, mixed methods research requires qualitative and quantitative methods to be *integrated* in the study design in a particular way.[11] The research design

[8] 'Methodology is a tool for testing theory, and choices among methodologies must be theoretically driven.' See LB Nielsen, 'The Need for Multi-Method Approaches in Empirical Legal Research' in Peter Cane and Herbert M Kritzer (eds), *The Oxford Handbook of Empirical Legal Research* (OUP 2010) 971.

[9] M Teresa Anguera and others, 'Revisiting the Difference between Mixed Methods and Multimethods: Is It All in the Name?' (2018) 52 Quality & Quantity 2757, 2758.

[10] ibid 2759. cf Nielsen (n 8) 953. Nielsen writes: 'Put most simply, multi-method research is any research that uses more than one research technique or strategy to study one or several closely related phenomena.'

[11] Anguera and others (n 9) 2760, 2765. There is a lack of consensus of when or how integrating methods should occur. Some definitions of mixed methods research 'indicate that mixing occurs in the data collection stage', others suggest combining qualitative and quantitative methods in the analysis, and still others suggest the integration occurs all throughout. See R Burke Johnson, Anthony J Onwuegbuzie and Lisa A Turner, 'Toward a Definition of Mixed Methods Research' (2007) 1 Journal of Mixed Methods Research 112, 122.

For example, a mixed methods design could be 'convergent' (where qualitative and quantitative results are analysed in tandem), 'explanatory' (where qualitative results determine what quantitative data should be collected and how it is analysed), or 'exploratory' (where qualitative results are used to formulate variables for quantitative data). See John W Creswell, 'Revisiting Mixed Methods and Advancing Scientific Practices' in Sharlene Nagy Hesse-Biber and R Burke Johnson (eds), *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry* (Oxford

employed in this dissertation is multimethod because it relies on qualitative and quantitative data and methods, but does not require the data and methods to be integrated or combined in a particular or predetermined sequence.

The decision to employ a multimethod approach stems from the author's view, common in the socio-legal literature, that regulatory research should adopt methods which measure both objective phenomena and subjective experience because regulation itself involves 'a number of leverage points, such as changes in law and norms, changes in networks and protocols or changes in relationships and behaviour'.[12] The importance of analysing both objective reality and subjective understandings of the objective reality is also affirmed by academics in the 'functional approach to law and economics', which sits between the more positivist Chicago school of law and economics and normative Yale school approach.[13]

An advantage of this multimethod study design is 'triangulation', whereby multiple sources of data, forms of analysis, and findings are used to corroborate each other, increasing the certainty of the study's findings.[14] 'Data triangulation' aims to reduce possible bias in data sources, and 'methodological triangulation' aims to reduce bias or compensate for weaknesses in any single

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University Press 2016) 59–60, 63–64. Creswell emphasises that integrating qualitative and quantitative methods yields a unique, systematic method, and that 'mixed methods is not adding qualitative data to a quantitative design.'

[12] Losoncz (n 6) 79.

[13] Francesco Parisi, 'Positive , Normative and Functional Schools in Law and Economics' (2004) 18 European Journal of Law and Economics 259, 266. Parisi writes that 'The functional approach to law and economics is informed by an explicit recognition that whatever social reality we seek to explain at the aggregate level, ought to be understood as the result of the choices and actions of individual human beings who pursue their goals with an independently formed understanding of the reality that surrounds them.' For a description of the Chicago (positivist), Yale (normative), and Virginia (functional) schools of law and economics, see ibid 264–265.

[14] For a discussion on the development of 'triangulation', beginning with Campbell and Fiske's 'multiple operationalism' in the 1950s to Webb et al. (1966) coining the term, see Johnson, Onwuegbuzie and Turner (n 11) 114.

research method.[15] Triangulation is helpful because converging findings support each other, whereas diverging findings indicate inconsistencies in the theory or results.[16] For example, the veracity of interviewees' responses to the question 'What is your perception of enforcement of the rules by AIM Regulation?' can be confirmed or undermined by AIM disciplinary and enforcement data published by the Exchange.

C. *Research question*

This dissertation was motivated by the observation that while many leading stock exchanges make and enforce their listing rules, the appropriateness of self-regulation is often assumed. Given the importance of stock exchange rules to public securities markets, and consequently to society, the motivating inquiries underlying this dissertation could be framed as: 'How much private regulatory authority should governments permit stock exchanges to have?', and 'What is the optimal mix of public and private regulation for stock exchanges and other public listing and trading venues?'. Neither this dissertation, nor any sole piece of work, could settle such a longstanding and contentious inquiry. Instead, this dissertation seeks to fill in a piece of the puzzle by providing new evidence and analysis of self-regulation on a single stock exchange, AIM. It is hoped that the evidence and findings presented about self-regulation on AIM will provide generalizable insights that other researchers can draw upon when tackling similar inquiries whether from a similar or different perspective.

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[15] These terms where developed in the 1970s by Norman Denzin. See Norman K Denzin, *The Research Act: A Theoretical Introduction to Sociological Methods* (Praeger 1978) 14; Johnson, Onwuegbuzie and Turner (n 11) 114–115.

[16] Johnson, Onwuegbuzie and Turner (n 11) 115.

Within this background, the overarching research question of this dissertation is ‘How do self-regulation and reputation interact on AIM?’. A thorough answer requires this question to be broken down into further sub-questions, illustrated below in *Table 3.1*, which provides a summary of methods and data presented in this chapter.

TABLE 3.1: OVERVIEW OF RESEARCH METHODS AND DATA

Sub-questions	**Research method**	**Data**
Chapter Two		
• What is ‘self-regulation’? • What is the function of stock exchanges within securities markets? • What are the objectives of securities regulation?	• Snowballing method for literature reviews • Law and economics analysis[17]	• Journal articles, books, and academic commentary • UK and EU company and securities legislation, regulations, and case law (‘Relevant Legal Sources’)
Chapter Four		
• Is AIM an illustrative case of private ordering, or could its self-regulation be characterised as public law?	• Legal doctrinal method	• Relevant Legal Sources (predominantly EU and UK legislation, and English case law) • Publicly available copies of the AIM Rules for Companies, AIM Rules for Nominated Advisers (Nomads), and AIM Disciplinary Procedures and Appeals Handbook (‘AIM Rules’)
Chapter Five		*Qualitative*
• Has AIM avoided a ‘race to the bottom’ in the quality of regulation? • How do reputational incentives and norms contribute to self-regulation on AIM?	• Case study method • Law and economics analysis	• Non-publicly available, archival records of the AIM Rules from 1995 to 2005 • Anonymized interview data (transcriptions and notes) with stakeholders such as directors, Nomads, brokers, etc. • AIM Rules, publicly available disciplinary notices, and AIM-related publications by the LSE • Relevant Legal Sources
		Quantitative
		• Publicly available financial market data on firm market capitalisation,

[17] See Section III(A) on the distinction between ‘law and economics’ when referring to the subject area or in the methodological sense. Used here in this latter sense, law and economics refers to the analytical approaches encompassed in the ‘economic analysis of law’ and ‘rational choice approach to law’.

		funds raised, trading data, etc. ('Financial Market Data') • Hand collected database of Nomad and broker statistics (compiled from publicly available regulatory news releases and historic Nomad registers) • Hand collected database of disciplinary and enforcement statistics (compiled from publicly available disciplinary notices)
Chapter Six • How do rules evolve over time on AIM? • What can the observed rule revisions tell us about the incentives of the Exchange as a self-regulatory actor?	• Leximetrics • Law and economics analysis	• Hand collected database of all material revisions to the AIM Rules from 1995-2020 (compiled from archival and publicly available AIM Rules) • Interactive visualizations of data prepared using Tableau software • Journal articles, books, and academic commentary • Relevant Legal Sources

SECTION II Research methods in Chapters Two and Four

A. *Chapter Two: snowballing method*

Systematic literature reviews are typically conducted by searching databases according to specific inclusion and exclusion criteria,[18] or by the 'snowballing' method, whereby a starting set of key sources is used to identify the relevant literature. Backward snowballing involves reviewing the citations from the initial set of articles (or books or legal cases) to discover additional sources. The citations of these older sources are then reviewed, and the additional citations are again reviewed,

[18] Systematic literature reviews are 'a method of summarizing the results of prior literature on a research question', and are intended to 'reduce actual or perceived bias' in selection of the articles or judicial decisions. See William Baude, Adam S Chilton and Anup Malani, 'Making Doctrinal Work More Rigorous: Lessons from Systematic Reviews' (2017) 84 University of Chicago Law Review 37, 38, 44.

and this is repeated until no new relevant sources are identified.[19] In contrast, forward snowballing searches for more recent sources that have cited the articles in the starting set, then reviews which additional sources have cited these newer sources, and so on.[20]

Forward and backward snowballing methods were used to identify many, but not all, of the literature review sources in Chapter Two. Unlike conventional snowballing methods, a small starting set of articles was not identified for the initial sample. Instead, the researcher began with a longer list of academic articles and books compiled by searching via the online legal database HeinOnline for leading European and North American corporate and securities law scholars in the fields of financial regulation or corporate governance.[21] Many additional sources were added throughout the process of writing the dissertation as new inquiries emerged and new authors were discovered. The literature review in Chapter Two is not intended to exhaustively canvass the field of law and economics. Instead, it includes both seminal and recent works from a diverse set of literature – on stock exchanges, securities regulation, regulatory studies, and private ordering – in order to provide the necessary background to the remainder of the dissertation. Chapter Two analyses and synthesizes relevant literature according to the descriptive law and economics approach described at Section III(A) below.

[19] Claes Wohlin, 'Guidelines for Snowballing in Systematic Literature Studies and a Replication in Software Engineering', *Proceedings of the 18th International Conference on Evaluation and Assessment in Software Engineering* (Association for Computing Machinery 2014) 2–4.

[20] ibid.

[21] The researcher relied on Brian Leiter's corporate law scholar citation rankings to identify leading American academics. See Brian Leiter, 'Twenty Most-Cited Corporate Law & Securities Regulation Faculty in the United States, 2010-2014 (Inclusive)' (2016) <http://leiterlawschool.typepad.com/leiter/2016/05/twenty-most-cited-corporate-law-securities-regulation-faculty-in-the-united-states-2010-2014-inclusi.html>.

B. *Chapter Four: legal doctrinal method*

Chapter Four relies on the legal doctrinal method. Legal doctrine can be understood as synthesizing and analysing 'legal concepts and principles of all types – cases, statutes, and rules'.[22] The doctrinal method therefore involves first identifying legal sources, then second applying doctrinal techniques such as inductive or deductive legal reasoning, or reasoning along the principle of *stare decisis*.[23] It is an inward-looking method because it analyses the law using words and concepts that derive their meaning from the law, rather than outside the law.[24] The nature and challenges of doctrinal legal research are perhaps best summarised by the Council of Australian Law Deans:

> Doctrinal research, at its best, involves rigorous analysis and creative synthesis, the making of connections between seemingly disparate doctrinal strands, and the challenge of extracting general principles from an inchoate mass of primary materials. The very notion of 'legal reasoning' is a subtle and sophisticated jurisprudential concept, a unique blend of deduction and induction, that has engaged legal scholars for generations…[25]

The legal sources analysed at length in Chapter Four are predominantly English cases relating to public law on the doctrine of amenability to judicial review. This doctrine in English law examines when decisions, even those made by private bodies, have a sufficiently 'public element' to attract

[22] Terry Hutchinson and Nigel Duncan, 'Defining and Describing What We Do: Doctrinal Legal Research' (2012) 17 Deakin Law Review 83, 84–85.

[23] ibid 111.

[24] Stephen A Smith, 'Taking Law Seriously' (2000) 50 University of Toronto Law Journal 241, 241, 255. According to Stephen Smith, doctrinal legal research 'is to examine the law using language, concepts, and techniques that are similar to those employed by (and in) the courts.' Doctrinal analysis 'adopts language and concepts that are internal rather than external to the law.' Mike McConville and Wing Hon Chui describe the goal of 'black-letter' legal research 'to systematise, rectify and clarify the law on any particular topic by a distinctive mode of analysis to authoritative texts that consist of primary and secondary sources.' Mike McConville and Wing Hong Chui, *Research Methods for Law* (Edinburgh University Press 2007) 4.

[25] Council of Australian Law Deans, 'Statement on the Nature of Legal Research' (2005) <https://cald.asn.au/wp-content/uploads/2017/11/cald-statement-on-the-nature-of-legal-research-20051.pdf>. Quoted at Hutchinson and Duncan (n 22) 105.

administrative law principles of procedural fairness (e.g., the absence of reasons or presence of bias) or substantive fairness (e.g., the decision is rationally made). Chapter Four also analyses European and UK legislation, academic commentary, and the AIM Rules.

SECTION III Research methods in Chapter Five

A. *Law and economics*

Chapter Five relies upon 'the methodology of law and economics'.[26] When described as a methodology rather than a subject area, 'law and economics' commonly refers to two ways of analysing law: 1) 'economic analysis of law',[27] and 2) 'the application of the rational choice approach to law.'[28] The first approach analyses law through the lens of economic efficiency.[29] Positive economic analysis of law applies economic models to analyse the law, whereas normative analysis asks how laws can correct 'market failures' – i.e., economic inefficiencies stemming from non-competitive market outcomes – or asks how the law can attain normative goals other than efficiency.[30] The second approach is not directly concerned with 'economic' subject matter per se,

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[26] Alessio M Pacces and Louis Visscher, 'Law and Economics - Methodology' in Bart Van Klink and Sanne Taekema (eds), *Law and Method: Interdisciplinary Research Into Law (Politika)* (Mohr Siebeck 2011) 85.

[27] Gary S Becker and Richard A Posner, *The Future of Law and Economics*, vol 1 (Francesco Parisi ed, Oxford University Press 2017).

[28] Pacces and Visscher (n 26) 86.

[29] Under the first fundamental theorem of welfare economics, competitive market equilibria generate Pareto efficient allocations (after making certain assumptions about the absence of transactions costs, information asymmetries, and price-taking). See generally Kenneth Arrow and Gerard Debreu, 'Existence of an Equilibrium for a Competitive Economy' (1954) 22 Econometrica 265. For a description of other conceptions of 'efficiency', such as Kaldor-Hicks efficiency or wealth maximisation, see Brian H Bix, 'Moral Philosophy and Law and Economics' in Francesco Parisi (ed), *The Oxford Handbook of Law and Economics: Volume 1: Methodology and Concepts* (Oxford University Press 2017) 289–290.

[30] Thomas J Miceli, 'Economic Models of Law' in Francesco Parisi (ed), *The Oxford Handbook of Law and Economics: Volume 1: Methodology and Concepts* (Oxford University Press 2017) 13. Pacces and Visscher (n 26) 93.

but instead applies rational choice theory to any area of law to predict and explain human behaviour.[31] It asks how changes in the law affect the incentives (utility function) of rational (utility maximising) actors.

To summarise, positive economic analysis of law employs quantitative economic models to explore the causal effects of legal rules, and normative analysis evaluates the desirability of legal rules based on economic efficiency or some other objective.[32] Some would also categorise 'descriptive law and economics' as distinct from the positive and normative methodological approaches. A descriptive approach seeks 'to *describe* legal rules, judicial decisions or legal institutions using the language of economics', rather than *predicting* legal rules (positive analysis) or *prescribing* legal rules (normative analysis).[33] This dissertation draws upon the normative analysis of law and descriptive law and economics approaches.

B. *Case study method*

Chapter Five combines a case study method with economic analysis of law. Case study is an empirical research method (different from business school cases used for teaching purposes) that 'investigates a contemporary phenomenon (the "case") in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident.'[34] Case study design typically consists of articulating the case study questions and the

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[31] Pacces and Visscher (n 26) 86–87.

[32] Eli M Salzberger, 'The Economic Analysis of Law: The Dominant Methodology for Legal Research?!' (2007) Haifa Law Review 207, 218–219 <http://law.haifa.ac.il/images/din_udvarim/d_10.pdf>. Salzberger writes that normative analysis examines 'not what the legal rule is, or why it exists or what its effects are, but whether it is a good rule and what the desirable legal or constitutional arrangement or judicial outcome is.'

[33] ibid 218 (emphasis added). Salzberger makes the helpful distinction between description, prediction and prescription.

[34] Robert K Yin, *Case Study Research and Applications* (6th edn, SAGE Publications 2018) 15. Yin distinguishes the case study method from non-research case studies (e.g., teaching-practice case studies) that also contain valuable

underlying propositions behind them, defining the case, and setting out how the data will be analysed and the criteria for interpreting findings.[35]

Case studies are advantageous compared with other social science research methods when asking 'how' and 'why' questions concerning contemporary events.[36] The goal of case studies is generally not to make causal claims, but to provide new understanding about the application of a theory or concept with analytic generalizability.[37] Case studies can usefully complement other methods as part of a larger research study.[38]

AIM is ideally situated for the case study method because it presents a unique case of private ordering.[39] AIM has one of the highest degrees of self-regulatory autonomy among contemporary stock exchanges, is economically significant (having raised more than £5 billion/year on average in the past decade), and is the largest stock exchange for small and medium sized enterprises in Europe.[40] AIM's size and relatively high degree of private ordering strengthen the external validity of the case, increasing the generalisability of its findings.

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insights but 'may not be concerned with convention social science procedures—as in formally describing their methodologies.' See ibid 19. Yin's definition of case study research is widely acknowledged in the literature: see Helen Simons, *Case Study Research in Practice* (SAGE Publications 2009) 19–20 <https://methods.sagepub.com/book/case-study-research-in-practice>.

[35] Yin (n 34) 33–34.

[36] ibid 13.

[37] ibid 38.

[38] ibid 235.

[39] Single case studies are well suited to exemplar cases ('a conspicuously good example of something') or outlier cases ('something remarkable by virtue of its difference'). Gary Thomas, *How to Do Your Case Study* (2nd edn, SAGE Publications Ltd 2016) 3–4. The relatively high degree of self-regulatory autonomy makes AIM an exemplar case for studying private ordering in public securities markets.

[40] London Stock Exchange, 'Discussion Paper: AIM Rules Review (July 2017)' 4 <https://docs.londonstockexchange.com/sites/default/files/documents/aim-discussion-paper-july-2017.pdf>. See also the discussion at Chapter Four n (113) for a comparison of AIM to other SME growth markets in Europe.

Furthermore, AIM is a unique case study on how self-regulating securities markets evolve. AIM has been continuously regulated and operated by the Exchange since its inception in 1995. Financial market data has been published monthly from 1999, and iterations of the AIM Rules have been published since 2002. Single-case designs are particularly appropriate for longitudinal studies, and this data allows for AIM to be studied over a 25-year time period.[41] Finally, private ordering on AIM is a unique case because it exists in parallel with public ordering on LSE Main Market, whose rules are administered by the Financial Conduct Authority, a public regulatory agency.[42]

Conceiving AIM as both a financial market and regulatory ecosystem provides natural boundaries to define the case. The case boundaries are limited to financial market activity on AIM (e.g., trading and fundraising) and the Exchange's regulation of AIM from inception in June 1995 to June 2020. The Exchange's regulation of AIM includes both hard law (with statutory or contractually enforceable legal obligations) such as the listing rules, and soft law such as the conduct and perceptions of the market participants it regulates, limited to Nomads, AIM-listed companies, and investors.

Chapter Five asks two questions: 'Has AIM avoided a race to the bottom in the quality of regulation?', and 'How do reputational incentives and norms contribute to self-regulation on AIM?'. The proposition behind the first question is that analysing the quality of regulation on AIM over time yields insights into the efficacy of self-regulation. If the quality of regulation on AIM has not decreased over time, AIM may serve as a case study of responsible self-regulation in

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[41] Yin (n 34) 51.

[42] See discussion in Chapter Four, Section III(C), on the different regulatory contexts of AIM and the Main Market, as well as how the differing scope of public law obligations affects private ordering on both exchanges.

securities markets. The second question is concerned with *how* and *why* regulation on AIM has deteriorated or improved. Its underlying theoretical proposition is that the reputational incentives of key constituents or 'gatekeepers' – the Exchange, Nomads, and brokers – prevent comparatively lean regulation from racing to the bottom.

Chapter Five utilises qualitative and quantitative data. The first question evaluates regulation on AIM through the lens of normative economic analysis of law, and the data relied upon include the AIM Rules, Relevant Legal Sources, hand collected descriptive statistics, and Financial Market Data described at *Table 3.1* above.

The second question, examining the role of reputation and norms in securities regulation, fundamentally concerns social phenomena. It relies on interviews with a wide range of AIM stakeholders – company directors and managers, Nomad employees, institutional investors, retail investors, brokers, and service professionals such as lawyers. Thirteen informal discussions took place, and eight formal interviews were conducted in 2019 and 2020. Interviews were semi-structured, and a sample list of questions is provided in the Section I of the Appendix. Questions were tailored to the participant's background and sent in advance. For reasons of time constraint, typically only a sub-set of the questions were asked. At times different questions were included, based on the researcher's judgment of the flow of conversation. Interviews were documented either in the form of summary notes or transcriptions (when consent to record was given).

The case study does not seek to 'prove' the reputational theory underlying the second question, which is not strictly falsifiable. Instead, the case study develops an understanding of the mechanisms of reputational incentives and norms on AIM by analysing the interview data and assessing their accuracy through data triangulation (e.g., how consistent are interview responses with each other?) and methodological triangulation (e.g., how consistent are interview responses

with data from the law and economics analysis of regulation?). The criteria for interpreting the interview data are whether they provide indirect or direct evidence for the proposition that reputational incentives and norms contribute to self-regulation on AIM. For example, when asked why her company would not undertake certain permitted actions under the AIM Rules, one interviewee responded: 'Because of credibility. The market would think you have something to hide.' References to non-legal motivations for regulator-related conduct provide indirect support for the existence of some form of reputational incentive or norm. In other circumstances, typically when the conversation was short and time was running out, interviewees were asked direct questions about the presence of reputational incentives. For example, a Nomad employee was asked: 'How important is the perceived market reputation of your organisation in influencing demand for Nomad advisory services?' Responses to direct questions such as these can be interpreted more straightforwardly as supporting or contradicting the reputational theory in question. Lastly, the findings are assessed against rival theories to the underlying theory that the reputational incentives of gatekeepers prevent comparatively lean regulation from racing to the bottom. The rival theories were identified on the basis of being the most plausible alternatives in the researcher's judgment, and they are: 1) reputational incentives are negligible in securities markets and do not play a meaningful role on AIM, and 2) reputational incentives exist in securities markets and play a meaningful role on AIM, but not in the way theorized (preventing a race to the bottom). The same criteria for assessing the reputational theory are applied to the rival theories, i.e., observing whether there is direct or indirect evidence for the propositions, and examining the evidence from a law and economics perspective.

SECTION IV Research methods in Chapter Six

A. *Leximetrics*

Chapter Six employs a leximetric approach to code revisions to the AIM Rules from June 1995 to June 2020. The field of leximetrics – or 'the quantitative measurement of legal documents' – originated with Robert Cooter and Tom Ginsburg's 2003 study of the word length of legislation and judicial decisions in the EU.[43] Leximetric analysis tests theoretical claims by determining how empirically supported each theory's hypotheses are by the data.[44] Chapter Six undertakes a 'leximetric' study because the categorization and coding of the AIM Rules allows for quantitative analysis of legal documents.

For the quantitative data in leximetric studies to be reliable, the qualitative legal texts must be coded as consistently as possible. Choices must be made concerning whether to rely on text-based or opinion-based coding, whether to have multiple researchers coding, and whether to inductively or deductively develop the coding algorithm.

Texts have both manifest and latent content. Manifest content refers to the literal or explicit text, whereas latent content refers to the non-overt and non-explicit meaning contained in a text.[45] Text-based coding only accounts for manifest content. In leximetrics, text-based coding only

[43] Robert D Cooter and Tom Ginsburg, 'Leximetrics: Why the Same Laws Are Longer in Some Countries than Others' (2003) 1. Cooter and Ginsburg describe leximetrics as 'our term for the quantitative measurement of legal documents.' Leximetrics has also been defined as 'the process of translating legal materials, principally texts of statutes, decrees and judgments, into a form which can be used in statistical analysis.' See Zoe Adams and others, 'The CBR-LRI Dataset: Methods, Properties and Potential of Leximetric Coding of Labour Laws' (2017) WP 489 6 <https://www.cbr.cam.ac.uk/fileadmin/user_upload/centre-for-business-research/downloads/working-papers/wp489.pdf>.

[44] Adams and others (n 43) 8.

[45] James W Drisko and Tina Maschi, *Content Analysis* (Oxford University Press 2015) 3–4.

considers the 'law on the books', and measures the presence or absence of a law regardless of its enforcement or other non-textual factors that might affect the 'law in action'.[46] Conversely, opinion-based coding goes beyond manifest content and can capture the operation of the law in practice or a non-textually explicit feature of the rule. Opinion-based coding could include a graduated scale indicating the perceived efficacy of a law, or categorising of a rule into one of several subject matter categories.

Text-based and opinion-based coding have their respective strengths, but when the methods are combined in the same index 'it becomes impossible to disentangle how far a given score is caused by the content of the rule and how far it is determined by weaknesses in the enforcement or observance of the law.'[47] Endogeneity problems will result if law and practice are bundled in the same coding algorithm.[48] It is important that the method adhered to is applied systematically. In opinion-based coding, subjective perceptions must be made consistently (e.g., by the same researcher or centralized research team) to avoid introducing coding inconsistencies.[49] Holger Spamann, writing on coding inconsistencies in La Porta et al.'s Anti-Director Rights Index (ADRI), suggests that in order to enhance replicability and interpretation of results, coding classifications 'should eliminate subjective judgment as far as possible…'.[50]

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[46] Adams and others (n 43) 14. See Adams and others' discussion of text-based analysis capturing 'law in the books' v. 'law in action'.

[47] ibid 15.

[48] Holger Spamann, 'On the Insignificance and/or Endogeneity of La Porta et Al's 'Anti-Director Rights Index' Under Consistent Coding' (2006) Discussion Paper No. 7 12.

[49] Adams and others (n 43) 15.

[50] Spamann (n 48) 4.

B. *Consistent coding and measurement validity*

Unlike the ADRI, this study does not purport to create an index. The dataset on revisions to the AIM Rules over time is not an index or composite indicator like the World Economic Forum's Global Competitiveness Index. Composite indicators measure multi-dimensional concepts that are composed of multiple indicators or variables and sub-indicators: e.g., the concept of 'competitiveness' in the WEF Global Competitiveness Index is composed of indicators such as 'Institutions' and 'Ethics and Corruption', and these variables are composed of respective sub-indicators such as property rights and diversion of public funds, allowing for comparing or benchmarking the performance of countries in a certain concept. [51] Since an overall 'quality of regulation' score is *not* being created, the problem of unbundling how much a composite score is based on text-based as opposed to opinion-based coding is avoided.

The study relies on a combination of text-based coding and opinion-based coding. Most variables in the dataset rely on some degree of subjective judgment: that is, the researcher must exercise judgment to determine which topical category a rule falls under given the text-based coding criteria. In order to achieve the greatest consistency possible for opinion-based coding, all coding has been carried out by the researcher.

Coding algorithms can be developed inductively (starting with the data and then coming up with relevant variables to code for), deductively (using theoretical insights to determine the variables and define how they will be coded), or a combination of both.[52] The researcher primarily developed the coding scheme deductively: the variables and draft coding algorithms were

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[51] Composite indicators aim to produce high level, cross-country comparisons of a measured concept. See OECD, 'Handbook on Constructing Composite Indicators: Methodology and User Guide' (2008) 13.

[52] Lee Epstein and Andrew D Martin, 'Coding Variables' (2005) 00 Encyclopedia of Social Measurement 321, 2.

developed prior to analysing the data, however details in the definitions of the variables and coding scheme were significantly revised in response to complexities in the data.

Measurement (or 'construct') validity refers to whether the variables or observations measured in a study 'meaningfully capture the ideas contained in the corresponding concept.'[53] Conceptualization and measurement in both qualitative and quantitative research first moves from background concepts (e.g., law) to systematized concepts (e.g., corporate governance), and then from indicators (e.g., mandatory or enabling provision) to scores (i.e., measuring the indicator for a particular legal rule). Measurement validity is meant to remove systematic error from research findings by ensuring that scores are derived from a given indicator, and that the indicator itself 'can meaningfully be interpreted in terms of the systematized concept'.[54] Put otherwise, are the variables being measured actually measuring the underlying concepts? Measurement validity does not focus on the merits of the systematized concept – e.g., contesting the definition of democracy used in a study producing democracy scores for different countries.[55] Instead, measurement validity focuses on whether the indicators used to measure democracy (e.g., elections, freedom of the press) validly operationalise the underlying concepts (e.g., the particular definition of democracy chosen). In order to ensure measurement validity, the researcher has outlined the underlying concepts that seek to be operationalized in variables coded for. These concepts are presented alongside the coding criteria, which are contained in the Appendix at *Table 7.4*.

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[53] Robert Adcock and David Collier, 'Measurement Validity: A Shared Standard for Qualitative and Quantitative Research' (2001) 95 American Political Science Review 529, 530.

[54] ibid 531.

[55] ibid 533.

C. *Purpose of dataset*

The dataset does not measure the 'quality' of regulation; rather, it captures the number of material revisions to the AIM Rules over time, the categories of rules which change, and other descriptive variables relating to rule revisions. The data can be used to analyse changes in formal regulation over time, but because the coding is largely text-based, it does not measure the practice or effectiveness of the rules over time.

In light of the case study research question in Chapter Five: 'Has AIM avoided a race to the bottom in the quality of regulation?', the dataset permits analysis of whether changes to the AIM Rules collectively constitute an increase or decrease in the quality of *formal* regulation over time. For example, observing whether the rules have evolved over time to afford more discretion to the Exchange in determining rule compliance does not directly indicate the quality of regulation, but does allow claims that the regime has become more permissive to be falsified. Other data, such as qualitative interviews, aid the researcher's analysis of whether quality of *informal* regulation (e.g., norms of market conduct or social practices driven by reputational incentives) has increased or decreased over time.

To determine the impact of changes to formal and informal regulation, the researcher must first ascertain the consequences of the regulatory change and then make inferences as to whether the change advances the desired regulatory objective. Rule changes that in the researcher's judgment advance a desired regulatory objective increase regulatory quality, and changes that impede the desired regulatory objective decrease regulatory quality. For example, if the regulatory goal is investor protection, the extent to which a regulatory change advances or hinders achievement of this goal determines the extent of the increase or decrease in regulatory quality. The cumulative effects of regulatory change over time indicates the overall direction of regulatory

quality upwards or downwards. Assessing the impact of regulatory change relies on the researcher's judgment and legal analysis, including whether revisions to the AIM Rules have contributed to or hindered the advancement of desired regulatory objectives over time.

D. *Construction of dataset*

The dataset lists every material revision to the AIM Rules from inception in June 1995 to June 2020. It is comprised of variables describing the characteristics of each rule revision and consists of over a thousand data points made by the researcher.[56]

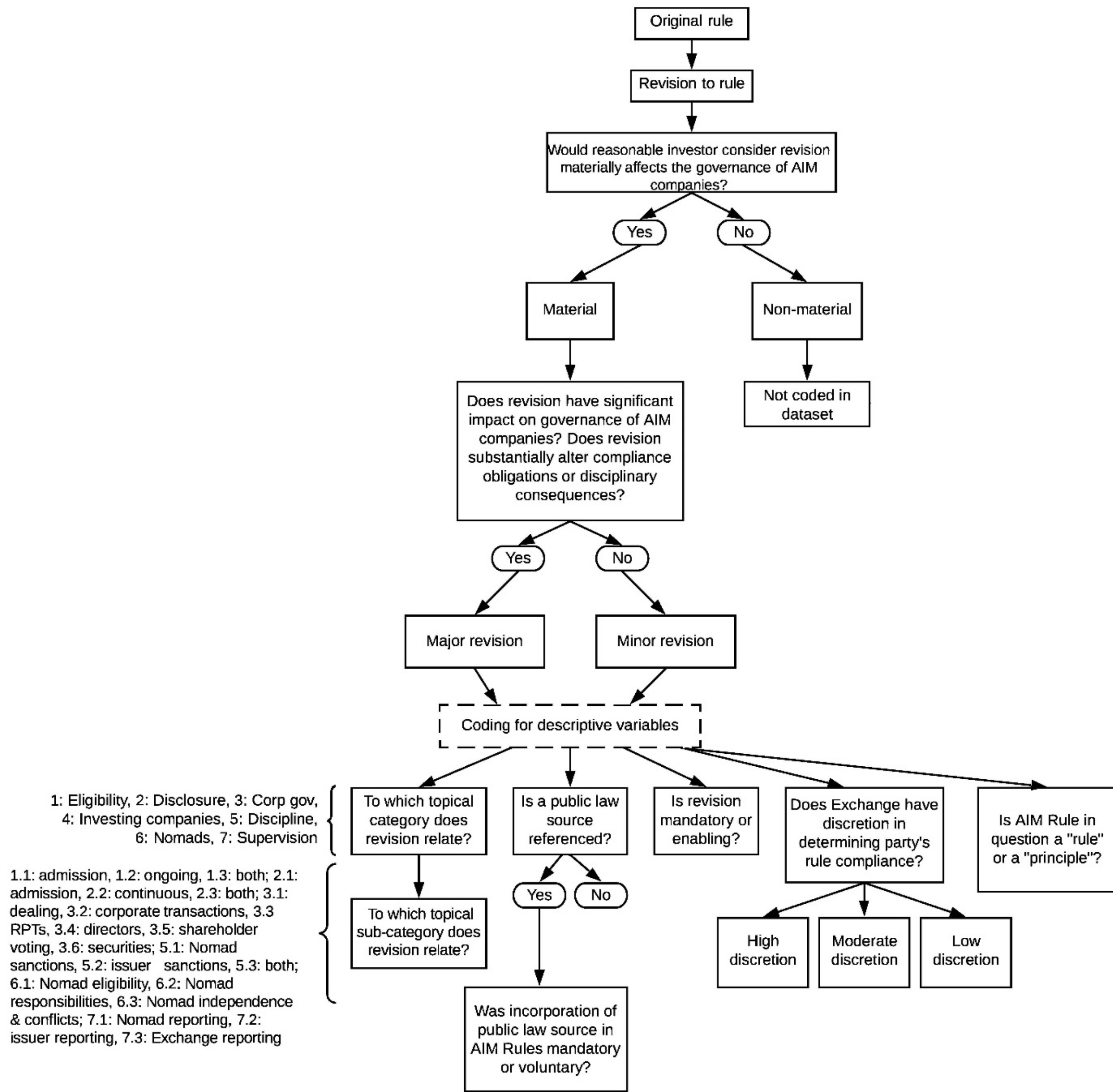
The dataset was constructed iteratively. First, the researcher reviewed all AIM-related notices published by the Exchange and listed in the Appendix at *Table 7.5*. These notices include consultations and feedback documents on proposed rule changes and statements explaining changes implemented to the AIM Rules. After obtaining a high-level impression of how the AIM Rules evolved, the researcher read through all the AIM Rules from 1995 to the present. A chart was compiled noting significant revisions to the rules, noticeable themes (e.g., voluntarily incorporation of legislative rules), and relevant commentary and questions. The chart was organised with separate headings for each iteration of the AIM Rules. After obtaining a granular perspective into how the AIM Rules evolved, the researcher identified variables of interest, defined the coding criteria, and drafted the methodology used for the study. With this methodology, the researcher read all the AIM Rules a second time, now coding revisions to the rules in Microsoft Excel. As the researcher reviewed the AIM Rules a second time, all AIM-related notices listed in the Appendix at *Table 7.5* were reviewed again, in order to contextualise the revisions and insert explanatory commentary into the dataset where necessary. After completion of the dataset, minor

[56] There are 126 material rule revisions in the dataset. This results in 1134 data points when multiplied by the nine variables which the researcher coded for.

adjustments were made to the coding criteria and methodology. The Excel database was reviewed a second time by the researcher to identify and remove any coding errors that were detected. More detailed commentary on the organisation and construction of the dataset is contained in the Appendix at Section III.

Figure 3.1 outlines the coding scheme used to create the dataset. It visually depicts the sequence the researcher followed to compile the dataset, and the discussion in this section (and the Appendix at *Tables 7.3* and *7.4*) elaborates the precise coding criteria for each variable/indicator in the dataset.

FIGURE 3.1: FLOW CHART OF RULE CODING



E. *Methodology for counting 'rules'*

All versions of the AIM Rules are numbered, though the numbering is not consistent across all years. The numbering of rules across certain time periods is closer than in others. Rule numbering has remained roughly consistent since August 2002, with very few changes since February 2007. Many of the AIM Rules contain clauses and sub-clauses. For the purposes of counting what constitutes one individual 'rule', reference is made to the numbering of the AIM Rules themselves. For example, Rule 31 of the March 2018 Company Rules sets out the regulatory compliance responsibilities for AIM companies and directors.

FIGURE 3.2: EXAMPLE OF ONE 'RULE'

AIM company and directors' responsibility for compliance

31. An **AIM company** must:

— have in place sufficient procedures, resources and controls to enable it to comply with these rules;

— seek advice from its **nominated adviser** regarding its compliance with these rules whenever appropriate and take that advice into account;

— provide its **nominated adviser** with any information it reasonably requests or requires in order for that **nominated adviser** to carry out its responsibilities under these rules and the **AIM Rules for Nominated Advisers**, including any proposed changes to the board of **directors** and provision of draft **notifications** in advance;

— ensure that each of its **directors** accepts full responsibility, collectively and individually, for its compliance with these rules; and

— ensure that each **director** discloses to the **AIM company** without delay all information which the **AIM company** needs in order to comply with rule 17 insofar as that information is known to the **director** or could with reasonable diligence be ascertained by the **director**.

Under the methodology adopted for counting, Rule 31 constitutes only one 'rule' despite the multiple legal obligations contained in the clauses, which are all related in terms of subject

matter. Revisions to multiple clauses or sub-clauses within the same numbered rule only constitute one rule change. Each schedule in the AIM Rules is counted as a single rule, since the legal obligations contained in each schedule are similarly related in terms of subject matter. The glossary (definitions) is not counted as a single rule because the definitions (self-evidently) relate to different subject matter. Each material revision to a definition in the glossary counts as one rule revision, since the revision effectively results in a change to the rule in which the definition is cross-referenced. However, revisions to the glossary are not counted if the rule implementing the definition has also been revised, as counting the revised definition would result in double counting the rule change.[57] In the few instances where prescriptive changes are introduced via the guidance notes (which are intended to help interpret the rules) rather than an amendment to a numbered rule itself, these are not counted as rule changes but are included as commentary in the spreadsheet. The counting methodology is relied upon to count the number of material rule revisions, and all variables in the dataset are organised around discretely numbered rules.

The counting methodology can be justified upon several grounds. First, when the same numbered rule contains multiple clauses, the subject matter of the clauses relates topically to the broader rule heading.[58] The rule headings can be quite broad – e.g., in the case of Rule 31, 'Disclosure of miscellaneous information', 'Dealing policy', or 'AIM company and directors'

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[57] For example, rule 15 of the AIM Rules for Companies was revised in January 2016 to introduce provisions related to 'AIM Rule 15 cash shells'. Since the change to rule 15 was counted as a revision, the addition of the new definition in the glossary was not counted as a second rule change.

[58] On the methodological difficulties associated with determining what constitutes a 'rule', see Edward H Stiglitz and Jennifer Nou, 'Regulatory Bundling' (2019) 128 Yale Law Journal 1174, 1183. Stiglitz and Nou discuss the US Administrative Procedure Act's definition of a 'rule', concluding that 'a rule can constitute either an entire agency statement of generality or just a portion of one. Rules, in other words, can resolve a set of subjects or simply component parts…'

responsibility for compliance'. The broader variety of clauses in Rule 31 can be understood to relate to the regulatory compliance obligations for companies and directors.

Second, counting each numbered AIM rule as one rule is the most consistent approach to leximetric coding because it is the least subjective method of determining what constitutes a rule, and the objective of text-based coding is to reduce subjective judgment.[59] Other methodologies for counting would require the researcher to determine how many prescriptive 'rules' or legal directives within a single AIM rule are changing, amidst different plausible interpretations. Counting a single numbered AIM rule as multiple rules depending on the number of clauses relies more heavily on the researcher's discretion of what content constitutes a 'rule'. Third, only the August 1995 and February 1999 Rules contain clauses and sub-clauses. All subsequent versions do not contain sub-clauses and thus fewer obligations are packed into each 'rule'.

F. *Methodology for coding 'rule changes'*

The dataset captures material rule changes and does not include de minimis amendments to the AIM Rules. Material changes are substantive rather than formal in nature; i.e., only material revisions which alter the substantive legal obligation or requirement are counted as rule changes, and non-material rephrasing or rewording of rules do not constitute rule changes. Material changes may be defined as revisions to the rules that a reasonable investor would consider as affecting governance of AIM companies, and are further classified as major or minor depending on their impact.[60] *Table 3.2* below describes the criteria for coding major and minor rule revisions.

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[59] Lee Epstein and Andrew Martin suggest that 'the overriding goal of a codebook is to minimize human judgment'. Epstein and Martin (n 52) 5.

[60] The assessment of materiality based on the 'reasonable investor' test is made in the researcher's judgment, which is informed by theory and practice in securities markets and corporate governance, as well as an understanding of AIM market practice gained through expert interviews. The 'reasonable investor' test is commonplace in US

TABLE 3.2: MAJOR V. MINOR REVISIONS

Indicator or variable	Description and coding criteria
Major or Minor Revision	Minor rule revisions are assigned values of 0 and major rule revisions are assigned values of 1. Rule revisions are coded as ‘minor’ if (while exceeding the *de minimis* materiality threshold), in the researcher’s judgment the change: • is administrative or procedural in nature; or • does not substantially alter the rule compliance obligations of issuers, or the disciplinary or supervisory powers of the Exchange vis-à-vis issuers; or • would not be considered to have a significant impact on the governance of AIM companies by a reasonable investor. Rule revisions are coded as ‘major’ if, in the researcher’s judgment the change: • creates new and substantial rule compliance obligations for issuers, or substantially alters the disciplinary or supervisory powers of the Exchange vis-à-vis issuers; and • would be considered to have a significant impact on the governance of AIM companies by a reasonable investor.

De minimis changes that do not materially alter a party’s rule compliance obligations, or that revise a subject matter that is itself not sufficiently material for a change to it to constitute a minor revision, do not constitute rule changes. Deletions of portions of a rule are counted as

corporate and securities law to determine materiality and is relied upon (although to a lesser extent) in European law. It is also relied upon in the AIM Company Rules themselves: the guidance to Rule 11 states that information likely lead to a significant price movement ‘includes but is not limited to information which is of a kind which a reasonable investor would be likely to use as part of the basis of his or her investment decisions’. In US securities law, materiality has long been assessed from the perspective of a ‘reasonable investor’. The US Supreme Court first assessed the materiality of company disclosures by reference to the reasonable investor in the 1976 decision *TSC Industries v Northway*, where it considered how important the information would have been to a reasonable investor (see Amanda M Rose, ‘The Reasonable Investor of Federal Securities Law’ (2017) 43 The Journal of Corporation law 77, 87). Reference is made to the ‘reasonable investor’ under the Market Abuse Regulation for the purposes of determining ‘inside information’. Part of the definition of inside information refers to ‘information a reasonable investor would be likely to use as part of the basis of his or her investment decisions.’ See Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (market abuse regulation) 2014 s 7(4). In the UK, FCA guidance on the meaning of open-ended investment companies refers to the ‘reasonable investor’ as a hypothetical investor with ‘sound judgment based on good sense’ and ‘some knowledge of, and possibly experience’ in the related investment area (see FCA Handbook PERG 9.7.).

revisions in the same manner that additions or rewordings to a rule are counted, so long as the deletion exceeds the *de minimis* materiality threshold. *Table 7.4* in the Appendix presents examples of non-material revisions that are not counted as rule changes because the revisions are either formal rather than substantive in nature or do not meet the *de minimis* materiality threshold.

G. *Methodology for coding subject matter of rule revision*

The dataset captures not only the frequency and magnitude of rule revisions, but the subject matter of the rule changes. Each rule being revised is assigned a category based on the topic upon which it predominantly relates: 1 - Eligibility, 2 - Disclosure, 3 - Corporate governance, 4 - Investing companies, 5 - Nomads, 6 - Discipline, and 7 - Supervision. Each of these categories is further divided into sub-categories.[61] Within category 2 (Disclosure) are the sub-categories of 2.1 - Disclosure at admission, 2.2 - Continuous/periodic disclosure, and 2.3 - Both (initial and continuous disclosure). The full list of sub-categories and coding criteria is contained in the Appendix at *Table 7.3*.

The categories are designed to be exhaustive in capturing the range of subject matter contained in the AIM Rules, while remaining mutually exclusive as possible. Each rule that is revised is assigned only one category, even in the limited circumstances where a case could be made for the rule to fall under more than one category. This is done to avoid double counting rules so that the number of rules changing across categories can be consistently compared over time. If rules that can arguably fall into two categories were counted twice, the dataset would overrepresent categories more prone to arguable overlap. Consider, for example, a rule prescribing that a Nomad must regularly review the advisee company's financial performance against existing profit

[61] The researcher has inserted notes in the dataset in the very few instances where the topical category of the revision differs from the topical category of the rule as a whole.

forecasts to determine whether ad hoc disclosure is necessary (February 1999, 16.19(h)). This rule is coded under 'Category 6 – Nomads' rather than 'Category 2 – Disclosure' because the rule applies to Nomads (the coding criteria for category 6). Although the rule involves disclosure, in the researcher's estimation it primarily concerns a Nomad's obligations to the issuer. The dataset contains a column titled 'Researcher Notes (Methodology)', and in cases where, in the researcher's estimation, a rule could arguably be classified under more than one topical category, a note is inserted explaining the researcher's choice.

H. *Methodology for coding remaining variables*

The dataset contains additional variables that capture information about each material rule revision other than topical subject matter. These variables are:

- Explicit public ordering: does the revision come from a statute or regulation that is explicitly referenced?
- Voluntary or mandatory public ordering: was incorporation of the rule from statute or regulation mandatory, or was public ordering voluntarily initiated by the Exchange?
- Rule voluntariness: is the revision mandatory, enabling, or 'enabling in nature'?[62]
- Discretionary or bright-line compliance: does the Exchange have high, moderate, or no discretion in determining rule compliance?
- Rule or principle: is the AIM Rule being revised better classified as a rule or a principle?

[62] Enabling in nature refers to a revision that is permissive (i.e., it expands compliance options) yet that cannot be contracted out of or set aside in favour of alternate arrangements. For example, a revision in February 2010 allowed all AIM companies to use electronic means to send annual accounts and admission documents to shareholders instead of having to send physical copies. Formerly, the AIM Rules only permitted companies subject to the UK Companies Act 2006 (which had provisions on electronic communications) to send annual accounts to investors electronically. An example of a purely enabling rule would be: 'Unless otherwise provided in the certificate of incorporation… each stockholder shall be entitled to 1 vote for each share of capital stock held by such stockholder.' Delaware General Corporation Law §212.

A full description of these variables, their coding criteria, and examples are contained in the Appendix at *Table 7.4*. Systematically coding these observable attributes provides a dataset from which the hypotheses (set out in Chapter Six) can be tested.

SECTION V Methodological challenges

It is important to reflect on how the researcher's background and methodological challenges may have influenced the study design. The researcher's experience as a practising corporate solicitor helped provide credibility during interviews and gain access to certain interviewees in the City. Legal practice intuition also helped when constructing the database of 'material' rule revisions in Chapter Six, as subjectivity cannot be completely eliminated from even the most careful rule coding criteria.

The researcher undertook fieldwork training offered by the University of Oxford, having no prior experience in conducting research interviews. University ethics approval was received in autumn 2018, and it was assumed that dozens of interviews would be arranged in the coming year. However, nine months later, few interviews had been conducted despite sending dozens of requests. Most often emails were ignored, but occasionally individuals would politely decline to participate. It became apparent that either the original study design was problematic, or that the individuals contacted were extremely reticent to speak to an outsider about AIM. It turned out both were the case.

Hindrances in the original study design became clear when willing interviewees would cease to respond to emails after receiving the three-page long participant information sheet, which made the necessary disclosures related to ethical considerations, data protection measures, etc. Other interviewees indicated they were comfortable with the information sheet, but were not

comfortable with signing the written consent form, which required initialling ten separate statements.[63]

In addition, while some of the challenges of arranging 'elite interviews' with time-pressed business people were predictable, the researcher underestimated how the sensitivity of AIM as a subject could pose difficulties.[64] AIM has received considerable negative press coverage in the UK, often with adverse consequences for potential interviewees whose livelihoods depend on AIM. Negative press certainly does not help the market, and prospective interviewees may have felt it was not worth this risk (despite the researcher's best assurances that the interviews were academic in nature, not journalistic, and the purpose was to contribute to scholarship from as neutral a perspective as possible). The risk of selection bias amongst interview participants is acknowledged, particularly since it is not in their self-interest to reveal negative or critical information.

When interviewees were asked whether other colleagues might be interested in participating, some mentioned the AIM regulatory team's significant discretion in pursuing companies or Nomads for rule violations. The researcher suspects that some individuals may have been reluctant to participate owing to the fear of regulatory retribution should participation become known. This also explains why, on occasion, interviews took place in the back corners of dimly lit pubs or far from the interviewees' workplaces.

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[63] The standard University of Oxford consent forms require participants to initial statements such as: 'I confirm that I have read and understand the participant information sheet…', 'I understand that this project has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee', etc.

[64] On the method for conducting interviews with 'elite participants', see William S Harvey, 'Strategies for Conducting Elite Interviews' (2011) 11 Qualitative Research 431.

In light of these challenges, a more streamlined interview design was implemented, and ethics approval was granted in summer 2019. Most importantly, the written consent form was replaced with an oral consent form. Instead of sending a three-page attachment, emails contained a link to the study information on a University website.[65] The goal of preparing and depositing anonymous interview summaries on an online data repository (accessible for academic researchers but not to the general public) was abandoned. Despite a smaller than planned sample size of interview participants, the researcher is grateful to have spoken with at least one representative from each of the main AIM constituents – the Exchange, company directors and managers, Nomad employees, institutional investors, retail investors, brokers, and service professionals such as lawyers – and to have gained valuable experience in qualitative interview design.

Finally, compiling the dataset and devising a unique leximetric design (focusing on coding revisions rather than the usual coding of rules at set intervals of time) was a time-intensive process spanning more than a year. The researcher reviewed in excess of a thousand pages of rules, stock exchange notices and publications on two occasions: once to prepare the dataset, and a second time to review. The first seven years of rule revisions needed to be identified manually (without software assistance), as the quality and layout of the PDFs were not conducive to creating blacklines highlighting the changes between documents. The coding criteria evolved during this process as new insight emerged, requiring some documents to be re-reviewed when the definition of a variable was modified. After compiling the dataset, the researcher needed to spend some time gaining proficiency with data visualisation software in order to analyse and present the results. This process gave the researcher an appreciation of the challenges of hand-compiling datasets and the pleasure of seeing long-sought results come to fruition.

[65] Jonathan Chan, 'Information Sheet for Current Study' <https://perma.cc/R7XP-DDLB>.

CHAPTER FOUR

THE RELEVANCE OF PUBLIC LAW TO PRIVATE ORDERING ON AIM

Ever since the seminal decision in *R v Panel on Takeovers and Mergers, ex p Datafin plc* (*Datafin*),[1] an inescapable aspect of English legal commentary on self-regulation has become analysis of whether a seemingly private self-regulatory body is exercising de facto public law power and therefore amenable to judicial review.[2] The attention now turns to this necessary inquiry, as Chapter Four examines the legal foundations of AIM's self-regulatory character and considers whether the Exchange's regulation of AIM involves the exercise of public law powers, which would render 'regulation on AIM' amenable to judicial review and subject the Exchange's private ordering on AIM to the public law requirements of procedural and substantive fairness.[3]

Regardless of whether regulation on AIM is amenable to judicial review, AIM remains an appropriate case study of stock exchange self-regulation. This is because, building off the arguments developed in Chapter Two, the self-regulatory character of stock exchanges is not

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[1] *R v Panel on Takeovers and Mergers, ex p Datafin Plc*, [1987] QB 815, [1987] 2 WLR 699 (*Datafin*). *Datafin*, discussed at length in Section I of this chapter, established that decisions of the Takeover Panel, a private self-regulatory body that policed M&A activity in the City and could call on its members to impose disciplinary sanctions, were amenable to judicial review when exercising power that is public in nature.

[2] Under English law, judicial review is 'the process by which the legality of the exercise of public functions may be challenged', or 'a procedure whereby the courts are able to determine the lawfulness of the exercise of executive power.' This differs from other jurisdictions where judicial review concerns courts' review of the lawfulness or constitutionality of legislation. See Andrew Le Sueur and others, *Public Law: Text, Cases, and Materials* (4th edn, OUP 2019) §19(1)(a), §19(3)(g); Neil Parpworth, *Constitutional & Administrative La*w (10th edn, OUP 2018) §13.1.

[3] 'Regulation on AIM' in this chapter refers to the hard law rules and enforcement governing AIM and its market participants, such as the AIM Rules for Companies, AIM Rules for Nominated Advisers, and AIM Disciplinary Procedures and Appeals Handbook. It also includes, along with the term 'AIM decisions', discretionary exercises of power by 1) the Exchange in regulating AIM, 2) internal adjudicating bodies such as the AIM Executive Panel (AEP) and AIM Executive Appeals Panel (AEAP), both comprised of Exchange staff, and 3) external adjudicating bodies such as the AIM Disciplinary Committee (ADC) and the AIM Disciplinary Appeals Committee (ADAC). Any references to 'AIM regulation' do not refer to the Exchange staff team known as 'AIM Regulation' that is responsible for regulatory compliance with the aforementioned AIM Rules.

diminished by the existence of governmental or public oversight of private rule-making and enforcement.[4] All contemporary stock exchanges and SROs experience some degree of public oversight.[5] AIM constitutes a 'mandated' model of self-regulation, as described in Chapter Two, whereby the government establishes a framework within which private actors make and enforce their own rules. The availability of judicial review would only change the framework of public oversight within which the Exchange continues to make and enforce the listing rules, rather than changing the nature of AIM's self-regulatory character. AIM would still possess a relatively high degree of private rule-making autonomy for a model of mandated self-regulation. Additionally, *Datafin* suggests that judicial review of regulation on AIM, if available, would be deferential in circumstances such as the Exchange making or interpreting its own rules. Courts following *Datafin* would be inclined to grant the Exchange wide latitude in its decision-making, and apart from clear procedural unfairness in disciplinary matters, would be likely to grant less intrusive declaratory orders and refrain from quashing the Exchange's decisions, particularly in relation to real-time rather than retrospective decision-making. It is important to contextualise the relatively non-intrusive nature that judicial review would take with respect to the Exchange's rule-making and interpretation to avoid over-stating its significance.

Before delving into the inquiry of whether private ordering on AIM has a public nature, it is worthwhile to ask a preliminary question: 'Why does it matter if regulation on AIM is amenable to judicial review?' It is suggested that the necessity and value of this inquiry can be justified for

[4] See the discussion of Julia Black's 'mandated self-regulation' and 'mandated partial self-regulation' in Chapter Two (III)(A).

[5] Even in highly self-regulatory 'cooperation models' in Canada and the US, stock exchanges and other SROs are subject to public oversight of rule-making (e.g., SEC approval), and must cooperate and share jurisdiction with public administrative agencies. See Stavros Gadinis and Howell E Jackson, 'Markets as Regulators: A Survey' (2007) 80 Southern California Law Review 1239, 1291–1292.

at least three reasons. First, this inquiry seeks to fill a gap in our understanding of the law that is of practical relevance to UK securities regulation: no English court has ruled definitively on whether AIM decisions are judicially reviewable, although courts have considered the issue without directly deciding on the matter.[6] Second, there are wider implications for the role of private ordering in broader UK financial markets if elements of AIM regulation are public in nature and therefore amenable to judicial review. An English court finding that AIM decisions of a sufficiently public nature are subject to judicial review would place procedural limitations on the Exchange's exercise of contractual discretion, reducing the Exchange's ability to confine dispute resolution to its own adjudicating bodies. Depending on the nature and intrusiveness of the remedy granted on judicial review, such as a quashing a disciplinary decision of the Exchange, this could contribute to a wider ripple of instability in public UK financial markets as other trading venues and financial institutions face similar uncertainty in their contractual arrangements and permitted discretion. Third, AIM provides a generalizable lesson that when public law obligations are clear ex ante, constraints on private ordering are minimised as private actors can contract with certainty knowing the boundaries of their legal obligations. This lesson is independent of whether regulation on AIM is or is not ultimately amenable to judicial review, as well as how significant courts' public law supervisory jurisdiction would be for the Exchange and other UK financial institutions. Since a decision-making body's susceptibility to judicial review varies depending on the power being exercised, in financial regulation and other contexts where the nature of self-regulatory powers may *arguably* be public, the application of public law obligations becomes unpredictable. Private actors such as the Exchange respond through over-compliance by drafting longer and more

[6] See discussion in Section II on *R (on the application of ZAI Corporate Finance Ltd) v AIM Disciplinary Committee of the London Stock Exchange plc* [2017] EWHC 778 (Admin) (*ZAI*) and *R (ZAI Corporate Finance Ltd) v AIM Disciplinary Committee of the London Stock Exchange plc* [2017] EWCA Civ 1294, [2017] Bus LR 2139 (*ZAI Appeal*).

procedurally complex contracts, in an effort to minimise the likelihood of a successful judicial review claim through increasing the adequacy of private law remedies (i.e., 'judicial review proofing' their private ordering).

However, a private body 'judicial review proofing' its decisions does not reduce the underlying problem of private ordering uncertainty, since claimants may still believe they are entitled to public law protections and courts may still impose procedural or substantive fairness protections ex post through judicial review. Revising and lengthening contracts to be more procedurally articulate to minimise the likelihood of a judicial review claim is likely to establish procedural 'fairness' on terms that are preferential to private rule-makers, who often have stronger bargaining power since counterparties must accept the procedural boilerplate or exit the self-regulatory regime. In the absence of true exercises of public power, judicial review proofing may provide beneficial procedural safeguards for some exercises of self-regulatory power, but in other circumstances it could hinder self-regulatory agility and prevent more informal regulatory responses. Public law uncertainty thereby imposes transaction costs for self-regulatory actors without corresponding benefits being clear.

This chapter begins by examining the public law doctrine of amenability to judicial review. Section I begins with the essential background of *Datafin* before turning to the current legal landscape and doctrinal tests for determining whether a decision-making body is exercising public power. Section I argues that public law doctrinal ambiguity creates an uncertainty problem and an incentive problem. Uncertainty over the availability of judicial review undermines ex ante bargaining and contracting, and may contribute to mistaken assumptions of fairness and procedural impropriety protections with the Exchange, leading to some parties failing to negotiate appropriate contractual protections ex ante. This uncertainty may also incentivise shrewd claimants to seek

judicial review of essentially private contractual disputes in order to be afforded public law procedural protections.

Section II analyses the judicial review jurisprudence in the financial regulation context, focusing in particular on the High Court and Court of Appeal decisions in *R (ZAI Corporate Finance Ltd) v AIM Disciplinary Committee of the London Stock Exchange plc*,[7] the only case to date to consider the amenability of regulation on AIM to judicial review without deciding on the issue. This analysis sets the stage for Section III, which concretely answers the main inquiry of this chapter by applying the legal tests for public law character to AIM. The doctrinal analysis in Section III suggests that regulation on AIM (including decisions of AIM disciplinary bodies) can be understood as constituting private law and thus not amenable to judicial review, however this finding is moderated by certain characteristics that point toward the Exchange exercising a public law function, leaving the door open to judicial review for future claimants (e.g., third parties without contractual rights). Section III also conducts a detailed comparison of the regulatory context of AIM and the LSE Main Market, describing how despite significant overlap in the sources of regulatory authority, the Exchange's regulation of the Main Market stems from public law obligations contained in the FCA Handbook, many of which do not apply to AIM in significant ways. Section IV concludes by advocating the normative position that it is desirable in most circumstances for courts to treat regulation on AIM as private law to avoid unnecessarily fettering private ordering and to reduce uncertainty in financial markets concerning the application of public law protections to private rule-making by other financial institutions.

[7] *ZAI* (n 6); *ZAI Appeal* (n 6).

SECTION I The problem of public law doctrinal uncertainty

A. *Datafin and de facto public power*

Under the English Civil Procedure Rules, a judicial review petition is defined as 'a claim to review the lawfulness of… a decision, action or failure to act in relation to *the exercise of a public function*…'[8] The focus of inquiry centres on whether there is the exercise of a 'public function', rather than on detailed analysis of whether the decision-making body is public or private. The availability of judicial review for a private body depends on a contextual analysis of the power being exercised.

Datafin established that a body is amenable to judicial review if it exercises 'public law functions'. Prior to *Datafin*, the test for amenability to judicial review focused solely on whether the source of power was public, i.e., stemmed from statute.[9] Decisions of statutorily empowered bodies were subject to judicial review because they exercised governmental power; decisions made by non-governmental bodies were not judicially reviewable because such private bodies did not derive powers from statute. The test of what was a 'public' power was clear and predictable. However, its binary nature was under-inclusive and could lead to unsatisfactory outcomes when third party claimants could not hold non-governmental bodies making seemingly public decisions to account through judicial review.

In *Datafin*, the decision-making body at issue was the Takeover Panel. Following the advent of hostile takeovers in the UK in the early 1950s and the steady rise in takeover bids

[8] Civil Procedure Rules, s 54.1(2)(a)(ii) (emphasis added).

[9] See discussion of the pre and post-*Datafin* tests in Colin D Campbell, 'The Nature of Power as Public in English Judicial Review' (2009) 68 The Cambridge Law Journal 90, 90.

thereafter, a committee led by the Bank of England drafted a brief set of takeover guidelines in 1959, titled the *Notes on the Amalgamation of British Businesses*.[10] Takeover bids continued to increase in the following decade, and in 1967 the Bank of England assembled a working party drawn from its previous committee – a group comprised of London-based institutional investors, finance industry associations, and the London Stock Exchange – to draft a more detailed set of takeover rules. These rules were published as the City Code on Takeovers and Mergers (Takeover Code) in March 1968, and the Takeover Panel was established concurrently to oversee the application and adjudication of the Code and to regulate merger and acquisition activity in the UK.[11]

The Takeover Panel's members consisted of the merchant bank and institutional investor industry bodies represented in the Bank of England working party.[12] At the time, the Takeover Panel made rulings regarding compliance with the Takeover Code despite having no statutory mandate and no contractual relations with market participants.[13] The Panel was an unincorporated body with no legal personality. Yet by virtue of the bodies represented on the Takeover Panel – which included the Council of the London Stock Exchange and the Board of Trade – the Panel wielded considerable power by interpreting and determining violations of the Takeover Code. Organizations represented on the Takeover Panel agreed to discipline their members when

[10] John Armour and David A Jr Skeel, 'Who Writes the Rules for Hostile Takeovers, and Why - The Peculiar Divergence of U.S. and U.K. Takeover Regulation' (2006) 95 Georgetown Law Journal 1727, 1758–1759.

[11] ibid 1760. See also The Takeover Panel, 'About the Panel' <https://www.thetakeoverpanel.org.uk/structure> accessed November 2020.

[12] Armour and Skeel (n 10) 1758–1761.

[13] The Takeover Panel acquired a statutory basis in Companies Act 2006 when the Directive on Takeover Bids (2004/25/EC) required the UK to appoint a supervisory authority to regulate takeovers. See CA 2006, ss 942-965.

requested by the Panel, and breaching the Takeover Code could result in a company being removed from the Official List or having its shares suspended by the London Stock Exchange.[14]

The fundamental question in front of the Court of Appeal in *Datafin* was whether the decisions of the Takeover Panel were subject to judicial review because the scope of the powers it exercised were similarly far-reaching to those exercised by statutorily-authorised regulatory bodies. The Court of Appeal held that decisions of the Takeover Panel were judicially reviewable. Lloyd LJ wrote that 'it is helpful to look not just at the source of the power but at the nature of the power', and that amenability to judicial review depends upon '[i]f the body in question is exercising public law functions, or if the exercise of its functions have public law consequences'.[15] Sir John Donaldson MR wrote that a 'public element' was an essential prerequisite.[16] Despite the Takeover Panel's submission that its authority was 'derived solely from the agreement of the bodies concerned', the Court of Appeal held that it exercised public law functions by virtue of the informal understanding that its members (which included the Governor of the Bank of England and the Council of the Stock Exchange) would instigate disciplinary measures to enforce the Takeover Code, and that the Council of the Stock Exchange effectively delegated 'its public law task of spelling out standards and practices in the field of take-overs which listed companies must observe if they are to enjoy the advantages of a Stock Exchange listing…'[17] Thus, *Datafin* widened

[14] Armour and Skeel (n 10) 1761–1762.

[15] *Datafin* (n 1) 847.

[16] ibid 838.

[17] ibid 852.

the scope of judicial review from decision-making bodies with de jure governmental power to those exercising de facto public power.[18]

B. *Doctrinal uncertainty in the tests for publicness*

Commentators have acknowledged that '*Datafin* suggests that the outer boundary of judicial review is traced by some concept of "publicness"', while simultaneously recognising that 'courts have struggled to identify and consistently apply a coherent test' given the nebulous task of identifying a sufficiently public element.[19] The test for determining amenability to judicial review – which strictly speaking is a question of law, but depends on the contextual (factual) exercise of power in question – involves a two-part inquiry focusing on the *source* and *nature* of a decision-making body's power.[20] Emphasis is placed on the public or private function of power being exercised, although the public or private character of the decision-maker is also considered.[21] The test is not bright-line, and apart from in the clearest cases, the factors are not individually determinative. First, one considers whether the source of power stems from statute or contract. A governmental source of authority such as statute or delegated legislation suggests a public law

[18] *R v Jockey Club ex p Aga Khan* [1993] 1 WLR 909 (CA), [1993] 2 All ER 853, 931 (*Jockey Club*).

[19] Mark Elliott and Jason Varuhas, *Administrative Law: Text and Materials* (5th edn, OUP 2017) §§4.5.2-3.

[20] *Holmcroft Properties* [2018] EWCA Civ 2093, [2019] 2 BCLC 477 [47], [56] (*Holmcroft Appeal*).

[21] The decision-maker must have a public character to be amenable to judicial review, however private bodies can satisfy this condition when 'harnessed by the state for the purpose of carrying out some administrative function.' See Kevin Costello, 'The "Public Element" Test for Amenability to Judicial Review: R (on the Application of Holmcroft Properties Ltd) v KPMG LLP' (April 2020) Public Law 229, 229. Unlike the analysis for amenability to judicial review, claims brought under the Human Rights Act 1998 (*HRA 1998*) require the court to determine whether the body is a 'public authority'. This requires a body by body inquiry, rather than a decision by decision inquiry when judicial review is typically sought. However, there is a 'close correlation' between the tests for a public authority under the *HRA 1998* and amenability to judicial review. See Parpworth (n 2) §13.33. Given the close correlation in doctrinal tests, and because *HRA 1998* proceedings and judicial review claims are often brought in conjunction, Section II references both judicial review and s 6 *HRA 1998* jurisprudence. See also Alexander Williams, 'Public Functions and Amenability: Recent Trends' (2017) 22 Judicial Review 15.

character, whereas a contractual source tends to suggest a private law character. The source of the body's power is influential but not determinative in assessing 'publicness' – therefore a contractual source of power does not inevitably preclude judicial review.[22]

Second, one considers whether the nature of power being exercised is public or private.[23] More specifically, one asks 'whether the decision has a sufficient public element, flavour or character to bring it within the purview of public law.'[24] Courts do not refer to a singular test to answer this question, although reference is often made to the 'no different to any private actor' test,[25] and in the context of determining whether 'functions of a public nature' are being exercised under the Human Rights Act 1998 (*HRA 1998*) courts conduct a 'multi-factorial assessment'.[26] Factors pointing toward a public character include, *inter alia*: whether the function would be performed by the government if it were not for the private body,[27] whether there are adequate

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[22] 'It is now firmly established that the mere fact that the source of power is contract does not of itself necessarily result in the conclusion that public law principles are inapplicable.' See *R (on the application of Holmcroft Properties Limited) v KPMG LLP* [2016] EWHC 323 (Admin), [2017] Bus LR 932 [23]-[24] (*Holmcroft*). See also *Datafin* (n 1) 847.

[23] *R (on the application of Beer) v Hampshire Farmers Markets Ltd* [2003] EWCA Civ 1056, [2004] 1 WLR 233 [16] (*Beer*).

[24] ibid [16].

[25] Kevin Costello describes this test as follows: 'A transaction between the state and the individual, which is no different to a transaction which might be engaged in between two private actors, is not amenable to judicial review.' See Costello (n 21) 229-230.

[26] *R (Weaver) v London & Quadrant Housing Trust* [2009] EWCA 587, [2010] WLR 363 [119] (Rix LJ). See also Williams, 'Public Functions and Amenability' (n 21) 16.

[27] This has been described as the 'but-for' test – see Campbell (n 9) 92. The but-for test is clearly illustrated in *Datafin*, where 'there was evidence that the Department of Trade and Industry had decided not to regulate take-overs by statutory instrument and to rely instead on the panel's enforcement of the City Code on Take-overs and Mergers.' See *Jockey Club* (n 18) 919.

private law remedies,[28] the 'creation, evolution, and ownership' of the body,[29] whether the decision fundamentally concerns the 'pursuit of private law rights',[30] the existence of 'an implied duty to act in the public interest',[31] the 'private and commercial motivation' of the body,[32] and whether the claimant faces private law or public law consequences as a result of the decision at issue.[33] Unlike the 'source of power' element, the analysis for the public or private 'nature' of a power – and hence the overall determination of a public function, is rarely clear cut.[34]

Judicial review is only available where public law power—as just defined—is being exercised. Private bodies can be subject to public law standards when there is 'an implied duty to

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[28] *Jockey Club* (n 18) 933. cf Williams discussion of judges writing disapprovingly of 'using judicial review to 'patch up' remedies against non-state defendants', including Hoffman LJ's dicta in *Jockey Club*. See Williams, 'Public Functions and Amenability' (n 21) 21, 24.

[29] *R v Birmingham International Airport Limited* [2009] EWHC 1913, [2009] LLR 727 [63] (*Birmingham Airport*).

[30] *Holmcroft Appeal* (n 20) [52].

[31] *R v Cobham Hall School (ex p)* [1998] Ed CR 79 (QB), [1998] ELR 389, 397-398 (*Cobham*). Dyson J cites commentary from Lord Justice Woolf and others, *De Smith's Judicial Review* (8th edn, Sweet & Maxwell 2018) §3-031.

[32] See *YL v Birmingham City Council and others (Secretary of State for Constitutional Affairs intervening)* [2007] UKHL 27, [2008] 1 AC 95 [116] (*YL*). Although the Supreme Court decision in *YL* concerned the test for constituting a public authority under the *HRA 1998*, the factors enumerated for a public function are relied upon in judicial review cases such as *Holmcroft Appeal* (n 20) and *R (on the application of Liberal Democrats and another) v ITV Broadcasting Ltd* [2019] EWHC 3282 (Admin), [2020] 4 WLR 4.

[33] *R (West) v Lloyd's of London* [2004] EWCA Civ 506, 2 CLC 649 [31] (*Lloyd's*).

[34] Scott Baker LJ wrote that 'whether a decision has a sufficient public law element to justify the intervention of the Administrative Court by judicial review *is often as much a matter of feel, as deciding whether any particular criteria are met*.' (emphasis added) See *R (Tucker) v Director General of the National Crime Squad* [2003] EWCA Civ 57, [2003] ICR 599 [13]. Lord Woolf CJ, in a case involving whether a body was a public authority under the *HRA 1998*, wrote: 'As is the position on applications for judicial review, there is no clear demarcation line which can be drawn between public and private bodies and functions.' See *Poplar Housing Association Ltd v Donoghue* [2001] EWCA Civ 595, [2002] QB 48 [66].

act in the public interest';[35] these could include sports governing bodies,[36] private companies running prisons or responsible for the administration of GCSE grades.[37] Although courts do not in general have public law supervisory jurisdiction over the decisions of private organisations, courts have context-dependent jurisdiction to review 'private abuse of power' on public law grounds such as irrationality/*Wednesdbury* unreasonableness, bias, and procedural unfairness.[38]

Some commentators have remarked that the judicial tests to determine the public or private nature of power 'cannot be applied coherently'.[39] Even the rationale for judicial review is 'hotly contested', with courts justifying their public law supervisory jurisdiction on the basis of preventing abuse of power, regulating governmental power, or constraining monopoly power.[40] Colin Campbell suggests an alternative 'monopoly power' test to determine whether a decision is amenable to judicial review: power is 'public' when exercised by a body that is the sole body tasked with a function and where individuals affected by the decision cannot seek redress or adjudication of their claim from another decision-maker.[41] Other commentators, such as Neil Duxbury, point out that many private bodies would satisfy a monopoly power test absent the

[35] *Cobham* (n 31) 397-398.

[36] See Simon Boyes, 'Sport in Court: Assessing Judicial Scrutiny of Sports Governing Bodies' (July 2017) Public Law 363.

[37] See *R (LB Lewisham) v AQA*, [2013] EWHC 211 (Admin), [2013] ELR 281 (*AQA*).

[38] Timothy Endicott, Administrative Law (4th edn, OUP 2018) §15.5.2. In practice, judicial control of private abuse of power is accomplished via declaration under CPR 40.20 or CPR 8. See Endicott's discussion of *Mullins v McFarlane* [2006] EWHC 986, [2006] LLR 437. See also the discussion below at Section II(A).

[39] Campbell (n 9) 115.

[40] Elliott and Varuhas (n 19) §4.5.3.

[41] Campbell (n 9) 115–116.

exercise of any public law function,[42] while Alexander Williams highlights normative and doctrinal weaknesses with the monopoly power test, advocating a stricter return to judicial review only for bodies with statutory sources of power.[43] The doctrinal uncertainty created by the 'multi-factorial assessment' of publicness is deemed unsatisfactory by many.

C. *Public law uncertainty creates an incentive problem*

The availability of private law remedies is relevant for judicial review claimants in the financial regulation context, because the jurisprudence suggests that judicial review will be denied when claimants face predominantly private law consequences and when adequate private law remedies are available.

The availability of judicial review matters most when a party has no contractual basis to bring a claim against another for an unfair exercise of power. As a general principle of English law, judicial review is 'a remedy of last resort' that a claimant may turn to in the absence of another applicable body of law, such as the private law of contract, to remedy the dispute.[44] Judicial review is appropriate when parties are unable to seek recourse with private law remedies because there is no pre-existing legal relationship between the parties and judicial review is a party's sole recourse

[42] Neil Duxbury, 'The Outer Limits of English Judicial Review' (April 2017) Public Law 235, 241.

[43] Williams advances a number of criticisms of the monopoly power test, including that it would prevent efficient breach of contract, it is unclear why monopoly power is 'distinctively *public*' and should be regulated via judicial review instead of through private law or legislation, bodies may involuntarily acquire monopoly power (e.g., competitors exit the industry), and as a doctrinal matter courts have routinely denied judicial review to bodies exercising monopoly power. See Alexander Williams, 'Judicial Review and Monopoly Power: Some Sceptical Thoughts' (Oct 2017) 133 Law Quarterly Review 656, 671–679. Williams' stricter return to the source of power test includes an additional requirement that the statutory power under review 'is a power to act in the public interest rather than simply in the interests of the power-holder.' ibid 664.

[44] Lord Justice Woolf and others (n 31) §3–065.

to contest an unfair or unlawful exercise of power,[45] yet at the same time judicial review is not intended to 'patch up' gaps or a lack of available remedies in private law.[46] Some commentators have even observed a 'hostility' of courts to the judicial review of exercises of contractual discretion.[47]

However, the mere existence of a contract between a public body and a claimant – and therefore the possibility of pursuing a private law claim against a public authority – does not necessarily preclude judicial review.[48] On the one hand, English courts are reluctant to find an exercise of public power when contractual remedies are available.[49] Decisions of public bodies exercising contractual rights are only subject to judicial review when an abuse of power is alleged and can be proven.[50] On the other hand, if the court determines a public or private body is exercising public powers, the presence of a contractual relationship with a claimant does not diminish the availability of judicial review.[51]

Claimants may be motivated to petition for judicial review of contractual disputes because of the fairness and due process requirements that they will be afforded if the court finds a public function at exercise. For example, in *R v Birmingham International Airport Limited* [2009] EWHC

[45] Campbell (n 9) 91.

[46] *Jockey Club* (n 18) 933.

[47] Williams, 'Public Functions and Amenability' (n 21) 16.

[48] Lord Justice Woolf and others (n 31) §3–065.

[49] See *Birmingham Airport* (n 29) [41]. See also *Jockey Club* (n 18) 924.

[50] See *Birmingham Airport* (n 29) [67].

[51] *Jockey Club* (n 18) 932. 'I would also accept that a body such as the Take-over Panel or I.M.R.O. [Investment Management Regulatory Organisation] which exercises governmental powers is not any the less amenable to public law because it has contractual relations with its members.'

1913, a dispute arose between two private companies over the termination provisions of their contract. The Birmingham and Solihull Taxi Association, a company limited by guarantee representing the interests of taxi drivers, sought judicial review of a decision by Birmingham International Airport Limited (BIAL), a private company operating Birmingham International Airport, to terminate a licence agreement to provide exclusive taxi services and award an agreement to another party.[52] The taxi company claimed that BIAL failed to consult them and act fairly towards them regarding the decision, as well as claiming an improper purpose.[53] Put otherwise, the taxi company sought additional protections than those negotiated in the agreement – public law procedural fairness rights surrounding consultation and the ability to make representations – by way of alleging BIAL was a public body whose decision merited judicial review. The court ultimately declined to grant judicial review and noted the risk of fettering contractual freedom by unnecessarily granting public law protections.

> In these circumstances, in my judgment, a Court should be extremely cautious about imposing public law duties upon the contracting party which have the effect of diluting or altering contractual terms freely concluded.[54]

However, the court acknowledged that in operating the airport, BIAL (a private company) *was* a body that is amenable to judicial review because many of BIAL's functions are public and its decisions impact 'significant numbers of the public at large'.[55] The court's refusal to

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[52] See *Birmingham Airport* (n 29) [28].

[53] ibid [29].

[54] ibid [41].

[55] ibid [63]. See also *AQA* (n 37) [139]. In *AQA*, a company responsible for awarding GCSE grades (under regulatory supervision by Ofqual, the public regulator) was found to be amenable to judicial review despite being a private body acting pursuant to contract. The court found that determining GCSE grades was a public function given the 'very significant public importance potentially affecting the life chances of those who are candidates for the examination'.

categorically close the door to judicial review is desirable in contexts where decisions by private bodies affect public constituents who lack contractual protections. Although private law remedies 'can usually extend to the same places as can judicial review', allowing judicial review of private bodies opens the door wider to claimants who do not have a pre-existing legal relationships with the decision-maker.[56] However, the uncertainty in English law of when a private body exercises public functions creates an incentive problem for contractual counterparties. If claimants know they may gain protections not initially negotiated for by contract by alleging an exercise of public function, frivolous claims may be brought forward and parties will be less incentivised to negotiate ex ante.[57]

D. *Intrusiveness of review powers*

This section elaborates on the grounds for judicial review and the remedies available, arguing that being subject to judicial review in principle would not detract from AIM's self-regulatory character. First, this is because judicial review of regulation on AIM would only influence the nature, not the existence, of government mandated self-regulation. In mandated self-regulatory models such as AIM, as described in Chapter Two, the government establishes a framework within which private actors make and enforce their own rules. The availability of judicial review would constitute a development in the framework of government oversight within which the Exchange operates. It would not, however, detract from the nature of AIM's self-regulatory character, since the Exchange's rule-making and enforcement has always occurred within a broader public

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[56] Duxbury (n 42) 245–246.

[57] As Justice Howell QC wrote in *R (McIntyre) v Gentoo Ltd* [2010] EWHC 5 (Admin), [2010] 2 P & CR DG6 [30]: 'Judicial review is not a procedure to be used to provide a party to a contract with a better remedy for a breach of contract than contract law itself provides.'

regulatory framework. In a similar vein, the availability of judicial review for the Takeover Panel post-*Datafin* only changed the framework of public oversight within which the Panel operated, but did not change the Panel's longstanding self-regulatory character. Second, although judicial review would introduce an additional degree of public accountability and oversight, the *Datafin* precedent suggests it would likely be deferential in nature, refraining from quashing orders apart from clear breaches to procedural fairness and limiting review to the Exchange's historic rather than contemporaneous or real-time decision-making. Thus, returning to the self-regulatory variables identified by Ogus in Chapter Two, the availability of judicial review would represent only a limited incursion on the variable of self-regulatory autonomy, as opposed to a fundamental shift in the form of government influence.

Judicial review is a supervisory jurisdiction concerned with the legality of how public power is exercised. Unlike courts exercising an appellate jurisdiction, judicial review is not concerned with the substantive merits of the decision being challenged.[58] Under the English Civil Procedure Rules, a claimant must first set out the grounds of their claim and seek the court's permission for a judicial review hearing.[59] The claimant must have a 'sufficient interest in the matter' in order to have standing, and must bring the claim without undue delay and within the prescribed time periods.[60]

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[58] See Mark Elliott and Robert Thomas, Public Law (3rd edn, OUP 2017) §11.2; Endicott (n 38) §15.5.2.

[59] Civil Procedure Rules, pt 54. This 'permission' was formerly known as 'leave' to apply for judicial review, and was conducted ex parte (without the respondent present). See Neil Parpworth, Constitutional & Administrative Law (11th edn, OUP 2020) §13.63.

[60] See Senior Courts Act 1981, ss 31(3) and 33(6); Civil Procedure Rules, s 54.5(1). See also Paul Craig, *Administrative Law* (8e edn, Sweet & Maxwell 2016) §§ 25–013-25–018. The time period to bring a claim under the Civil Procedure Rules is three months, and the court has discretion to lengthen or shorten it.

There are three broad grounds for judicial review of public power: illegality, irrationality, and procedural impropriety.[61] Illegality comprises issues like decision-makers taking into account irrelevant considerations or failing to account for relevant considerations, acting in bad faith, fettering their discretion, or acting with an improper purpose not prescribed by statute.[62] Irrationality is a more difficult ground for a claimant to prove, as the decision must be 'so unreasonable that no reasonable authority could ever have come to it'.[63] Procedural impropriety comprises ultra vires acts by decision-makers, such as a statutorily empowered tribunal failing to properly consult, listen to representations, or give reasons.[64] It also includes the common law principles of natural justice that safeguard against the improper exercise of public power, and which can be understood as a contextual 'duty to act fairly'.[65] In some circumstances, these common law protections against procedural impropriety may require upholding a claimant's legitimate expectations about a procedure based on a representation or past practice,[66] ensuring a fair hearing (which, depending on the importance of the decision, can include the right to make

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[61] *Council of Civil Service Unions v Minister for the Civil Service* [1985] AC 374, [1984] 3 WLR 1174, 410 (*GCHQ*). Proportionality is a separate ground of review for claims under the Human Rights Act 1998.

[62] Craig (n 60) §19-010—19-019; Parpworth (n 59) §§14.6-14.21.

[63] *Associated Provincial Picture Houses Ltd. v Wednesbury Corporation* [1948] 1 KB 223, [1947] 2 All ER 680; *GCHQ* (n 61) 410.

[64] Craig (n 60) §12-031—12-044; Parpworth (n 59) §§14.43-14.48.

[65] Craig (n 60) §12-009—12-010; Parpworth (n 59) §14.50.

[66] *GCHQ* (n 61) 410-413; *Paponette v Attorney General of Trinidad and Tobago*, [2010] UKPC 32, [2012] 1 AC 1.

oral submissions and examine the evidence),[67] ensuring freedom from bias, and providing reasons for the decision.[68]

Judicial review is not a remedy in itself – rather, courts have discretion at the judicial review hearing to grant remedies such as quashing, prohibiting, and mandating orders, as well as declarations and injunctions.[69] The most commonly sought remedy is a quashing order that invalidates the initial decision, often accompanied by remitting it to the decision-maker.[70] When the decision is invalidated on procedural grounds, the original decision-maker is free to arrive at the same outcome again, so long as the requirements of procedural fairness are upheld. Prohibiting orders require decision-makers to refrain acting in a manner that is ultra vires or contrary to the principles of natural justice, while mandatory orders require decision-makers to act or exercise a duty, such as undertaking a proper consultation.[71] Quashing, prohibiting, and mandating orders, known as the 'prerogative' orders, may only be pursued in a judicial review claim.[72] Declarations, which merely consist of a 'statement of the legal position', and injunctions may be pursued outside of a judicial review claim procedure.[73] Courts may only award damages in limited circumstances, such as when satisfied that compensation would have been awarded under ordinary proceedings

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[67] Craig (n 60) §12-034—12-036; Parpworth (n 59) §14.63-79.

[68] Although no general duty at common law exists to give reasons, courts have indicated that 'in general they [reason] should be given unless there is a proper justification for not doing so.' See Parpworth (n 59) §14.84.

[69] The remedies available through judicial review are set out in the Senior Courts Act 1981, s 31 and the Civil Procedure Rules, pt 54. See also Sir William Wade and Christopher Forsyth, Administrative Law (11th edn, OUP 2014) 532.

[70] Elliott and Thomas (n 58) §14.4.2.

[71] Parpworth (n 59) §§15.15-15.17.

[72] Civil Procedure Rules, pt 54.

[73] Craig (n 60) §26-018—26-023; Parpworth (n 59) §§15.7, 15.53.

apart from the judicial review application, and courts cannot award damages alone to compensate for the abuse of public power.[74]

Even if a claimant successfully proves that public power was exercised illegally, irrationally, or with procedural impropriety, the court's review powers are much less intrusive than private law remedies such as awarding damages. Unlike successful private law claims, successful judicial review claimants are not *entitled* to a remedy, reflecting the difference (vis-à-vis private law) that public law remedies are only granted when in the public interest.[75] Courts must also refuse to grant a remedy if it appears that a judicial review claim would not lead to a 'substantially different' outcome for the applicant.[76] A remedy would not be granted if, for example, a failure by the Exchange to consult or provide an oral hearing would not have affected the ultimate outcome for the claimant.

An important factor limiting the intrusiveness of the courts' review powers, beyond the procedural nature of the remedies themselves, is the *Datafin* precedent for a deferential approach to judicial review. Although the Takeover Panel was subject to judicial review, Sir John Donaldson MR wrote that the Panel must be given 'considerable latitude' in interpreting its rules.[77] Should the Panel's interpretation be 'far removed from the natural and ordinary meaning of the words of the rules', Sir John Donaldson MR continued, a declaratory remedy that clarified the rules' meaning would likely be appropriate, rather than an order quashing the Panel's decision.[78] In fact,

[74] Senior Courts Act 1981, ss 31(4).

[75] See Parpworth (n 59) §§13.4.1-2.

[76] Senior Courts Act 1981, ss 31(3C)-(3F).

[77] *Datafin* (n 1) 841-842.

[78] ibid.

Sir John Donaldson MR indicated that quashing and mandating orders would only be used in the context of the Panel's disciplinary function, and 'in the event, which I hope is unthinkable, of the panel acting in breach of the rules of natural justice—in other words, unfairly.'[79] In order to avoid tactical appeals of the Panel's decision-making during a takeover bid, Sir John Donaldson MR wrote that he 'should expect the court to allow contemporary decisions to take their course, considering the complaint and intervening, if at all, later and in retrospect by declaratory orders…'[80] Thus, *Datafin* suggests that courts would apply a relatively non-intrusive approach to judicial review of AIM decisions that would be reluctant to quash the Exchange's decision-making apart from clear breaches of procedural fairness in matters with a significant impact upon the claimant, such as disciplinary hearings. In circumstances involving a challenge to the Exchange's interpretation of its own rules, courts would be more likely to follow *Datafin* and issue a mere declaratory order when relief is required, limiting interventions to review of the Exchange's historic rather than contemporaneous or real-time decision-making.

A final factor suggesting a more deferential approach to judicial review of AIM decisions is the independence and expertise of the Exchange's appellate decision-making bodies. For matters involving disciplinary action, the Exchange refers disciplinary action to the AIM Disciplinary Committee and the AIM Disciplinary Appeals Committee, which are comprised of persons independent of the Exchange staff and with 'relevant expertise' to adjudicate.[81] Warning notices

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[79] ibid 842.

[80] ibid. See also *R v Panel on Take-overs and Mergers, ex parte Guinness Plc*, [1990] QB 146, [1989] 2 WLR 863, 158-159.

[81] AIM Disciplinary Procedures and Appeals Handbook (October 2018) s A14. The Exchange does not publish an official list of AIM Disciplinary Committee members, but the group's composition includes legal experts and senior barristers (Queen's Counsel). See eg 3 Verulam Buildings, 'Andrew Onslow QC Appointed to AIM Panel' (2019) <https://www.3vb.com/knowledge-hub/news-detail/andrew-onslow-qc-joins-the-london-stock-exchange>.

and non-disciplinary decisions by the Exchange may be appealed to the AIM Executive Panel and AIM Executive Appeals Panel, which are comprised of Exchange staff who do not work within AIM's regulatory staff team.[82] Expertise was identified as a relevant factor towards granting deference to the Takeover Panel's rulings in *Panel on Takeovers and Mergers v David Cunningham King*, where Lord Drummond Young noted that despite the court's statutory authority to make orders enforcing rulings or refusing remedies of the Panel,[83] the independence and expertise of the Panel's Appeal Board 'provides an obvious justification for the restriction of the Court's power of enforcement'.[84] Similarly, the independence and expertise of the Exchange's appellate decision-making bodies are factors tending towards a more deferential approach if regulation on AIM was amenable to judicial review.

SECTION II AIM and the judicial review jurisprudence

A. *The ZAI decisions concerning AIM*

Are AIM decisions amenable to judicial review? Before conducting an inquiry into the nature and source of the Exchange's power in operating AIM – which in any event would depend upon the particular exercise of power at issue – it is important to note that the issue has already come before the English courts. However, questions of AIM's public law character and amenability to judicial review have not been definitively decided: the sole decision (and appeal) on AIM judicial review declined to determine whether the AIM Disciplinary Committee (ADC) was a public body by

[82] AIM Disciplinary Procedures and Appeals Handbook (October 2018) s A13.

[83] *Panel on Takeovers and Mergers v David Cunningham King* [2018] CSIH 30, 2018 SLT 1205 [13].

[84] ibid [13]. The Takeover Appeal Board is independent from the Takeover Panel, and '… its Chairman and Deputy Chairman have usually held high judicial office…Other members of the Board usually have knowledge and experience of takeovers and the Code…'

finding there was no contractual violation of the AIM Rules.[85] This illustrates the main contention of this chapter: uncertainty in public law doctrine creates uncertainty in self-regulation, attracting both meritorious and frivolous lawsuits, because it is difficult for contractual counterparties to know whether they are legitimately entitled to procedural and substantive public law protections.

In *R (ZAI Corporate Finance Ltd) v AIM Disciplinary Committee of the London Stock Exchange plc* (*ZAI*), a regulatory adviser firm (ZAI Corporate Finance) brought a claim for judicial review concerning its hearing in progress before the ADC.[86] The AIM listing rules require all companies to retain a regulatory adviser firm at all times. These advisers – called nominated advisers or 'Nomads' – owe duties to the Exchange to assess the appropriateness of companies for listing on AIM, advise AIM companies on complying with the listing rules, and work with the Exchange on regulatory matters. Nomads are typically investment banks and corporate finance firms, they must be approved by the Exchange, and can be removed from the official Nomad register for wrongdoing.

The heart of the claim, in addition to seeking recusal of three ADC members, was that the Nomad objected to the ADC's refusal to conduct its disciplinary proceedings in public. The AIM Disciplinary Procedures and Appeals Handbook (May 2014) provided parties with 'the right to ask' for hearings to be conducted in public, but the rules contained some ambiguity as to whether a public hearing was required to be granted upon such a request.[87] The Nomad argued that 1) the

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[85] The 'AIM Rules' refer to the latest versions of the AIM Rules for Companies, AIM Rules for Nomads, and AIM Disciplinary Procedures and Appeals Handbook.

[86] *ZAI* (n 6) [1].

[87] AIM Disciplinary Procedures and Appeals Handbook (May 2014), rule C.22.1. 'The AIM Disciplinary Committee will usually conduct hearings in private, although an AIM company or nominated adviser which is subject to proceedings <u>has the right to ask for such hearing to be conducted in public</u>. An AIM company or

ADC misconstrued the rules, 2) the ADC did not properly exercise its discretion in rejecting the Nomad's request, and 3) the ADC violated Article 6 of the European Convention for the Protection of Human Rights and Fundamental Freedoms (*Human Rights Convention*), incorporated domestically under the *HRA 1998* which guarantees entitlement to a fair and public hearing.[88] The Divisional Court (and subsequently Court of Appeal) considered whether *ZAI* was a purely contractual dispute or whether the dispute warranted judicial review because of the public law issues involved.

As a matter of contract interpretation, Mostyn J of the Divisional Court found that the ADC's rules did not require public hearings upon request. Mostyn J declined to decide on whether the ADC constituted a 'public body' under the *HRA 1998*, although he opined that 'AIM seems to me to have far more of the characteristics of a private club than a public body.'[89] An influential factor in the decision was that even if AIM was a 'public body' for the purposes of the *HRA 1998*, Mostyn J did not believe the ADC's conduct violated the requirement to a 'fair and public hearing' in section 6 of the *HRA 1998*. Mostyn J wrote that, properly construed, section 6 allows for hearings to be conducted in private when necessary to achieve a fair hearing, and can be satisfied if the hearing results are made public.[90] After determining that it was not necessary to determine whether AIM was a public body under the *HRA 1998*, and in light of his finding that 'the decision made by the ADC was rational and fair and cannot be impugned', Mostyn J refused the Nomad's

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nominated adviser requiring such hearing to be conducted in public shall notify the Chairman at least five business days prior to commencement of the hearing' (emphasis added).

[88] *ZAI Appeal* (n 6) [11]. To the author's knowledge, the ADC has never conducted a hearing in public.

[89] *ZAI* (n 6) [20].

[90] ibid [20]-[23].

claim to seek judicial review of the ADC's decision.[91] Mostyn J's judgment was upheld by the Court of Appeal, which held that the ADC rules as 'properly construed' permit Nomads to request but not require a public hearing.[92]

The Court of Appeal decision focused on the wording and meaning of the ADC rules and did not decide the amenability of AIM decisions to judicial review. Sir James Munby P wrote for the Court of Appeal: 'I should record that there is dispute between the parties as to whether the Committee is amenable to judicial review at all, though not a dispute which anybody suggested we should resolve.'[93] The Court of Appeal determined it was unnecessary to rule on the ADC's amenability to judicial review because the outcome and arguments would have been identical under public law (judicial review) or private law proceedings (Civil Procedure Rules, Part 8).[94] The Court of Appeal similarly declined to decide on whether the ADC was a public body under the *Human Rights Convention* because 'even if article 6 is engaged, it has not been breached.'[95]

In the *ZAI* cases, the availability of judicial review was not a fundamental consideration given that the court determined that the Exchange had upheld its contractual obligations and the alleged breach of the *HRA 1998* could not be sustained on the facts. But what if, on another set of facts, the Exchange were found to have violated its contractual obligations and a claimant alleged that the Exchange exercised its discretion improperly as a public authority under the *HRA 1998*? The question of amenability to judicial review remains unclear. *ZAI* illustrates the problem created

[91] ibid [18], [24].

[92] *ZAI Appeal* (n 6) [18].

[93] ibid [11].

[94] ibid [11].

[95] ibid [5].

by this lack of clarity: uncertainty in the legal tests for 'publicness' creates uncertainty in the Exchange's regulation of AIM, since it is unclear whether parties may be entitled to protections from illegal, procedural improper, or irrational decisions in addition to their explicit contractual obligations. If judicial review is denied, then parties will lack desired or expected procedural protections when the Exchange exercises public power. If judicial review is granted because a decision is deemed to have been a public exercise of power, then the certainty of the Exchange's private ordering is undermined. The Exchange may then revise its contracts in areas that do not involve public exercises of power in order to avoid further judicial review, resulting in over-compliance and unnecessary transaction costs.

In *ZAI* the ultimate outcome of the dispute was not favourable to the Nomad. The Exchange removed the firm's Nomad status in October 2017, a few short months after the Court of Appeal decision. This raises an important practical consideration: Nomads are unlikely to bring AIM-related legal disputes with the Exchange before the courts – whether contractual or claims for judicial review – because of the wide discretionary power that the Exchange has to remove Nomads from the license register for conduct impairing the 'reputation and/or integrity of AIM'.[96] This power stems from contract and is effected via the AIM Rules regulating Nomads. For this reason, one might expect future claims for judicial review against the Exchange's operation of AIM to come from claimants such as investors who are not contractual counterparties with the Exchange.

[96] AIM Rules for Nominated Advisers (July 2018) r 29.

The year following the judicial review claim in *ZAI*, the AIM Disciplinary Procedures and Appeals Handbook roughly doubled both in length and number of rules.[97] The vast majority of the rules introduced were procedural and did not impose substantive or new material obligations. The significant expansion of the AIM Rules in light of the *ZAI* judicial review claim demonstrates the relevance of public law to private ordering, because a public law petition strongly influenced a private rule-maker (the Exchange) to double the size of the AIM disciplinary rules.[98] Since the *ZAI* judicial review claim was based both on the ground of irrationality and a breach of the *HRA 1998*, and *HRA 1998* claims may be brought via an application for judicial review, it is difficult to ascertain whether the Exchange's response was a reaction to the threat of judicial review, the application of the *HRA 1998*, or both.[99] However, the *HRA 1998* renders it unlawful for public

[97] The May 2014 Disciplinary Procedures and Appeals Handbook contained 8,435 words, and the revised October 2018 Disciplinary Procedures and Appeals Handbook ballooned to 16,660 words. The 2014 Handbook contained 124 'rules', counting each numbered sub-clause in the Handbook as one rule (e.g., C1.1, C1.2, etc.). In comparison, the 2018 Handbook contained 243 'rules'. The researcher counted each of the six appendices, as well as the glossary, as one rule each. The researcher excluded rules A1-4, A6-8, and A11-15 from the 2018 Handbook rule count because these rules were contained but not counted in the 2014 Handbook since they were not codified as numbered clauses.

[98] The *ZAI* judicial review claim took place in April 2017, with judgment delivered that month. The Exchange published a discussion and general rule consultation paper in July 2017. The *ZAI* appeal decision was delivered on August 30, 2017. The significant expansion to the Disciplinary Handbook came into effect on October 1, 2018. The influence of *ZAI* on the Exchange can be observed in the accompanying notice published with the revised Disciplinary Handbook, where the Exchange referenced the *ZAI* appeal decision. 'The Exchange notes that the Court of Appeal has supported the rationale for conducting ADC hearings in private…' See AIM Regulation, 'AIM Notice 54' (2018) 3, <https://www.londonstockexchange.com/companies-and-advisors/aim/advisers/aim-notices/aim-notice-54.pdf> accessed October 2018. The author's assessment that the *ZAI* judicial review claim strongly influenced the Exchange to roughly double the length of the disciplinary rules governing AIM also stems from discussions with an anonymous interviewee possessing considerable professional experience relating to AIM.

This does not imply that public law uncertainty was the only contributing factor to the Exchange revamping the AIM disciplinary rules. The researcher argues in Chapter Six that the *ZAI* cases also triggered the disciplinary rule overhaul because of reputational harm posed to the Exchange and the desire to prevent similar reputationally damaging cases in the future.

[99] Paul Craig writes that 'many s. 6(1) [HRA 1998] actions will be brought by way of application for judicial review and linked with other possible heads of illegality.' Craig (n 60) §§20–038. Although courts cannot award damages alone for judicial review claims based upon the traditional grounds of illegality, irrationality, and procedural impropriety, it is advantageous to make both claims simultaneously because courts may award damages for breaches to the HRA 1998. See ibid §20–040.

authorities to breach the *Human Rights Convention* right to 'a fair and public hearing' (Article 6), and following the *ZAI* claim the Exchange revised the rules to make clear that AIM companies and Nomads do not have the right to a public hearing:

> AIM Disciplinary Handbook (pre-*ZAI* claim): 'The AIM Disciplinary Committee will usually conduct hearings in private, although an AIM company or nominated adviser which is subject to proceedings has the right to ask for such hearing to be conducted in public.'
>
> AIM Disciplinary Handbook (post-ZAI claim): 'All hearings shall be conducted in private.'[100]

The revision to the AIM Disciplinary Handbook suggests that following the *ZAI* judicial review claim, the Exchange was cognisant of the potential applicability of the *HRA 1998* and sought to deter future *HRA 1998* claims, in addition to deterring future judicial review applications. There is greater need for private self-regulatory actors to articulate more procedurally explicit rules – i.e., to 'judicial review proof' their decisions – when it is not clear whether, ex ante, they may be subject to public law proceedings and owe public law duties of procedural propriety. An important lesson from the Exchange's regulation of AIM is that public law uncertainty imposes transaction costs on self-regulatory actors, who must reappraise their contracts and adjust their private ordering in response to (or in anticipation of) public law duties that are unpredictable because they are *potentially* owed. This is desirable in circumstances when the self-regulator may be exercising public power and the procedural additions add beneficial protections. However, this is undesirable in the many circumstances where decisions do not likely involve public power, and greater procedural articulation hinders self-regulatory flexibility and the advantages of informal regulatory responses. Furthermore, more procedurally explicit rules are likely to codify decision-making procedures favourable to the rule-maker, such as the Exchange revising the AIM Disciplinary

[100] AIM Disciplinary Procedures and Appeals Handbook (May 2014) s C22.1; AIM Disciplinary Procedures and Appeals Handbook (October 2018) s B11.

Handbook to remove the option to ask for a public hearing, since the existing rule-takers have weak bargaining power and have to either accept the procedural boilerplate or exit the regime.

B. *The ability of contract law to remedy unfairness*

The extent of any impetus for judicial review of exercises of the Exchange's discretion depends on the willingness of courts to impose principles of fairness (or principles analogous to *Wednesdbury* unreasonableness) through the law of contract. The need for judicial review diminishes the more courts are willing to imply contractual terms of fairness. There is, however, no general principle of good faith or fairness in English contract law.[101] Contractual discretion cannot be exercised irrationally,[102] and courts may imply contractual terms requiring good faith performance in the exercise of discretionary powers.[103] The legal principles determining when to imply such contractual terms actually bear much resemblance to the public law principles of judicial review.[104]

In some contexts, such as employment relationships when there is a strong power imbalance between the parties,[105] courts have implied a requirement that any exercise by the

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[101] See *Mid Essex Hospital Services NHS Trust v Compass Group UK and Ireland Ltd (t/a Medirest)* [2013] EWCA Civ 200, [2013] BLR 265 [105]. Jackson LJ writes 'there is no general doctrine of "good faith" in English contract law, although a duty of good faith is implied by law as an incident of certain categories of contract.' See also HG Beale and Joseph Chitty, *Chitty on Contracts* (33rd edn, Sweet & Maxwell 2018) §1.044.

[102] *Socimer International Bank Ltd v Standard Bank London Ltd* [2008] EWCA Civ 116, [2008] Bus LR 1304 [66].

[103] Beale and Chitty (n 101) §1.057. Courts implying a contractual term of good faith is highly contextually dependent: see *Greenclose Ltd v National Westminster Bank Plc* [2014] EWHC 1156 (Ch), [2014] 1 CLC 562 [150].

[104] *Braganza v BP Shipping Ltd* [2015] UKSC 17, [2015] 1 WLR 1661 [29] (*Braganza*). Lady Hale of the UK Supreme Court writes in *Braganza* that 'the contractual implied term is drawing closer and closer to the principles applicable in judicial review'.

[105] ibid [18]. This is because the decision-maker faces a more pronounced conflict of interest in exercising discretion fairly that affects the weaker party's rights.

employer of their discretion be 'bona fide and rational'.[106] In fact, there is an established line of 'restraint of trade' cases, taken up in *Lee v The Showmen's Guild of Great Britain* [1952] 2 QB 329 and forcefully expressed by Lord Denning in *Nagle v Fielden* [1966] 2 QB 633, holding that professional associations such as trade unions, horse racing clubs, and even the Committee of the London Stock Exchange cannot act arbitrarily or capriciously in exercising their discretion to deny membership or licenses that would unjustly exclude a person's right to work at their trade or profession.[107] In *Nagle*, the Jockey Club refused to grant a trainer's licence to a woman. Lord Denning held that in cases where a claimant possessed no contract with a professional association, but where the association 'exercises a virtual monopoly' and could exclude the claimant from their profession, courts can intervene to remedy arbitrary or capricious exercises of discretion by granting a declaration or an injunction.[108] And more recently, Lady Hale of the UK Supreme Court affirmed that employment relationships 'may justify a more intense scrutiny of the employer's decision-making process than would be appropriate in some commercial contracts'.[109]

One could imagine a circumstance where the Exchange exercised its discretion to remove a Nomad's license for conduct that did not formally breach the rules but impaired AIM's

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[106] *Horkulak v Cantor Fitzgerald* [2004] EWCA Civ 1287, [2005] ICR 402 [46]-[47].

[107] *Lee v The Showmen's Guild of Great Britain* [1952] 2 QB 329, [1952] 1 TLR 1115; *Nagle v Fielden* [1966] 2 QB 633 [1966], 2 WLR 1027, 644-645 (*Nagle*); *Weinberger v Inglis* [1919] A. 606, 35 TLR 399 (*Weinberger*). In *Weinberger*, the Committee of the London Stock Exchange exercised its discretion not to renew the membership of a German born, naturalized British citizen in 1917, despite his having been re-elected annually since 1895. This was due to the influence of members of the Stock Exchange who had formed an Anti-German Union in 1915 to lobby the Committee not to re-elect 'enemy-born' members. The House of Lords held that the Committee could not exercise its powers arbitrarily or capriciously to exclude a person's livelihood, but that despite no doubt being cast upon the claimant's character or integrity, the Committee acted honestly and with due procedure, and 'such nice discriminations' were permissible exercises of discretion. See *Weinberger* 617-621. In *Nagle*, Lord Denning opined that 'The result of *Weinberger v. Inglis* might have been very different if it had been heard today.' See *Nagle* 638.

[108] *Nagle* (n 107) 644-647.

[109] *Braganza* (n 104) [55].

reputation,[110] or where the Exchange decided to withhold or not renew the necessary regulatory approvals to 'qualified executives' employed by Nomads. In cases like these, where the Exchange exercises a 'virtual monopoly' in controlling access to the market for Nomads and qualified executives, and the decision has a significant impact on an individual's ability to work in their profession, courts would have strong precedent along the 'restraint of trade' jurisprudence to prevent the Exchange from exercising its discretion in an arbitrary or capricious manner. Thus, the availability of judicial review in this context may not be necessary to afford claimants procedural protections. A court following *Nagle* could make a binding declaration of the lawfulness of an action under the Civil Procedure Rules (CPR) 40.20, coupled with an injunction 'requiring the association to rectify their error',[111] rather than making the same declaratory order under judicial review proceedings in CPR Part 54. Although the remedies of quashing, prohibiting, and mandating orders are limited to judicial review, the effect of an order under CPR 40.20 declaring that a private body's decision was unlawful would effectively lead to the same outcome of the decision being re-made in a non-arbitrary, procedurally fair manner.

There has been a long-standing debate as to whether courts' supervisory jurisdiction to review arbitrary and capricious exercises of discretion applies only to private bodies in restraint of trade cases and similar 'constitutive' contracts relating to membership of clubs and trade unions,[112]

[110] This is permitted under rule 29 of the AIM Rules for Nominated Advisers (July 2018).

[111] Dawn Oliver, 'Common Values in Public and Private Law and the Public/Private Divide' (1997) Winter Public Law 630, 635.

[112] Terence Daintith, 'Contractual Discretion and Administrative Discretion: A Unified Analysis' (2005) 68 The Modern Law Review 554, 580–581. Professor Daintith, responding to Professor Dawn Oliver's position, argues that 'rules of natural justice have rarely been applied, outside the field of 'constitutive' contracts, to discipline the exercise of contractual discretions, even when such "vital individual interests" have been affected.'

or to any private body conducting 'important services in areas of virtual monopoly'.[113] Although courts' control of contractual discretion outside of restraint of trade cases and club membership/disciplinary type cases has been rare, in yet another decision involving the Jockey Club the High Court has stated that its jurisdiction to grant declaratory relief under CPR 40.20 is 'unrestricted', thereby preserving the possibility of controlling private abuses of power outside of the restraint of trade or club membership contexts.[114] This has led more recent commentators to suggest that courts can declare private abuses of power to be unlawful, along principles highly analogous to public law principles of irrationality, illegality, and procedural impropriety, in contexts like the Jockey Club and possibly others with 'a virtual monopoly in an important field of human activity', in accordance with Lord Denning's discussion in *Nagle*.[115]

In most commercial contexts courts are unlikely to imply good faith contractual terms between sophisticated parties.[116] In a dispute between the Exchange and a Nomad or an AIM-listed company over a non-employment related, commercial aspect of AIM Rules, it is unlikely that a court would imply a contractual term of fairness given the sophistication and capability of both parties to contract for their best interests, albeit with unequal bargaining power (the AIM

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[113] Oliver (n 111) 638–640. Oliver argues that 'there exists a broad common law duty of considerate decision-making'.

[114] *Mullins v McFarlane*, [2006] EWHC 986 (QB) [39].

[115] Endicott (n 38) §15.5.2.

[116] *Greenclose* (n 103) [150]. Justice Andrews writes: 'So far as the 'Good Faith' condition is concerned, there is no general doctrine of good faith in English contract law and such a term is unlikely to arise by way of necessary implication in a contract between two sophisticated commercial parties negotiating at arms' length.' Cf *Redwood Master Fund, Ltd and Others v TD Bank Europe Limited and Others*, [2002] EWHC 2703 (Ch). *Redwood* concerned a contractual dispute in a syndicated loan facility, and Rimer J held that it was necessary to assess whether the majority class of lenders exercised contractual power in good faith towards the minority class of lenders, absent any good faith contractual term, since the purpose for which the power conferred was 'for the benefit of the lenders as a whole'. See *Redwood* [150].

Rules are effectively standard-form contracts).[117] However, as set out above, it is possible in principle for a court to make a declaratory order under CPR 40.20, in private law proceedings not concerning the restraint of trade, that the Exchange has exercised its discretion unlawfully. This is possible because the Exchange arguably possesses a virtual monopoly over SME listings in the UK, similarly to the Jockey Club in *Nagle*.[118] While there is much greater uncertainty in private law surrounding the imposition of principles of natural justice to the Exchange's discretion outside of the restrain of trade context, this is an important possibility to consider.

In summary, claimants may be motivated to seek judicial review of exercises of the Exchange's discretion in the AIM listing rules – which do not, unlike the *Rules of the London Stock Exchange* that set out the technical rules for member firms on trading, market making, and clearing and settlement, require express consent to any exercise of the Exchange's discretion not constituting bad faith – because it is unlikely an English court would imply a term of fairness under the law of contract, and it is uncertain whether a court would grant declaratory relief apart from the restraint of trade context.[119]

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[117] This conclusion is moderated by the observation that on occasion courts have implied contractual good faith terms in commercial contexts – see *Yam Seng Pte Ltd v International Trade Corp Ltd* [2013] EWHC 111 (QB), [2013] 1 All ER (Comm) 1321, 526.

[118] See also discussion of the Exchange's monopoly powers at n 159 below.

[119] The *Rules of the London Stock Exchange* set out the requirements applicable to LSE member firms, which include investment firms and credit institutions such as banks, brokers, proprietary traders, and market makers. Member firms gain direct access (lowest latency) to the LSE's trading platforms. The rules cover trading (on and off the Exchange), market making, clearing and settlement, and compliance and default of member firms. The member firm rules provide that 'The Exchange shall not be liable in damages for anything done or omitted in the discharge of these rules unless it is shown that the act or omission was done in bad faith.' See London Stock Exchange, 'Rules of the London Stock Exchange (effective 1 July 2019)' 3, <https://docs.londonstockexchange.com/sites/default/files/documents/rules-lse.pdf> accessed August 2019.

C. *Administrative law jurisprudence on financial regulation*

Administrative law jurisprudence in the financial regulation context suggests that judicial review claims will be denied when adequate private law remedies are available, the claimant faces predominantly private law consequences, and when the private body does not have a public duty to carry out the alleged public law function. Conversely, courts will not entertain private law remedies when a financial regulatory body is exercising public power and judicial review is the appropriate petition.[120] The key challenge for claimants is identifying whether the contextual exercise of power by a private body is public, and therefore amenable to judicial review, or not. The jurisprudence also suggests that judicial review in commercial regulatory contexts is more likely to succeed on procedural rather than on substantive grounds.[121]

A recent and significant development concerning financial regulation and public law is the 2018 Court of Appeal decision in *R (Holmcroft Properties Limited) v KPMG LLP* (*Holmcroft*).[122] In *Holmcroft*, Barclays entered into a voluntary undertaking with the (then) Financial Services Authority (FSA) to settle claims from mis-selling interest rate hedging products. Rather than adjudicating the claims itself, under the FSA agreement Barclays appointed KPMG to independently assess the claims and implement the settlement scheme. KPMG only had contractual relations with Barclays – not with Barclays' mis-selling claimants – and was appointed as a 'skilled person' under section 166 of the Financial Services and Markets Act 2000 (*FSMA 2000*) by the FSA. One of the mis-selling claimants, Holmcroft Properties, was not satisfied with

[120] *Burford Capital Limited v London Stock Exchange Group plc* [2020] EWHC 1183, [175]-[180] (*Burford Capital*).

[121] Andrew Lidbetter, 'Commercial Regulation: Judicial Review: Hardly Looking or Looking Hard?' (2016) 21 Judicial Review 31 [57].

[122] *Holmcroft Appeal* (n 20).

the Barclays settlement offer that KPMG approved, and sought judicial review of KPMG's decision on public law grounds by alleging a duty of fairness.[123]

In the first instance, the Administrative Court refused to grant judicial review, holding that KPMG's duties 'do not have sufficient public law flavour' to bring the firm's claim adjudication decisions under judicial review despite being 'clearly "woven" into the regulatory function'.[124] KPMG was 'woven into' the regulatory function because it acted 'in pursuance of the FSA's regulatory objectives' by implementing Barclays' mis-selling settlement scheme pursuant to a contractual agreement with Barclays, who themselves had entered into an undertaking with the FSA to rely on KPMG as a third-party claims adjudicator.[125] Even though KPMG assisted the FSA 'in the effective performance of its regulatory functions', the court emphasized that KPMG had no relationship with the claimants, who could have pursued redress against Barclays in civil court. Significantly, Elias LJ and Mitting J wrote that 'the fact that private arrangements are used to secure public law objectives does not bring those arrangements into the public domain sufficient to attract public law principles.'[126]

The Court of Appeal upheld the Administrative Court's decision in 2018. Arden LJ found that the nature of the mis-selling compensation scheme was 'essentially for the pursuit of private

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[123] *Holmcroft Appeal* (n 20) [4].

[124] *Holmcroft* (n 22) [38]-[39].

[125] ibid [23].

[126] ibid [44]. In the same paragraph, Elias LJ and Mitting J also write that: 'courts are reluctant to find amenability to judicial review merely because a private body is carrying out functions at the behest of a public body which, if performed by that public body, would be subject to public law principles.' This reasoning extends from *R v The Insurance Ombudsman Bureau ex parte Aegon Life* [1995] LRLR 101, [1994] CLC 88 (Div Court), where even though the self-regulatory body was 'effectively delegated' dispute adjudication powers that would have been subject to judicial review if carried out by the delegating body (because the powers stemmed from statute), Rose LJ and McKinnon J found that the body was not subject to judicial review because its source of power stemmed from contract.

rights', and though KPMG was acting as an FSA-appointed 'skilled person' under the *FSMA 2000*, reviewing KPMG's assessments with Barclays' customers was 'beyond the regulatory exercise performed by the FSA'.[127] Furthermore, since the compensation provided by the scheme was 'to be negotiated on private law principles' and enforceable by the courts, the FSA's 'regulatory function did not extend to replacing the role of the court'.[128] The claimant argued that a factor supporting public law flavour was that in the backdrop of the mis-selling compensation scheme, the FSA could still initiate regulatory sanctions. In response to this submission, Arden LJ commented that the possibility of regulatory sanctions does not bring decisions within judicial review.[129] The claimant was not obliged to seek redress through the FSA-appointed claims mechanism; it was free to initiate a private law claim.

Holmcroft therefore illustrates the importance of whether the claims can be characterised as relating to private rather than public law, as well as the availability of private law remedies. Even when a private body is exercising functions when 'woven into the fabric of public regulation', the availability of satisfactory private law remedies to claimants strongly reduces a court's need to find the dispute amenable to judicial review and resort to public law principles. Furthermore, as advanced by counsel for the FCA, the claimant could not find precedent for judicial review 'where the commercial entity is carrying on for profit an activity under a commercial contract which it was under no public duty to carry out.'[130] However, the distinction is nuanced between a private body being woven into the public regulatory fabric (insufficient on its own to attract public law

[127] *Holmcroft Appeal* (n 20) [52].

[128] ibid [52].

[129] ibid [54].

[130] ibid [35].

principles) and having an affirmative public duty to carry out its functions (analogous to the Takeover Panel's delegated mandate in *Datafin* attracting public law principles). Additionally, commentators have criticized *Holmcroft* on the basis that it is not justifiable nor consistent with precedent to exclude 'private law claims' from judicial review when the decision is made by public bodies (or private bodies effecting administrative functions), and that this approach narrows access to judicial review for parties otherwise lacking legal recourse.[131] *Holmcroft* illustrates how the lack of bright-line clarity in the tests for publicness obscures parties' expectations of their legal entitlements, thus contributing to uncertainty in UK financial regulation.

Another recent decision highlighting the salience of regulatory context in the cloudy boundaries of public and private law is *Burford Capital Limited v London Stock Exchange Group plc* [2020] EWHC 1183. The decision involved an AIM-listed company (Burford) whose shares plummeted more than 50% over two trading days in August 2019 following a short-selling attack by Muddy Waters LLC (MW), who tweeted about an alleged 'accounting fiasco' and published a highly critical opinion piece while revealing their short position.[132] Burford did not allege that MW's tweets or short-selling were unlawful. Rather, Burford alleged that the precipitous decline in its share price was caused by market manipulation (via spoofing and layering) and that MW was

[131] Kevin Costello has criticized the *Holmcroft Appeal* decision on the basis that courts should not discriminate between public and private law claims because an 'individual requires the protection provided by access to judicial review just as much when an administrative undertaking has been instituted by the state to determine matters of a private law nature as when an administrative undertaking has been instituted to determine matters of a public nature.' See Costello (n 21) 232-233. Costello further remarks that this leaves a 'gap in protection', as the claimant in *Holmcroft* was ultimately left without redress in public law and private law since it did not possess a contract with KPMG. See Costello (n 21) 234-235. It is worth noting that Holmcroft Properties did have remedies in contract against Barclays, but these were statute-barred by the time of KPMG's decision under the regulatory scheme. See *Holmcroft Appeal* (n 20) [61].

[132] *Burford Capital* (n 120) [5]-[14].

implicated in the market manipulation.[133] The Exchange and FCA independently investigated – the FCA has regulatory responsibility for investigating and prosecuting violations of the Market Abuse Regulation (MAR) – and both concluded that no market manipulation occurred. Burford disagreed with the Exchange's conclusion, and sought a *Norwich Pharmacal* order (NPO) for document production that would compel the Exchange to identify the names and order information of everyone who traded on the two days in question, so that Burford could itself assess whether it had a claim against those who it believed committed market manipulation.[134] Justice Andrew Baker denied granting the NPO – without which Burford would not have the evidence to pursue any private law claim – and chastised Burford for not instead pursuing a judicial review claim against the FCA.[135]

Burford Capital illustrates a similar lesson to *Holmcroft*, albeit the other side of the coin: in *Holmcroft* judicial review was denied because private law remedies were deemed appropriate, and in *Burford Capital* judicial review was encouraged because private law remedies were deemed

[133] *Burford Capital* (n 120) [16]-[18]. Spoofing and layering are unlawful trading practices whereby a trader submits orders without the intention to execute the trade, instead seeking to move the price in one direction (by misrepresenting supply and demand), cancel its orders (which were never entered in good faith), and profit by buying at the now lower price (or selling at the now higher price) on the other side of the order book.

[134] Burford received anonymised trading data from the Exchange, which led it to believe (alongside the export reports commissioned on the trading data) that market manipulation had occurred. Burford sought a *Norwich Pharmacal* order (NPO) disclosing trading identifiers including a full list of the names of persons submitting each buy and sell order on the two trading days in question. The NPO sought both the names of the brokers and institutions who were members of the trading venue, and the names of the clients on whose behalf the trades were executed. See *Burford Capital* (n 120) [22]. Courts have equitable jurisdiction to grant NPOs when relief cannot be obtained under the Civil Procedure Rules – the purpose is to compel third parties (e.g., the Exchange) to produce documents or information disclosing the identity of an alleged wrongdoer (e.g., a market manipulator) when a claimant has suffered harm but does not know the wrongdoer's identity.

[135] 'On this claim, Burford must persuade the court that… the Stock Exchange provide Burford with the Participant Identity details so that Burford could seek to pursue a private prosecution rather than seek a judicial review of the FCA's conclusion that there is nothing to prosecute. Justice would not so demand.' See *Burford Capital* (n 120) [175]. 'Burford does not need *Norwich Pharmacal* relief to challenge that conclusion, if there are grounds for doing so, through judicial review.' ibid [177]. 'The means by which the law provides for the protection of Burford's relevant interests is, ultimately, the amenability in principle of the decisions of the FCA to judicial review.' *Burford Capital* (n 120) [179]-[180].

inappropriate. This highlights the centrality of whether appropriate private law remedies are available for courts determining the availability of judicial review. It also reinforces the argument that a lack of public law clarity – whereby one decision of a private body may be public while the next decision may not – obscures parties' expectations of their legal entitlements and causes uncertainty in UK financial regulation.[136]

Similar to *Holmcroft*, judicial review was denied in *R (on the application of West) v Lloyd's of London* (*Lloyd's*) to a private body woven into the public regulatory fabric. A claimant challenged a series of decisions made by an adjudicative body of Lloyd's of London, an insurance syndicate analogous to AIM in that it regulates its members via contract in the backdrop of public financial regulation. The decision made by Lloyd's approved minority buy-outs of its insurance underwriting syndicate memberships at an alleged undervalued price. Lloyd's powers are statutory (Lloyd's is a statutory corporation which came into being via the Lloyd's Act 1871), its objects are commercial in nature, and it is regulated domestically under the *FSMA 2000* and under European legislation as an insurance undertaking.[137] Membership in an underwriting syndicate at Lloyd's is voluntary, and the contracts members enter into with Lloyd's stipulate that Lloyd's by-laws are binding.[138] The claimant in *Lloyd's* argued for the publicness of the decision using the

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[136] The public law uncertainty in *Burford Capital* did not concern the amenability of judicial review, as it did in *Holmcroft Appeal* (n 20). Rather, it concerned whether market manipulation under the Market Abuse Regulation could ground a private right of action. Burford had advanced several private law causes of action, most notably that a MAR violation could directly found a private claim in tort. See *Burford Capital* (n 120) [158]. Justice Andrew Baker held that it could not. The limited remedies that can be obtained through judicial review are of little help to a company that may have been victim to market manipulation. To take the most common remedy, a quashing order invalidating the FCA's decision would not begin to compensate a claimant for financial loss suffered, unless accompanied by a private right of action claiming for damages or restitution. It is therefore hard to see how 'judicial review provides fair and sufficient protection of Burford's interests as alleged victim of market manipulation with no private law cause of action against the manipulators.' *Burford Capital* (n 120) [180].

[137] *Lloyd's* (n 33) [4]-[7].

[138] ibid [8].

‘but-for’ test: the government would be regulating the market but for Lloyd’s regulating its members.[139] In holding that Lloyd’s was not exercising a public function, the Court of Appeal noted that Lloyd’s’ decisions were not amenable to judicial review because they solely pertained to the commercial relationship between the claimant and Lloyd’s, and because this commercial matter was governed by contracts.[140] The claimant faced private law consequences, not public law consequences. Brooke LJ distinguished the facts of the case from *Datafin*:

> The Panel [in *Datafin*] exercised regulatory control in a public sphere where governmental regulatory control was absent. This case is concerned with the working out of private contractual arrangements at Lloyd’s which is itself subject to external governmental regulation.[141]

However, it should be emphasised that *Lloyd’s* held that the association of insurance underwriters was not amenable judicial review ‘in relation to those of its functions that are under scrutiny in this case’,[142] functions which only concerned ‘exercising regulatory powers in relation to the affairs of the members of Lloyd’s’.[143] Brooke LJ made clear that the ruling on Lloyd’s amenability to judicial review was ‘not concerned with the exercise of disciplinary functions, nor with the exercise of regulatory functions for the protection of policy-holders.’[144] Thus, while *Lloyd’s* supports the position that the Exchange interpreting its contracts (eg, the listing rules) or exercising regulatory power concerning its commercial relationships with Nomads or listed companies would not be amenable to judicial review, it leaves the door open for the Exchange to be amenable to

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[139] ibid [29].

[140] ibid [31].

[141] ibid [32].

[142] ibid [40].

[143] ibid [3].

[144] ibid.

judicial review when exercising disciplinary functions or regulatory functions affecting investors who do not have a commercial relationship with the Exchange, and therefore no redress in private law.

C. *Tying together the judicial review jurisprudence*

By refraining from ruling on the amenability of AIM decisions to judicial review, the Court of Appeal in *ZAI* left many questions unanswered. Judicial review was unnecessary because the outcome and arguments would have been identical under private and public law proceedings, but one could imagine other instances where the availability of public law protections (e.g., the right to reasons or a quashing order) would alter the outcome of the decision and tip the court's scale towards granting judicial review. The Court of Appeal decision in *Holmcroft* set the balance more firmly in the other direction, closing the door to judicial review for claims relating to the pursuit of private rights and claims that can be pursued in private law proceedings. This is the case even when private bodies act in pursuit of public regulatory objectives. The court in *Burford Capital* affirmed the centrality of appropriate private law remedies by admonishing a claimant for inappropriately resorting to private law claims when judicial review would have been the proper avenue. However, the court in *Lloyd's* leaves open the possibility that private self-regulatory bodies in the financial regulatory context could be amenable to judicial review when exercising disciplinary functions or regulatory functions affecting third parties without redress in private law.

SECTION III Applying public law tests to regulation on AIM

The *Datafin* jurisprudence on amenability to judicial review suggests that the inquiry into public law character balances considerations of the source of power, nature of power, and regulatory

context, and is dependent upon the particular exercise of power in question.[145] On balance, then, would a decision by the Exchange in regulating AIM, or by an AIM decision-making body such as the ADC, have a sufficiently public law character to be amenable to judicial review? A court would consider the following factors in determining the answer:

1. Source of power (statute, contract, both?);
2. Nature of power being exercised (is the body exercising public power? Are appropriate private law remedies available?);
3. Regulatory context (how woven is the body into a public regulatory function and how present or absent is governmental regulatory control?).

Considering these factors and comparing the similarity of regulation on AIM to relevant English public law cases in the financial regulation context, the analysis in this chapter suggests that on balance it is unlikely that regulation on AIM has a sufficiently public law character to be amenable to judicial review, but that the jurisprudence leaves open the possibility of judicial review, particularly in the context of a disciplinary hearing or decision affecting third parties.

A. *Source of power*

A court would begin by asking whether the Exchange's source of power in regulating AIM stems from contract or statute. The Exchange's direct authority to regulate AIM companies comes from contract: the AIM Rules are effectively standard-form contracts between companies, Nomads, and the Exchange. The Exchange's authority to refer disputes to internal or external disciplinary committees and impose disciplinary sanctions on companies, Nomads and brokers stems from

[145] *Jockey Club* (n 18) 916. 'It is wrong to seize on any single feature or test to determine whether a body or a decision is susceptible to judicial review. That is a question to be determined in the light of all the circumstances.'

contract (i.e., the AIM Rules written by the Exchange). However, the Exchange's broader authority to operate AIM as a trading venue comes from statute. The Exchange can only operate AIM because it is a 'Recognised Investment Exchange' (RIE) under the *FSMA 2000*.[146] AIM itself has no separate legal personality,[147] but through the Exchange's regulatory status AIM is a 'prescribed market' under the FSMA 2000. However, given the discussion in *Holmcroft*, a claimant seeking judicial review of an AIM decision would need to point to more than the statutory objectives of the *FSMA 2000* to ground an argument of AIM's public law character.

In summary, the basis of the Exchange's ability to operate and regulate a trading venue is statutory, but the basis of the Exchange's ability to determine the content of the AIM Rules and enforce them – e.g., to suspend trading or de-list companies – primarily comes from the private law of contract. A relevant question a court may examine is the significance of this 'statutory underpinning' to the Exchange's contractual authority in regulating AIM.[148] Unlike *Holmcroft*, where KPMG did not have direct contractual relations with claimants under the mis-selling redress scheme, the Exchange has direct contractual relations with all companies and Nomads via the AIM Rules. In fact, the Exchange determines the admission of companies to AIM and the licensing of

[146] The *FSMA 2000* prohibits all person from carrying out 'regulated activity' in the UK unless they are an 'authorised person' or an 'exempt person' – see *FSMA 2000*, s 19(a)(b). The Exchange is an exempt person because of the FCA's order recognising it as a Recognised Investment Exchange under Part XVIII of the *FSMA 2000*, and as such the Exchange is able to carry out regulated activity in operating AIM as a 'prescribed market'.

[147] *ZAI* (n 6) [2].

[148] For a relatively recent example see *R (Baker Tilly UK Audit LLP) v Financial Reporting Council* [2015] EWHC 1398 (Admin), [2015] ACD 120 [32]. The Financial Reporting Council (FRC) was found amenable to judicial review despite having a contractual source of power because it 'perform[s] public law functions in substance…'. Justice Singh emphasized the 'statutory underpinning' of the FRC in the Companies Act, and that 'but for' the FRC the government would need to regulate in the public interest. cf *R (Lewin) v Financial Reporting Council and others* 2018 EWHC 446 (Admin), [2018] 1 WLR 2867 where a director of an AIM-listed company unsuccessfully sought judicial review of a decision by the FRC to publish a report of disciplinary tribunal. The decision concerned the lawfulness of publishing findings of misconduct against the claimant without providing the opportunity respond or provide evidence. Davies J found that the tribunal's publication was not an unjustified interference with the claimant's right to respect for privacy under art 8 of the European Convention on Human Rights.

Nomads. Although the Exchange's source of power with respect to rule enforcement disputes with most claimants is predominantly contractual, this factor is not sufficiently clear to be determinative of the inquiry.

In contrast to AIM, the listing rules of the LSE Main Market are published by the FCA, a public body that is in principle amenable to judicial review.[149] Since the FCA has recognised the Exchange as an RIE under the *FSMA 2000*, the Exchange has public law obligations contained in the FCA Handbook (concerning its operation of the Main Market) that require it to have appropriate procedures to make and amend rules, appropriate consultation procedures, 'effective arrangements for monitoring and enforcing compliance' with the rules, and 'effective arrangements for the investigation and resolution of complaints arising in connection with the performance of, or failure to perform, any of its regulatory functions.'[150] While the Main Market of the LSE is a 'regulated market' under MiFID II and the FCA Handbook, AIM is a 'multilateral trading facility' (MTF) and 'SME growth market' under MiFID II and the FCA Handbook.[151] This distinction is relevant because the Exchange's public law obligations concerning its operation of MTFs and SME growth markets are more limited and do not require the MTF or SME growth

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[149] See Justice Andrew Baker's discussion of 'the amenability in principle of the decisions of the FCA to judicial review' in *Burford Capital* (n 120) [180].

[150] See Financial Conduct Authority, 'FCA Handbook' chs REC 2.14-2.16 <https://www.handbook.fca.org.uk/handbook/REC/2/> accessed May 2020 ('FCA Handbook'); *FSMA 2000* (Recognition Requirements for Investment Exchanges and Clearing Houses) Regulations 2001 (SI 2001/995) paras 7-9 ('Recognition Requirements Regulations'). The requirement to have effective arrangements for resolving complaints does not include complaints about the content of its rules or complaints concerning disciplinary decisions that may be appealed.

[151] SME growth markets are a category of multilateral trading facility (MTF) under MiFiD II. The Exchange applied to the FCA (as its home competent authority) to register AIM as an SME growth market, which occurred on 3 January 2018. For the MiFID II provisions on SME growth markets, see art 33. For a background to the SME growth market regime, see European Securities and Markets Authority, 'Consultation Paper (On the Functioning of the Regime for SME Growth Markets)' (May 2020) <https://www.esma.europa.eu/sites/default/files/library/esma70-156-2061_mifid_ii_consultation_paper_on_sme_gms_under_mifid_ii_and_mar.pdf> accessed June 2020.

market to have the same 'appropriate' procedures for rule-making, amendments and rule consultation applicable to 'regulated markets' (like the Main Market), nor to have the same requirements for effective disciplinary and complaints arrangements.[152] Not only do RIEs have procedural fairness duties surrounding rule consultation and rule adoption that are not applicable to MTFs, but other RIEs (e.g., the London Metal Exchange) have been found amenable to judicial review.[153] This suggests that the Exchange would be amenable to judicial review in relation to claims arising from its operation of the Main Market that are grounded in the statutory procedural fairness duties imposed on RIEs in relation to rule-making, consultation, compliance, and discipline that are contained in the FCA Handbook.

B. *Nature of power*

The next factor – the heart of the inquiry – would concern whether the Exchange was exercising a public law function in the particular AIM decision at hand. Most of the Exchange's functions are

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[152] See FCA Handbook (n 150) ch REC 2.16A para 9E; see Financial Conduct Authority, 'FCA Handbook' ch MAR 5.10 <https://www.handbook.fca.org.uk/handbook/MAR/5/?view=chapter/> accessed May 2020. A UK RIE operating an MTF (i.e., the Exchange operating AIM) must comply with Title II, Chapter I of MiFID II which is incorporated domestically in the Schedule to the Recognition Requirements Regulations paras 9A-9H, and the FCA Handbook ch REC 2.16A. The requirements (for a UK RIE operating an MTF) in the FCA Handbook (ch REC 2.16A) cover order execution, membership rules, disclosure obligations, and restrictions for SME growth markets on listing financial instruments already trading on other SME growth markets. Some of the MiFID II requirements applicable to the Exchange in operating AIM include having appropriate risk management arrangements and systems (art 19(3)(a)) and having 'effective systems and controls aiming to prevent and detect market abuse' under the Market Abuse Regulation (No 596/2014) (art 33(3)(g)), but do not include the same procedural fairness requirements applicable to RIEs under the Recognition Requirements Regulations discussed at n 150.

[153] In *R (United Company Rusal plc) v The London Metal Exchange* [2014] EWHC 890 (Admin), [2014] ACD 87, a claimant succeeded in the first instance in a judicial review claim against the London Metal Exchange (LME), alleging that the LME's rule consultation process and decision to adopt a rule were procedurally unfair. Justice Phillips wrote that 'It is not in dispute that the LME is subject to the principles of public law and amenable to judicial review', and quashed the decision implemented by the LME. See ibid [3]. On appeal, Lady Justice Arden found that the judge erred in the first instance by over-extending the public law principle of the duty of fairness. Arden LJ overturned the initial judgment and held that the LME's rule consultation and adoption was lawful and fair. See *R (United Company Rusal plc) v The London Metal Exchange* [2014] EWCA Civ 1271, [2015] 1 WLR 1375. However, neither party on appeal contested the LME's amenability to judicial review – Arden LJ notes that the initial judgment carefully explained the factual and regulatory background, and that neither party on appeal claimed the initial judgment was inaccurate in these respects. See ibid [5].

clearly private in nature, while other functions may possess elements of a public law character. The Exchange's decision to fine and privately censure a company (publishing an anonymous disciplinary notice) for breach of the AIM Rules has an entirely private law flavour, whereas the Exchange's decision to cancel the admission of AIM securities (de-list an issuer) or remove a Nomad from the register is less clearly an exercise of private power. The latter examples are more serious in nature, have potentially greater impact on third parties and the public interest, and affect the company or Nomad's regulatory position. In these examples, the availability of public law protections relating to procedural impropriety (e.g., the absence of reasons or the presence of bias) could materially change the outcome of a decision to remove an issuer or Nomad from the market. In fact, Lloyd LJ recognised in *Datafin* that certain exercises of power by stock exchanges were public in nature, such as admitting securities to the Official List of the LSE:

> …the Council of the Stock Exchange *is performing a public duty when deciding whether or not to admit a security to official listing and whether or not to discontinue such a listing*. There is no longer a formal listing agreement entered into by companies seeking a listing of their securities. The council now has all the power required or permitted to be conferred on "the competent authorities" by, inter alia, the admission directive of the Council of the European Communities of 5 March 1979 (79/279/E.E.C): see the Stock Exchange (Listing) Regulations 1984… *Such an application, in this country, would take the form of an application for judicial review*.[154,155]

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[154] *Datafin* (n 1) 851 (emphasis added).

[155] The Hansard report of the House of Lords debate introducing the Stock Exchange (Listing) Regulations 1984 presents one of the first clear articulations of the inherent tension in the public/private law character of UK stock exchange regulation. Lord Bruce of Donington recognises that the proposed EU legislation would confer on the Exchange public law powers normally exercised by the Department of Trade and Industry. Lord Bruce acutely observes that this increase in public law power is not accompanied by an increase in public accountability, save for the Exchange's reputation: 'One point which the noble Lord [Lucas] has touched upon is the appointment of the Stock Exchange as the competent authority for carrying out the supervisory functions and, in some cases, derogation from regulations, in substitution for what would normally be the functions of the Department of Trade and Industry… *This puts the Stock Exchange in a position of considerable power. As the noble Lord is well aware, the Stock Exchange is not accountable to the public in any way—save, of course, by its reputation*, which I should not wish in any way to underrate. Nevertheless, I do not consider that this is the manner in which it should have been done.' See HL Deb 18 May 1984, vol 451, cols 1610–9 <https://perma.cc/U9VT-TYQS> (emphasis added).

There are several strong distinguishing features between the Exchange's operation of AIM and Lloyd LJ's commentary in *Datafin* that the Council of the Stock Exchange was exercising a public function when listing and de-listing companies. First, in the context of *Datafin*, the conditions for 'official listings' were set out under EU Council Directive 79/279/EEC, which permitted member states to confer listing authority on public or private bodies under the regime. Taking this into account, it is clear that the Takeover Panel exercised regulatory control despite not formally contracting with issuers to determine admission or rule adjudication.

Unlike official listings, there is no public law requirement for the UK government to implement a regime harmonising the rules on AIM listings with other EU member states. Herein lies a key distinction between official listings on stock exchanges and listings on AIM and other trading venues. The Consolidated Admission and Reporting Directive (2001/34/EC) coordinates the conditions for official listings between EU member states – the UK government would have to regulate official listings (which it does via the FCA) in the absence of a private body performing this public function. The UK government is not statutorily required to establish and regulate other trading venues – such as AIM or Acquis Stock Exchange (formerly NEX Exchange) – however beneficial these markets may be to the public. This factor points against a public function.

This turns our attention to the 'but-for' test, which asks whether the function would be performed by government if not for the private body. There are two separate issues to consider: first, would AIM be regulated by the UK government but for the Exchange, and second, how determinative would this factor be in considering the amenability of regulation on AIM to judicial review?

First, if the Exchange stopped regulating AIM tomorrow, the regulatory functions necessary to avoid market collapse would need to be performed either by a government body such

as the FCA or by a willing private body with suitable expertise. The existence of other privately operated UK SME growth markets, such as the Acquis Stock Exchange Growth Market, suggests that the Exchange's regulatory function could be performed by another private body without government involvement.[156] However, the 'but-for' test need not be premised upon a hypothetical, immediate cessation of a private body's function. Under this construction, all private firms whose operations could impose substantial negative externalities if suddenly halted would pass the 'but-for' test, regardless of a non-governmental function or lack of governmental relationship.[157]

Datafin presents a compelling, alternative construction of the 'but-for' test. In *Datafin*, the conclusion that government would have performed the regulatory function but for the Takeover Panel was based upon a consideration of the history of the Panel's activity in relation to government, which included in particular 'the expressed willingness of the Secretary of State for Trade and Industry to limit legislation in the field of take-overs and mergers and to use the panel

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[156] Some commentators, such as Michael Beloff QC and Tim Kerr, argue that the 'but-for' test should not consider whether other private bodies would willingly perform the function. See Michael Beloff and Tim Kerr, 'Why Aga Kha Is Wrong' (1996) 1 Judicial Review 30. However, English courts have routinely considered the availability of other private bodies as a relevant factor in the 'but for' test: see *R v Football Association Ltd* (*ex p Football League Ltd*) [1993] 2 All ER 833, *R v Servite Houses (ex p Goldsmith*) [2000] 3 CCLR 325, and *R (on the application of Moreton) v Medical Defence Union* [2006] EWHC 1948.

[157] There are legitimate and differing constructions of the 'but-for' test, as indicated in n 156, and these differing constructions may be influenced by the breadth of one's conception of the public interest. Some commentators support a more expansive version whereby private bodies would always pass the 'but for' test if the activity was important enough to the public interest for the government to perform, regardless of any governmental nature or the availability of other private bodies to perform the task. See Campbell (n 9) 95–96. Others, such as Justice Simon Brown, support a less expansive conception of the public interest. In *R v Chief Rabbi of the United Hebrew Congregation*, Justice Brown writes: 'To say of decisions of a given body that they are public law decisions with public law consequences means something more than that they are decisions which may be of great interest or concern to the public or, indeed, which may have consequences for the public. To attract the court's supervisory jurisdiction there must be not merely a public but potentially a governmental interest in the decision-making power in question.' See *R v Chief Rabbi of the United Hebrew Congregation of GB and the Commonwealth (ex p Wachmann)* [1993] 2 All ER 249, [1992] 1 WLR 1036, 1041, cited with approval by Rose J in *R v Football Association Ltd* (*ex p Football League Ltd*) [1993] 2 All ER 833, 847-848.

as the centrepiece of his regulation of that market.'[158] Applying the 'but-for' test in a similar vein, one would consider whether the function of regulating an SME listing and trading venue could have developed a different regulatory architecture other than the Exchange operating AIM or other than the government performing the function. The existence of other competing, privately operated listing and trading venues for UK SMEs suggests that the government would not need to perform this function but for the Exchange, since it could be performed by private bodies in contexts other than AIM.

The lack of a statutory duty for the government to operate MTFs like AIM or the Acquis Exchange is also a factor suggesting that regulation on AIM might fail the 'but-for' test, because the UK government does not have a legal duty to prescribe and enforce AIM regulation in the absence of private regulation, unlike its aforementioned statutory duty to regulate official listings. The lack of public duty to operate AIM also highlights the salience of properly defining the 'public function' at issue. If the public function is to provide an AIM-specific listing, then the argument in favour of judicial review is strengthened because the Exchange wields monopoly regulatory power over AIM listings. If the public function is framed as providing smaller companies with access to capital markets through admission to trading on an SME growth market, then the Exchange arguably wields the vast majority of market power in the UK but not in Europe.[159] And

[158] *Datafin* (n 1) 838. Sir John Donaldson MR also wrote that: 'No one could have been in the least surprised if the panel had been instituted and operated under the direct authority of statute law…Its lack of a direct statutory base is a complete anomaly…' ibid 835.

[159] The ESMA register at May 2020 shows that AIM had 755 SME issuers, which constituted of 91% of all SME issuers in the UK. The only other UK SME growth market was the NEX Exchange with 74 SME issuers, while Property Partner Exchange had 1 SME issuer but is not technically an SME growth market (it is an MTF targeting SMEs). The ESMA register shows 1,715 SME issuers listing equity on European SME growth markets, meaning that AIM only constitutes 44% of all SME issuer equity listings in Europe. When accounting for MTFs that target SMEs (but are not registered as SME growth markets), AIM's market share of SME issuer equity listings falls to 31%. See ESMA Consultation Paper (On the Functioning of the Regime for SME Growth Markets) (n 151) 15.

if the public function is to provide *any* stock exchange listing, given the importance of capital markets to the UK public, it is much harder to make the case for an exercise of public function given the lack of monopoly regulatory control over all public listings by a sole institution. Given these considerations of defining the public function at issue, the arguments in favour of the Takeover Panel's public law character in *Datafin* may have been less persuasive had effective and meaningful access to public UK capital markets been more readily available at the time through other means than an official listing. Weighing the public function jurisprudence since *Datafin*, the author's view is that the exercise of a public function must stem from a public law duty, which in this context does not compel the Exchange to establish an SME growth market such as AIM, but does entail (*inter alia*) that once established AIM must have fair order execution rules, sufficient disclosure and public information arrangements 'to enable users of a multilateral trading facility operated by it to form investment judgements', and for the Exchange to maintain robust market abuse detection and controls.[160]

Although the functioning of AIM is important to the UK public, the import of AIM listings as compared to the necessity of the Official List of the Main Market may not be of enough significance to imply a duty to act in the public interest. This is reminiscent of the persuasive submissions in *Holmcroft* that there is scant precedent of successful judicial review petitions by commercial bodies carrying out allegedly public functions without being able to point to a

[160] See discussion of the Exchange's public law obligations in relation to AIM at n 152. The view presented above connects the nature of power test more closely to the source of power test by limiting the exercise of 'public functions' to those grounded in public law obligations, as Alexander Williams also advocates (see text to n 43). There will inevitably be differing views on the nature of what should constitute a public function, since 'the meaning of a "public" function will depend heavily on one's political impressions as to the proper role of the state.' See Williams, 'Public Functions and Amenability' (n 21) 17. There will also inevitably be a tension between fairness and certainty or predictability. The view advocated for here has the advantage of being highly predictable while avoiding, in the case of private bodies exercising alleged *de facto* public power, courts unpredictably drawing upon public law principles to 'essentially [ask] whether one private individual should be made to act fairly for the benefit of another or others.' See Williams, 'Judicial Review and Monopoly Power' (n 43) 15-16.

corresponding public duty. However, if a broader definition of the public interest was adopted, such that any decision which significantly affected the public at large would imply a public law duty, then the case to subject the regulation on AIM to judicial review would be strengthened.[161]

Turning to the second issue of how determinative is the 'but-for' test in the amenability to judicial review analysis, the decision in *R v Jockey Club ex p Aga Khan* [1993] 1 WLR 909 (CA) ('*Aga Khan*') provides a helpful starting point. A racehorse owner sought judicial review of the Jockey Club's decision to disqualify his horse after winning a race. Sir Thomas Bingham MR accepted the claimant's arguments that 'the Jockey Club effectively regulates a significant national activity, exercising powers which affect the public and are exercised in the interest of the public' and that 'if the Jockey Club did not regulate this activity the government would probably be driven to create a public body to do so.'[162] However, despite passing the 'but-for' test, Sir Thomas Bingham MR held that the Jockey Club was not amenable to judicial review because it lacked the origin, history, and constitution of a public body, it was not 'woven into any system of governmental control of horseracing', and it exercised contractual rather than governmental powers with its members that gave rise to private law remedies.[163] *Aga Khan* suggests that even if the government would need to create a public body to regulate AIM in the absence of regulation by the Exchange, this factor alone is not sufficient to find a body amenable to judicial review.

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[161] See *Birmingham Airport* (n 29), where it was relevant to the public interest that the decision impacted 'significant numbers of the public at large'. However, Neil Duxbury suggests that a private decision does not necessarily invoke the public interest by virtue of impacting many people; rather, 'public interest is the interest which citizens have in being able to challenge decisions which they consider to be based on an improper exercise of public power.' Along this narrower conception of the public interest, a regulatory decision by the Exchange affecting many people (e.g., shutting down AIM) would not necessarily engage the public interest. See Duxbury (n 39) 240.

[162] *Jockey Club* (n 18) 923. See also Craig (n 60) §§27–030.

[163] *Jockey Club* (n 18) 923-924.

However, an important distinguishing feature from *Aga Khan* is that AIM is woven into a broader system of public financial regulation, the implications of which are discussed below in Section III(C). Additionally, *Aga Khan* suggested that judicial review on public law principles might be available in circumstances where the clamant had no contractual relationship with the Jockey Club, or where the Jockey Club made discriminatory rules.[164] Thus, while *Aga Khan* tends against the availability of judicial review in cases like *ZAI* where the claimant has a contractual relationship with the Exchange and can seek private law remedies, it leaves the door open to judicial review of private bodies when claimants do not possess contractual rights or are subject to discriminatory exercises of self-regulatory power.

The Takeover Panel in *Datafin* exercised informal regulatory control over admission to official listings because of the willingness of the Council of the London Stock Exchange to impose sanctions for breaches of the Takeover Code.[165] Conversely, the Exchange in operating AIM does not exercise the same degree of regulatory control over admission to stock exchange listings in the UK – there are other trading venues than AIM upon which companies can seek to have securities admitted. Furthermore, 'the private and commercial motivation' of AIM is to earn profits as opposed to predominantly public objectives, pointing towards a private nature.[166]

Another influential factor suggesting AIM regulation is private in nature is the availability and adequacy of private law remedies. The Exchange enters into formal contracts via the listing

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[164] *Jockey Club* (n 18) 924, 927.

[165] Through the Takeover Panel's relations with the Stock Exchange and a 'devolution of power through the Bank of England and the Department of Trade and Industry'. See *Datafin* (n 1) 822. See also text to n 159 for discussion of other trading venues in the UK.

[166] See *YL* (n 32) [116]. Lord Mance wrote: 'In providing care and accommodation, Southern Cross acts as a private, profit-earning company… The private and commercial motivation behind Southern Cross's operations does in contrast point against treating Southern Cross as a person with a function of a public nature.'

rules with companies and Nomads, and contractual disputes relating to AIM decisions or regulation may be challenged in court under the private law of contract. Private law remedies are typically available to claimants, removing the need for a court to find that decisions by AIM adjudicating bodies are amenable to judicial review on public law grounds in order to provide redress. The situation becomes more nuanced when it involves contractual counterparties alleging an unfair exercise of discretion, or third parties, such as investors or employees of AIM-listed companies, who do not possess contractual rights against the Exchange. Courts have unrestricted jurisdiction to declare a private body's exercise of contractual discretion to be unlawful, though judicial intervention for private abuses of power outside of the club membership/discipline and restraint of trade cases has been limited and is uncertain. Concerning third parties, it would be difficult to claim in negligence against the Exchange, given the difficulties in establishing a duty of care (since in most circumstances the Exchange has not voluntarily assumed responsibility towards third parties), and demonstrating a breach of that duty that has caused a recoverable form of loss (which generally excludes pure economic loss). The adequacy of private remedies would depend on the facts of the claim being brought, but a court would be more inclined to find an exercise of public power when a private law claim would not provide satisfactory relief to the claimant. Given the centrality of appropriate private law remedies in *Holmcroft* and *Burford Capital*, a claimant would need to demonstrate that appropriate redress for the alleged public exercise of power could not be found in private law and was solely available through public law remedies. However, given courts' traditional reluctance to control for unfair exercises of contractual discretion, a future claimant may well be able to demonstrate that private law relief is unavailable and public law protections are necessary.

A countervailing factor that carries significant weight against characterising regulation on AIM as purely private in nature is that the Exchange's exercise of discretion (e.g., ceasing trading or cancelling a company's securities instead of imposing a lesser penalty) could have detrimental effects on third parties such as investors or on the livelihoods of employees of AIM-listed companies.[167] For example, Nomads must allocate at least one 'qualified executive' (QE) to be principally responsible for supervising each AIM company it advises. The Exchange grants QE status to Nomads rather than granting individuals a designation that is portable across firms: QE status 'is a designation which is granted to a nominated adviser firm *denoting those individuals within the firm* who are authorised by the Exchange to lead AIM Rules for Companies advice for that nominated adviser.'[168] However, the Exchange has discretion to deny QE status to individuals even though they meet all enumerated criteria relating to corporate finance experience and expertise.[169] Since QE status does not belong to the individual but is tied to their employment at a particular Nomad, one could imagine a QE attempting to change firms and having their QE status denied for no other discernable reason. In this case the claimant has no direct contractual relationship with the Exchange – only with the Nomad as employer – yet the Exchange's regulatory discretion significantly affects their livelihood. The nature of the power exercised in this scenario has a stronger public law flavour than when a claimant has a contractual relationship

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[167] See Williams, 'Public Functions and Amenability' (n 21) 19. Despite the Jockey Club not being found amenable to judicial review in *R v Jockey Club ex p. Massingberd-Mundy* [1993] 2 All ER 207 (Div Ct), Roch J's remarks (in obiter) that the Jockey Club 'has near monopolistic powers in an area in which the public generally have an interest and in which many persons earn their livelihoods' as a factor supporting the Jockey Club's public nature.

[168] AIM Rules for Nominated Advisers (July 2018) rule 4 (emphasis added).

[169] ibid.

with the Exchange, particularly if private law remedies are not satisfactory.[170] This is a relevant consideration because the importance of private bodies' decisions to third parties affected is a factor suggesting the potential exercise of a public function.[171] This factor on its own does not mean the Exchange's regulation of AIM is a public function, but it does suggest that the door to judicial review on AIM could well remain open in certain contexts.

C. *Regulatory context*

AIM is deeply woven into the fabric of domestic and European financial regulation. Mostyn J noted in *ZAI* that 'AIM belongs to the LSE; it has no separate legal existence. The LSE, and therefore AIM, are, unsurprisingly, regulated by European and domestic legislation.'[172] In addition to being regulated by the FCA (pursuant to the *FSMA 2000* and FCA Handbook) and subject to the MiFID II regime, AIM companies are governed by public regulation such as the Market Abuse Regulation, and UK-incorporated AIM companies are subject to the Takeover Panel's regulation. Table 4.1 below compares the regulatory context of AIM to the Main Market of the LSE.

TABLE 4.1: REGULATORY CONTEXT – AIM V. LSE

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[170] There may be satisfactory remedies in private law in this scenario, as discussed in Section II(B), because the principles of natural justice apply to restraint of trade cases where exercises of contractual discretion restrict a person's ability to work in their profession. See *Lee* (n 107) and *Nagle* (n 107).

[171] In *AQA* (n 37), the significance of GCSE grades in the lives of students contributed to Elias LJ finding that the decisions of private awarding organisations (who operate under the regulatory supervision of the Office of Qualifications and Examinations Regulation) were amenable to judicial review. See *AQA* (n 37) [139]. cf *TH v Chapter of Worcester Cathedral* [2016] EWHC 1117 (Admin) [76]. Justice Coulson writes: 'First, the fact that the decisions in question are said to have had a significant impact on the claimant (and I accept that they have) is irrelevant to the question of amenability' (citing *R v Chief Rabbi (Ex parte Wachmann)* [1992] 1 WLR 1037). Justice Coulson also writes: 'Secondly, the argument that judicial review must be available because otherwise a claimant would be left without a remedy is also immaterial, because the administrative court is not there simply to fill in the gaps left by statute or the common law…' (citing *Jockey Club* [1993] 1 WLR 909 (CA), 932-933). See ibid [76].

[172] *ZAI* (n 6) [2].

Regulatory source	AIM	LSE Main Market
Listing rules[173]	London Stock Exchange plc	FCA
Rules of the London Stock Exchange for member firms (e.g., trading, market making, clearing and settlement)[174]	✓	✓
UK Companies Act 2006[175]	✓ (UK issuers) ✗ (foreign issuers)	✓ (UK issuers) ✗ (foreign issuers)
FSMA 2000	'Prescribed market'	'Recognised Investment Exchange'
Disclosure Guidance and Transparency Rules (DTRs) (FCA Handbook)[176]	✓ (DTR 5 applies to UK issuers)	✓ (DTRs apply to all issuers)
Prospectus Regulation (EU) (2017/1129)[177]	✓ (offers of securities to the public)	✓ (offers of securities to the public)

[173] Primary responsibility for making and enforcing the listing rules.

[174] See also text to n 119 on the *Rules of the London Stock Exchange*.

[175] Certain provisions of the Companies Act 2006 apply to 'overseas companies' conducting business in the UK – see pt 34. One notable requirement for UK AIM companies is compliance with the Companies Act 2006 pt 21A, which requires keeping a register of people with significant control.

[176] AIM companies incorporated in the UK or with their principal place of business in the UK must comply with chapter 5 of the DTRs. DTR 5 contains rules on the disclosure of major shareholdings and voting rights. UK issuers on AIM must disclose shareholding positions at the same thresholds as issuers on the Official List, which begins upon acquisition of 3% of voting rights and requires notification upon every subsequent 1% increase or decrease.

[177] The Prospectus Regulation (EU) (2017/1129) repealed and replaced the Prospectus Directive (2003/71/EC) framework. AIM companies are subject to the Prospectus Regulation requirement that offers of transferable securities to the public require a prospectus, as was formerly required under the Prospectus Directive (2003/71/EC), and the FCA is the competent authority with respect to the Prospectus Regulation Rules. In practice, most fundraising on AIM relies on prospectus exemptions in order to reduce costs by avoiding an FCA approved prospectus, instead of requiring an admission document approved by the Exchange under the AIM listing rules. The Prospectus Regulation requires a prospectus for the admission of securities to a 'regulated market' in an EU member

Regulatory source	AIM	LSE Main Market
	✗ (admission of securities to AIM)	✓ (admission of securities to LSE Main Market)
Market Abuse Regulation (EU) (596/2014)[178]	✓	✓
MiFiD II	✓ (applicable provisions to MTFs and ‘SME growth markets’)	✓ (applicable provisions to ‘regulated markets’)
UK Corporate Governance Code[179]	✗ (‘comply or explain’ with a ‘recognised’	✓ (‘comply or explain’ for premium listed issuers)

state, but since AIM ceased to be a ‘regulated market’ in 2004, companies are not required to produce an FCA approved prospectus upon admission to AIM (unless the listing is accompanied by an offering of securities to the public).

[178] The Market Abuse Regulation (MAR) applies to issuers with securities trading on regulated markets (such as the Main Market) and MTFs (such as AIM). The FCA is the competent authority for monitoring and enforcing the MAR regime in the UK. This means that the FCA (rather than the Exchange) is responsible for prosecuting market abuse such as insider dealing (art 14) or market manipulation (art 15). Prominent MAR requirements for AIM companies include disclosing ‘inside information’ (art 17), providing insider lists to the FCA upon request (AIM has benefited from an exemption to maintain insider lists since January 2018 due to its SME growth market status) (art 18), and requirements for persons discharging managerial responsibilities (PDMRs) involving transaction notifications and closed periods (art 19).

[179] Issuers with a premium listing on the Main Market of the LSE are required to comply with the UK Corporate Governance Code (CGC) published by the Financial Reporting Council, or explain why they do not. Issuers with a standard listing on the Main Market are not required to comply or explain with the UK CGC. As of September 2018, all AIM companies have to comply with a ‘recognised corporate governance code’ adopted by the board of directors, or explain why they do not. There is no definition of a recognised code, consistent with AIM’s principles-based regulatory approach. In 2018, 89% of AIM issuers complied with the Quoted Companies Alliance Corporate Governance Code, 6% complied with the UK Corporate Governance Code, and 5% complied with other governance

Regulatory source	AIM	LSE Main Market
	corporate governance code)	
City Code on Takeovers and Mergers (‘Takeover Code’)[180]	✓ (UK issuers) ✗ (foreign issuers)	✓ (UK issuers) ✓ (some foreign issuers from EEA countries)
Short Selling Regulation (EU) (236/2012)[181]	✓	✓

It is not the mere fact of being regulated that lends a public law character – all private bodies are subject to some form of public regulation. Being woven into a regulatory function does not automatically imply public law character. In *Holmcroft*, KPMG was woven into a public regulatory function, acted ‘in pursuance of the FCA's regulatory objectives’, and yet was not found to have a sufficiently public law character.[182] This was partially due to the Court of Appeal finding

codes. See Quoted Companies Alliance, ‘Which Corporate Governance Codes Do AIM Companies Apply?’ (2018) <https://www.theqca.com/news/briefs/175536/whichcorporate-governance-codes-do-aim-companies-apply-.thtml> accessed March 2019.

[180] The Takeover Code has a statutory basis in pt 28 of the Companies Act 2006, and its rules governing takeover bids and merger activity are administered by the Takeover Panel. The Takeover Code applies to all offers for companies trading on a regulated market (e.g., the Main Market) or an MTF (e.g., AIM) that have registered offices in the UK, Channel Islands, and Isle of Man. It also applies to all AIM and Main Market companies deemed by the Takeover Panel ‘to have their place of central management and control in the United Kingdom’ (Takeover Code, rule 3(a)(i)-(ii)). The Takeover Code does not apply to foreign companies listed on AIM, but does apply in certain circumstances (depending on shared regulatory jurisdiction) to foreign companies listed on the Main Market with registered offices in other European Economic Area (EEA) member states (Takeover Code, rule 3(a)(iii)).

[181] The Short Selling Regulation (SSR) applies to persons short selling securities trading on EEA ‘trading venues’, which include the Main Market and AIM. The FCA is the competent authority responsible for enforcement of the SSR in the UK.

[182] *Holmcroft* (n 22) [28].

that the FSA's 'regulatory function did not extend to replacing the role of the court'.[183] KPMG's adjudication was based on private law principles, enforceable by the courts, and claimants were free to pursue civil claims against Barclays and not rely on the FSA-approved regulatory scheme to seek redress. Similarly, a decision by the ADC to de-list an issuer or publicly censure a Nomad for rule violation could be challenged in court as a contractual dispute. The regulatory fabric that AIM is woven into does not typically preclude claimants from seeking adequate private law remedies in court. However, one could imagine circumstances involving third parties where a decision by the Exchange or an AIM adjudicating body could affect the public interest so significantly as to conceivably imply a public law duty, and where private law remedies would not be adequate.[184]

Apart from the decision in *ZAI*, the facts in *Lloyd's* are the most analogous to the circumstances of regulation on AIM. Individuals entered binding contracts with Lloyd's to participate in a market whose operation was regulated by Lloyd's but subject to external public regulation under the *FSMA 2000*. The Exchange similarly regulates AIM companies through contract in a public regulatory environment under the *FSMA 2000* and other company and securities laws. In determining whether a public function is being exercised on AIM, a court would likely pose the same fundamental question as in *Lloyd's*: is the matter a dispute over the working out of a contract, or is the Exchange 'exercising regulatory control' on AIM in an area not governed by public regulation? The fact that AIM regulation occurs in the context of government regulation,

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[183] *Holmcroft Appeal* (n 20) [52].

[184] Although private law remedies were inadequate in the *Burford Capital* (n 120) decision discussed above, there was no need to analyse the nature of power to determine whether the Exchange and FCA owed Burford a public law duty. The Exchange has public law duties to ensure 'effective systems and controls aiming to prevent and detect market abuse on that market as required under the Market Abuse Regulation' – see the 'FCA Handbook' ch MAR 5.10.2(7). The FCA is a public body that is amenable to judicial review – see *Burford Capital* (n 120) [180].

whereas 'governmental regulatory control was absent' for the Takeover Panel in *Datafin*, is a factor tending against amenability to judicial review. However, as discussed earlier, *Lloyd's* pertained to the insurance underwriting association's exercise of regulatory powers concerning its members, thus leaving the door open for judicial review of disciplinary decisions or decisions affecting third parties.

SECTION IV Conclusion

This chapter has examined whether regulation on AIM is sufficiently public in nature to subject AIM decision-making bodies' judgments to judicial review and to impose public law obligations of procedural and substantive fairness on the Exchange in its regulation of AIM. In order to thoroughly address this inquiry, the chapter first set out the doctrinal tests for 'publicness' and critiqued their ambiguity, whereby one decision of a private body may be public in nature and the next may be private in nature, all depending on the contextual exercise of power. Next, administrative law jurisprudence in the financial regulation context was reviewed. The leading cases suggest that it is not enough for private bodies to merely be woven into a fabric of public regulation – judicial review is only appropriate when private law claims are not. The source of power and nature of power doctrinal tests were applied to AIM, and its regulatory underpinning was examined in detail and compared to the LSE Main Market. The fruit of this inquiry suggests that on balance, regulation on AIM is not likely to be amenable to judicial review in most circumstances given the contractual nature of the Exchange's regulation of AIM. This conclusion is buttressed by comparison to the LSE Main Market: it is significant that the Exchange does not have a public duty to operate AIM as a trading venue, unlike the Official List which is maintained by the FCA.

Nonetheless, amenability to judicial review is still a context specific inquiry that depends on the particular power being exercised, and several factors leave open the possibility of regulation on AIM having a public law element. The most likely instance where a court might determine public power to be at play would be a decision by the AIM Disciplinary Committee to suspend trading in a company's shares or cancel the admission of its securities, or the decision to remove a Nomad from the register, simply because in its view the reputation or integrity of the market has been impaired. This would be a sufficient reason under the AIM Rules, which permit the Exchange to enact the strongest possible disciplinary actions where the integrity and reputation of AIM has been impaired. However, one could envisage an argument where this reason without further justification is insufficient under public law obligations of procedural fairness, and where no relief is denied in private law through applying the principles of natural justice. A decision of this nature could have considerable impact on large numbers of third parties (such as laid-off employees of the disciplined company) who have no private law claim in contract or tort against the Exchange, differentiating the circumstances from the cases in *Holmcroft* and *Lloyd's*. The conclusion that AIM decisions are not likely amenable to judicial review, particularly after the Exchange articulated much more detailed procedural obligations and doubled the length of its Disciplinary Handbook, becomes less certain when private law remedies are inappropriate and the Exchange's decision significantly affects the public interest, construed broadly.

The significance of whether aspects of regulation on AIM constitute public law and are therefore amenable to judicial review relates to the narrow issue of how much private ordering is desirable for stock exchanges, as well as the broader issue of how self-regulation can be undermined by uncertainty in public law doctrine. If stock exchanges exercise public functions pursuant to a public law duty, such as the FCA's regulation of the Main Market, their decisions

should be subject to the public law obligations of procedural and substantive fairness (e.g., illegality, procedural impropriety, irrationality and proportionality). However, public law obligations fetter private ordering on stock exchanges, and more broadly permit some degree of constraint on all self-regulatory arrangements. The problem is not imposing constraints on self-regulation through public law principles, which are clearly necessary to the degree that self-regulation involves both private ordering and public law. Rather, the problem is the uncertainty created in self-regulatory arrangements by a lack of ex ante clarity on whether public law principles apply. Private bodies such as the Exchange respond to public law uncertainty by drafting longer and more procedurally articulate contracts to prevent further judicial review claims, a response which has been described as 'judicial review proofing' decisions. Since private bodies are uncertain which of their powers may be public in nature, over-compliance inevitably results when unnecessary procedures are implemented for powers that are not public in nature. Although more procedural rules may provide beneficial procedural safeguards for some exercises of self-regulatory power, they may also cement procedural terms favourable to the private rule-maker with stronger bargaining power, as seen in the Exchange removing the right to ask for public hearings from the Disciplinary Handbook. In other circumstances, creating procedural obligations to 'judicial review proof' decisions could hinder self-regulatory agility and prevent more informal regulatory responses. The problem is that public law uncertainty imposes self-regulatory transaction costs without clear corresponding benefits.

The assessment that on balance, regulation on AIM does not possess a predominantly public character, is desirable from a policy perspective because if a court were to grant judicial review on public law principles, a risk of creating wider uncertainty in UK financial markets arises by casting doubt over the degree of contractual discretion permitted by other trading venues and

financial institutions. Financial markets react to uncertainty, and ambiguity over whether public law obligations may be imposed ex post by courts could disrupt the functioning of the markets, since corporate contracts exist within networks and contractual uncertainty can spread quickly throughout the financial system. Less uncertainty would be created if more deference was consistently granted on judicial review, such as declaring acts to be unlawful rather than quashing them, but the problem of unpredictable application of public law principles and remedies would remain. This is particularly disconcerting in the context of financial regulation, where financial firms' private ordering can impose momentous negative externalities. It is therefore important to highlight a generalizable finding of this chapter: the applicability of public law obligations must be clear ex ante in order to facilitate informed private ordering where parties appreciate the full extent of their legal obligations, allowing private actors to bargain and allocate risk appropriately. Continued deferential approaches to judicial review in the financial regulatory context, such as in *Holmcroft*, lessen but do not altogether eliminate the fundamental problem of unpredictable public law principles undermining the certainty of private ordering. Clearer articulation of the scope and applicability of public law principles, including when decisions of private bodies have a sufficiently public element to be amenable to judicial review, will enable more informed private ordering and more robust self-regulation.

CHAPTER FIVE

REPUTATIONAL INCENTIVES AND SELF-REGULATION ON AIM

The previous chapter examined the public and private law elements of self-regulation on AIM to determine the appropriateness of AIM as a case study on private ordering. In light of the assessment that AIM has a predominantly private character and is an appropriate example of self-regulation in securities markets, Chapter Five conducts a case study of AIM focusing on two specific issues. In response to critiques of AIM as the 'wild west' or a 'casino',[1] this chapter asks two questions: has AIM avoided a 'race to the bottom' in the quality of regulation? How do reputational incentives and norms contribute to self-regulation on AIM?

Section I begins by providing an overview of AIM's historical and regulatory background and unique self-regulatory structure. AIM regulation is predicated on Nomads, brokers and the Exchange acting as gatekeepers – essentially monitors, corporate fundraisers, and reputational intermediaries – and regulation is delegated to combined 'Nomad-broker' firms who are afforded significant responsibility and discretion. AIM's principles-based regulatory design is compared to rules-based regimes, followed by details on the amount of institutional shareholding on AIM and the significant increase towards more secondary fundraising and less IPO fundraising in the latter half of AIM's history.

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[1] For critiques of AIM as the 'wild west', see e.g. Kate Burgess, 'Aim's Wild West Reputation Seems to Be Deserved' *Financial Times* (15 October 2017) <https://www.ft.com/content/2cb37958-af6a-11e7-beba-5521c713abf4> accessed October 2019. Burgess writes: 'The Aim is likened so often to the wild west it has become a cliché. But the comparison bears scrutiny.' See also Rose Murray-West, 'As Junior AIM Market Hits Its 25th Birthday, There Are Still Big Profits up for Grabs - If You Brave Some Wild West Swings' *This is Money* (30 May 2020) <https://www.thisismoney.co.uk/money/investing/article-8372573/Big-profits-grabs-AIM-brave-Wild-West-swings.html> accessed October 2020. Murray-West writes that '…over the past 25 years as a whole, AIM has gained something of a "Wild West" reputation.'

Section II then examines whether the quality of regulation on AIM has deteriorated over time. In March 2007, former SEC Commissioner Roel Campos criticised AIM as being a 'casino' due to low regulatory standards.[2] When asked to explain his comments, Commissioner Campos replied: 'What I was referring to was a generalised situation in which if [regulatory] standards are ignored and you have a spiral downward you could get into a situation where an exchange could be nothing more than a casino.'[3] These comments evidence concern over a perceived 'race to the bottom' where self-regulation permits regulatory standards to deteriorate over time.[4] To assess this critique in light of AIM's experience, Section II examines whether AIM has avoided a race to the bottom in the quality of regulation with reference to the regulatory goal of market integrity, which the Exchange describes as one of the principal objectives of AIM regulation. Section II also presents data on the Exchange's disciplinary actions and rule enforcement.

Sections III and IV turn to the second question of how reputational incentives contribute to self-regulation on AIM. This inquiry is motivated by the idea that a thin rulebook does not necessarily lead to deficient regulation, since (as argued in Chapter Two) a legitimate and wider concept of regulation includes uncodified obligations or 'unwritten rules' that influence regulated participants' behaviour. Section III outlines the theory behind reputational capital and reputational sanctions. It provides a theoretical account, grounded in rational choice theory, of how reputational incentives might be expected to apply on AIM. Section III puts forward a 'reputational hypothesis'

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[2] Jeremy Grant, Norma Cohen and David Blackwell, 'SEC Official Sparks Row over Aim "Casino"' *Financial Times* (8 March 2007) <https://www.ft.com/content/cd0530e2-cdab-11db-839d-000b5df10621> accessed May 2018. Then CEO of the NYSE John Thain also claimed that AIM 'did not have any standards at all and anyone could list'.

[3] ibid. Former Commissioner Campos stated that his original commentary was 'taken out of context' and that it was not his intention to portray AIM as a casino.

[4] See Chapter Two, Section IV(G) for a discussion of regulation competition in the market for stock exchange listings.

that remains the focus for the rest of the chapter: namely, that reputational incentives spur Nomads to perform diligently their gatekeeping role and constitute an unwritten core of the AIM regulatory model, preventing a regulatory regime with relatively few mandatory rules from spiralling towards the bottom. Reputational incentives for diligent gatekeeping should increase as the number of repeated interactions between issuers and investors increases, which is significant because the proportion of secondary fundraising on AIM has increased by nearly three-quarters since 2008. Section IV forms the most substantial part of the discussion, presenting and analysing the empirical evidence for and against the reputational hypothesis. Section V concludes.

Before proceeding, a brief reminder of the methodological discussion in Chapter Three may be of value.[5] The legal analysis and theoretical exposition in this chapter fall broadly under the descriptive law and economics methodology. A case study method is used to investigate the two primary research questions. These questions are not designed to be strictly falsifiable, since the goal of case studies is not to make causal claims. Rather, to generate insights into 'how' and 'why' self-regulation functions in securities markets, the case study examines how much support the evidence lends to the research hypothesis and rival explanatory theories. The case study relies upon evidence such as interview data, financial market and trading data, hand-collected data on Nomads and brokers, and historic news reports and company financial accounts. The interview data includes thirteen informal discussions and formal interviews conducted in 2019 and 2020. These discussions survey a broad range of AIM market participants including company managers and directors, Nomads, brokers, retail and institutional investors, and professional advisors. Taken together, this chapter gathers the widest range of evidence of which the researcher is aware to

[5] See Chapter Three, Section III for a complete discussion of the case study methodology used in this chapter.

understand how AIM has evolved and whether it is a cautionary or reassuring example of self-regulation in securities markets.

SECTION I Gatekeeper self-regulation

A. *Historical and regulatory background*

The rise of AIM can be traced to the closure of the Unlisted Securities Market (USM) in 1996, as well as the termination of trading in unquoted securities under the former Rule 4.2 of the LSE Rules in 1995. Prior to AIM, the Exchange operated the USM from 1980 to 1996, a market with lower costs and more relaxed admission requirements compared to the Official List.[6,7] The number of listings on the USM rapidly declined in the early 1990s, partially due to the Exchange relaxing the Main Market listing standards in 1991,[8] and partially due to the significant decreases in liquidity and soaring bid-ask spreads for smaller issuers on the USM in the years following the

[6] Sridhar Arcot, Julia Black and Geoffrey Owen, 'From Local to Global: The Rise of AIM as a Stock Market for Growing Companies' (2007) 11. Roger Buckland and Edward Davis trace the impetus for the creation of the USM to demand for 'a lower-tier market' that was vocalized before the Wilson Committee in 1977. This led the Exchange to publicize the existence of Rule 163(2) (as it was then called) in a December 1977 brochure, advertising that LSE member firms could deal in the shares of unlisted companies. The rise in unlisted trading created controversy because unlisted companies were under no obligation to comply with the LSE rules, prompting the creation of the USM in 1980. See Roger Buckland and Edward Willmore Davis, *The Unlisted Securities Market* (Clarendon Press 1989) 1–2.

[7] The Official List is a record of all listed securities in the UK maintained by the UK securities regulator, the UK Listing Authority (which is currently the Financial Conduct Authority). Only securities admitted to the LSE's Main Market are included on the Official List – AIM companies are excluded. The requirement to maintain an official list stems from section 74 of the Financial Services and Markets Act 2000.

[8] According to one interviewee, changes to EU legislation led to the demise of the USM because they eliminated crucial differences (advantages) of the USM listing rules relative to the Main Market. In other words, as the regulatory delta between the USM and the Main Market narrowed, the relative advantages of a USM listing decreased. See also Jonathan Blake and John Daghlian, *AIM and EASDAQ: The New Enterprise Markets: A Specially Commissioned Report* (FT Law & Tax 1996) 1. Blake and Daghlian write in 1996: '…the impact of the EU directives forced lower regulation on the Official List which eroded the advantages of the USM and smaller companies increasingly applied for admission to the Official List of the London Stock Exchange, rather than the USM.'

October 1987 Black Monday crash.[9] The USM's impending closure left a void for SMEs who could not qualify for the Official List, and it appeared that their demand for listings might be met by EASDAQ, a Brussels-based pan-European exchange for high growth companies, whose creation was announced in 1994 and became operational in 1996.[10]

In the period preceding the launch of AIM, the Exchange observed the threat of competition for smaller company listings posed by the launch of EASDAQ, as well as an opportunity stemming from the USM's decline in the early 1990s, which had led to increased trading in unquoted securities. This trading was done pursuant to the former Rule 4.2 of the London Stock Exchange rules which permitted LSE member firms to operate a dealing facility for unlisted shares.[11] The growth of this trading in unquoted securities 'was probably due to the very low costs and the almost total lack of regulation.'[12] When AIM was created in June 1995, the Exchange provided companies with unlisted securities trading under Rule 4.2 'a much simplified procedure' to join AIM.[13] 82 out of over 300 unlisted companies so trading took advantage of the streamlined procedure to join

[9] See Ranald Michie, *The London Stock Exchange: A History* (Oxford University Press 1999) 618–619. Michie describes the drought in liquidity and soaring bid-ask spreads for smaller issuers on the USM in the early 1990s: 'Turnover in smaller company shares fell from £200m per day, before the October 1987 crash, to £40m per day in 1991, while the average spread almost quadrupled from 3 per cent to 11 per cent. Faced with these difficulties in the secondary market, smaller companies ceased to make new issues, as they were poorly received. By 1991 only £11.6m of new capital was raised by USM companies compared to £308m in 1988.' Such low turnover and high spreads would discourage new listings to the USM and may have contributed to de-listings.

[10] Arcot, Black and Owen (n 6) 12. Some commentators held high prospects for EASDAQ, asking whether EASDAQ could become 'The European Stock Market for the Next Hundred Years'? EASDAQ was acquired by NASDAQ in 2001 and subsequently discontinued. See Dana T Ackerly II, Philipp Tamussino and Wesley S Jr Williams, 'Easdaq-The European Stock Market for the Next Hundred Years?' (1997) 3 International Business Law Journal 86.

[11] Blake and Daghlian (n 8) 1–2.

[12] ibid 2.

[13] ibid.

AIM that year.[14] In contrast, of the 86 companies with USM quotations in January 1996, only 14 joined AIM, while 71 joined the Official List.[15] This limited migration occurred despite the Exchange providing USM companies with the opportunity to join AIM simply 'by giving an undertaking to comply with the AIM rules.'[16] Thus, some commentators have argued that 'AIM is primarily a successor to the now defunct Rule 4.2 trading arrangements rather than to the USM.'[17]

The Exchange announced the closure of the USM in 1993, and on the back of its closure the Exchange launched AIM in June 1995 with ten issuers representing a market value of £82 million. By the end of that year, 121 companies were trading on AIM with a market value of £2.38 billion, indicative of the high demand for an SME growth market and the rapid growth AIM would experience in its first decade.[18]

B. *Regulatory backdrop*

AIM exists in a complex regulatory setting, which is the inevitable product of its unique relationship with the LSE, a publicly regulated securities market. AIM is privately regulated by its predominant rule-maker and enforcer, the Exchange, which operates the LSE, whose predominant rule-maker and enforcer is in turn the Financial Conduct Authority (FCA). Furthermore, since AIM and the LSE operate in the wide swathe of UK and EU financial regulation, AIM can be indirectly affected by regulatory changes that, strictly speaking, only apply to the LSE. The

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[14] Keith Hatchick, Keith Smith and Paul Watts, *The Alternative Investment Market Handbook* (2nd edn, Jordan Publishing 2002) 2.

[15] ibid 3.

[16] Blake and Daghlian (n 8) 2.

[17] ibid. See also Hatchick, Smith and Watts (n 14) 1. Hatchick and others write that an consultation document circulated in 1994 concerning the creation of AIM 'was largely prompted by the popularity of the rule 4.2 facility…'

[18] For a definition of SME growth markets, see Chapter Four (n 107). SMEs are defined at (n 24) below.

Exchange's statutory authority to regulate AIM stems from the Financial Services and Markets Act 2000 (*FSMA 2000*), whereby the Exchange has authority as a 'Recognised Investment Exchange' to regulate AIM, which is designated under the *FSMA 2000* as a 'prescribed market'.[19] The Financial Services Authority (FSA), predecessor to the FCA, assumed responsibility from the Exchange as the UK Listing Authority (UKLA) in May 2000, and in doing so gained authority as UK securities regulator to make listing rules for the Main Market.[20]

AIM was operated as an 'EU regulated market' until October 2004, when the Market Abuse Directive was implemented and the Exchange announced that AIM would become an 'Exchange-regulated market'.[21] This change in regulatory status not only exempted AIM from requirements of the Market Abuse Directive, but also from key requirements of the Prospectus Directive, which came into force in December 2003 and were to be implemented in the UK by July 2005.[22] Forfeiting AIM's EU regulated market status allowed the Exchange, and not the FSA, to remain in the regulatory driver's seat.[23] AIM's current regulatory status is that of a multilateral trading

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[19] AIM's 'prescribed market' status is designated by the UK Treasury. See Chapter Four, Section III(A) for a more detailed discussion of AIM's regulatory context. See also Chapter Six, Section III for a discussion of The Public Offers of Securities Regulations 1995, which was a significant component of the regulatory context when AIM was created.

[20] See 74(4) FSMA 2000. See also Andrew Rosling and Theodore Goddard, 'FSA Takes Over LSE Responsibility as UK Listing Authority' (2000) 19 International Financial Law Review 13.

[21] Arcot, Black and Owen (n 6) 9.'As an exchange-regulated market, AIM is not directly supervised by the Financial Services Authority, but falls under the responsibility of the Stock Exchange.'

[22] By becoming an MTF, AIM avoided the requirement under the Market Abuse Directive to prepare insider lists and avoided the requirement to have prospectuses approved by the FSA for companies seeking admission of their securities to a 'regulated market' under the Prospectus Directive.

[23] Arcot, Black and Owen (n 6) 16. 'Its [AIM's] status as an exchange-regulated market not subject to the EU Prospectus Directive, was confirmed in October 2004, allowing the Stock Exchange rather than the Financial Services Authority to continue setting and enforcing the rules.' However, distance from the FSA (now FCA) should not be overstated – as Black and others point out, the (then) FSA regulates the Exchange on a 'close and continuous basis', and AIM is operated by the Exchange. See ibid 18.

facility (MTF) under the FCA Handbook, and as of January 2018 it also became an SME growth market under the Markets in Financial Instruments Directive (2014/65/EU) ('MiFiD II').[24]

The Exchange's formal regulation of AIM is contained in the *AIM Rules for Companies* (Company Rules), the *AIM Rules for Nominated Advisers* (Nomad Rules), and the *AIM Disciplinary Procedures and Appeals Handbook* (Disciplinary Handbook) (collectively, the AIM Rules).[25] The AIM Rules also contain guidance notes, which were initially a necessary interpretive aid but since June 2009 have constituted part of the AIM Rules.[26]

It is helpful to contextualise the AIM Rules within the rising regulatory tide of European company and securities laws, most notably the application of the MAR and MiFiD II to AIM companies.[27] Given the FCA's 'onshoring' powers to incorporate EU legislation into UK law following Brexit, it appears that the UK's withdrawal from the EU will not substantially alter the regulatory obligations of AIM companies or the Exchange in operating AIM in the immediate

[24] The new classification as an SME growth market had little practical impact for AIM issuers. The change affected the length of time certain pre-existing disclosure requirements must be posted online, but AIM companies remain exempt from the insider list requirement under the Market Abuse Regulation (MAR). The change in regulatory status to an SME growth market requires that a majority of AIM issuers fall under the market capitalization based definition of SME in the MiFID II rules (<€200 million). The European Commission definition of 'SME', which is used for purposes such as conducting EU-wide reviews on the economic performance of SMEs, contains three components. The SME must have annual revenue of less than €50 million, an employee headcount of fewer than 250 employees, and an annual balance sheet total of less than €43 million. See *Commission Recommendation of 6 May 2003 concerning the definition of micro, small, and medium-sized enterprises* (2003/361/EC), Annex, art 2.

[25] The regulation of trading in AIM securities by LSE member firms is contained in the *Rules of the London Stock Exchange*, which sets out the rules for all LSE member firms concerning on and off order book trading, market making, clearing and settlement, compliance, and default.

[26] See London Stock Exchange, 'AIM Notice 16 (16 March 2006)' <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-16.pdf>. 'This guidance codifies current market best practice and although it does not form part of the AIM Rules and is intended to assist in their interpretation. The Exchange expects that resource companies and nominated advisers should follow this guidance with immediate effect.' In June 2009 the Exchange amended the Company Rules so that the guidance notes constituted part of the Company Rules.

[27] Following introduction of the MAR, AIM issuers and Main Market issuers have the same disclosure requirements regarding inside information and directors' trading.

future.[28] Domestic (UK) and European company and financial services legislation form a baseline of mandatory rules for all UK incorporated companies and foreign companies listed on a UK trading venue such as the LSE's Main Market or AIM. For example, AIM companies' disclosure obligations are not exhaustively contained in the AIM listing rules. AIM companies must also heed the relevant overlapping disclosure requirements in the *FSMA 2000,* the Companies Act 2006, Regulation (EU) No 596/2014 on market abuse (MAR), and the Disclosure Guidance and Transparency Rules sourcebook of the FCA Handbook (DTRs). Although not explicitly mentioned in the AIM listing rules, the Financial Reporting Council (FRC) monitors AIM companies' annual reports and ad hoc disclosures (Regulatory News Service notifications) and may write to companies requiring clarification and further explanation of disclosure and business performance.[29] In the context of acquisitions, market abuse, or fraud, AIM companies are subject to the respective authority of the UK Takeover Panel, the FCA, or the Serious Fraud Office.[30]

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[28] The European Union (Withdrawal) Act 2018 broadly provides for EU Regulations to be incorporated into UK domestic law, and for UK legislation implementing EU Directives to be retained. The FCA has 'onshoring' authority to amend to UK legislation until 31 March 2022 to ensure the operability of converting EU financial legislation into UK domestic law following Brexit. Minor regulatory changes relevant to AIM are the revised transaction reporting requirements for the Exchange (formerly under MiFID II), and that issuer notifications formerly under the MAR will need to be provided to the FCA, regardless of obligations to an EU competent authority. Only minor revisions will be required to the AIM Rules due to Brexit (e.g., revising definitions). See FCA, 'Key Requirements of Firms' <https://www.fca.org.uk/brexit/onshoring-temporary-transitional-power-ttp/key-requirements-firms> accessed November 2020.

[29] The FRC is the accounting and audit regulator in the UK. Under the AIM company rules, EEA incorporated companies are required to prepare accounts in accordance with International Accounting Standards. According to one interviewee, it is routine practice for the FRC to send letters to company chairpersons presenting a listing of points to clarify or address, particularly when the FRC has not deemed the company's disclosure to be clear enough to investors or have sufficiently explained the business' performance. The FRC last published a review of 22 smaller listed companies and 18 AIM companies in 2018: see Financial Reporting Council, 'Corporate Thematic Review: Reporting by Smaller Listed and AIM Quoted Companies' (2018) <https://www.frc.org.uk/getattachment/a6d7ef32-1564-4fe1-9fcc-b050f58ba098/Small-Listed-and-AIM-Quoted-Companies.pdf>.

[30] See London Stock Exchange, 'AIM Regulatory Landscape - Who's Who' <https://perma.cc/YYV8-7B7G> accessed June 2020.

C. *Domestic tax benefits*

From an investor perspective, the tax advantages available for investing in AIM companies are an important component of AIM's regulatory context. An interviewee went as far as to state that one of the reasons there are still companies on AIM is because its tax incentives are not replicated on other European stock exchanges. UK government policy initiatives designed to stimulate investment in smaller companies have spurred investment on AIM by conferring investments in AIM companies with the same tax advantages as investments in unlisted companies. From its inception in 1995, purchases of shares in AIM companies have been exempt from inheritance tax, subject to certain holding period requirements and restrictions on the types of qualifying companies.[31] AIM shares have been exempt from the 0.5% stamp duty applicable to purchases of securities on recognised investment exchanges (such as the LSE Main Market) since 2014, have been eligible for inclusion in investment ISAs (individual savings accounts which avoid capital gains tax and income tax) since 2013,[32] and qualify for significant income tax relief if purchased through an AIM venture capital trust (VCT) or enterprise investment scheme (EIS).[33,34] The tax benefits for investing in AIM companies are important for generating institutional investor

[31] See Arcot, Black and Owen (n 6) 41. In order to obtain inheritance tax relief, AIM shares need to be held for two years, and AIM companies dealing in investments and property are generally excluded. Inheritance tax relief for unlisted companies pre-dated AIM's inception. At present, AIM shares can gain exemption from inheritance tax (which is 40% on assets exceeding £325,000) by qualifying for HMRC's 'business property relief'.

[32] Katie Binns, 'AIM ISAs: Five Things You Need to Know' *The Times* (29 July 2020) <https://www.thetimes.co.uk/money-mentor/article/aim-isas/>.'Figures compiled by the broker Wealth Club in the 2017-18 tax year show that £435m was invested in AIM ISAs across the 15 main providers.'

[33] Simoney Kyriakou, 'Exploring Various Tax Advantages of Aim' *Financial Times* (16 March 2016) <https://www.ftadviser.com/2016/03/10/training/adviser-guides/exploring-various-tax-advantages-of-aim-39jwmpxHDbnkGM6egBVOEK/article.html?page=1> accessed October 2020.

[34] The UK government implemented a system for venture capital trusts in 1995, that was 'designed to promote wide-scale, indirect investment by the general public in relatively small UK companies.' AIM companies qualified for VCTs (subject to conditions on the type of company), whereas LSE-listed and EASDAQ companies did not qualify. The Enterprise Investment Scheme was implemented in 1994. See Blake and Daghlian (n 8) 75–77.

participation in the market, since there is high demand from retail investors for AIM investment funds that are offered by institutional investors and possess substantial tax breaks. These tax considerations contribute to a higher percentage of domestic share ownership for AIM companies than for companies in the FTSE 100, although as will be discussed in Section II(F), recent data indicate that foreign ownership of AIM shares remains substantial at 48%.

D. *Principles-based regulation is at the heart of the AIM model*

AIM distinguishes itself from the LSE Main Market by having 'a principles based approach to regulation' that 'provides flexibility and is not disproportionately burdensome or costly'.[35] Principles-based regulation (PBR) is the heart of the AIM regulatory model. Principles-based regulation generally refers to 'a framework in which the regulatory agency prescribes general norms, but their detailed design and implementation is left to market actors under the regulator's supervision.'[36] Regulated parties are encouraged to exercise judgment to achieve a more broadly defined regulatory goal.[37] In contrast, rules-based regulation (RBR) drafts more particular, narrowly defined rules setting out permissible actions which contain little to no exceptions or flexibility in applying the rules.[38] Whereas PBR relies on regulated parties' judgment to achieve the regulatory objective, RBR assumes that the regulatory objective will be fulfilled if regulated parties comply with the prescriptive rules.[39] Enforcement of PBR involves an ex post assessment

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[35] London Stock Exchange, 'Feedback Statement and Consultation: AIM Rules Review (11 December 2017)' 2, 5.

[36] John Armour and others, *Principles of Financial Regulation* (OUP 2016) ch 24.2.

[37] See Christopher Decker, 'Goals-Based and Rules-Based Approaches to Regulation' (2018) 17 <https://www.gov.uk/government/publications/regulation-goals-based-and-rules-based-approaches> accessed September 2019.

[38] ibid 16.

[39] ibid 19.

by the regulator concerning whether the regulated party's actions furthered the regulatory objective, whereas under RBR permissible conduct is determined ex ante.[40]

Narrow, technical interpretations of the AIM Rules violate the purposive, principles-based regulatory model. A defining characteristic of PBR – rules that are drafted broadly to cover a wide range of circumstances – is that they must be interpreted in a purposive-based as opposed to a narrow manner. Principles-based rules provide AIM Regulation, the regulatory team at the Exchange responsible for creating and enforcing the AIM Rules, with more discretion to determine appropriate standards of conduct. PBR places more responsibility than RBR on Nomads' judgment to advise companies on the conduct required by the principles elaborated in the AIM Rules, the rationale being that smaller companies with less experienced management may not have the necessary expertise and intuition. The lack of ex ante certainty over rule compliance encourages AIM companies to regularly engage in dialogue with Nomads to ensure compliance, who in turn must regularly engage in dialogue with the Exchange to determine which course of action best fulfils the principle. PBR avoids a plethora of mandatory rules that could create a high cost of rule compliance, and relies on ex ante rule enforcement by regulators through effective monitoring of agents.[41] In the AIM regulatory model, effective monitoring cannot be achieved without effective Nomads, who act simultaneously both as principals (supervising AIM companies) and agents (supervised by the Exchange).

[40] ibid 16–17.

[41] While PBR reduces compliance costs of by reducing the number of mandatory rules, a lack of ex ante certainty creates compliance costs (in the form of opportunity costs) for issuers who delay or forego permissible actions.

E. *Nomads are gatekeepers*

Nomads have been fairly described as the 'de facto, if not de jure' market regulators on AIM.[42] However, the Exchange did not originally conceive AIM with a structure of delegated Nomad governance. A consultation document circulated in September 1994 suggested that only directors should have responsibility for companies' compliance with the AIM Rules.[43] The Exchange thought that requiring AIM companies to have advisers similar to sponsors on the Main Market would be too costly, but it changed its position following feedback from market participants who 'were concerned about the absence under the AIM Rules of any party with a role analogous to that of a sponsor.'[44] Significant industry players such as the British Venture Capital Association voiced concern over inadequate regulation and investor protection, and to address these concerns the Exchange created Nomads and adopted a structure delegating responsibility to Nomads for AIM companies' appropriateness for admission and compliance with the rules.[45]

Most Nomads play multiple roles on AIM. They are regulatory advisers, investment bankers, market makers and research analysts, all in the same firm. Nomads' principal regulatory duties are to evaluate companies' appropriateness for AIM, both at admission and once listed,[46] and to advise companies on their responsibilities for ongoing compliance with the AIM Rules.[47]

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[42] Hatchick, Smith and Watts (n 14) 18. Hatchick and others write: 'The nominated adviser (Nomad) has a crucial role to play in AIM. He is de facto, if not de jure, the market regulator, since the Stock Exchange relies on his judgement as to the suitability or otherwise of a company that wishes to have its shares traded on AIM and it is his responsibility to ensure that the company continues to act in an appropriate manner after admission.'

[43] Blake and Daghlian (n 8) 14.

[44] ibid. However, other commentators opine that nominated advisers and nominated brokers were 'an entirely new concept and not related to the role of sponsor on the Official List.' See Hatchick, Smith and Watts (n 14) 17.

[45] Hatchick, Smith and Watts (n 14) 2.

[46] AIM Rules for Nominated Advisers (March 2018) rule 14.

[47] ibid rule 17.

Each Nomad has a duty to notify AIM's regulatory team if any company it advises is, in its view, 'no longer appropriate for AIM'.[48] In addition to this regulatory function, as mentioned, AIM companies rely on their Nomads to provide corporate broking and underwriting services in order to sell their securities, assist with investor relations, and provide advice concerning the securities after-market.[49] Nomads are therefore central to AIM's self-regulatory structure, since they carry out the regulatory heavy lifting of managing companies' compliance with the AIM Rules and corporate finance needs.

AIM's regulatory structure involves two layers of private regulatory authority. The Exchange has rule-making authority as a 'Recognised Investment Exchange' under the *FSMA 2000* to operate AIM (a 'prescribed market'), and it in turn delegates regulatory and supervisory responsibilities to Nomads to achieve compliance with the principles-based AIM Rules. The importance of Nomads is reflected in the order of the Company Rules; Rule One requires companies to appoint a Nomad to be eligible for admission to AIM, and provides that 'an AIM company must retain a nominated adviser at all times.'[50] A company that is temporarily without a Nomad will have trading in its securities suspended, and will be de-listed if a Nomad is not appointed within one month.[51] In a system prioritising delegated gatekeeper governance, no Nomad equals no listing.

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[48] ibid rule 14.

[49] See discussion on the roles of brokers and Nomads in Arif Khurshed, Dimitris Kostas and Brahim Saadouni, 'Warrants in Underwritten IPOs: The Alternative Investment Market (AIM) Experience' (2016) 40 Journal of Corporate Finance 97, 100.

[50] AIM Rules for Companies (March 2018) rule 1.

[51] ibid rule 1.

Functionally, Nomads play a 'gatekeeper' role in vetting the appropriateness of companies for AIM and being held responsible for their conduct.[52] Nomads fall squarely within John Coffee's definition of 'gatekeepers', who are monitors who 'prevent wrongdoing by withholding necessary cooperation or consent', and an 'agent who acts as a reputational intermediary to assure investors as to the quality of the 'signal' sent by the corporate issuer'.[53]

Nomads are empowered to exercise their gatekeeper role through enhanced monitoring powers. Nomads can request information at any time from the AIM companies they advise, which must furnish information reasonably requested or that is necessary for the Nomad to execute its duties under the AIM Rules.[54] In turn, the Exchange can request any information reasonably required from Nomads.[55] AIM companies must 'seek advice from its nominated adviser regarding its compliance with these rules whenever appropriate and take that advice into account';[56] in fact, failure to seek Nomad advice with ongoing rule compliance is one of the most frequently cited violations attracting disciplinary action. In practice, AIM companies cannot be forced to implement their Nomad's advice, but since Nomads face disciplinary measures for the non-

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[52] See e.g., Reinier H Kraakman, 'Gatekeepers: The Anatomy of a Third-Party Enforcement Strategy' (1986) 2 Journal of Law, Economics, & Organization 53. For discussion on Nomad roles specifically, see Chris Mallin and Kean Ow-Yong, 'The UK Alternative Investment Market – Ethical Dimensions' (2010) 95 Journal of Business Ethics 223.

[53] John C Coffee, Jr., *Gatekeepers: The Professions and Corporate Governance* (OUP 2006) 1–2. As reputational intermediaries, Nomads provide value to clients by 'renting out' their reputation. 'A reputational intermediary is simply a firm whose business is to "rent" its own reputation to client companies that are not large or established enough to have their own, or that obtain added value from burnishing their reputations by associating with a reputable intermediary.' See Jonathan Macey, 'The Value of Reputation in Corporate Finance and Investment Banking (and the Related Roles of Regulation and Market Efficiency)' (2010) 22 Journal of Applied Corporate Finance 18, 19.

[54] AIM Rules for Companies (March 2018) rule 31.

[55] AIM Rules for Nominated Advisers (March 2018) rule 19. Rule 19 makes clear that Nomads' communication with the Exchange is confidential and not to be shared with AIM companies.

[56] AIM Rules for Companies (March 2018) rule 31.

compliance of the AIM companies they advise, Nomads are incentivised to persuade AIM companies to become compliant or to report non-compliance to the Exchange. Nomads' primary duty of care is owed to the Exchange and not to the companies they advise.[57] The scope of Nomads' duties to the companies they advise is negotiated contractually in a separate Nominated adviser and broker agreement, which typically provides that the Nomad can terminate its appointment in the event of a material breach of the AIM Rules by the company.[58]

F. *Most Nomads have skin in the game by providing corporate broking services*

As at August 2019, the vast majority of Nomads (87%) may be more accurately described in general terms as 'Nomad-brokers' or 'integrated houses', since they provide corporate finance and brokerage services in addition to providing nominated adviser services. Corporate broking services, as the term is commonly used in the UK, can refer to distinct primary and secondary market roles, although emphasis should be placed on the latter. The primary market role involves advising on fundraising and new issuances of securities. In this respect, the term 'corporate broking' is used to encompass the firm's corporate finance function. The broker acts as bookrunner and underwriter, advising on the type of fundraising, pricing, and transaction structure, among others. The broker also assists with dealing in shares, such as placing securities with investors through the broker's electronic platform. The second and more distinctive broking role is to continuously act as intermediary between the company and investors, ensuring a healthy and liquid secondary market for the company's securities. Brokers can formally act as registered market

[57] AIM Rules for Nominated Advisers (July 2018) 1 (Introduction). 'The obligations and responsibilities of a nominated adviser under these rules and the AIM Rules for Companies are owed solely to the Exchange.'

[58] Practical Law Corporate and Allan Taylor (White & Case), 'Nominated Adviser and Broker Agreement: AIM Admission' (2020) <https://uk.practicallaw.thomsonreuters.com/6-202-2436?comp=pluk&contextData=(sc.Default)&transitionType=Default&firstPage=true&OWSessionId=8f802e9dcf5e47e8b6581bee02f6ed02&skipAnonymous=true#co_anchor_a616073> accessed January 2020.

makers or informally play a market-making function by 'using [their] best endeavours to find matching business.'[59] The broker publishes research on the company, provides ongoing investor relations advice or 'market intelligence', assists with shareholder communications and soliciting shareholder feedback, and provides other strategic advice relevant to the performance of the securities in the secondary market. Given the wide range of broking functions, AIM companies often hire multiple brokers (e.g., a joint broker alongside its nominated broker) to benefit from different broking expertise and different investor bases (e.g., relationships with institutional investors or private clients).

SECTION II Is self-regulation on AIM racing to the bottom?

A. *Market functioning on AIM is inconsistent with a race to the bottom*

The development of AIM over its now 25-year history can be effectively divided into two periods: roughly the first half, from 1995 to the end of 2007, and the second half from the beginning of 2008 to 2020. This division is meaningful from both a rule-making perspective and from a market evolution perspective. From a rule development perspective, primarily discussed in Chapter Six, the year 2007 marked the most significant revision of the AIM Rules to date. A separate Nomad rulebook was introduced,[60] the Company Rules amendments were among the most significant to date, and the Exchange began publishing disciplinary notices and issuing public and private censures on Nomads and issuers for breaches of the AIM Rules. From a market evolution perspective, the period surrounding the year end 2007 is significant because it marked a peak in the number of issuers trading on AIM and a peak in the total market capitalization of all AIM

[59] 'Brokers - The Role of a Broker' <https://www.aimlisting.co.uk/brokers/> accessed December 2020.

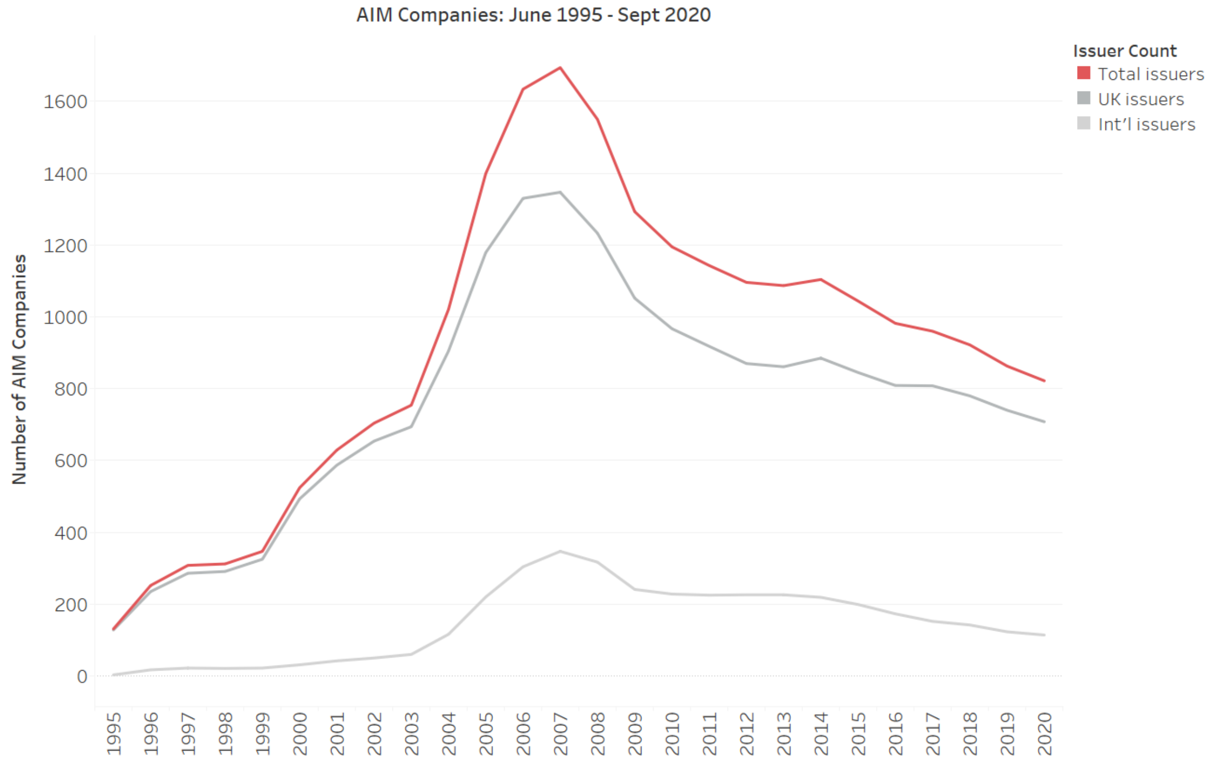
[60] The Exchange framed the creation of a standalone Rules for Nominated Advisers as codifying existing good market practice. Only a handful of new, material rules were introduced, as the majority were already contained in the former Nominated Adviser Eligibility Criteria.

companies. The data and visualizations presented in this section demonstrate that AIM has transformed over the second half of its history to become a market composed of far fewer, but much better capitalized, companies. Setting aside for now the desirability of these developments from a regulatory policy perspective, which is discussed in Chapter Seven (Conclusion), this section suggests that market functioning on AIM is inconsistent with a race to the bottom in the quality of regulation. The concept of regulatory quality should be assessed with reference to the regulatory objective pursued, given that trade-offs are sometimes required because regulatory objectives can conflict (e.g., maximising market efficiency and minimising systemic risk). This chapter primarily assesses regulatory quality based on the Exchange's stated priorities of market integrity and preserving the reputation of AIM as a growth market.[61]

FIGURE 5.1 compares the number of AIM-quoted companies at calendar year end from 1995 to September 2020. It reveals a peak in the number of issuers quoted on AIM in 2007 (1694) which steadily declines by more than 50% by September 2020 (822).

[61] 'The Exchange's approach to regulation is aimed at maintaining the integrity, orderliness, transparency and good reputation of its markets and changing behaviour in those markets where necessary.' See AIM Disciplinary Procedures and Appeals Handbook (October 2018) s A4. The Exchange has stated that it 'operates AIM with an overarching objective of maintaining the integrity and reputation of its growth market.' See London Stock Exchange, 'AIM Regulatory Landscape - Who's Who' <https://perma.cc/YYV8-7B7G> accessed June 2020. Market integrity, described in the text to note 160 of Chapter Two, entails equal market access, informative, accurate and transparent prices, the curbing of market abuse, and investor confidence. See also Chapter Two, Section IV(C) for a list of the principal objectives of securities regulation.

FIGURE 5.1: Number of AIM Companies, 1995-2020



This halving in the number of issuers from 2007 to 2020 would be consistent with an explanation of declining market integrity if commensurate decreases were observed in market capitalization and liquidity, demonstrating that AIM as a securities market had simply shrunk by half. However, the decline in the total market capitalization of AIM companies during this period is only 24.6%, and the average daily value of shares traded during this period only decreased by 27.2% (both figures adjusted for inflation). The LSE Main Market has not experienced similar trends over the same period, suggesting that the shift towards fewer and larger companies is specific to AIM and not the result of wider capital market trends.[62] These and other indicators of AIM market

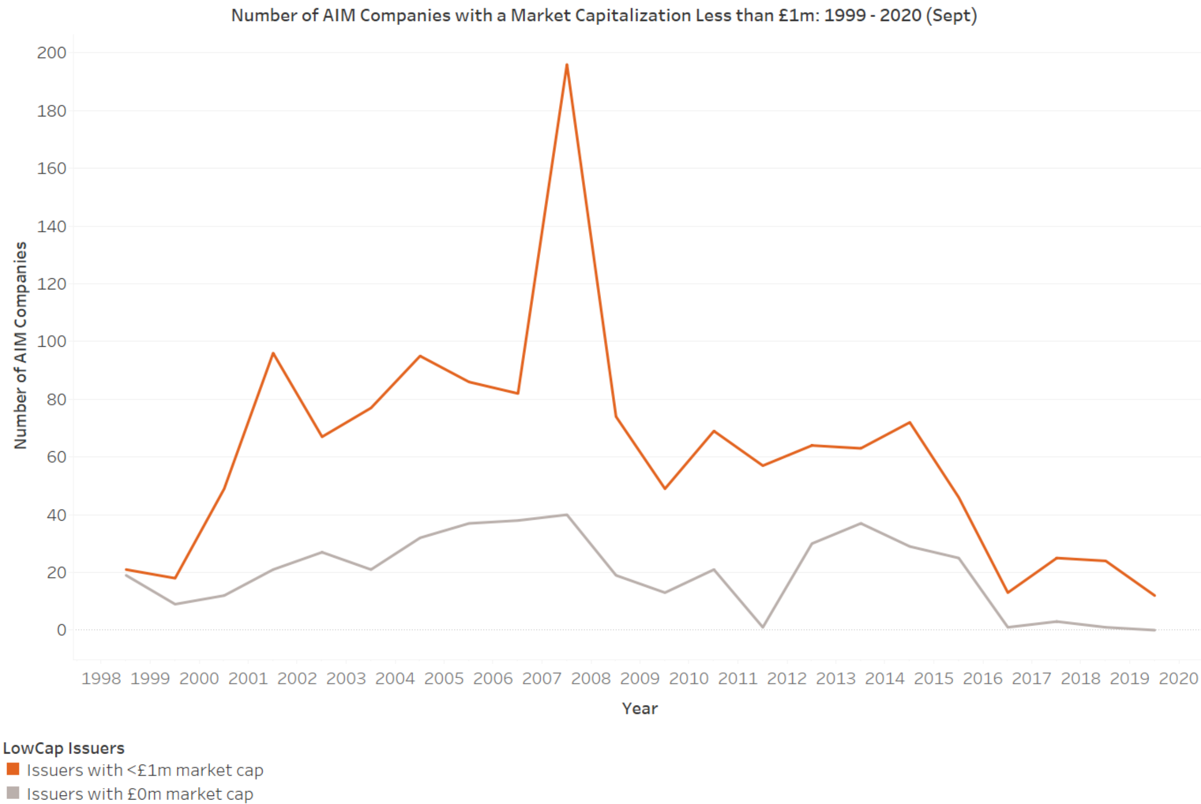
[62] The number of listings on the LSE Main Market barely moved between December 2007 to September 2020, with 1129 and 1124 listed companies, respectively. Similarly, the mean market capitalization only increased by 5% during this period, from £2499m to £2630m (after adjusting for inflation). Increases in trading volume were also more pronounced on AIM than the Main Market during this period. Trading increased on AIM by 38% between

functioning from 2007 to 2020 suggest that the decline in listings can be partially explained by a reduction in lower quality (i.e., poorly capitalized) companies and a market maturation towards fewer and larger companies. This suggests that although AIM has shrunk as a trading and fundraising venue, market integrity has not spiralled downwards.

Issuers with a market capitalization of less than £1 million are low quality companies that attract speculation rather than investment, and perhaps were the type of companies envisaged by former Commissioner Campos' description of AIM as a casino in 2007. An increase in such poorly capitalized companies over time would be consistent with a decline in market integrity. *FIGURE 5.2* depicts the number of AIM companies with sub-£1m market capitalizations, as well as companies which remain quoted but whose market capitalization the Exchange reports as £0m (i.e., defunct cash-shells or companies whose securities have been cease-traded). *FIGURE 5.2* reveals that the number of poorly capitalized AIM companies has decreased dramatically over time, which is inconsistent with a decline in market integrity.

December 2011 to December 2019 (measured by average daily volume), while it only increased by 28% on the LSE Market during the same period (measured by total trades on the LSE order book, excluding AIM).

FIGURE 5.2: Number of sub-£1m AIM Companies, 1999-2020



What might explain the decline in total issuers and peak in sub-£1m issuers following 2007? The first and most obvious consideration involves the financing difficulties and drastic valuation decreases companies experienced during the global financial crisis. Further analysis of historical market data is needed to test this proposition, but it is logical that company insolvencies and de-listings due to fundraising challenges would reduce the number of issuers after 2007, and that this would correspond with a rise in the number of companies on the brink of insolvency, demonstrated by the spike in sub-£1m companies one year later, in December 2008. Other explanations of the total decline in AIM companies, displayed in *FIGURE 5.1*, can be ruled out: for example, it is unlikely that the total number of AIM issuers begins to decline in 2008 due to changes in the tax

treatment of AIM securities.[63] Nor can the decrease in firms be explained by AIM companies switching to the LSE's Main Market, since from 2007 to 2009 less than a dozen AIM companies switched to the Main Market each year.[64] The precipitous rise in sub-£1m companies in 2008 was followed by an equally precipitous drop by the end of the following year. That was likely the result of rules introduced in 2009 on 'investing companies' (i.e., companies whose primary business is investing in other companies' securities) that required additional disclosures, shareholder approval, and board independence requirements. The reduction of dormant, speculative, or defunct investing companies over time has advanced the objectives of market integrity and preserving AIM's reputation as a growth market.[65]

FIGURE 5.3 and *FIGURE 5.4* depict how AIM companies have increased in size over time. The decline in the total market capitalization of AIM companies from December 2007 to September 2020 (24.6%) is less than half of the corresponding decline in the number of AIM-quoted companies (51%).

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[63] To verify whether any significant tax reforms affecting AIM could have contributed to the drop in companies, the researcher conducted a FACTIVA search for 'Alternative Investment Market + tax' between 01/01/2006 to 01/01/2009. The search results were limited to all articles published in the Financial Times. The only meaningful tax reforms reported in the FT during this period were: 1) in April 2006, tax changes were introduced for VCTs, investment vehicles which invest in AIM companies and unlisted companies. The income tax relief for VCTs was revised from 40% to 30%, the holding period for eligible VCT shares was increased from 3 to 5 years, and the gross assets of eligible VCTs was downsized from £15 to £7 million; and 2) in April 2007 the rate of capital gains tax on AIM shares (sold after a two-year holding period) increased from 10% to 18%.

[64] See Kevin Campbell and Isaac T Tabner, 'Bonding and the Agency Risk Premium: An Analysis of Migrations between the AIM and the Official List of the London Stock Exchange' (2014) 30 Journal of International Financial Markets, Institutions and Money 1, 10.

[65] The AIM Company Rules since January 2016 require companies that become cash shells due to a fundamental disposition to complete a reverse takeover within 6 months. Cash shells that fail to complete a reverse takeover within 6 months will have their shares cease-traded.

FIGURE 5.3: Total AIM Market Capitalization, 1995-2020

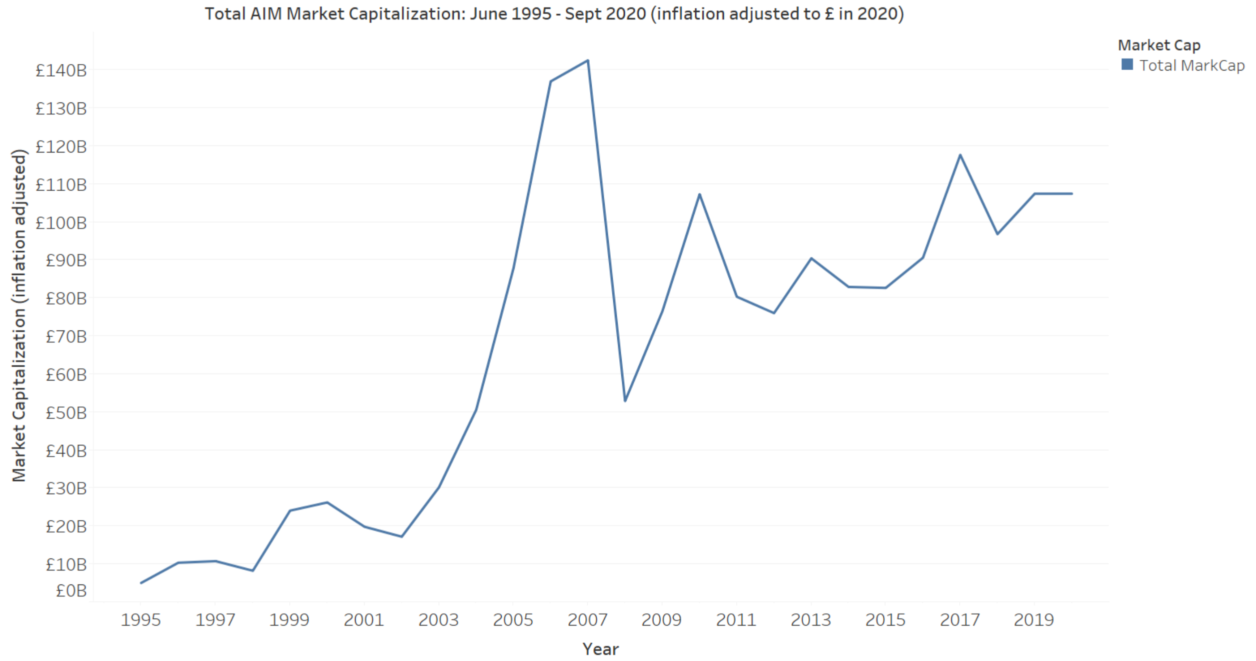
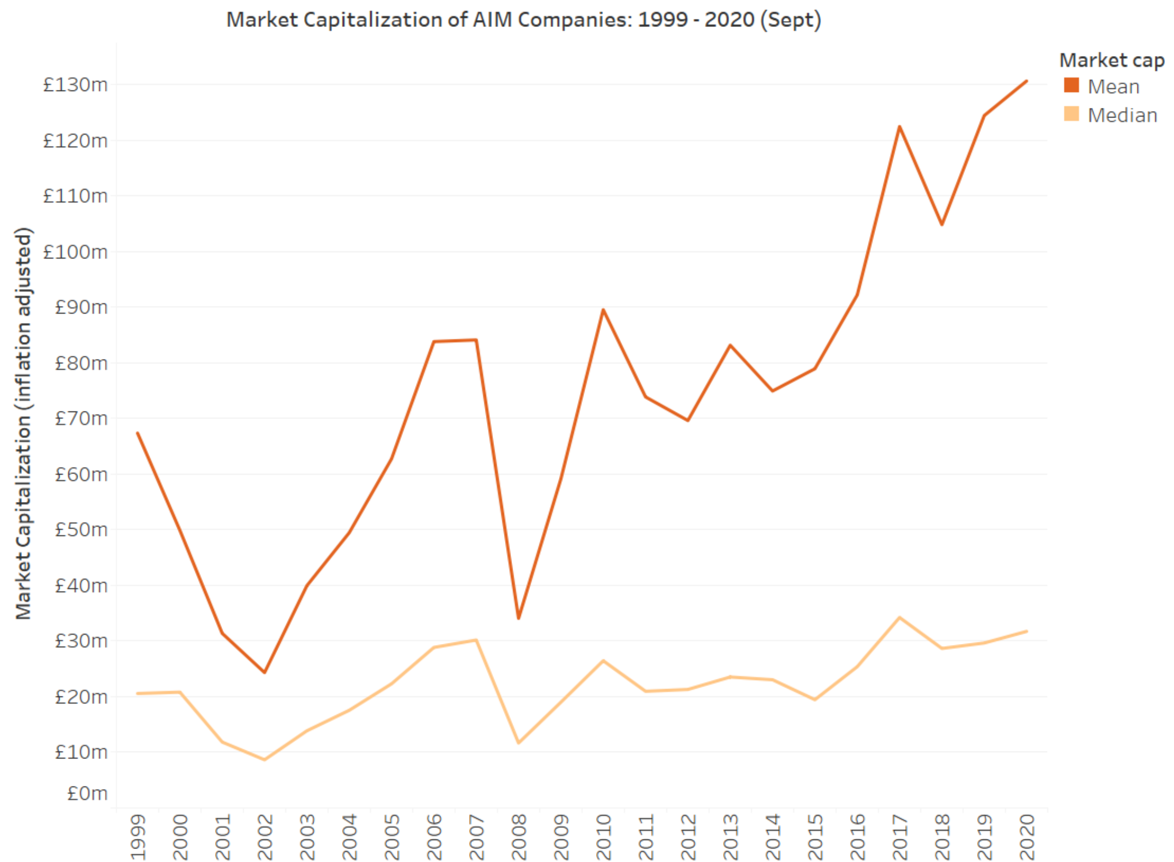


FIGURE 5.4: Mean and Median AIM Market Capitalizations, 1999-2020

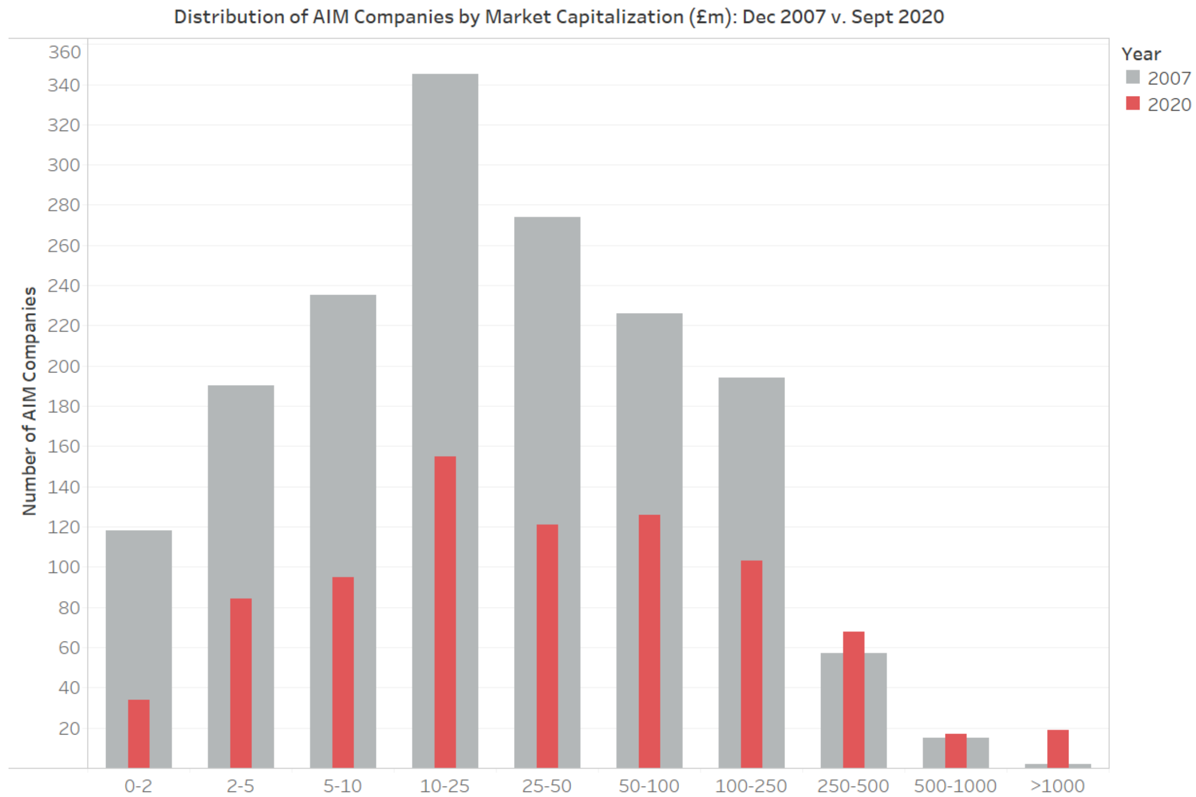


After adjustment for inflation, the median market capitalization on AIM from 2007 to 2020 has barely increased: £20.7 million in December 2007 (equivalent to £30.2m in 2020) has risen to £31.7 million in September 2020. (Although the median market capitalization has increased 272% when comparing December 2008 to September 2020). However, the mean market capitalization during this period has skyrocketed from £57.6 million in 2007 (equivalent to £84.1m in 2020) to £130.6 million in September 2020. After adjusting for inflation, this represents a 55% increase in mean market capitalization since 2007. Comparing the mean and median market capitalizations in 1999 and 2020 reveals significant market maturation: the median company has a 54% larger market capitalization, and the average company has a 94% larger market capitalization.[66]

AIM now plays host to fewer, larger companies. While this might fly in the face of some regulatory objectives (e.g., providing SMEs with access to public markets), it does not necessarily indicate a decline in market integrity. Although the distribution of AIM companies by market capitalization is highly skewed – a mere 2.3% of issuers (i.e., the largest 19 companies) constituted 34.6% of the equity value of all AIM-quoted companies in September 2020 – the distribution is even more skewed on the Main Market of the LSE, where a mere 1.5% of issuers (i.e., the largest 17 companies) constituted 44.9% of the market's entire equity value in May 2020. *FIGURE 5.5* superimposes the distribution of AIM companies by market capitalization at two points in time to show that the skewing towards larger companies has increased substantially.

[66] This period was selected because 1999 is the first year for which comprehensive financial data on AIM companies are publicly available.

FIGURE 5.5: Distribution of AIM Companies by Market Capitalization



Finally, liquidity on AIM has improved substantially from 2007 to 2020, as illustrated by the measures of trading volume and daily trades in *FIGURE 5.6* and *FIGURE 5.7*. As discussed in Chapter Two, Section I(c), higher liquidity is associated with more information production, better price accuracy and lower bid-ask spreads, all of which strengthen market integrity. The steady and significant increase in AIM liquidity over time is consistent with increasing market integrity and inconsistent with a decline in the quality of regulation.

FIGURE 5.6: Average Number of Daily Trades

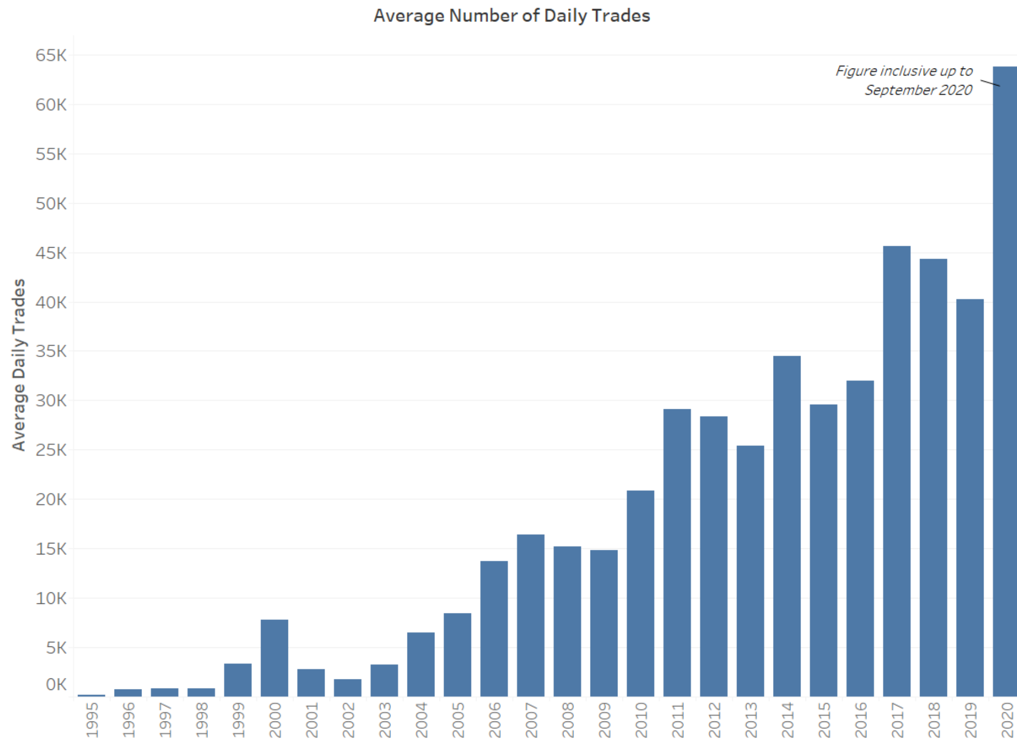
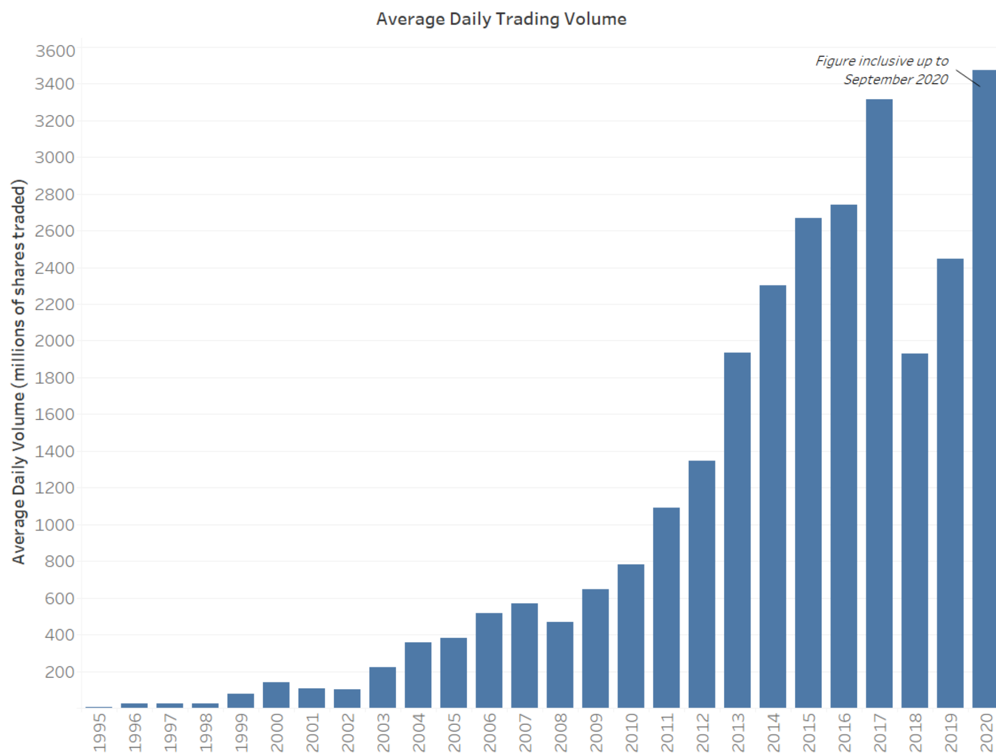


FIGURE 5.7: Average Daily Trading Volume



E. *Formal enforcement on AIM is low*

The Exchange is the ultimate gatekeeper on AIM: it possesses final authority on initial admission, determines compliance or contravention of the listing rules, administers disciplinary action, and can expel issuers from the market. The Exchange has a wide scope of ex ante and ex post disciplinary powers. At one extreme, it can deny listing if it believes admission 'may be detrimental to the orderly operation of AIM or the reputation of AIM', even if a company has retained a Nomad to support its application to AIM and is formally compliant with all the listing rules.[67] At the other extreme, it has broad discretion to suspend trading if, in its view, trading 'is not being conducted in an orderly manner' or if suspension is necessary to protect investors or the integrity and reputation of the market.[68] After a six month period of suspended trading, the Exchange will cancel the issuer's AIM securities.[69] The Exchange may also impose a moratorium on Nomads advising additional AIM companies,[70] and strike Nomads from the register, in effect revoking their licence.[71]

AIM Regulation, the Exchange's staff team responsible for the day to day regulation of AIM, continually monitors Nomads by conducting compliance visits and providing real-time guidance on the Rules.[72] Nomads wishing to remain in good standing (and on the register of

[67] AIM Rules for Companies (March 2018) rule 9. Interview evidence presented in Section IV suggests that it is common practice for the Exchange to informally advise Nomad-brokers that a prospective company's application to AIM is not likely to be successful.

[68] ibid rule 40.

[69] ibid rule 41.

[70] AIM Rules for Nominated Advisers (March 2018) rule 30.

[71] AIM Rules for Companies (March 2018) rule 29.

[72] More reputable Nomads have less frequent formal inspections (i.e., not every year), while other Nomads might be inspected with a compliance visit and audit every year. Nomads are typically given notice in advance of the inspection.

approved Nomads) must implement any guidance or recommendations issued by AIM Regulation following a compliance inspection.[73]

The lightest form of disciplinary action the Exchange can deliver is a warning notice, which is a private notice to an issuer or Nomad for violating the AIM Rules. The warning notice goes on an issuer or Nomad's 'compliance record' and may influence the severity of future discipline.[74] Appeals of warning notices and non-disciplinary actions proceed before the AIM Executive Panel and AIM Executive Appeals Panel, which are composed of Exchange staff not directly involved with the AIM Regulation team or the dispute at issue. For more severe infractions, the Exchange can refer disciplinary action to the AIM Disciplinary Committee (ADC), a committee composed of independent (i.e., non-Exchange staff) members. The ADC may impose fines of any amount and often issues consent orders to an agreed fine and disciplinary measure between the Exchange and the offending company or Nomad.[75] The ADC's determination of any matter, such as a decision by the Exchange to cancel admission of an AIM company's securities, can only be appealed to the AIM Disciplinary Appeals Committee on the basis that the ADC could not reasonably have arrived at its determination or that misapplication or misinterpretation of the AIM Rules was involved.[76]

[73] London Stock Exchange, 'AIM Disciplinary Notice 14' (7 September 2015) para 6 <https://docs.londonstockexchange.com/sites/default/files/documents/ad14.pdf> accessed October 2020. Once a Nomad agrees to recommendations from AIM Regulation, '[f]ailure to implement agreed changes is unacceptable to the Exchange given the importance of the role of the nominated adviser in respect of maintaining the integrity and reputation of AIM.'

[74] AIM Disciplinary Procedures and Appeals Handbook (May 2014) s C3.2.

[75] AIM Disciplinary Procedures and Appeals Handbook (October 2018) s G12.

[76] ibid ss D30, D35.

The Exchange may publicly or privately censure issuers and Nomads. Public censure involves publishing a description of the rule breach and disciplinary committee findings, coupled with the name of the offending party. Public censure plays a name and shame function intended to penalise the offending party's reputational capital. Private censure involves publishing a description of the rule breach and any details of the disciplinary committee findings without revealing the name of the offender. When privately censuring companies or Nomads, data are anonymised to protect the identity of the disciplined party. The role of private censure is to inform the market on appropriate standards of conduct, not to have reputational consequences.[77]

The Exchange began publishing disciplinary data and publicly fining companies and Nomads for wrongdoing after the introduction of the separate Nomad Rules and Disciplinary Handbook in 2007. *FIGURE 5.8* and *FIGURE 5.9* display the number of formal enforcement actions carried out by the Exchange from February 2007 to September 2020. These figures depict the number of enforcement actions per month over the time period, rather than combining the number of enforcement actions into a single figure for each year.

[77] The Exchange publishes disciplinary notices 'for the purpose of educating the market on the expected standards of conduct for AIM companies under the AIM Rules'. see AIM Regulation, 'AIM Disciplinary Notice 16' (5 October 2017) para 2 <https://docs.londonstockexchange.com/sites/default/files/documents/ad16.pdf> accessed October 2020.

FIGURE 5.8: Number of Companies and Nomads Disciplined, 2007-2020

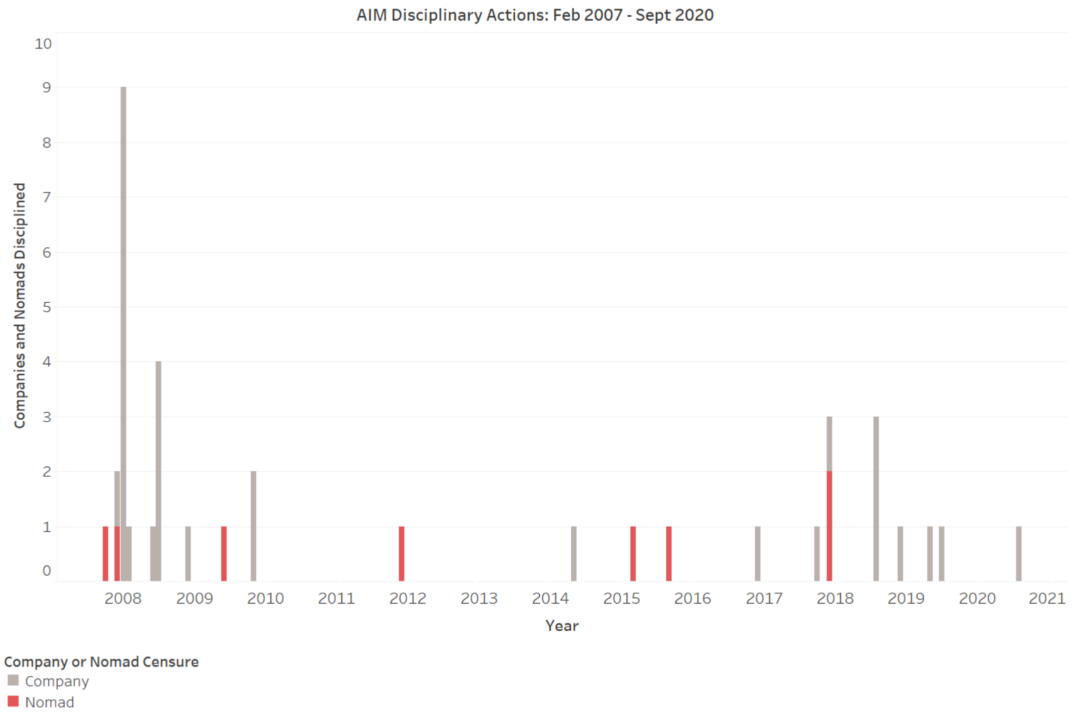


FIGURE 5.9: Number of Public and Private Censures, 2007-2020

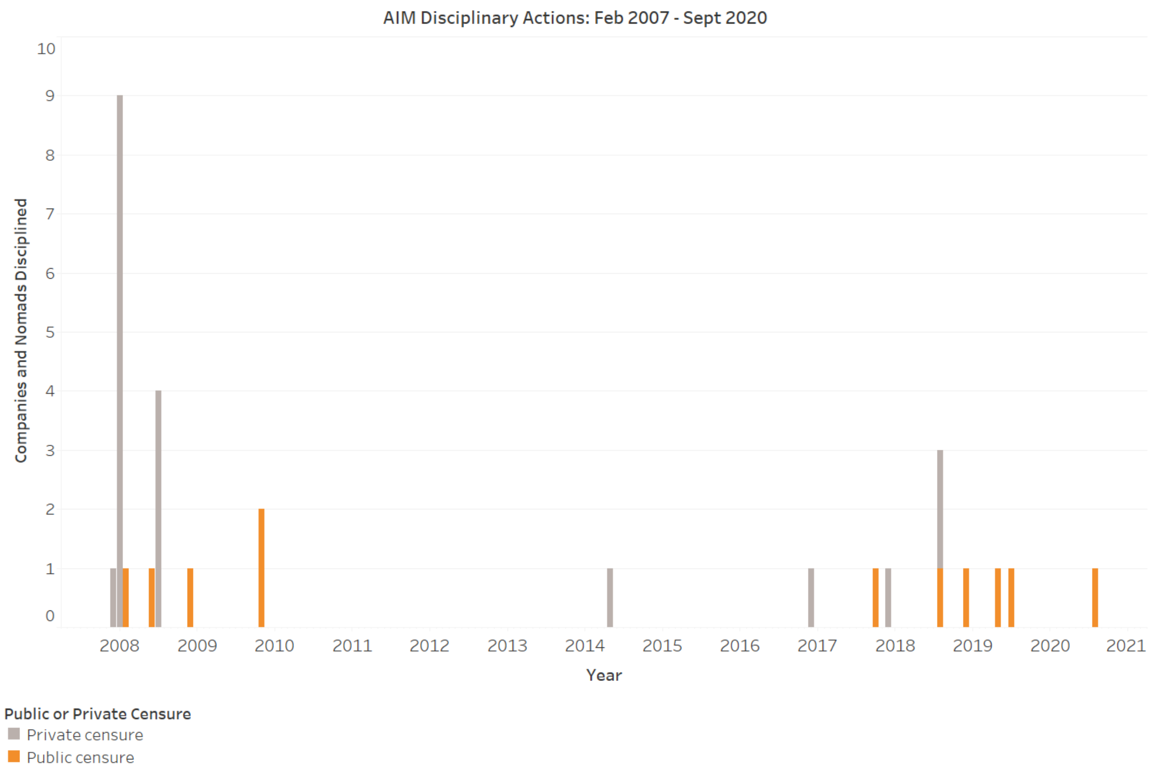


FIGURE 5.8 shows that from 2007 to 2020, 30 companies were both fined and censured for violating the AIM Rules, whereas only eight Nomads have been penalized over the same period. However, when expressed as a proportion, the percentage of Nomads disciplined during this period (>10%) is much higher than the percentage of AIM companies (0.03%) fined for breaching the AIM Rules.[78] This reflects the importance of Nomads as gatekeepers. The emphasis on stronger discipline for Nomads is also observed in the fines imposed. The average fine levied against an AIM company was £114k, although the average fine paid was £86.5k because the Exchange awards settlement discounts for cooperation or waives the fine when the company is in financial distress.[79] Nomads faced higher fines than issuers – the average fine levied was £176.3k and the average fine paid was £137.5k.

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[78] There were roughly 80 Nomads in 2007 and only 31 Nomads in 2019, so the proportion of Nomads disciplined is in double digits. The average number of AIM companies from 2007 to September 2020 was 1,125 (using the Exchange's year end figures). The enforcement rate of 0.03% was calculated using this average.

There is a paucity of available data on non-publicized discipline by the Exchange (for obvious reasons), but it appears that a high proportion of AIM companies (>10%) receive private warnings from the Exchange. In a 2017 discussion paper, the Exchange reported that it conducted an average of 190 compliance inspections per year between 2013-2016, and issued an average of 16 private warnings and private censures/fines per year during this period. Private censures/fines are published (albeit anonymously), and since there were four private censures/fines between 2013-2016, it would appear there were approximately 15 private warnings per year between 2013-2016. The Exchange also reported that it issued an average of 93 'recorded breach[es]' during this period, which are another form of private warning – a rule breach is noted on the company or Nomad's 'compliance record', and is 'usually accompanied with education and/or requirements for remedial action.' The proportion of AIM companies informally disciplined between 2013-2016 appears to be 12.7%, since there was an average of 850 AIM companies and annual averages of 108 private warnings. See London Stock Exchange, 'Discussion Paper: AIM Rules Review (July 2017)' 15 <https://docs.londonstockexchange.com/sites/default/files/documents/aim-discussion-paper-july-2017.pdf>.

[79] Companies or Nomads that accept a settlement offer from the Exchange within 20 business days are awarded a 30% fine discount. Parties that initially refuse settlement but agree to settle via a 'consent order' within 10 business days of the scheduled case management conference receive a 15% fine discount. See AIM Disciplinary Procedures and Appeals Handbook (October 2018) ss E1–E5. For an example of the Exchange waiving a £300,000 fine due to a company's financial distress, see AIM Regulation, 'AIM Disciplinary Notice 23: Public Censure and Fine – Yü Group Plc' (10 August 2020), <https://docs.londonstockexchange.com/sites/default/files/documents/ad23.pdf> accessed September 2020.

FIGURE 5.9 shows that only 14 of 38 disciplinary actions have publicly identified the name of the wrongdoer. The vast majority of these public censures (11 of 14) targeted companies rather than Nomads. It is important to note that the number of enforcement actions for violations of the AIM Rules is an imprecise proxy for the amount of market misconduct on AIM, since the Exchange may under-report wrongdoing to protect its reputation. There is an inherent tension between the Exchange's regulatory objective of maintaining the 'good reputation of its markets' and rigorous *publicized* enforcement. For this reason, the Exchange may undertake substantial *non-publicized* enforcement against companies and Nomads who violate the AIM Rules.[80] Furthermore, the Exchange often does not initiate disciplinary action for high profile cases of fraud (such as Patisserie Valerie's 2019 bankruptcy),[81] perhaps because when misconduct extends beyond the scope of the AIM Rules to include breaches of legislation, other public enforcement agencies become involved.[82,83] Viewed in isolation, the relatively low number of formal disciplinary action by the Exchange could be consistent with both narratives of high or low market

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[80] This much can be inferred from the Exchange's regulatory philosophy: 'The Exchange's approach to regulation is aimed at maintaining the integrity, orderliness, transparency and good reputation of its markets and changing behaviour in those markets where necessary. Accordingly, *where appropriate, the Exchange will bring to account breaches of the AIM Rules through disciplinary action, but it may also undertake other work to improve standards and to promote future compliance.* (emphasis added)' See AIM Disciplinary Procedures and Appeals Handbook (October 2018) s A4.

[81] One interviewee believed that AIM received significant unfair press, stating: 'When Patisserie Valerie and other AIM companies failed, it became [seen as] a failure of the AIM market. But strangely enough, no one has thought that the failure of Carillion was a failure of the FCA or of the Main Market.'

[82] For example, the investigation of accounting fraud and the subsequent bankruptcy of Patisserie Valerie, a very high-profile AIM company, was undertaken by the Serious Fraud Office. See Richard Partington, 'Police Arrest Five in Patisserie Valerie Investigation' *The Guardian* (23 June 2019) <https://www.theguardian.com/business/2019/jun/23/sfo-arrests-five-in-patisserie-valerie-investigation> accessed October 2020. However, the Exchange did not publish any notices concerning breaches of the AIM Rules by Patisserie Valerie.

[83] Another example of a public regulatory agency investigating an AIM company was Burford Capital, discussed in Chapter Four, Section II(B). After Burford Capital alleged market abuse by a short seller, the Exchange cooperated with the FCA to investigate whether market manipulation had occurred (and both concluded that it had not).

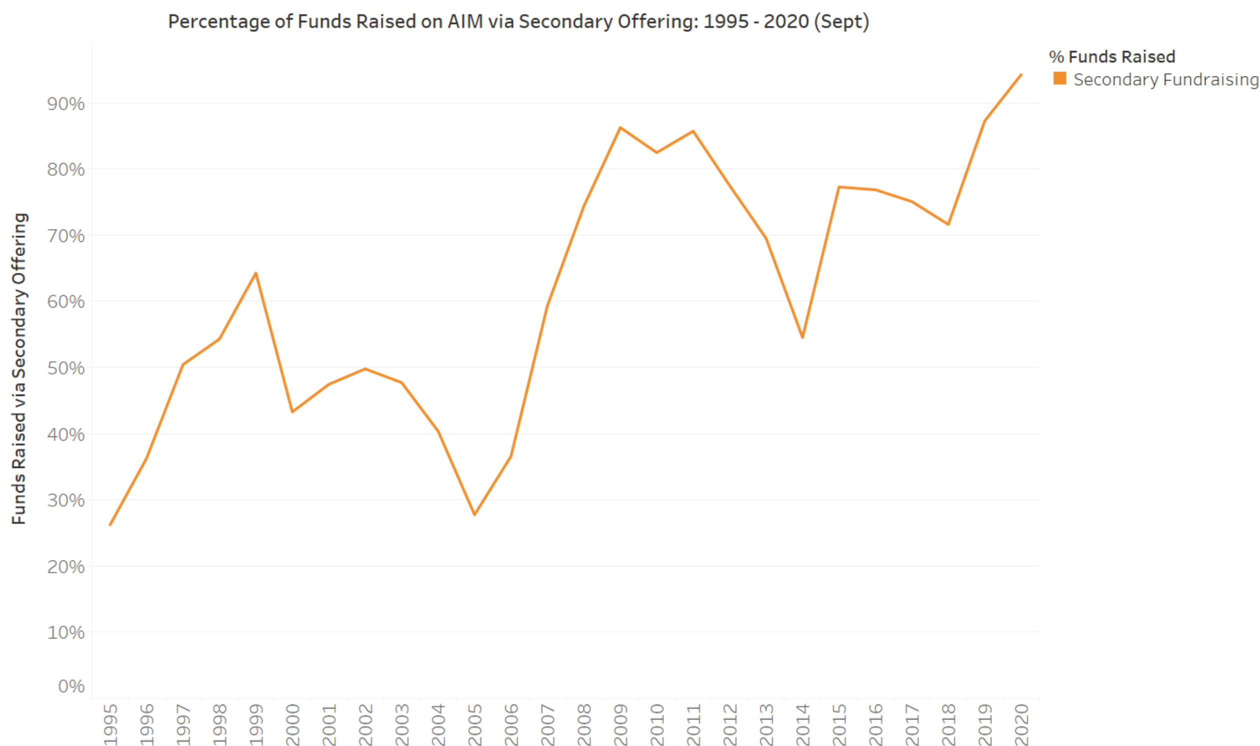
integrity. If the Exchange does not issue a high number of non-publicized warnings to AIM companies and Nomads, the data would indicate relatively high rule compliance and low market misconduct given the number of issuers. If the Exchange does issue a substantial number of private warnings and relies on non-publicized enforcement to protect AIM's reputation, the data would have low probative value in rebutting a race to the bottom in market integrity.

F. *AIM is dominated by secondary fundraisings (rather than IPOs) issued as private placings*

The decline in the number of issuers since December 2007 corresponds with a shift towards an increasing percentage of funds raised through secondary offerings rather than initial public offerings (IPOs). *FIGURE 5.10* shows how AIM has transformed in the past 12 years to a market where, on average, more than three-quarters of funds are raised in secondary offerings.[84]

[84] The terms secondary offering, follow-on offering, seasoned issuance, and further issue are used interchangeably.

FIGURE 5.10: Percentage of Funds Raised via Secondary Offerings, 1995-2020



In the first half of AIM's history, from 1995 until the year end 2007, an average of 44.9% of total funds (i.e., newly issued securities) were raised via secondary offerings. In the second half of AIM's history, from 2008 until September 2020, an average of 77.9% of total funds were raised via follow-on offerings. Cumulatively, 61.9% of the £119.6 billion raised on AIM since its inception in 1995 has been via secondary offerings. In comparison, 39.4% of all equity raised on the Main Market from 1999-2017 has been via further issues.[85]

A remarkably high 94% of all secondary offerings on AIM, from 1996 to September 2020, were issued as prospectus-exempt private placings.[86] By issuing securities via private placements

[85] This figure is calculated from the LSE's historic market data and excludes debt securities such as Eurobonds and medium-term notes.

[86] To determine this figure, the researcher reviewed the data on 42,000+ further issues on AIM between January 1996 and September 2020, adjusting all figures for inflation to pounds sterling in 2020. The researcher included all

to 'qualified' investors and other sophisticated investors (such as institutional investors), issuers can fundraise at lower cost because they do not need to produce a full-blown prospectus.[87] Private placings are also appealing because investors can purchase shares at a discount relative to the market price, unlike riskier open offers (e.g., rights subscriptions) where the share price for small companies could dip below the offer price before take-up.[88] The extremely high percentage of private placements is consistent with observations by other legal commentators who suggested in 2007 that '… AIM is an institution-dominated market. Virtually all IPOs and secondary offerings on AIM take the form of private placings with institutions…'[89] A 2011 study found that institutional investors held roughly 50% of shares in AIM companies, a rise from roughly 30% in

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sums raised with the word 'placing' in the transaction type. The Exchange categorizes their further issues data into transaction types such as 'Exercise of options', 'Exercise of warrants', 'Further issues', 'Open offer', etc., and has multiple categories for placings, many of which are no longer used: e.g., 'PLACING', 'Placing for cash', 'Placing – vendor consideration'. The Exchange does not provide their definition of 'Placing', and the researcher adopts the conventional meaning of 'placing' to refer to private placements of securities issued via a prospectus exemption to qualified (accredited) investors. Reputation should be more relevant to the cost of capital for placings than other transaction types (e.g., exercise of options).

[87] *FSMA 2000* section 85 prohibits issuing securities to the public without an approved prospectus; FSMA section 86 and PRR 1.2.3 of the FCA Handbook outline the criteria for exempt offers to the public, which include (inter alia) offers not exceeding €8 million in total consideration, offers made to solely 'qualified investors', or offers made to fewer than 150 persons excluding qualified investors.

[88] In a private placement the securities are purchased by selected investors, whereas open offers can be taken up by any of the existing shareholders. It is common practice in the UK that 'open offers are generally always accompanied by a [private] placing.' See Nick Bryans and Caroline Chambers (Ashurst LLP), 'Placings and Open Offers (Practical Law)' (2020) <https://uk.practicallaw.thomsonreuters.com/8-204-5050?originationContext=document&transitionType=DocumentItem&contextData=%28sc.Default%29&comp=pluk>.

[89] Arcot, Black and Owen (n 6) 43. See also John Armour, Martin Bengtzen and Luca Enriques, 'Investor Choice in Global Securities Markets' (2017) ECGI - Law Working Paper No. 371/2017 44–45 <http://ssrn.com/abstract_id=3047734>.. 'AIM is actually only a secondary market, with the primary market component operating as a private placement.'

2003.[90] The most recent data indicate that 25% of AIM shares are beneficially owned by individuals, as displayed in *TABLE 5.1* below.[91]

TABLE 5.1: Holdings of AIM and FTSE 100 Companies

Table 2: Holdings of FTSE 100, Alternative Investment Market and other quoted companies by beneficial owner
At 31 December 2018

		Percent	
	FTSE 100	**AIM**	**Other quoted**
Individuals	11.3	25.1	19.8
Charities	0.5	0.6	0.7
Insurance companies	4.1	1.3	3.8
Pension funds	2.4	3.7	2.3
Investment trusts	1.2	1.4	1.9
Unit trusts	9.6	10.9	9.5
Banks	2.0	0.7	2.7
Other financial institutions	8.2	7.3	7.7
Private non-financial companies	2.3	0.6	3.3
Public sector[2]	1.2	0.2	0.0
Rest of the world	57.1	48.2	48.4
Total[1]	100.0	100.0	100.0

Source: Office for National Statistics

The percentage of AIM shares held by 'individuals' in *TABLE 5.1* does not necessarily mean that 25% of AIM shares are held by ordinary retail investors. These shares could be held by related

[90] Tom Nicholls, 'A Practitioner's Guide to the AIM Rules' 2. This figure is from a study (not publicly accessible online) prepared by Growth Company Investor.

[91] These figures represent the beneficial owner of the shares as registered in CREST. Office for National Statistics, 'Ownership of UK Quoted Shares: 2018' (2020) <https://www.ons.gov.uk/economy/investmentspensionsandtrusts/bulletins/ownershipofukquotedshares/2018#beneficial-owners> accessed October 2020.

parties (e.g., directors, officers, and their relatives). Furthermore, this 25% could not be predominantly made up of 'mom and pop' retail investors since the vast majority of shares issued by AIM companies are sold via placings to sophisticated investors. However, retail investors form an important component of the secondary market for AIM shares, unlike the resale of privately placed securities under Rule 144A in the US, which can only be re-sold among other 'qualified institutional buyers' and cannot be traded on a US exchange.[92]

Since nearly half of AIM beneficial shareholders are classified under 'Rest of the world', it is difficult to gauge the proportion of institutional ownership in this category, and therefore difficult to estimate the exact amount of institutional investor ownership on AIM. However, there may be more foreign controlling shareholders or foreign institutional investor ownership than foreign retail investor ownership. This is because, first, the tax benefits of AIM shares are targeted towards domestic retail investors and are of little advantage to foreign retail investors, and second, many international AIM companies have controlling shareholders. The lack of specificity in the *TABLE 5.1* data prepared by the Office for National Statistics does not therefore contradict the 2011 study and data indicating that 94% of secondary fundraising occurs via placings, and the evidence is consistent with the narrative of AIM being an institutional investor dominated market. This also suggests that institutional investors play an important gatekeeping role on AIM, a view the Exchange has also affirmed.[93]

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[92] Armour, Bengtzen and Enriques (n 89) 34–35.

[93] When the Exchange proposed a minimum £3 million fundraising requirement for investing companies in 2005, it stated that 'The fundraising requirement has been set at a level to necessitate some institutional participation, ensuring an extra level of scrutiny over the viability of its [the applicant's] investment strategy…' When this fundraising requirement was raised to £6 million in 2016, the Exchange again cited the value of institutional investor participation. The underlying idea is that if an investing company applicant cannot secure £6 million in institutional fundraising, they are not suitable to join AIM. See AIM Regulation, 'AIM Notice 11' (31 January 2005) 3, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-11-final.pdf> accessed May 2020.

The trend towards more secondary fundraising and less IPOs could be unrelated to AIM market integrity, resulting from broader economic conditions reducing the number of public flotations and changing market preferences. However, since the proportion of secondary fundraising has risen much more on AIM than the Main Market over the past two decades, this trend is less likely due to broader economic conditions. Even if it were, the success of AIM companies in raising additional funds and continually returning to the market does not support the view of declining market integrity.

Of the 31 registered Nomads in August 2019, only three are not registered as brokers with the Exchange, and by the researcher's count all but four are active as Nomad-brokers rather than pure Nomads.[94] These Nomad-brokers are largely boutique investment banks and corporate advisory firms but also include London-based branches of international firms, and they provide broking and underwriting services to AIM companies. It does not automatically follow that a Nomad provides corporate finance services to the issuer who retains it *qua* Nomad. By the researcher's count in September 2019, 80% of issuers used the same Nomad and broker.[95]

See also AIM Regulation, 'AIM Notice 42' (15 October 2015) 1, <https://docs.londonstockexchange.com/sites/default/files/documents/aimnotice42.pdf > accessed May 2020.

[94] Grant Thornton UK LLP, PricewaterhouseCoopers LLP and Deloitte Corporate Finance are the only Nomads who do not also possess broking licenses. At least one other Nomad, Cairn Financial Advisers, may be counted as 'independent' despite possessing a broking license because it does not advertise corporate finance/broking services, and does not possess a corporate finance team capable of acting as the sole broker to its Nomad clients.

[95] This figure includes AIM companies whose Nomad is listed as a joint broker or the sole broker. Of the 717 companies in September 2019 using the same Nomad and broker, 26% of companies listed their Nomad as a joint broker rather than the sole broker.

SECTION III A reputational theory of gatekeeper governance

A. *A reputational hypothesis*

This section proposes a reputational hypothesis of AIM self-regulation – namely, that reputational incentives spur Nomads to diligently perform their gatekeeping roles and form an unwritten core of AIM's regulatory model, enabling principles-based regulation with a relatively low number of mandatory rules from racing towards the bottom.[96] Section III tests this theory using the methods of data and methodological triangulation described in Chapter Three. It considers how consistent the interview data are with each other (and other data),[97] and assesses whether the reputational hypothesis has more support from the evidence than rival theories. The rival theories against which the reputational hypothesis is assessed are that 1) reputational incentives are negligible in securities markets and do not play a meaningful role on AIM, and 2) reputational incentives exist in securities markets and play a meaningful role on AIM, but not in the way hypothesized by preventing a race to the bottom in the quality of regulation. The reputational hypothesis and rival theories were informed by initial discussions with AIM market participants. They were also informed by the traditions of scholarship theorizing how reputation may incentivise compliance with rules or facilitate effective private ordering,[98] act as a complement or substitute for law,[99] lead to

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[96] The AIM Rules for Companies (June 2019) consist of 45 enumerated rules (plus seven schedules and the guidance notes). The AIM Rules for Nominated Advisers (July 2018) consist of 33 enumerated rules (plus three schedules).

[97] As discussed in Chapter Three (Methodology), Section III(B), nearly every category of AIM stakeholder is represented in the range of interview data, such as Nomads, brokers, directors, legal advisers, investors, etc.

[98] See e.g., Avner Greif, 'Reputation and Coalitions in Medieval Trade: Evidence on the Maghribi Traders' (1989) 49 The Journal of Economic History 857; Robert Ellickson, *Order Without Law: How Neighbors Settle Disputes* (Harvard University Press 1991); Lisa Bernstein, 'Merchant Law in a Merchant Court: Rethinking the Code's Search for Immanent Business Norms' (1996) 144 University of Pennsylvania Law Review 1765.

[99] See e.g., Jonathan Macey, 'The Demise of the Reputational Model in Capital Markets: The Problem of the "Last Period Parasites"' (2015) 60 Syracuse Law Review 427, 445. Macey argues that 'the value to financial institutions of investing in reputation declines to the extent that a regulatory system that people believe is effective is put into place. This is because reputation and regulation, both of which serve the role of providing contracting parties with

reputational sanctions in financial markets,[100] and how actions with significant reputational consequences may constitute a form of soft law itself.[101] Prior scholarship has described AIM as a 'reputational market',[102] but little work outside the finance literature has been done to empirically assess this claim and account for significant changes in the marketplace in the second half of AIM's history.[103]

some reassurance that they won't be cheated or taken advantage of in the course of financial dealings, are substitutes for one another.'

[100] See e.g., John Armour, Colin Mayer and Andrea Polo, 'Regulatory Sanctions and Reputational Damage in Financial Markets' (2017) 52 Journal of Financial and Quantitative Analysis 1429; Roy Shapira, 'A Reputational Theory of Corporate Law' (2015) 26 Stanford Law & Policy Review 1; Alan D Morrison and William J Wilhelm Jr., 'Trust, Reputation, and Law: The Evolution of Commitment in Investment Banking' (2015) 7 Journal of Legal Analysis 363.

[101] See e.g., Andrew T Guzman, 'A Compliance-Based Theory of International Law' (2002) 90 California Law Review 1823, 1825. Guzman writes that a 'reputational theory' of international law 'would label as international law any promise that materially alters state incentives…' He argues that 'compliance [with international law] occurs due to state concern about both reputational and direct sanctions triggered by violations of the law.' ibid 1827.

[102] AIM was first described as a 'reputational market' by Steven Davidoff Solomon because '[i]nvestors rely upon the prior reputation of the nominated advisors as proxy for the quality of issuers listed rather than on the regulation itself.' Davidoff Solomon, writing in 2007, characterised AIM's 'relaxed listing requirements' and regulation as exemplifying the 'low regulation model' of securities exchanges. See Steven M Davidoff Solomon, 'Regulating Listings in a Global Market' (2007) 86 N.C. L. Rev. 89, 138. Jose Miguel Mendoza, writing in 2008, also described AIM as a reputational market and emphasised the role of reputational capital: 'Nomad performance is driven by a unique incentive structure in which their reputational capital is pledged as a proxy for a firm's suitability to AIM, its accuracy of ongoing disclosure, and its quality of internal governance structures.' See Jose Miguel Mendoza, 'Securities Regulation in Low-Tier Listing Venues: The Rise of the Alternative Investment Market' (2008) 13 Fordham Journal of Corporate & Financial Law 257, 327.

[103] For prior legal literature on AIM, see Arcot, Black and Owen (n 6). See also Mendoza (n 102). For helpful finance literature on AIM, see also Khurshed, Kostas and Saadouni (n 49); Silvio Vismara, Stefano Paleari and Jay R Ritter, 'Europe's Second Markets for Small Companies' (2012) 18 European Financial Management 352; Edward Peter Stringham and Ivan Chen, 'The Alternative of Private Regulation: The London Stock Exchange's Alternative Investment Market as a Model' (2012) 32 Economic Affairs 37; Ulf Nielsson, 'Do Less Regulated Markets Attract Lower Quality Firms? Evidence from the London AIM Market' (2013) 22 Journal of Financial Intermediation 335; Chris Mallin and Kean Ow-Yong, 'Factors Influencing Corporate Governance Disclosures: Evidence from Alternative Investment Market (AIM) Companies in the UK' (2012) 18 European Journal of Finance 515; Tim Jenkinson and Tarun Ramadorai, 'Does One Size Fit All? The Consequences of Switching Markets with Different Regulatory Standards' (2013) 19 European Financial Management 852; Joseph Gerakos, Mark Lang and Mark Maffett, 'Post-Listing Performance and Private Sector Regulation: The Experience of London's Alternative Investment Market' (2013) 56 Journal of Accounting and Economics 189; Susanne Espenlaub, Arif Khurshed and Abdulkadir Mohamed, 'IPO Survival in a Reputational Market' (2012) 39 Journal of Business Finance and Accounting 427; John A Doukas and Hafiz Hoque, 'Why Firms Favour the AIM When They Can List on Main Market?' (2016) 60 Journal of International Money and Finance 378; Campbell and Tabner (n 64).

B. *A theory of reputational capital and reputational sanctions*

Reputational capital can simply refer to whether persons or institutions have 'good' or 'bad' reputations.[104] Reputations are acquired through a history of transactions between parties; in securities markets, issuers and investment banks develop 'good' reputations through a verifiable history of accurate representations about a company's business prospects and the quality of the securities offered. As trust is developed through repeated business representations proving accurate over time, the issuer or investment bank's commitments become more credible in the eyes of transactional counterparties. Reputational capital strengthens the credibility of the commitment one party can make to another, thereby lowering transaction costs because investors can rely on the (increasingly credible) representations or commitments that issuers or gatekeepers with 'good' reputations make about the quality of the securities, instead of 'demand[ing] assurances that future behaviour will differ from past behaviour'.[105] Demanding assurances from a party to behave differently represents a form of bonding or monitoring costs.[106]

Reputational capital reduces agency costs between parties, and in primary securities markets it allows companies to lower the cost of capital.[107] Primary securities markets are

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[104] See Frank Partnoy, 'Barbarians at the Gatekeepers: A Proposal for a Modified Strict Liability Regime' (2001) 79 Washington University Law Quarterly 491, 494. See also Macey (n 99) 429. 'For the industries on which I focus, credit rating agencies, law firms, investment banks, stock exchanges and accounting firms, reputational capital historically has been the primary mechanism by which businesses establish trust in markets and in contracting relationships.'

[105] For a discussion of reputational capital serves as an ex ante signalling mechanism to overcome adverse selection problems, see Partnoy (n 104) 494.

[106] Michael C Jensen and William H Meckling, 'Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure' (1976) 3 Journal of Financial Economics 305, 325–326.

[107] See Jonathan M Karpoff, 'Does Reputation Work to Discipline Corporate Misconduct?' in Michael L Barnett and Timothy G Pollock (eds), *The Oxford Handbook of Corporate Reputation* (OUP 2012) 363. Karpoff defines reputation as 'the present value of the cash flows earned when an individual or firm eschews opportunism and performs as promised on explicit and implicit contracts. Stated differently, reputation is the value of the quasi-rent stream that accrues when counterparties offer favourable terms of contract because they believe the firm will not act

characterised by information asymmetries between companies issuing securities and the investors purchasing them, not unlike the market for used automobiles.[108] Management and the investment banks conducting due diligence have more information about the future prospects of the company, and therefore the quality of securities being offered, than outside investors. The quality of the securities and the accuracy of the representations concerning those securities will become observable ex post by verifying the accuracy of the disclosures made, and to some extent by the performance of the security in secondary trading.[109] This results in an adverse selection problem: since the quality of goods is not entirely observable ex ante, and the information asymmetry makes it difficult for the buyer to ascertain the 'type' of goods, the buyer will discount its purchase price unless the seller can credibly signal the goods sold are not 'lemons' (i.e., low quality).[110] Reputational capital allows issuers to *credibly* signal to investors that the securities offered are not lemons, avoiding a higher cost of capital that investors would otherwise demand to compensate for the adverse selection risk.[111] A 'reputation mechanism' allows parties to more credibly commit to honest future conduct, and it works because parties know that the long-term payoffs for honest conduct are higher than the short-term payoffs for dishonest conduct, if cheaters (once exposed) will be excluded from future business with the group.[112]

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opportunistically toward them.' A lower cost of capital for issuers is a more favourable contractual term offered because of reputation.

[108] See generally George A Akerlof, 'The Market for "Lemons": Quality Uncertainty and the Market Mechanism' (1970) 84 The Quarterly Journal of Economics 488.

[109] Partnoy (n 104) 502.

[110] Victor P Goldberg, 'The Gold Ring Problem' (1997) 47 The University of Toronto Law Journal 469, 482.

[111] Partnoy (n 104) 495.

[112] Greif (n 98) 858–859, 867.

The exposure of disreputable conduct leads to *reputational sanctions*, i.e., a loss of reputational capital which raises the costs of future transactions (because less credible commitments can be made) and reduces the number of future transactions (because of full or partial exclusion from the group). Reputational sanctions can be understood as the adverse consequences experienced by a company or firm when stakeholders downgrade their beliefs about the quality of a company or firm in light of receiving information that is perceived to be negative.[113]

C. *Applying the reputational capital theory to AIM*

In theory, reputational capital would be valuable on AIM to reduce the cost of capital for issuers and influence demand for Nomad-brokers' services. The information asymmetry between issuers and investors, and the consequent adverse selection problem, is more significant on AIM than the Main Market of the LSE: Main Market issuers have longer track records of financial performance and more analyst coverage following the IPO.[114] This is supported by evidence that IPO under-pricing is more significant on AIM than on the Main Market.[115] Nomads possess a greater advantage relative to issuers – because of their reputational capital – in assuring investors

[113] This definition comes from Roy Shapira's work on reputational sanctions. Shapira defines reputation as 'the set of beliefs that stakeholders hold regarding the company's quality', and reputational sanctioning as 'the process of belief updating'. Shapira suggests that reputational sanctions are 'inherently noisy' because stakeholders updating their beliefs about the company possess 'asymmetric information, judgment biases, and divergent incentives'. Stakeholders doing business with the company may impose stronger or weaker than appropriate sanctions (e.g., ceasing all business with the firm or not reacting at all) in response to new information about the company's reputation because they have inaccurately judged how indicative the company's wrongdoing is with respect to their future interactions with the company. See Roy Shapira, 'Reputational Through Litigation: How the Legal System Shapes Behavior By Producing Information' (2016) 91 Washintgon Law Review 1193, 1196–1204.

[114] Companies seeking a Main Market listing must publish three years of audited financial information. Companies seeking an AIM listing must publish the last two years of audited financial information; however, this requirement can be waived for companies that have not earned revenues for at least two years if related parties and employees holding more than 0.5% of securities agree to a one-year lock-in period following admission.

[115] Miguel Á Acedo-Ramírez and Francisco J Ruiz-Cabestre, 'IPO Characteristics and Underpricing in the Alternative Investment Market' (2017) 24 Applied Economics Letters 485, 488–489.

that the securities offered are not 'lemons'.[116] Nomads' reputation can therefore lower companies' costs of fundraising, playing a crucial role in the efficiency of capital fundraising on AIM.

D. *Reputational sanctions differ in models of one-shot v. repeated interactions*

Repeat players behave differently than one-shot players because of their long-run incentives. Marc Galanter, one of the first scholars to theorize the behaviour of repeat players in legal systems, suggested that repeat players are less concerned with the outcome of any one round than with protecting their long-term interests over multiple rounds.[117] Furthermore, repeat players possess the resources and capacity to pursue their long-term interests.[118] When repeat players interact with each other in Galanter's model, the expectation of continued profitable future interactions cause them to rely on informal control mechanisms between the parties rather than on courts or third parties to settle disputes.[119]

The more a gatekeeper is a 'repeat player' in the market, the more reputational capital the gatekeeper can accumulate through a higher number of trust-building interactions. The greater the gatekeeper's reputational capital, the more revenues a gatekeeper can expect to generate, since higher reputational capital should mean lower costs of capital for issuers and therefore higher

[116] See Partnoy (n 104) 503. 'Accordingly gatekeepers are most valuable when it is substantially less costly for them to persuade investors of the veracity of representations than it is for issuers to do so. As investors' perception of issuers improves, the value of certification declines. Accordingly, gatekeepers are more valuable in markets where investors perceive that issuers are of lower quality.'

[117] Mark Galanter, 'Why the "Haves" Come out Ahead: Speculations on the Limits of Legal Change' (1974) 9 Law & Society Review 95, 98.

[118] ibid.

[119] ibid 110–111. On Galanter's analysis, repeat players with mutually beneficial relations seek to avoid the transaction costs of litigation and formal dispute resolution. Repeat players rely on costly formal mechanisms of enforcement when the expected future value of the relationship decreases; to occasionally demonstrate the credibility of threats; when informal control mechanisms have less effective (e.g., if one party becomes less reliant on the other for business), or where the dispute relates to values or principles instead of pure economic considerations.

demand for the gatekeeper's services.[120] However, there is a natural floor to the amount an issuer's cost of capital could be reduced, and a corresponding limit on how much reputational capital could increase demand for the gatekeeper's services.

A predominant critique of AIM is that Nomad-brokers are not effective gatekeepers because they face a conflict of interest between monitoring companies and advising the Exchange on their suitability for admission, while at the same time depending on them for business. Prominent legal commentators have criticised Nomads along these lines, emphasizing that Nomads are not themselves monitored sufficiently by the Exchange or public shareholders.[121] It can be plainly observed that an inherent tension arises between Nomad-brokers' corporate finance and regulatory functions. Nomad-brokers face incentives to maximise fee earning (by advising more companies on more corporate finance activity) and to police the companies they advise (potentially discouraging fee earning activity). An inevitable degree of conflict exists between Nomads' responsibilities to the client and to the Exchange, although Nomads' duties under the AIM Rules are owed to the Exchange. A regulatory model that delegates monitoring to potentially conflicted gatekeepers raises the concern that the monitors themselves will not be adequately supervised. Nomads' conflict of interest is also reminiscent of the inherent tension stock exchanges classically face to strictly police the companies they depend on for generating trading and data sales revenue.

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[120] See Partnoy (n 104) 495. 'Issuers with plans to access the capital markets repeatedly will consider the fact that investors who are disappointed ex post will demand a higher cost of capital for future issues.' See also ibid 501. 'Gatekeepers will have less of an incentive to engage in fraud if they are more likely to be repeat players or if they are less likely to be in or near an end period.'

[121] Coffee, Jr. (n 53) 339–340. 'In overview, Nomads probably present the limiting example of reliance on a gatekeeper.'

A regulatory model where Nomad-brokers act as gatekeepers could result in an exacerbated conflict of interest if the market is comprised of one round rather than repeat interactions between issuers and investors. This is because in a theoretical model of one round issuer-investor interactions – e.g., imagine a market of exclusively IPOs, where issuers do not return for secondary fundraisings – demand is increased for lax Nomads (i.e., Nomad-brokers the market perceives to have low reputational capital) because the benefits of a lax Nomad increase for issuers.[122] Nomads who make inaccurate representations or do not strictly monitor their companies will experience reputational sanctions, thereby raising the cost of capital for the issuers they advise. The cost is shared among all the issuers that the Nomad-broker advises, while the benefit from lax supervision or inaccurate representations of the quality of securities offered is entirely captured by the sole issuer for whom the Nomad-broker is acting. For an issuer with no plans to return to the market for secondary fundraising, the benefits of a lax Nomad are higher, and the costs of a lax Nomad are lower. These benefits could include the lax Nomad-broker overvaluing the issuer's securities and turning a blind eye to misconduct when the issuer deems contravening the AIM Rules would produce a net benefit. These costs include higher costs of capital due to the lax Nomad's less-than-credible guarantees. From an issuer's perspective, the costs of a lax Nomad increase when issuers are repeat players in the fundraising market, since the market will penalise the issuer with higher costs of capital for its secondary offerings, as well as lower secondary market trading prices, in order to compensate for the Nomad-broker's poor reputation for accurate disclosure and vigilant monitoring. The benefits of a lax Nomad (e.g., overvalued securities and permitting or not reporting misconduct) diminish in a market dominated by secondary fundraising, because any lax

[122] This is within the realm of possibility, given that 94% of AIM fundraising in 2020 (up to October) took place through secondary offerings.

practice detected by the market is penalised through higher costs of capital in the issuer's next round of fundraising.

The increased demand for lax Nomads in a one-shot issuer-investor model may remain unmet, given that Nomads are repeat players in the market and any lax practice must remain undiscovered for the next round of investors to purchase securities from the lax Nomad, much less the Exchange remove the Nomad from the register. However, demand for lax Nomads could be met in a one-shot model if the probability of detecting Nomad misconduct is low, allowing Nomads as repeat players to be laxer towards issuers than the market perceives them to be. Demand for Nomads with low reputational capital could also persist in a one-shot model because, despite the fact that Nomads are repeat players, all companies require a Nomad and some companies may be willing to incur higher costs of capital in order to gain access to the market.

In contrast, in a world in which issuer-investor interactions are repeated – where issuers return regularly to the market for fundraising – demand is generated for 'strict Nomads' (i.e., vigilant and rule-abiding Nomad-brokers whom the market perceives to have high reputational capital). Issuers' incentives change when they become repeat players, since they no longer capture one-shot gains from a lax Nomad-broker and are penalised for having a lax Nomad-broker the next time they seek to raise capital. However, even without the demand from certain firms for high reputation Nomads, all Nomad-brokers have an incentive to perform their monitoring function well and build their reputational capital in order to attract future business. This incentive exists in both the one round model and when issuer-investor interactions are repeated, so long as a Nomad is a repeat player (i.e., the current IPO is not its last).

Secondary offerings on AIM have increased from an average of 45% of funds raised from 1995-2007 to more than 78% of funds raised from 2008-2020. In absolute terms, £38.2 billion was

raised from 1995-2007 whereas £58.7 billion was raised from 2008-2020, after adjusting for inflation. This growth in repeat interactions between the same parties should increase issuers' demand for strict Nomad-brokers with high reputational capital. This is because in a market characterized by issuers' reliance on repeat interactions with sophisticated investors via private placings, Nomad-brokers' reputational capital should drive demand for their fee-earning services because better reputations lower issuers' cost of capital. In turn, greater demand for high reputation Nomads should increase the cost of reputational sanctions that Nomad-brokers experience, since more future business is at stake to be forfeited in a market of repeated interactions with the same players. Reputational incentives may therefore spur Nomads to be more diligent gatekeepers, in turn reducing company misconduct and complementing formal regulation.

SECTION IV Assessing the reputational hypothesis

Section IV takes the theory to the data. It assesses the reputational hypothesis and theoretical exposition of Nomad-brokers' incentives in light of interview evidence, information and descriptive statistics on the number and nature of Nomads over time, as well as historical evidence on the effect of reputational sanctions. In support of the hypothesis, it finds that there are substantial 'unwritten' elements of regulation on AIM, and that reputational incentives play an important role on AIM. Some unwritten elements of regulation stem from offline or behind the scenes discussions with AIM Regulation, the Exchange team responsible for the regulation and operation of AIM. Other unwritten elements of regulation stem from norms that are enforced by the respective issuer, investor, or Nomad communities. Reputational incentives influence Nomads' behaviour as gatekeepers and play an important informal regulatory role, though no unanimous body of unwritten rules is identified. The Exchange's offline regulation appears to be motivated by reputational risk aversion: as one interviewee put it, the Exchange 'doesn't want AIM to screw

up'. Perhaps due to the limited number of market participants interviewed, no significant overlap was identified on the subject matter of an 'unwritten core' of regulation. The evidence suggests that Nomad-brokers have strong reputational incentives which play a role in AIM's day to day regulation and contribute to diligent gatekeeping.

A. *Sources of unwritten regulation*

Interviewees consistently pointed to norms and unwritten rules that either influenced or outright prohibited certain courses of conduct in the market. One interviewee complained that 'there is unwritten stuff that stifles business.' Another interviewee with decades of experience working with AIM companies said: 'One of the complaints [among] nominated advisers is there are a lot of rules which aren't actually written down…' When asked for examples of 'unwritten' rules, this person mentioned that understandings exist in the market that companies applying for admission to AIM should have a certain free float percentage (the amount of shares in public hands) and minimum size. Other interviewees identified different types of unwritten rules, often focusing on the high discretion the Exchange has in determining the suitability of companies for admission. For example, a story was recounted where AIM Regulation (the Exchange staff responsible for regulating AIM) would not let a new listing go ahead unless the company had institutional investor funding. However, the interviewee expressed frustration that there are no requirements in the AIM Rules saying where a company's capital must come from. Companies applying to join AIM must submit an early notification form to the Exchange, and at this stage unwritten rules are sometimes uncovered. This is not surprising given the high discretion the Exchange possesses under principles-based regulation: applicants can be refused if admission 'may be detrimental to the orderly operation, the reputation and/or integrity of AIM'.[123] Prior to the early notification

[123] AIM Rules for Companies (June 2019) rule 9.

requirement in 2018, Nomad-brokers could spend considerable time and resources preparing a company for admission, only to be denied for reasons not formally expressed in the AIM Rules.

It appears that because the AIM Rules are principles-based, the Exchange can exercise high discretion in determining their application, which some market participants interpret as a form of unwritten rule-making. While several interviewees cited unpredictability as a significant problem with the AIM Rules, others viewed this positively because it also provided the company with wiggle room. Apart from companies applying for admission, there was little consensus on any universally identifiable corpus of unwritten regulation. What can be inferred is that higher amounts of informal regulation increase companies' reliance on gatekeepers to stay within the rules, while simultaneously providing some flexibility to make the rules work to their benefit. Companies want a Nomad who 'interprets the rulebook and makes it work for clients.' Higher degrees of discretion exercised by the Exchange suggest that Nomads need a strong relationship with the Exchange to effectively perform their regulatory guidance function for issuers. A Nomad's reputation with the Exchange, and not only with investors, may be an additional and important channel through which reputational incentives operate.

There is also evidence of norms that significantly influence AIM market participants' conduct. Unlike unwritten rules that may be enforced by the Exchange at its discretion, norms can be enforced by other market participants that impose reputational sanctions. Following a rule change in 2018 requiring AIM companies to adopt a 'recognised' corporate governance code of their choosing, it became market practice to adopt the Quoted Companies Alliance (QCA) Corporate Governance Code, and 89% of AIM companies adopted the QCA code that year.[124]

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[124] In 2018, 89% of AIM companies adopted the QCA Corporate Governance Code, 6% complied with the UK Corporate Governance Code, and 5% complied with other governance codes. See Quoted Companies Alliance,

When asked about the QCA code, multiple interviewees affirmed that it 'made a big difference' in improving corporate governance on AIM. This is an example of a norm applied by the issuer community. It is also common practice for most AIM companies to have relationship agreements with significant shareholders, including provisions such as the shareholder not interfering with the board and interacting with the company only on arms-length commercial terms. Relationship agreements are not formally required under the AIM Rules, yet are prevalent because most Nomads insist on them. This is an example of a norm applied by the Nomad community. Relationship agreements are also an example of Main Market rules influencing AIM market practice, since the FCA Handbook has required premium-listed issuers to have relationship agreements with controlling shareholders since 2014.

Interviewees indicated other influential forms of market and social practice that were more difficult to corroborate. These include a significant proportion of AIM companies conducting quarterly risk reviews for the board, although this is not required under the AIM Rules, as well as norms governing the retention of Nomads and brokers. One interviewee indicated that you would never change your Nomad or broker and your auditor in the same year because of credibility and the market thinking you have something to hide. Another interviewee indicated that the institutional investor community would not touch explorative industries and very small (e.g., sub-£10m) companies. These are both examples of norms that are enforced by the investor community, rather than issuers or the Exchange.

'Which Corporate Governance Codes Do AIM Companies Apply?' (2018) <https://www.theqca.com/news/briefs/175536/whichcorporate-governance-codes-do-aim-companies-apply-.thtml> accessed March 2019.

Consistent with the reputational hypothesis, unwritten rules, forms of soft law (such as voluntary adoption of the QCA governance code), and norms of market practice all play a significant role in the regulation of AIM. While the evidence of unwritten rules was corroborated among different market constituents – with repeated emphasis on highly discretionary requirements imposed by the AIM Regulation team in approving companies for admission – no unanimous corpus of specific unwritten rules was identified. A complete understanding of AIM self-regulation includes its formal and informal elements, and the behaviour of market participants depends on much more than 'hard law' alone. As one company director put it: 'If a market is to function you need a moral code, and that's an old-fashioned word, but you do. And if you don't have it, it's not going to work. You can't run it by regulation alone, that's the bottom line. And regulators hate hearing that because that's what they don't do.'

The fact that the Exchange exercises considerable discretion over the interpretation of the listing rules is not unique to AIM, since the *Admission and Disclosure Standards* applicable to the LSE Main Market also grants the Exchange discretion to refuse admission to companies that satisfy all of the listing criteria on the basis that admission 'may be detrimental to the orderly operation of the Exchange's markets and/or to the integrity or reputation of such markets.'[125] What is unique to AIM is the heavy weight placed on the ad hoc exercise of discretion to regulate market conduct given the dearth of bright line rules. This lowers the direct costs of regulatory compliance for AIM companies, while substantially raising the indirect costs due to uncertainty or arbitrariness in the Exchange's unwritten regulation.

[125] London Stock Exchange, 'LSE Admission and Disclosure Standards' (2018) s 2.5 <https://www.lseg.com/sites/default/files/content/documents/LSE/Trading/Admission Disclosure Standards 01102018.pdf>.

B. *The market for Nomad-brokers*

This section analyses the market for Nomad-brokers, explaining their business model and the factors that influence demand for their services. The first important observation is that the fees that issuers pay to retain Nomad and broking services are minor compared to the more lucrative deal fees generated by fundraising transactions. Nomads charge an annual retainer for their services, and although figures varied slightly between interviewees, the majority were in the range of £30,000-£75,000 per year, depending on the size and needs of the company. Nomads also charge additional fees for extra projects, and companies might receive a bill of £10,000 or £20,000 for Nomad services when conducting an acquisition or other one-off transactions. Nomads also acting as brokers to the company tend to only charge a slightly higher retainer for additional broking services – e.g., a Nomad-broker might charge a £100,000 combined retainer instead of only £75,000 for providing Nomad regulatory advisory services. Retainer fees have increased substantially since the launch of the market; fees for a Nomad and broker in 1996 were in the range of £15,000-£20,000, which is equivalent to £29,000-£38,000 in 2020 after adjusting for inflation.[126]

When asked why combined retainers were not significantly higher than Nomad only retainers, one interviewee indicated that '[t]he reason why the delta doesn't look like it prices all of the extra liability is because from the market perspective, whether you are a Nomad or a broker, the reputational hit is the same. The market doesn't care whether you are advising on a deal as a Nomad or broker.' This provides evidence for the existence of reputational sanctions that do not differ fundamentally between integrated houses in their roles *qua* Nomad and *qua* broker.

[126] Blake and Daghlian (n 8) 28.

In most Nomad-broker business models, it is not worthwhile to take on companies that will only pay retainers and generate no transaction fees. Annual retainers pale in comparison to the deal fees that Nomad-brokers generate from fundraising. Nomad-brokers could earn somewhere in the range of 3.5-5% of funds raised in an IPO and 2.5-3% of funds raised in a secondary offering.

The traditional business model is that Nomad-brokers seek to cover expenses and 'keep the lights on' with retainer fees, and then generate profits through deal fees. However, there are a small number of independent Nomads that only provide regulatory advisory services.[127] It is worth noting that when asked about the business model of independent Nomads, several interviewees were surprised to learn they existed. Some independent Nomads generate additional revenue by cross-selling accounting services or other services (e.g., Grant Thornton). Those who only provide regulatory advisory services tend to be lean operations, deploying a small staff.

In addition to providing corporate broking services, a Nomad-broker is often responsible for generating research on the company to attract investment. Following the MiFID II rules on research unbundling, Nomad-brokers no longer bundle their fees for broking and research services into one lump sum. One director of an AIM company in the science and technology sector indicated that institutional investors were less willing to pay for research and that the quality of research coverage for smaller AIM companies has suffered.[128]

[127] Some of these Nomads also possess corporate broking licenses, making them harder to identify. They typically would not have sales teams or possess significant corporate broking expertise, although they may be listed as joint brokers on a transaction.

[128] This interviewee's observation is consistent with research on the effects of MiFID II on analyst coverage for European firms. Bingxu Fang and others find that smaller firms with lower institutional ownership experience greater decreases in sell-side analyst coverage. See Bingxu Fang and others, 'The Effects of MiFID II on Sell-Side Analysts, Buy-Side Analysts, and Firms' (2020) 25 Review of Accounting Studies 855, 894.

Although there was little evidence contradicting the notion that Nomad-brokers' reputation influenced demand for their services, interviewees did not suggest that the relevant reputational consideration was Nomad strictness or laxity in rule compliance. Instead, multiple interviewees indicated that demand for Nomad-brokers depends on the firm's broking success and its research capacity. Companies are attracted to advisers 'usually because of a broker's track-record in fundraising, and that broker's track-record in fundraising for a particular sector, and the quality of research that broker can prepare and disseminate to the market.' Brokers' reputations can vary between industries. For example, a well-reputed broker in oil and gas may not have a strong fundraising record in the healthcare sector. Furthermore, a company's choice of Nomad-broker is often effectively limited by the number of brokers active in the industry. For example, one company director with experience in the resource sector complained that 'in mining the number of brokers that would do money for us was really small.' A further factor limiting the supply of Nomads is that no Nomad-broker wants to 'back a loser' and become associated with a company which performs poorly or experiences corporate governance issues. Being associated with companies that perform poorly in the market harms a Nomad-broker's reputation. For these reasons, a company in poor financial health that operates in a sector with few active brokers may have a very limited selection of Nomad-brokers to choose from. Many companies retain a second corporate broker in a joint appointment to assist with fundraising.

Nomad-brokers cannot take on an unlimited number of companies. The Nomad Rules require Nomads to appoint at least one 'qualified executive' (QE) to have responsibility for each AIM company advised. QE status is granted by the Exchange to an individual in his or her capacity at a particular Nomad, and the market for QEs is limited. The Exchange prescribes tight requirements on the amount of transactional experience QEs must possess, as well as corporate

finance understanding and AIM-specific expertise.[129] One interviewee indicated that a QE could be responsible at a Nomad for anywhere between 6 to 15 AIM companies, depending on their size and needs, and that companies with smaller market capitalizations typically require more attention from QEs.

One interviewee with significant experience in private equity and as a director of a large AIM company suggested that no one was worried about which Nomads were more or less strict because the rules are the rules and you would only care if you were going to break them. Other respondents expressed contrary views implying some companies were routinely breaking the rules and that companies in the market knew which Nomads were strict and lax. The differences in opinion on Nomad strictness are worth noting; the theme will be further explored below.

Interviews also made clear that Nomad-brokers with the highest revenues do not always have the strongest reputations, and examples such as Zeus Capital were cited. News reports indicate that Zeus Capital ranked first or second among brokers in the value of AIM deals from 2013-2017, while simultaneously having its reputation criticized in the press due to controversy and being described as a 'deal machine' with 'reputational issues'.[130]

There is evidence of demand for Nomads that are not overly zealous in their interpretation of the AIM Rules. The following exchange occurred between the researcher and an AIM company director with decades of experience in the market:

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[129] AIM Rules for Nominated Advisers (July 2018) rules 2, 4, 17. The Nomad Rules require firms applying to become approved as a Nomad to have four QEs.

[130] Hannah Murphy, 'Zeus Capital Faces Scrutiny after Client Woes' *Financial Times* (10 December 2017) <https://www.ft.com/content/282f2cdc-ca23-11e7-ab18-7a9fb7d6163e>.

> Director: There is one type of Nomad I don't like, and those are the ones that interfere with your business. A Nomad's job is very simple, it's to make sure you're compliant with the rules.
>
> Researcher: If you don't want the Nomad to interfere in your business, how do you know whom to pick?
>
> Director: By reputation. I know quite a lot of Nomads, the one I have has been excellent. The [person] who I deal with directly in our Nomad, when he first started he tended to be very literal in his interpretation of the rules. For him there was only black and white. Nevertheless, as our relationship evolved, gradually he got the measure of us, and he knew when he had to flag something and when not to, and he does that very well. And I have absolutely no complaints with the Nomad. He never criticises my business deals, he accepts my business, and he's absolutely right. It is my business.

This conversation reinforces the view that a Nomad-broker's reputation influences demand for its services, but that the relevant reputational considerations differ widely. This director was not seeking a lax Nomad who would turn a blind eye to the rules, having previously stated that 'Because I'm not doing anything controversial, I have no problems with Nomads.' However, in this director's view, Nomads enforcing more stringent interpretations of the rules are 'complete pains', for example 'when you're doing, say, an IPO and you submit the 15th draft, all they do is you can't say this or you do that…' Not all Nomads carry out their regulatory advisor role in the same way and other interviewees indicated that the individuals in the market knew of differences between Nomads in the style of regulatory compliance. The mere existence of independent Nomads, who would be expected to have a different style of regulatory compliance due to the absence of conflicting interests with a broking side, demonstrates a spectrum of preference between AIM companies in the type of Nomad desired.

The market for Nomad-brokers is also characterised by high switching costs. In a market with fewer issuers than in the past but more repeated capital raising, Nomad-brokers are incentivised to prioritise business for existing issuers because of the diminished pool of potential

new clients. Nomad-brokers' incentive to prioritise existing issuers rather than attract new issuers has grown over time, since the number of AIM companies has decreased from roughly 1700 in 2007 to the low 800s in 2020. While it is true that Nomad-brokers can gain new clients by poaching from rival firms, in practice this is difficult because companies are reluctant to routinely switch their Nomad and broker. As one interviewee indicated, 'you can't keep changing brokers'. This stems partially from the financial costs and time costs of paying for due diligence again when switching advisers, the loss of relationship-specific knowledge, as well as reputational costs. One interviewee indicated that in some circumstances you would not change your broker even if you wanted to, as the reputational costs of switching would be high because investors might believe the company is hiding negative information.

Market participants perceive reputational differences between Nomad-brokers. These firms do not always have universally perceived 'better' or 'worse' reputations, although multiple interviewees identified a common sub-set of high and low reputation firms. Nomad-brokers have distinct reputations for providing underwriting and broking services, producing quality research in a sector, and providing Nomad services. Reputation plays an important role in generating demand for Nomad-brokers, and the relevant reputational aspects depend on the AIM company's needs. The stronger the Nomad-broker's reputation in the aspects relevant to the client, the higher the number of clients the Nomad-broker can attract, as well as the more profitable type of client the Nomad-broker can attract (i.e., larger firms with more fundraisings).

The individual reputations of executives working at the Nomad-broker are influential, as well as their relationships and connections to the AIM company. In the same way that a company might opt for a lower-ranked law firm because of a partner with particular expertise, an AIM company might select a Nomad-broker based on the reputation of a QE or sector-specific research

analyst who can generate investor interest. Multiple interviewees indicated that although managers ultimately choose Nomad-brokers based on confidence in a particular person or team, reputation is the ticket to the beauty pageant.

C. *How do reputational incentives influence Nomad gatekeeping?*

A Nomad's primary duty is to safeguard the reputation of AIM and its market integrity, and a Nomad's incentive for doing so is concern for its own reputation.[131] The Exchange creates this incentive structure by express design, directly linking the welfare and reputation of its gatekeepers to the welfare and reputation of the market as a whole. According to Marcus Stuttard, the Head of AIM since 2009, 'Nomads act as the principal quality controllers for the market and therefore have their reputations to consider when confirming a company is suitable for the market.'[132] Stuttard further writes that 'Above all, [Nomads] have a duty to protect the reputation and integrity of the market.'[133] This section investigates whether this complementary incentive structure links Nomads' reputational incentives closely enough with AIM's reputation to assure a sufficiently high quality of gatekeeping.

The rigour with which Nomads perform their role as gatekeepers depends on the strength of the conflict of interest between their regulatory and corporate finance roles, and whether reputation or other incentives can alleviate this conflict of interest. For example, companies usually consult their Nomad before issuing any ad-hoc disclosure (e.g., a Regulatory News Service

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[131] See AIM Rules for Nominated Advisers (July 2018) rule 1.'When deciding whether or not an applicant should be approved as a nominated adviser, the Exchange's overriding consideration will be the preservation of the reputation and/or integrity of AIM…'

[132] Tom Nicholls (ed), *A Practitioner's Guide to the AIM Rules* (7th edn, Sweet & Maxwell 2014) 4.

[133] ibid.

announcement). The Nomad must verify the disclosure and should not let misleading information be published or allow information that is likely to significantly affect the share price to be withheld. The broker, on the other hand, could benefit if a negative news release that should be published under the AIM Rules was withheld or delayed in advance of a private placing of securities, since negative news would reduce the price at which the broker could market the company's securities. If a 'Nomad imposes discipline on the companies he's looking after', as one interviewee put it, a Nomad-broker has conflicting incentives to do so.

Almost all interviewees acknowledged a tension between Nomad-brokers' roles as regulatory policeman, investment bank, and equity research house. One senior executive of an AIM company mentioned that a 'structural weakness is that you appoint a broker who is also your Nomad, effectively your policeman, and they are also responsible for your research. And of course brokers don't necessarily have expertise in all three areas… You have to pick your broker under the AIM Rules basically thinking "Is it more important that we have good research or a good broker?" Which is a real problem…' From this executive's perspective, the tension between Nomad-brokers' regulatory and corporate finance functions was problematic for the company, which needed to make trade-offs choosing between a strong broker and a strong research team. This tension was also problematic, in this executive's view, for AIM regulation as a whole: 'it's a huge mistake from a regulatory point of view to have the policeman, or at least your regulatory side dealt with by the same companies doing your broking side that's writing research. It's terrible, it's structurally stupid.' Because of this structural conflict, they suggested, Nomads should be separate from brokers. Ultimately, this executive decided to change Nomad-brokers because they 'failed on the broking side', meaning the Nomad-broker did a poor job helping the issuer raise

funds. This again illustrates that demand for Nomads is driven by separate reputational considerations between their regulatory advisory and broking sides.

Another AIM company director said that their company opted for an independent Nomad, even though hiring a separate Nomad and broker was more expensive than choosing a combined Nomad-broker. When asked why, they said it was because Nomad-brokers were biased towards their broking side. In this director's experience, independent Nomads were more focused on compliance with the rules, and Nomad and broking sides should be separated.

Others indicated that Nomad-brokers' conflict of interest was amplified by the financial precariousness of smaller Nomads. Larger ones can afford to push back against clients and rigorously act as regulatory policeman, however smaller Nomad-brokers run tight profit margins and cannot afford to resign accounts. It is expensive for Nomads to hire QEs, and Nomads in financial trouble experience a greater conflict of interest. With this in mind, the Nomad Rules were amended in May 2014 to require Nomads to notify the Exchange of 'any material adverse change in [their] financial or operating position that may affect [their] ability to act as a nominated adviser.'[134] However, there is a significant difference between Nomads on the brink of appointing an administrator (which would require notification under the AIM Rules), and those simply with tight margins and under strong financial pressures being tempted to push the bounds of the rules.

The AIM Rules address conflicts of interest, but their primary focus is on ensuring independence between Nomads and the companies they advise, as well as preventing Nomads from acting for companies on opposite sides of a transaction.[135] Rule 21 of the Nomad Rules

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[134] AIM Rules for Nominated Advisers (May 2014) rule 11; AIM Rules for Nominated Advisers (July 2018) rule 12.

[135] Rule 21 provides that 'A nominated adviser must be able to demonstrate to the Exchange that both it and its executives are independent from the AIM companies for which it acts such that there is no reasonable basis for impugning the nominated adviser's independence.' Rule 22 provides that 'A nominated adviser must not have, and

addresses Nomad independence requirements, and permits a Nomad (and its directors, partners, or employees) to collectively hold up to 10% of the shares in an AIM company it advises 'provided adequate safeguards are in place to prevent any conflict of interest'.[136] This rule further provides that a Nomad may only act as auditor to an advisee company 'if it has satisfied the Exchange that appropriate safeguards are in place', that Nomad employees, directors and partners may not serve on board of directors of an AIM company it advises, and that a Nomad (and its personnel) may not deal in its clients securities during a MAR closed period.[137]

In order to alleviate their conflict of interest, Nomad-brokers implement 'Chinese walls' (i.e., information separation barriers) preventing the corporate finance side from accessing information possessed by the Nomad side.[138] However, unlike reputational sanctions, Chinese walls do not reduce the incentives creating the conflict of interest; they only reduce the ability of Nomad-brokers to act in a conflicted manner. Furthermore, opinion varied between interviewees on the effectiveness of Chinese walls. Some insisted that 'Chinese walls in all brokerages are robust', whereas others were not confident at all in the robustness of Chinese walls: '… there's a huge conflict of interest, because there are supposed Chinese walls between the broking side, the Nomad side… but in reality these [Nomad-brokers] are very small firms, so that's very dangerous.'

Interviewees with experience working at Nomad-brokers had a more positive perspective on the nature of their conflict of interest. In their view, the reputational incentives of reputable

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must take care to avoid, the semblance of a conflict between the interests of the AIM companies for which it acts and those of any other party.' See AIM Rules for Nominated Advisers (July 2018) rules 21, 22.

[136] AIM Rules for Nominated Advisers (July 2018) Schedule One (emphasis original).

[137] AIM Rules for Nominated Advisers (July 2018) Schedule One (emphasis original).

[138] The FCA defines a Chinese wall as 'an arrangement that requires information held by a person in the course of carrying on one part of the business to be withheld from, or not to be used for, persons with or for whom it acts in the course of carrying on another part of its business.' See FCA, 'FCA Handbook – SYSC 10.2 (Senior Management Arrangements, Systems and Controls)' <https://www.handbook.fca.org.uk/handbook/SYSC/10/2.html> accessed October 2020.

Nomad-brokers were strong enough to curb their conflict of interest as gatekeepers in the market. One interviewee said: ‘Certainly based on my experience, no integrated house would ever wish to put its Nomad licence in jeopardy.’ The underlying idea was that the value of a Nomad licence stems from the business it brings in on the broking side, and the more profitable a Nomad-broker’s corporate finance side, the more reluctant the firm would be to jeopardize its broking business by cutting corners as regulatory policeman.

A view was also expressed that the community of institutional investors in the market would impose discipline on Nomad-brokers. An experienced Nomad-broker expressed this sentiment most clearly: ‘If someone’s lost money for an institutional investor, the community says: “I’m not touching that guy again.” Investors have long memories… especially when it comes to bad things.’ This supports one component of the reputational hypothesis: reputational incentives on AIM are strong because of repeat interactions in a financial community with the same players. Comments from other Nomad-broker interviewees are consistent with the picture of a close-knit investment community: ‘Three-quarters of institutions are going to be the same on every IPO anyways.’ The threat of exclusion from the community of institutional investors (i.e., reputational sanctions) motivates strict performance of Nomads’ duties. This underemphasised fact is essential to understanding AIM’s regulatory environment: reputational sanctions are imposed by local market participants in London’s financial district, known as ‘the City’. The City community of Nomad-brokers and institutional investors with long memories strengthens the reputational incentives of Nomad-brokers as gatekeepers.

It was posited earlier that reputational incentives for Nomads and issuers would be strengthened by the significant increase in the percentage of secondary fundraising over time. While this may be the case for existing AIM companies returning to the same players in the

investment community for private placements of shares, interviewees indicated that an increase in the proportion of secondary fundraising did not strongly affect Nomad-brokers' incentives because 'The investors you're speaking to on one IPO are potentially the same as the investors you're speaking to on secondary fundraisings 90% of the time.' This perspective does not contradict the incentive mechanism underlying the reputational hypothesis, since Nomad-brokers' reputational incentives are influenced by the prospect of a gain or loss of future business. Rather, it suggests that the distinction between primary and secondary fundraising is less relevant to Nomads' reputational incentives when the investment community is substantially similar between the two types of fundraising. The strength of Nomad-brokers' reputational incentives are increased when in a tight-knit community, such as when a small group of institutional investors can impose strong and predictable reputational sanctions. This does not mean, however, that issuers' incentives are substantially similar between IPO and secondary fundraising. Demand for less stringent Nomads from issuers who are 'IPO only' fundraisers could increase the temptation for lax gatekeeping. It is therefore significant that this possible temptation has been abated by the marked rise in secondary fundraising and precipitous drop in IPOs since 2007.

Despite the influence of institutional investors, retail investors also play an important role on AIM. Trading by retail investors can dramatically influence the share prices of smaller AIM companies, and it should be recalled that 45% of AIM companies had a sub-£25 million market capitalization in September 2020. One manager of a small-cap AIM company expressed frustration that the market was strongly influenced by retail pundits on websites like voxmarkets.co.uk, shareprophets.com, and proactiveintestors.co.uk. Online 'bulletin boards' on ADVFN (uk.advfn.com) or the London South East (lse.co.uk) form the basis of retail investor communities where information is posted on discussion threads and forums, allowing rumours to spread quickly.

Managers of companies with significant retail investor bases need to stay abreast of developments on these online bulletin boards. Other interviewees indicated that private Twitter groups have become more influential than bulletin boards and online discussion sites hosted by retail pundits. Social media influencers can act like virtual fund managers with private Twitter groups, generating activity in stocks by encouraging followers to buy and sell.

The interaction between retail investor communities and Nomad-brokers' reputational incentives is a subject where additional evidence is needed, as it remains unclear how strongly this constituency can impose reputational sanctions. There is a focus in online discussion groups on exposing misconduct by AIM companies and Nomads. There are examples of online discussion forums serving a beneficial information production function by exposing wrongdoing that the Exchange had not detected or publicized. For example, in one of the highest-profile cases of corporate fraud on AIM to date (the 'Langbar scandal' discussed in Chapter Six), the Langbar CEO stated in a 2005 press release:

> Our task in rebuilding Langbar has not always been helped by the spread of rumour and false information, often taken out of context, which has been disseminated through the "internet chat rooms"… I would urge all our investors to rely on these official releases from Langbar, rather than chat room gossip…[139]

One month later, the company's shares were cease-traded and it came to light that reported cash reserves of more than $600 million USD were fraudulently concocted. However, bulletin boards and private Twitter groups may also spread mis-information.

[139] John Harrington, 'AIM at 25: The Winners, Sinners, Blaggards, Laggards and Bounders' (*Proactive Investors*, 2015) <https://www.proactiveinvestors.co.uk/companies/news/921587/aim-at-25-the-winners-sinners-blaggards-laggards-and-bounders-921587.html> accessed 12 October 2020.

It is difficult to assess the amount of misconduct on AIM (i.e., breaches of the AIM Rules and applicable corporate/securities laws) given the variance in interviewee perceptions. One broker described insider trading on AIM as a 'constant problem' and this concern was echoed by others. Some interviewees still evoked 'wild west' metaphors, whereas others expressed confidence that companies play by the book and insisted 'compliance on AIM is very high.' One experienced Nomad-broker said that informal discipline was high and the Exchange reprimanded Nomads in private: 'There isn't a Nomad that hasn't been slapped on the wrist.' Interviewees involved with smaller issuers and those who paid closer attention to retail investors and online bulletin boards consistently perceived higher levels of market misconduct than interviewees working with larger AIM companies, who were more optimistic on the state of market governance. Stricter gatekeeping could deter many forms of misconduct (e.g., untimely or inaccurate disclosure) and prevent suspect companies from joining AIM in the first place, but could not prevent all instances of outright fraud.

D. *Evidence on the number and nature of Nomads*

A view articulated by several interviewees was that many unscrupulous Nomads operated in the early years of AIM, but since the peak of AIM companies around 2007/8, the Exchange has actively reduced the number of low quality Nomads. In the view of one Nomad interviewee, there is no longer a problem of lax Nomads or less-than-diligent gatekeepers: 'Remember most firms are reputable, because if they were not reputable, the Exchange would get to know about it and they would lose their license.' This Nomad interviewee continued: 'There's a view held in the market that QEs and Nomads tend to know their business, because if they didn't the stock exchange would throw them out.' This section examines evidence on the number of Nomads over time, as

well as their characteristics, to identify trends in the number of Nomads and how any changes might affect their reputational incentives.

One way for the Exchange to incentivise strong monitoring by Nomads is to maximise their reputational capital. The Exchange can increase Nomads' reputational capital by licensing fewer Nomads, resulting in each Nomad or Nomad-broker supervising more companies. Fewer licensed Nomads means each Nomad has more skin in the game.[140]

If that is correct, then Nomads' reputational incentives have increased over time because the number of Nomads has decreased by more than two-thirds in the second half of AIM's history, from a peak of more than 80 Nomads in 2007 to 26 Nomads in October 2020.[141] More firms advised (or larger firms advised) means higher expected payoffs on corporate transactions.[142] As at August 2019, the Exchange had 31 approved Nomads on the register who were cumulatively responsible for 924 issuers.[143] This is remarkable given that AIM launched in 1995 with nearly the

[140] Assuming the number of issuers remains constant, or (as is the case on AIM) the decrease in the number of Nomads is proportionally greater than the decrease in the number of issuers.

[141] There were 64 Nomads on the register in June 2009, and at least 84 Nomads in 2007 – see David Blackwell, 'Aim Nomads Learn Difference between Mad and Bad' *Financial Times* (25 June 2009) <https://www.ft.com/content/34c151ca-61a7-11de-9e03-00144feabdc0> accessed June 2019. Blackwell writes: 'The number of nomads is also in decline. It has fallen by 20 in just over two years, and now stands at 64.' Furthermore, the researcher reviewed AIM IPO data from 2001 to 2019 and identified 128 *different* Nomads during this period. When asked to estimate the number of Nomads around 2007 when the number of issuers on AIM peaked, multiple interviewees estimated there were more than 80 Nomads at that time.

[142] While the number of issuers has also halved since 2008, the total market value of AIM companies has only decreased by roughly a quarter, indicating that Nomads have more 'skin in the game' since AIM companies are worth more on average (and are therefore likely to generate higher corporate finance fees).

[143] Stockdale Securities Ltd, Citigroup Global Markets and Smith & Williamson appear on the August 2019 Nomad register but were not counted in the Nomad calculations because 1) Regulatory News Service press releases indicated that these Nomads had previously been removed from the register, and 2) because on the Nomad register Stockdale and Citigroup were listed as Nomad for 0 companies, and Smith & Williamson listed as Nomad for 1 company. Two other Nomads – PricewaterhouseCoopers LLP and Deloitte Corporate Finance – were also listed as Nomad for 0 companies but have been counted as Nomads because there was no indication they no longer possessed a Nomad license.

same number of Nomads yet one hundred times fewer issuers.[144] The decline in the number of Nomads is consistent with an interviewee's remarks that the Exchange is managing down the number of Nomads in order to tighten Nomad quality. This decline may also be the result of less transactional activity, since there were 770 fewer companies on AIM in August 2019 than in December 2007.

A Regulatory News Service search for 'Nomad register' reveals that 40 Nomads have been removed from the register between January 2008 and August 2019. With the exception of one Nomad being removed for misconduct, Nomads during this period either merged with other firms or requested their Nomad status be removed voluntarily.[145]

Most Nomads are local firms specialising in corporate broking and advisory services, rather than international (bulge bracket) investment banks. Of the 31 licensed Nomads as at August 2019, of which all but four possess broking licenses,[146] 19 can be classified as 'local' firms, and 12 can be classified as 'global' firms or London branches of international investment banks.[147] Although the proportion of local Nomads is not very high (61%), the percentage of

[144] 'There were 24 Nomads when the market opened (about the same number of applicants had been rejected), and the number increased to about 50 by the end of 1996.' See Arcot, Black and Owen (n 6) 13.

[145] 15 of the 40 Nomads removed from the register were the result of mergers between Nomad firms.

[146] A small number of Nomads possess broking licenses to advertise broking services to clients, but do not possess genuine broking capabilities and need a joint broker on the deal.

[147] The classification was made after visiting each Nomad's website and considering 1) published statements (e.g., 'Panmure Gordon acts as corporate broker or adviser to circa 130 UK listed companies.') [Local], 2) the number of employees (e.g., Davy Corporate Finance is based in Ireland and has 600 employees. Its AIM business is small compared to its business on Euronext Dublin, as in 2020 it advised 9 AIM companies compared to 66% of companies listed on Euronext Dublin.) [Global], and 3) the number of international offices (e.g. London-based Liberum Capital has a New York office with three staff) [Local].

AIM companies represented by local Nomads is very high. Local Nomads monitor 83% of AIM companies.[148]

Local Nomads each supervise on average 40 AIM companies, whereas global Nomads each supervise on average only 13 companies. The more business a Nomad derives from AIM-related services relative to non-AIM-related corporate finance activity, the higher the Nomad's reputational capital tied to AIM. Issuers too have an incentive to choose local Nomads over bulge bracket Nomads – as one interviewee stated, most AIM companies are relatively more important to local Nomads than international firms and would receive more attention from local firms. Local Nomads have strong reputational incentives because they derive a greater proportion of their business from corporate finance transactions on AIM with repeat players in the London market. Having 83% of AIM companies monitored by local Nomads with reputational 'skin in the game' significantly contributes to good governance on AIM.

Positing that local Nomads have stronger reputational incentives than global Nomad-brokers assumes that global Nomads experience relatively lower reputational sanctions on AIM because of more diversified revenue streams in multiple markets. Although the value of global Nomads' reputational capital is higher than local Nomads in absolute terms, it is uncertain how much a gatekeeping failure by a global Nomad (e.g., J.P. Morgan Securities Plc) would cause reputational losses to the global parent, and how much the global Nomad would be incentivised to avoid reputational harm to the global parent when much of the reputational loss would be

[148] As at August 2019 there were 901 issuers on the AIM company list, of which 765 retained local Nomads. (There are occasionally minor discrepancies in the number of AIM companies when comparing fundraising data and Nomad data provided by the Exchange.)

externalised onto the parent and not borne by the Nomad.[149] One observation that may challenge this assumption is that two global Nomads advise zero AIM companies; this may be because the benefit of fee-earning activity on AIM is not worth the cost of reputational sanctions due to a gatekeeping failure.[150] This is supported by further observation that of the 39 Nomads who resigned between 2008 and August 2019, half (19) could be categorised as global Nomads (e.g., Goldman Sachs, Nomura, HSBC). A further possibility that may challenge the assumption that local Nomads have stronger reputational incentives is that if parent investment banks would close global Nomads due to reputational loss, employees of global Nomads may have stronger incentives than local Nomads to diligently perform their regulatory function in order to retain their jobs.

The following summary statistics paint a picture of how most Nomads have considerable skin in the game:[151]

- the average number of companies monitored by a Nomad is 32;
- there are only 7 Nomads monitoring 5 or less AIM companies;
- there are only 4 Nomads monitoring more than 5 and less than 20 AIM companies;
- there are 20 Nomads monitoring 20 or more AIM companies.

The high number of AIM companies monitored on average (32) and the high proportion of Nomads monitoring more than 20 issuers (65%) supports the hypothesis that Nomads have strong

[149] Whereas the market imposes reputational sanctions on issuers by discounting the value of the company, only AIM-listed Nomads are subject to the market imposing the reputational penalty.

[150] In February 2018, there were four licensed firms advising zero companies: Citigroup Global Markets, Deloitte Corporate Finance, PricewaterhouseCoopers, and RBC Europe Limited.

[151] The average number of companies monitored excludes the two global Nomads not currently advising any AIM companies. Including these two Nomads, the average number of companies advised is 30.

incentives to perform their gatekeeping function well.[152] Nomads can attract more broking clients through effective monitoring, increasing their future revenue streams and capitalising on economies of scale.

Some Nomads belong to investment firms which are AIM-quoted companies, and the risk of being doubly disciplined (by the Exchange *qua* issuer and *qua* Nomad) may strengthen these Nomads' incentives to perform their regulatory responsibilities diligently. Five Nomads belonged to companies that were quoted on AIM as of November 2020, and collectively these Nomads advise 32% of companies on the market (261 issuers).[153]

Additionally, empirical finance research supports the reputational hypothesis that Nomads with more reputational capital act as better gatekeepers. Espenlaub, Khurshed and Mohamed analyse AIM company IPOs from 1995 to end 2004 and follow the performance of these firms until end 2010. The authors show that 'Nomad reputation has a highly significant, positive impact on survival times.'[154] After classifying Nomads into 'reputable' versus 'non-reputable' categories, they find that 'IPO companies with reputable Nomads have median a survival time of 91 month as compared to 58 for IPOs backed by other Nomads.'[155]

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[152] This holds if, as argued, the high proportion of secondary fundraising causes demand for strict rather than lax issuers. In a market with demand for lax Nomads, a high number of issuers monitored could signal that the monitoring role is pro forma or symbolic.

[153] These five Nomads are Arden Partners Plc, Cenkos Securities Plc, finnCap Ltd, Numis Securities Limited, and W.H. Ireland Limited. The AIM-quoted investment firms that these Nomads belong to must have a separate Nomad to advise on regulatory compliance.

[154] Espenlaub, Khurshed and Mohamed (n 103) 430. In the researcher's intuition, the mean market capitalization of a Nomad's clientele would be a straightforward and effective proxy for reputation, since high reputation Nomads have stronger incentives to avoid backing 'losers' (poorly capitalized companies that fail to meet growth expectations). Another relevant proxy for reputation would be the percentage of Main Market clients relative to AIM clients, since Nomads' providing corporate finance services to larger Main Market clients tend to have higher reputational capital than those with AIM clients alone.

[155] ibid. The authors also show that survival rate of IPO firms on AIM is 'broadly comparable' to the survival rates of firm IPOs on North American Exchanges.

On the whole, the evidence suggests that a stock exchange with fewer but higher quality issuers leads to demand for fewer but higher quality Nomad-brokers. However, the Exchange has played a lead role in actively managing down the number of Nomads, improving the quality of its gatekeepers by increasing their skin in the game and by engaging in more effective monitoring.

E. *Examples of the strength of reputational sanctions*

The experience of publicly censured Nomad-brokers supports the reputational hypothesis – Nomads which have been publicly censured and fined for wrongdoing suffer irreparable losses to their reputational capital and soon go out of business. To date, only three Nomads have been publicly censured, all of which have been dissolved or liquidated within the following three years. Only one independent broker (not a Nomad) has been publicly censured by the Exchange, and it has suffered significant (though not irreparable) losses, also providing evidence of the strength of reputational sanctions on AIM.

In October 2007, Nabarro Wells & Co Limited was fined £250,000 and reprimanded for a series of breaches to the Nomad Rules. Violations included inadequate diligence on the appropriateness of a company for admission to AIM, failing to act with due care in advising a company on continuous disclosure matters and a related party transaction, failing to have adequate internal controls, and delegating its Nomad advisory responsibilities to another firm that did not possess Exchange approval as a Nomad.[156] Nabarro Wells' censure was reported in The Telegraph, a leading British national newspaper.[157] Nabarro Wells had been a Nomad since AIM's inception

[156] London Stock Exchange, 'AIM Disciplinary Notice 1' (19 October 2007) <https://docs.londonstockexchange.com/sites/default/files/documents/ad1v4-clean.pdf> accessed October 2020.

[157] Ben Bland, 'LSE Fine Slumps Nabarro Wells into the Red.' *The Telegraph* (4 February 2008) <https://www.telegraph.co.uk/finance/markets/marketreport/2783848/LSE-fine-slumps-Nabarro-Wells-into-the-red.html> accessed March 2018.

in 1995, and in the previous year had advised 41 issuers.[158] Its 2006 year end profit was £183k; in January 2008 Nabarro Wells published its 2007 year end accounts, revealing a net loss of £296k after taking a £450k charge to pay the Exchange fine.[159] Nabarro Wells' Directors' Report shows that one month after the public censure one director resigned and within 6 months five additional directors had resigned, leaving only a single director on the board as at April 2008. Nabarro made further losses of £114k for the year end 2008, and a liquidator was voluntarily appointed to wind up the company in July 2009.[160] It is difficult to disentangle the impact of the fine on the Nabarro's winding up from the impact of the reputational loss on Nabarro's business, since the size of the fine is large relative to Nabarro's earnings. Regardless, if the market perceives the reputational loss from Nomad misconduct to be associated with firm failure, the deterrent effect of reputational sanctions remains the same (whether the negative consequences are caused by the fine or by the harm to future business caused by the loss of reputational capital). As a Nomad with high reputational capital (advising 41 AIM companies at the time), the effect of public censure appears to have irreparably harmed Nabarro Wells' business as a Nomad, leading to exit from the market as a gatekeeper.

In June 2009, Blue Oar Securities plc was fined £225,000 and reprimanded for a host of breaches including failing to act with due skill and care, failing to advise and guide an AIM company on its responsibilities, failing to comply with the Nomad Rules, and not 'seek[ing] the

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[158] ibid.

[159] ibid. See also Nabarro Wells &Co Limited, 'Directors' Report and Financial Statements for the Year Ended 31 March 2007' (2008) 6, 10 <https://beta.companieshouse.gov.uk/company/01950025/filing-history?page=2> accessed May 2018. This charge, described on the cash flow statement as a 'Provision for regulatory compliance costs', presumably reflects both the fine and associated costs (e.g., legal fees, etc.).

[160] The liquidation was prolonged, and the Final Gazette notice indicates Nabarro was dissolved on 3 November 2015.

advice of the Exchange in situations where it [was] unsure as to the application or interpretation of the AIM Rules or it [had] a concern about the reputation or integrity of AIM.'[161] Two months prior to the censure, Blue Oar, an AIM-quoted investment bank, changed its name to Astaire Securities following the ousting of its then CEO.[162] Astaire (Blue Oar)'s misconduct was covered in leading national newspapers.[163] A year later, in June 2010, Astaire's wealth management division was fined £511,000 by the FSA after client funds went missing.[164] Astaire was liquidated in October 2011.[165] The reputational consequences of Nomad misconduct are difficult to isolate from the public fine imposed on its wealth management arm by the FSA, but Astaire's liquidation is consistent with the notion of strong reputational sanctions and that the adverse economic consequences of publicized wrongdoing may take time to come to fullness.

In December 2011, Seymour Pierce Limited was fined £400,000 for improperly advising a company on its continuous disclosure obligations (causing the company's shares to cease being traded after share price swings of over 80%), and insufficient diligence on approving a director and assessing the 'regulatory risks' of another company seeking admission to AIM.[166] Half of the

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[161] London Stock Exchange, 'AIM Disciplinary Notice 8' (22 June 2009) <https://docs.londonstockexchange.com/sites/default/files/documents/ad8-disciplinary-notice.pdf> accessed October 2020.

[162] Brooke Masters, 'Blue Oar to Refocus under Astaire Banner' *Financial Times* (15 April 2009) <https://www.ft.com/content/83c57c1a-29d5-11de-9e56-00144feabdc0> accessed May 2018.

[163] See e.g., Peter Taylor, 'Stock Exchange Fines Astaire Group for Rule Breaches' *The Telegraph* (22 June 2009) <https://www.telegraph.co.uk/finance/markets/5603849/Stock-exchange-fines-Astaire-Group-for-rule-breaches.html> accessed May 2018.

[164] Alistair Grey, 'FSA Fines Two City Brokers' *Financial Times* (7 June 2010) <https://www.ft.com/content/39f87f82-725a-11df-9f82-00144feabdc0> accessed May 2018.

[165] Simon Mundy, 'Astaire Group Set to Be Withdrawn from Aim' *Financial Times* (27 October 2011) <https://www.ft.com/content/63ea56aa-ffe2-11e0-8441-00144feabdc0> accessed May 2018. Astaire's wealth management division was called Rowan Dartington.

[166] London Stock Exchange, 'AIM Disciplinary Notice 11' (21 December 2011) <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-ad11.pdf> accessed October 2020.

£400,000 fine was immediately payable, the remaining half was a suspended fine payable upon future misconduct. Seymour Pierce published its 2011 year end accounts in June 2012, revealing a pre-tax loss of £587,119, compared to a pre-tax profit of £617,275 in its 2010 accounts.[167] The speed at which Seymour Pierce's 2011 profits declined – a minimal £3k profit in 2010 compared to a £713k loss in 2011 – supports the hypothesis of swift reputational sanctions for Nomad misconduct.[168] However, Seymour Pierce's revenues did not decrease substantially – from £20.5m in 2010 down to £19.9m in 2011. Seymour Pierce borrowed £1.5m from a third party investor in 2012, which proved insufficient to keep the business a going concern. Seymour Pierce was put into administration in February 2013, and its broking unit was acquired by Cantor Fitzgerald that same month.[169] The firm was dissolved in March 2014.

Nomad approval is not a commodity that can be bought or sold, preventing offending Nomads from selling their book of business to another financial firm to escape the effects of reputational sanctions. The Exchange amended the Nomad Rules in May 2014 to require Exchange approval to changes in control of Nomads. The Nomad Rules now require Nomads to notify the Exchange of 'any change of control which is reasonably likely' and the Exchange has authority to 'deem a change of control to have occurred' and will require a new Nomad application form to be submitted upon such a deemed change. The Exchange also requires notice of 'any potential changes to the structuring or organisation of the directors, partners or employees which impacts

[167] Seymour Pierce Holdings Limited, 'Directors' Report and Consolidated Financial Statements (30 September 2011)' (2012) 1 <https://beta.companieshouse.gov.uk/company/04719360/filing-history>.

[168] Seymour Pierce's 2010 turnover was £20.5m with a £2.8m cost of sales, compared to turnover in 2011 of £19.9m and £2.4m in cost of sales. ibid 7.

[169] Harry Wilson, 'Cantor Fitzgerald Buys Seymour Pierce out of Administration' *The Telegraph* (8 February 2013) <https://www.telegraph.co.uk/finance/newsbysector/banksandfinance/9858794/Cantor-Fitzgerald-buys-Seymour-Pierce-out-of-administration.html>.

the nominated adviser services provided by the firm' and 'any material adverse change in its financial or operating position that may affect its ability to act as a nominated adviser..'.[170] The Exchange, concerned about losses to its own reputational capital, seeks to prevent a gatekeeping failure by learning in advance when Nomads are in financial distress or experiencing internal employee issues. The Nomad Rules also require Nomads to notify the Exchange of 'receipt of any formal warning or disciplinary communication from any other regulatory body', which allows it to free ride off the supervisory efforts of the FCA and other regulatory bodies.

There is only one instance of a corporate broker, as opposed to a Nomad or integrated Nomad-broking house, being publicly censured on AIM. In January 2017, the Exchange publicly censured Cornhill Capital for violating the Exchange's trading rules applicable to member firms in respect of an incident dating back to April 2015. Cornhill, an independent broker for AIM companies, sold shares to its clients in advance of a private placing set to take place in May 2015. When shareholders voted down the placing, Cornhill could not cover its naked short sale, its AIM client's shares swung wildly in price until being suspended and eventually de-listed.[171] Cornhill received a £300k fine, reduced to £210k after a settlement discount, and was 'the first LSE member firm to be named and shamed for breaking the exchange's codes of conduct since 1999.'[172]

Cornhill, unlike the Nomads who were publicly censured by the Exchange, did not go out of business within the following three years. Cornhill changed its name to 'Pello Capital' the

[170] See AIM Rules for Nominated Advisers (May 2014) rule 11; AIM Rules for Nominated Advisers (July 2018) rule 12.

[171] Roger Lawson, 'Cornhill Capital Fined Over AIM Placing' *ShareSoc* (20 January 2017) <https://www.sharesoc.org/blog/regulations-and-law/cornhill-capital-fined-over-aim-placing/>.

[172] Chloe Cornish, 'LSE Fines Independent Broker Cornhill Capital' *Financial Times* (16 January 2017) <https://www.ft.com/content/7a937776-dc0d-11e6-9d7c-be108f1c1dce>.

following year and has remained in business despite a string of loss-making years following its public censure. Cornhill averaged profits of £259k in the three years prior to its public censure, whereas in the three years following the censure it averaged losses of £226k.[173] The adverse financial consequences following the publication of Cornhill's misconduct can be clearly seen in the firm's declining revenues: Cornhill experienced a 18% decline in revenue the year after the censure, followed by declines in revenue of 13% and 47% in the second and third following year. In total, the firm's revenues declined by 62% in the three years following publicization of its AIM-related wrongdoing.[174] Cornhill's legal change of name in the year following its public censure, coupled by the steep decline in revenue and profits following the censure, provide evidence of strong reputational sanctions on AIM that are consistent with the reputational hypothesis.

SECTION V Conclusion

This chapter conducted a case study of AIM focusing on two principal questions. It first examined whether the quality of regulation on AIM, viewed through the lens of market integrity, has 'raced to the bottom' over time. The evidence of market functioning on AIM is not consistent with this view. The Exchange has cleaned up the number of dormant cash shells on AIM, and liquidity as measured by trading volumes has significantly improved. In the second half of its history, from 2008 to 2020, AIM has transformed into a market with roughly half the number of companies which are on average better capitalized than before. The increase in the number of companies toward the top end of the market and the pruning of companies at the bottom end is consistent with

[173] Cornhill Capital's after tax profits were £272,986 on turnover of £5,212,997 (2016), £364,834 on turnover of £2,375,649 (2015), and £140,384 on turnover of £1,995,051 (2014). Cornhill's after tax losses were £(424,568) on turnover of £1,958,203 (2019), £(116,382) on turnover of £3,682,063 (2018), and £(138,532) on turnover of £4,255,089 (2017). See Companies House, 'Pello Capital Limited - Filing History' <https://find-and-update.company-information.service.gov.uk/company/05267797/filing-history> accessed October 2020.

[174] When comparing Cornhill's 2016- and 2019-year end accounts.

a narrative of market maturation and does not definitively indicate a decline in market integrity. These observations do not 'prove' that market integrity has increased over time. However, they provide evidence that the Exchange has prioritised quality over quantity of issuers in the second half of AIM's history. Regulatory competition for listings is not causing a race to the bottom because the Exchange is not trying to maximize the number of companies on AIM in the short term. This chapter's findings are consistent with an explanation that following increasingly prominent criticisms of AIM in the years leading up to the global financial crisis, coupled with global and UK regulators' change in attitude towards light-touch regulation in the aftermath of crisis, the Exchange reversed a trend of declining market integrity by improving the quality of its gatekeepers.

The second question examined how reputational incentives contribute to AIM self-regulation. The core of the hypothesis presented – i.e., reputational incentives spur diligent gatekeeping by Nomad-brokers – was supported by triangulation of interviews with a variety of AIM market participants. Nomad-brokers are incentivised to act as strict gatekeepers because the exposure of wrongdoing would jeopardize their credibility in the City, where the vast majority of IPOs and secondary fundraisings occur within the same close-knit financial community of institutional investors. Publicly censured Nomads and brokers either go out of business or suffer significant financial losses, suggesting that reputational sanctions on AIM are strong.

The evidence of reputational incentives contradicts the rival theory that these incentives are negligible in securities markets and do not play a meaningful role on AIM. A Nomad-broker's reputation is composed of different constituent elements including its fundraising track record for clients, the quality of its equity research analysts, and its particular style of rule compliance and monitoring as a Nomad. Demand for Nomad-brokers is driven by the reputational considerations

that are most relevant to a company's idiosyncratic fundraising or regulatory needs, as well as directors' and managers' personal relationships, rather than a reputation for being 'strict' or 'lax'. This is consistent with the reputational hypothesis, since there should be less demand for lax Nomads, and thus fewer lax Nomads at all, following a significant rise in the proportion of secondary offerings and repeat issuer-investor interactions. Although the findings do not indicate a linear relationship between some universally perceived reputation and demand for Nomads, the evidence does not disprove the theory that reputational incentives alleviate the inherent conflict of interest that gatekeepers face between their roles as regulatory police and corporate broker.

There is support for the other rival theory that reputational incentives play a meaningful role on AIM, but not necessarily by preventing a race to the bottom. The reputation of some players, such as the fundraising reputation of Nomad-brokers earning substantial deal fees, incentivises strict gatekeeping and prevents market integrity from declining. However, the reputational incentives of a Nomad-broker with tight margins, who is dependent on high net worth retail investors to finance micro-cap companies, may not encourage a high quality of gatekeeping.

The quality of gatekeepers has improved on AIM as the number of Nomads has decreased by roughly two-thirds from 2007 to 2020, allowing closer monitoring by the Exchange. There was little evidence that many 'lax Nomads' exist today. These observations are consistent with the reputational hypothesis that Nomads with more 'skin in the game' (i.e., future business at stake) perform their gatekeeping role more diligently, forming an unwritten core of the AIM regulatory model.

Finally, unwritten rules and market norms play an influential role in the regulation of the market, and support was provided for the hypothesis that reputational incentives constitute an unwritten core of AIM regulation that prevents a race to the bottom. Some unwritten rules are

enforced at the Exchange's discretion, and norms are enforced by different, sometimes overlapping communities of investors, issuers, and Nomads. However, no unanimous body of unwritten rules was identified, although AIM's principles-based system confers the rule-maker with a high degree of discretion to make regulation offline and discipline Nomads informally. On the whole, the evidence supports the key intuition of the reputational hypothesis – more skin in the fundraising game amplifies the strength of reputational sanctions, reducing Nomad-brokers' inherent conflict of interest. However, Nomads, brokers, and AIM companies have distinct reputational components and preferences that can incentivise vigilant gatekeeping in some circumstances while motivating conflicted gatekeeping in others.

CHAPTER SIX

RULE EVOLUTION ON AIM

The previous chapter examined the role of reputational incentives in preventing self-regulation on AIM from spiraling to the bottom, employing a triangulation of qualitative and quantitative data and methods. Chapter Six continues the self-regulatory inquiry at a macro level, first asking a descriptive question: 'How did the AIM Rules evolve over their first 25 years?'. This chapter employs a 'leximetric' approach, as defined in Chapter Three, to compile a novel dataset by coding all material revisions to the AIM Rules from its inception in June 1995 to June 2020.[1] The supposition underlying Chapter Six is that systematic analysis of 25 years of observed rule revisions on AIM may shed light on the incentives of the Exchange as a self-regulatory actor. This is because we cannot meaningfully empirically test theories of *why* AIM's rules have changed over time without first having a clear account of *how* these rules have evolved. This inquiry is of generalizable relevance: empirical study of *how* and *why* rules evolve on self-regulatory stock exchanges like AIM contributes to the broader academic debate concerning how much regulatory authority governments should permit stock exchanges and other private actors to have, and under what conditions.

An additional contribution of this chapter is to set out a detailed methodology for analysing the dynamics of rule evolution. Most 'leximetric' studies analyse legal evolution by coding rules at set intervals of time in order to create indices and assess high-level concepts (e.g., corruption or investor protection) at a macro level. In contrast, to the researcher's knowledge this study is the

[1] The 'AIM Rules' refer to the AIM Rules for Companies, AIM Rules for Nomads, and AIM Disciplinary Procedures and Appeals Handbook. They also include the 'AIM Note for Investing Companies' and 'AIM Note for Mining, Oil and Gas Companies', which are effectively expansions to the listing rules for applicable AIM issuers.

first to code *revisions* to rules at the time the rule change was implemented, rather than coding the properties of rules at set intervals in time. Coding for the properties of revisions to rules (instead of the properties of the rule as a whole) allows for analysis of the dynamics of rule evolution, such as understanding whether rules evolve consistently and incrementally or episodically and in periods of rapid change.

Section I of this chapter begins by setting out a theory for how rules evolve in self-regulatory environments. Rule revisions are conceptualized as regulatory responses, triggered by threats to a regulator's critical goals. It is suggested that a critical goal of the Exchange is protecting its reputation, and that threats to the Exchange's reputational capital motivate a significant amount of reactive regulatory activity on AIM. Section II puts forth two testable hypotheses based on a reactive theory of rule evolution. A reactive theory would predict, if rule change is triggered by threats to the Exchange's reputation, that rule revisions occur in peaks and troughs as the rule-maker responds to ad hoc regulatory threats. Section III provides an overview of the data and methodology, and briefly analyses the initial AIM Rules in order to contextualise their later development. Section IV analyses the data and presents two significant findings. First, major rule revisions are front-loaded on AIM, with nearly three-quarters of major revisions occurring in the first half of AIM's history, from 1995-2007. Second, major revisions occur episodically following extended periods of regulatory stasis, which is consistent with the proposed reputational trigger theory. Indeed, the five peaks of high rule revision activity which are identified are readily explained by reference to preceding reputational threats. Section V summarises the main findings and concludes.

SECTION I Theory

A. *A reactive theory of rule evolution*

This chapter contributes to the broader literature on the evolution of legal rules by developing and testing a theory of how rules evolve in self-regulatory environments. There is an established body of literature within law and economics on the evolution of legal rules. However, discussion has largely focused on how the common law and judge-made legal rules evolve.[2] Much of the debate centres around proving or disproving the so-called 'efficiency hypothesis', a theory whereby competition in the market for legal rules causes efficient rules to survive and inefficient rules to be superseded.[3] The dynamics of rule evolution are explained by the principles of supply and demand for legal rules, often described with reference to Darwinian natural selection.[4]

Regulatory supply and demand in self-regulatory environments differ in key respects from the traditional efficiency hypothesis explaining the evolution of the common law or rules made by legislatures. Self-regulatory environments have more centralized rule-making than the

[2] See George L Priest, 'The Common Law Process and the Selection of Efficient Rules' (1977) 6 The Journal of Legal Studies 65; Paul Rubin, 'Why Is the Common Law Efficient?' (1977) 6 The Journal of Legal Studies 51; Ronald A Heiner, 'Imperfect Decisions and the Law: On the Evolution of Legal Precedent and Rules' (1986) 15 Journal of Legal Studies 227. For a broader range of discussion on rule evolution, see generally Peer Zumbansen and Gralf-Peter Calliess, *Law, Economics and Evolutionary Theory* (Edward Elgar 2011).

[3] Emanuela Carbonara and Francesco Parisi, 'Choice of Law and Legal Evolution: Rethinking the Market for Legal Rules' (2009) 139 Public Choice 461, 461. See also Mark J Roe, 'Chaos and Evolution in Law and Economics' (1996) 109 Harvard Law Review 641, 641; Gillian Hadfield, 'Bias in the Evolution of Legal Rules' (1992) 80 Georgetown Law Journal 583, 583. Hadfield notes (at footnote 2 of her paper) that the argument that the common law converges toward efficiency was first advanced by Richard Posner in the early 1970s. For more recent empirical evidence contradicting the convergence claim, see Anthony Niblett, Richard A Posner and Andrei Shleifer, 'The Evolution of a Legal Rule' (2010) 39 Journal of Legal Studies 325.

[4] See e.g., Robert C Clark, 'The Interdisciplinary Study of Legal Evolution' (1981) 90 The Yale Law Journal 1238, 1241; Roe (n 3) 642. Paul A. David describes the tendency to conflate Darwinian competition with the metaphor of Adam Smith's invisible hand. See Paul A David, 'Why Are Institutions the "Carriers of History"?: Path Dependence and the Evolution of Conventions, Organizations and Institutions' (1994) 5 Structural Change and Economic Dynamics 205, 217.

decentralized judicial rule-making of the common law, typically concentrating regulatory authority in the hands of a sole regulator or small number of regulators. Non-monopolistic self-regulated markets face more regulatory competition than legislatures given the greater availability of substitute markets, unlike legislatures which possess regulatory monopolies in the jurisdiction.[5] In principle, relatively high competitive pressures to attract participants to opt-in to the self-regulatory regime (as well as dissuade them from opting-out) should incentivize self-regulators to respond to participants' regulatory needs, driving rule evolution.[6] However, a regulatory competition theory of rule evolution does not consider the impact of incentives that may dissuade the self-regulator from attracting participants to the market. In the context of securities regulation, it may sometimes be in the regulator's self-interest *not* to attract the greatest number of market participants, but to prioritize other objectives such as market integrity or the prevention of corporate scandal for the long-term health of the market. Another regulatory objective is preventing reputational harm, a theme which emerged in the researcher's interviews with AIM market participants and led to the theory of rule evolution developed below, a theory that focuses on regulatory trigger and response rather than regulatory supply and demand.

[5] Ehud Kamar was among the first to argue that state competition in corporate law is more accurately characterised by imperfect competition. See Ehud Kamar, 'A Regulatory Competition Theory of Indeterminacy' (1998) 98 Columbia Law Review 1908, 1912. Gillian Hadfield and Eric Talley demonstrate that profit-maximizing firms experience different dynamics of regulatory competition than legislatures, and argue that private providers of corporate law are more innovative and offer more tailored corporate law rules for incorporating firms than legislatures. See generally Gillian Hadfield and Eric Talley, 'On Public versus Private Provision of Corporate Law' (2006) 22 The Journal of Law, Economics, and Organization 414.

[6] A key feature of regulatory competition is that 'individual jurisdictions must have some incentive to attract regulated parties to their regime.' These regulatory incentives can be pecuniary or non-pecuniary, and 'can include increasing tax revenues, promoting economic growth, or simply expanding regulatory influence.' See Daniel Schwarcz, 'Regulating Insurance Sales or Selling Insurance Regulation?: Against Regulatory Competition in Insurance' (2010) 94 Minnesota Law Review 1707, 1717.

Ian Ayres and John Braithwaite's theory of responsive regulation in the early 1990s brought the dynamic or 'responsive' nature of regulation to the fore.[7] Part of the novelty of their theory was that 'responsive regulation is distinguished (from other strategies of market governance) both in what triggers a regulatory response and what the regulatory response will be.'[8] Though the 'regulatory responses' Ayres and Braithwaite had in mind were not, admittedly, altering the regulatory environment by revising the rules, their core observation of regulatory responsiveness can inform a theory of rule evolution in self-regulated markets.[9]

The theory proposed in this chapter is that regulatory triggers cause regulatory responses in the form of rule revisions.[10] What are the triggers of regulatory change? Regulatory triggers are threats or harm to a critical goal of the rule-maker. These extend beyond the public regulatory objectives espoused by the regulator or contained in its legislative mandate,[11] and include the regulator's private goals and interests such as maximising profit and preserving or enhancing

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[7] The essence of 'responsive regulation' is that 'governance should be responsive to the regulatory environment and to the conduct of the regulated in deciding whether a more or less interventionist response is needed.' John Braithwaite, 'Types of Responsiveness' in Peter Drahos (ed), *Regulatory Theory: Foundations and Applications* (ANU Press 2017) 117.

[8] Ian Ayres and John Braithwaite, *Responsive Regulation: Transcending the Deregulation Debate* (Oxford University Press 1995) 4.

[9] The regulatory responses that Ayres and Braithwaite had in mind were a series of techniques beginning with persuasive dialogue and escalating towards stiffer penalties and eventually expulsion. In Ayres and Braithwaite's model of 'pyramidal responsiveness', regulators should initially assume that the regulated party is a virtuous actor and begin with persuasion and dialogue. Should non-compliance result, regulators escalate through increasingly costly, deterrent penalties on the assumption that the regulated party is a rational actor who may cheat when it pays. Should deterrence fail, regulators resort to incapacitation (e.g., revoking a license) assuming the regulated party's incompetence or irrationality. See Braithwaite (n 7) 119–120.

[10] Rule revisions include material amendments to existing rules, or the introduction or deletion of material rules.

[11] For example, the public regulatory objectives for a securities regulator might be protecting investors, promoting market fairness and efficiency, or reducing systemic risk. These goals would stem from the regulator's public (statutory) mandate, as well as any other objectives disclosed by the regulator in publicly available documents (i.e., regulatory objectives discussed with the intent of reaching the wider public).

reputational capital. In fact, it is later argued that a critical goal of the Exchange in safeguarding its reputational capital, and that threats to this goal can explain rule evolution on AIM.

This theory does not imply that the forces of regulatory competition do not also influence the evolution of rules, only that the strength of regulatory demand as a causal influence on rule evolution is limited to the extent that attracting participants is only one of the regulator's critical goals. This theory is predominantly responsive or reactive rather than proactive; after the regulator establishes the initial rules, change to the rules is triggered by threats to the public or private goals of the regulator. It also implies that regulatory action may be driven by more than public regulatory objectives, which constitute a part rather than the whole of the rule-maker's goals.

Regulatory triggers cannot be exhaustively or definitively identified given their partly private (subjective) nature. However, this does not prevent meaningful hypotheses from being put forth on the basis of available information.[12] The first set of challenges involve identifying critical goals of the regulator. These goals include privately-held beliefs, which, unlike public goals, are not objectively verifiable. They may be prone to change over time and are likely to be heterogenous between individuals at the same regulatory institution. The qualifier 'critical' therefore refers to the goals of the regulator that would be commonly identified, if such a survey were possible, by senior officials at the regulator. The next set of difficulties involves identifying when a regulator perceives a threat or harm to its critical goals. While news reports can be an effective proxy for the date a threat or harm crystallizes, the timing they imply is not definitive, since the regulator may have had prior access to non-public information. Furthermore, even if regulatory triggers were

[12] For example, interviews can shed light on privately-held beliefs, which can be verified against other empirical data on suspected regulatory triggers (e.g., news reports) and regulatory responses (e.g., data on the timing and nature of rule revisions).

only based upon public information, it cannot be determined (without interviewing the regulator) what the consequences of the information were taken to be, and how swiftly or slowly the information was processed. The primary purpose of a generalizable theory conceptualising rule revisions as regulatory responses is not to identify the precise dates of regulatory triggers nor test causation, but to generate insights into the dynamics of rule evolution in self-regulatory markets.

Conceptualising revisions to rules as a form of regulatory response raises further interesting considerations. The first is that while rule revisions are the means of rule evolution, not all revisions are equally important. That there is a significant amount of regulatory activity – issuing rule consultation documents, soliciting stakeholder feedback, and even revising the rules – does not guarantee significant evolution of the substantive content of the rules. Unlike rule evolution in the common law, it is conceivable that rule-makers in self-regulatory environments may have reasons to engage in 'rule tinkering' – understood to mean a rule-maker revising many rules without creating material or substantive rule change. Making a high number of trivial 'micro-adjustments' to rules focuses on the quantity of rule revision rather than the quality. Rule tinkering may be unintentional, potentially driven by the desire to be seen as responding to a regulatory trigger (e.g., an economic crisis).[13] Alternatively, rule tinkering may be motivated by a desire to be perceived as earning one's regulatory keep, thereby staving off criticism which may threaten a regulatory goal.[14]

[13] The global financial crisis 'require[d] regulators to become active and appear to be "doing something," no matter whether "something" will even help markets…'. See Luca Enriques, 'Regulators' Response to the Current Crisis and the Upcoming Reregulation of Financial Markets: One Reluctant Regulator's View' (2009) 30 University of Pennsylvania Journal of International Law 1147, 1147–1148.

[14] It is also possible that a high quantity of micro-adjustments, when taken together, contribute to a qualitatively significant macro-evolution in the regulatory environment. This would not constitute rule tinkering because significant rule revision activity corresponds with significant rule evolution.

Another interesting consideration is how a reactive regulatory theory fits with existing theories of rule evolution, and complements the theory of 'punctuated equilibria' path dependence in particular. Path dependence refers to the process of how 'an outcome or decision is shaped in specific and systematic ways by the historical path leading to it.'[15] It posits a causal influence between yesterday's and today's path, of how legal rules or institutions in the past influence those in the present.[16] Oona Hathaway distinguishes between three types of path dependence: 'increasing returns', 'evolutionary', and 'sequencing'.[17] Evolutionary theories of path dependence employ analogies of Darwinian natural selection or punctuated equilibria to explain legal change.[18] The evolutionary theory of punctuated equilibria posits that, unlike the gradual theory of evolution espoused by Darwin, most species are stable and evolution occurs rapidly when stasis is disturbed by 'episodic events'.[19] Change does not occur gradually since 'stasis is the rule',[20] but occurs episodically or 'in fits and starts' as 'stability is punctuated by periods of rapid adaptation'.[21] Mark Roe applies the theory of punctuated equilibria to suggest that political crises or economic

[15] Oona A Hathaway, 'Path Dependence in the Law: The Course and Pattern of Legal Change in a Common Law System' (2001) 86 Iowa Law Review 601, 604.

[16] As Mark Roe puts it simply, 'today's road depends on what path was taken before', and the road best suited to yesterday may or may not be best suited for today. Roe (n 3) 643–644. Path dependence involves 'a causal relationship between stages in a temporal sequence…' See Hathaway (n 15) 604.

[17] Increasing returns path dependence relies on economic explanations of change, e.g., 'it is less costly to continue down that same path than it is to change to a different path.' Evolutionary path dependence relies on biological theories of change. Sequencing path dependence relies on rational choice theory such that 'the sequence in which alternatives are considered can decisively influence the outcome.' See Hathaway (n 15) 606–608.

[18] ibid 607.

[19] Stephen Jay Gould and Niles Eldredge, 'Punctuated Equilibria: An Alternative to Phyletic Gradualism' in Thomas JM Schopf (ed), *Models in Paleobiology* (Freeman, Cooper and Company 1972) 84. See also EO Wiley and Bruce S Lieberman, *Phylogenetics: Theory and Practice of Phylogenetic Systematics* (2nd edn, John Wiley & Sons 2011). According to Wiley and Lieberman, punctuated equilibria 'asserts that in the long term, over millions of years, most species were stable throughout their evolutionary history.' ibid 53.

[20] Research since the theory was first espoused by Niles Eldredge and Stephen Jay Gould in the 1970s 'continue[s] to reiterate the notion that stasis is the rule for most, though not all, species.' See Wiley and Lieberman (n 19) 53.

[21] Hathaway (n 15) 607.

depressions may constitute shocks that cause legal rules and institutions to evolve.[22] However, the theory of punctuated equilibria only explains the process of evolution following 'contingent events' which disrupt equilibrium, but does not predict *when* or *why* these shocks occur.[23] This means that additional theory is required to develop predictive guidance about when and why stasis is disrupted. A reactive theory of rule evolution attempts to develop guidance on what provokes rule revisions (i.e., what disturbs regulatory stasis). A reactive theory suggests that some regulators prefer regulatory stasis (i.e., no change in the rules) to consistent, proactive rule revisions, in the absence of any threat to a critical goal of the rule-maker. This may be because the risks and costs of rule change are higher in some environments than others. In securities markets, the risk of unintended, harmful market consequences when a regulator changes the rules are particularly acute.[24] For example, it may be difficult for a rule-maker to predict how rule changes will affect the entry and exit of market participants given the availability of substitute markets. Regulators in higher risk environments – i.e., where the effects of rule change are difficult to predict and could lead to substantial costs – would not voluntarily undertake the risks and costs of rule change without a regulatory trigger.[25]

[22] Roe (n 3) 663. 'Nothing important might happen except in crisis. Institutions and rules would be comparatively rigid until a shock hit the system: an economic depression or political crisis for us, an asteroid smashing into the earth for the biologists.'

[23] Hathaway (n 15) 615–616. As Hathaway helpfully explains, this is because contingent shocks are 'outside the explanatory framework of biological theories.'

[24] The challenge of predicting the consequences of rule change to corporate/securities regulation makes cost-benefit analysis particularly difficult in these contexts. See e.g., Martin Petrin, 'Regulatory Analysis in Corporate Law' (2016) 79 The Modern Law Review 537, 583–539.

[25] Revising rules requires an investment of time and resources (pecuniary and non-pecuniary) by the rule-maker. It also poses the risk of negative or undesirable regulatory consequences, since the consequences of rule revisions cannot be fully known ex ante. A regulatory trigger theory suggests that these costs and risks would not be borne by a self-regulator in the absence of a corresponding benefit, which is framed as advancing or preventing harm to a critical regulatory goal. The cost-benefit calculation is different for legislators revising statutes or regulations.

B. *Applying the reactive theory of rule evolution to AIM*

This study posits that a critical goal of the Exchange is safeguarding its reputational capital. Reputation and revenue are intimately intertwined, since the Exchange needs reputational capital to ensure its long-run profitability. Reputational capital is acquired through a history of transactions between parties. A stronger reputation lowers the costs of contracting for the Exchange by increasing the credible commitments it can make, thereby facilitating more future transactions.[26] Reputation is also an asset that the Exchange sells to companies that list on AIM *and* the Main Market.[27] This is a crucial consideration – reputational loss affects the London Stock Exchange plc brand as a whole, even if caused by transactions on AIM. As a rational actor, the Exchange should seek to minimise reputational loss stemming from AIM that harms its other profit-making activities.[28] The cost-benefit calculation of revisions to the AIM Rules therefore

[26] Jonathan Karpoff defines reputational capital as 'the present value of the improvement in net cash flow and lower cost of capital that arises when the firm's counterparties trust that the firm will uphold its explicit and implicit contracts, and will not act opportunistically to their counterparties' detriment. Viewed this way, reputation is a capital asset that a person or firm can invest in and build.' See Jonathan M Karpoff, 'Financial Fraud and Reputational Capital', *Corruption and Fraud in Financial Markets: Malpractice, Misconduct and Manipulation* (John Wiley & Sons 2020) 155.

[27] Jonathan Macey and Maureen O'Hara identify reputational capital as one of the four products that exchanges sell to listed firms. See Jonathan Macey and Maureen O'Hara, 'Regulating Exchanges and Alternative Trading Systems: A Law and Economics Perspective' (1999) 28 Journal of Legal Studies 17. Prior to increased competition in the market for reputational intermediaries (e.g., with law firms or investment banks), Macey and O'Hara suggest that 'Historically, perhaps the most important element in the bundle of services offered to firms on listing on the NYSE was the reputational capital associated with listing.' See ibid.

[28] This form of reputational loss can be conceived of as a 'reputational externality'. Reputational externalities occur when 'the actions of one group may damage the reputation of another group, thereby reducing overall welfare.' See Robert Evans and Timothy W Guinnane, 'Collective Reputation, Professional Regulation and Franchising' (2007) 1627 2 <https://cowles.yale.edu/sites/default/files/files/pub/d16/d1627.pdf>. Jean Tirole has written on the 'long-lasting' effects of reputational externalities, demonstrating that 'individual reputations are determined by collective reputations, and vice versa.' See Jean Tirole, 'A Theory of Collective Reputations (with Applications to the Persistence of Corruption and to Firm Quality)' (1996) 63 The Review of Economic Studies 1, 5, 18. More recently, Chris Nosko and Steven Tadelis demonstrate the effects of reputational externalities on eBay. Following a negative experience, buyers on eBay downgrade their beliefs about all sellers, not only the seller at issue, imposing reputational externalities on sellers and decreasing the quality of the online marketplace. See Chris Nosko and Steven Tadelis, 'The Limits of Reputation in Platform Markets: An Empirical Analysis and Field Experiment' (2015) NBER Working Paper 20830 <http://www.nber.org/papers/w20830>.

includes not only AIM-related revenues but, to some extent, the entire balance sheet of the London Stock Exchange Group. To summarise the main suppositions behind this theory, reputational capital is important to the Exchange because it facilitates future business and attracts companies to list on AIM. The Exchange should seek to avoid reputational losses for the sake of its broader balance sheet and not only to preserve AIM-related revenues.[29]

The proposition that safeguarding reputational capital is a critical goal for the Exchange is supported by both official publications and the AIM Rules themselves. An important policy document describing AIM's regulatory environment states: 'London Stock Exchange operates AIM with an overarching objective of maintaining the integrity and reputation of its growth market.'[30] The AIM Rules have incorporated disciplinary sanctions for reputational harm since 1997, less than two years after AIM was founded.[31] The AIM Rules have made it front and centre, at least since 2005, that 'the Exchange's overriding consideration will be the preservation of the reputation and integrity of AIM' when assessing the eligibility criteria of Nomad applicants.[32]

[29] Reputational capital is not preserved 'at all costs', since reputation and long-term profit maximisation are intertwined. A rational actor would consider the costs and benefits of preserving reputational capital. Furthermore, reputation is not solely relevant to firms for its pecuniary consequences. Socio-legal research interviewing corporate executives provides evidence that 'good repute is valued for more than its relevance to financial goals; it is valued for its own sake.' See Brent Fisse and John Braithwaite, *The Impact of Publicity on Corporate Offenders* (State University of New York Press 1983) 248. Corporate decision-makers seek to preserve their firms' reputations for a host of non-pecuniary reasons, such as executives' feelings of self-worth, standing or prestige in the community, loss of other professional opportunities, harm to employee morale, etc. ibid 232–233.

[30] London Stock Exchange, 'AIM Regulatory Landscape - Who's Who' <https://perma.cc/YYV8-7B7G> accessed June 2020.

[31] Rule 16.35 of the February 1999 AIM admission rules (amended August 1997) provided that the Exchange may suspend or discontinue trading of an issuer's securities 'where the integrity and reputation of the market has been or may be impaired by dealings in those securities.' Rule 16.38 (amended January 1997) provided that the Exchange may censure or remove a Nomad from the register (effectively revoking its licence) where 'the integrity and reputation of the market has been or may be impaired as a result of the conduct or judgement of a nominated adviser.'

[32] Nominated Adviser Eligibility Criteria (April 2005) Part One. See also AIM Rules for Nominated Advisers (July 2018) rule 1. The effect of this overriding reputational consideration is that firms may be denied Nomad status despite satisfying all other eligibility criteria contained in the AIM Rules.

Nomads have been required since 2007 to contact the Exchange should they have any concerns about the reputation of AIM,[33] and the Exchange 'is likely to refuse an admission to AIM' where listing may be 'detrimental to the orderly operation, the reputation and/or integrity of AIM.[34] Second, the proposition that safeguarding reputational capital is a regulatory goal is supported by documents published by the Exchange citing reputational concerns when justifying rule revisions.[35] Third, interviews the researcher has conducted with market participants provide evidence for reputation as a regulatory trigger. For example, one interviewee with decades of experience on AIM remarked that 'rules come out after accidents happen'.

This reputational trigger may generate regulatory responses (e.g., rule revisions) at the expense of other public or private goals of the regulator, such as foregoing increased short-term revenue, given the highly deleterious effect of reputational sanctions on all of the Exchange's fee-

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[33] AIM Rules for Nominated Advisers (February 2007) rule 19.

[34] AIM Rules for Companies (March 2018) rule 9. Formerly, from at least August 2006, this rule provided that 'the Exchange *may refuse* an admission to AIM' where admission may be detrimental to the reputation of AIM. In March 2018 this rule was revised so that 'the Exchange *is likely to refuse* an admission to AIM' where admission may be detrimental to its reputation.

[35] For example, when the Exchange received comments that an amendment to the 2018 Rules for Nominated Advisers was too heavy handed (allowing the Exchange to require Nomads to undertake remedial action such as hiring additional staff), the Exchange justified the rule revision on the basis of maintaining its reputation. 'The Exchange takes seriously the maintenance of the reputation and integrity of AIM. Given that the performance of a nominated adviser's regulatory obligations has the potential to adversely impact the reputation of AIM, it is in the interests of the market for the Exchange to have effective supervisory powers to require remedial action where necessary.' See AIM Regulation, 'AIM Notice 52: Feedback Statement in Relation to AIM Notice 51' (4 July 2018) 3, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-52.pdf> accessed May 2020.

The Disciplinary Handbook has described maintaining a good reputation as a regulatory objective since (at least) 2007: 'The Exchange's approach to regulation is aimed at maintaining the integrity, orderliness, transparency and good reputation of its markets and changing behaviour in those markets where necessary.' See AIM Disciplinary Procedures and Appeals Handbook (October 2018) s A4.

When the Prospectus Directive was implemented in 2005 and the Exchange sought to revise its rules on offering documents, it rejected copying the Public Offers of Securities Regulations 1995 (which were repealed) into the listing rules because 'POS will no longer be a recognisable standard and this could damage the reputation of AIM from an investor perspective.' See AIM Regulation, 'AIM Notice 12' (31 January 2005) 7, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-12-final.pdf> accessed May 2020.

earning services and relatively small impact of AIM on the Exchange's balance sheet.[36] The Exchange has strong rule-making incentives to protect its reputation by revising and introducing new rules to prevent perceived deficiencies in the quality of regulation. A reactive theory would predict that rule revisions will occur when deficiencies in the rules are detected in order to minimise the risk of reputational sanctions due to company scandals or investor criticism.

Framing reputational capital as a critical goal of the regulator does not rule out the Exchange having incentives to attract market participants that stem from competition in the market for listing services. Such incentives can also be conceived as goals of the regulator that could trigger rule revisions. By many conventional measures the Exchange operates a successful growth market,[37] a feat which is made possible by the Exchange, as rule-maker, being responsive to market demand. The Exchange has moderate fee-earning incentives to revise rules in response to demand from key stakeholders such as investors, brokers, and Nomads in order to increase the number of issuers, volume of trading and most importantly demand for its data and information services.[38] And regulation driven by market demand may lead to more efficient rules for issuers from a regulatory cost perspective. However, a reactive theory of rule evolution posits that protecting reputational capital provides stronger regulatory incentives for the Exchange to revise rules rather

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[36] Reputational sanctions can be understood as the negative, market-imposed consequences from losses to reputational capital. For a discussion of reputational sanctions, see Chapter Five, Section III. For a breakdown of LSEG's revenue generating activities, see Chapter Two, Table 2. The London Stock Exchange Group's financial statements do not explicitly make clear how much revenue comes from AIM (capital markets activity, data and analytics, post-trade services, etc.). In 2019, only 18% of LSEG revenue came from capital markets activity, including AIM and the LSE Main Market.

[37] In 2019, AIM accounted for 60% of capital fundraised on European growth markets. See London Stock Exchange Group, 'Annual Report' (2019) 36 <https://www.lseg.com/investor-relations/overview-group-activities/annual-report-2019> accessed April 2020 .

[38] See Chapter Two, Section I(B) for discussion on how the Exchange is incentivised to uphold the quality of its listing rules and prioritise market integrity in order to stimulate demand for accurate and informative trading and market data.

than the competitive pressures of regulatory demand. Regulatory competition is weakened on AIM because of the high switching costs issuers face and the lack of appropriate substitutes, such as lower cost stock exchanges or equally liquid and accessible fundraising options.[39] If anything, the Exchange may be more responsive to the regulatory demand of applicants rather than issuers, because companies' bargaining position with the Exchange is weakened once listed due to switching costs. In contrast, the Exchange possesses equally strong incentives to respond to reputational triggers from all regulated constituents (i.e., applicants and issuers).

SECTION II Hypotheses

This chapter asks two principal questions: how do the AIM Rules evolve over time? Why have the AIM Rules evolved in this way? The hypotheses articulated below, followed by the discussion in Section IV, concern the initial question of *when* rules change and *what* types of rules undergo change. The theory underlying the hypotheses concerns the second question of *why* rules change. The hypotheses make testable predictions stemming from the observable attributes (variables) coded for in the dataset. While only the hypotheses (rather than theory) can be demonstrated as true or false on the basis of the study's observed findings, hypotheses supported by the data support the theory advanced for rule evolution and hypotheses contradicted by the findings weaken the theory expounded.

Hypothesis 1: *Major revisions will occur episodically rather than at consistent intervals.*

Hypothesis 1 tests the reactive theory by predicting that major rule revisions will occur episodically rather than at predictable, consistent time intervals. This theory, along with the punctuated equilibria theory, suggests that major revisions to rules (i.e., disruptions to regulatory

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[39] For a discussion of the limited options for SME listings in Europe, see the discussion at Chapter Four n (113).

stasis) will occur in 'fits and starts' as the rule-maker responds to threats to its reputational capital. One would expect shocks to occur episodically (without predictable intervals) if they were external to the rule-maker. Conversely, one would expect major rule revisions to occur consistently (at regular intervals) if rule evolution is caused by proactive regulatory impetus (e.g., to continually improve the rules on the basis of some regulatory objective) rather than reactive (e.g., responding to a regulatory trigger). Longer periods without rule revisions provide support for rule-makers' preference for regulatory stasis due to the high risks and costs of rule change, though extremely infrequent revisions could suggest that the Exchange was not attentive in self-regulation (unless the initial rules were extremely fit for purpose). If plotted as the number of rule changes per year, the alternative pattern of steady, consistent rule revisions would approximately resemble a horizontal line. Conversely, episodic rule revisions would resemble a line with peaks and troughs. Instead of a relatively similar proportion of rule changes occurring each year, episodic rule revisions would predict substantially more rule revisions in some years than others.

> ***Hypothesis 2:*** *The frequency of major revisions will decrease over time rather than at consistent time intervals, due to the Exchange acquiring rule-making expertise and the rules becoming more tailored to the market.*

Hypothesis 2 concerns the influence of regulatory demand as a trigger initiating rule change, and the acquired expertise of the rule-maker over time. It is hypothesized that regulatory demand for major revisions will decrease over time as rules become more tailored to the needs of market participants. More rule revisions would be expected initially as the rule-maker faces a regulatory steep learning curve, but as the Exchange acquires rule-making expertise, the need for major revisions should decrease over time. This is because revisions would become more effective at achieving the targeted regulatory outcome and would therefore be needed less frequently. This

hypothesis predicts substantially more rule revisions near the beginning of the time period in question rather than towards the end, because fewer rule changes should be needed over time as regulatory learning increases and the rules become more tailored to market needs.

SECTION III Data and methods

A. *Overview of data and leximetric method*

This chapter employs a 'leximetric' study design in order to analyse changes to the AIM Rules over time. The leximetric method involves coding legal documents with numerical values based on identified attributes, and therefore permits quantitative analysis of qualitative legal rules. This study is unique because it primarily codes revisions to rules at the time they occur, rather than coding for the properties of rules at consistent time intervals. The aim of this study is not to produce an index to assess a higher-level concept such as quality of regulation, but to understand the dynamics of rule evolution by compiling data on the nature and timing of rule revisions. The data and methods briefly described here are complemented by the methodological discussion in Chapter Three, Section IV, and the detailed coding criteria contained in the Appendix, Section III.

In order to understand how the AIM Rules change over time, the researcher created a dataset containing every material revision to the AIM Rules from its inception in June 1995 to June 2020. The first step was to acquire archival copies of the AIM Rules, since there were no publicly available copies prior to 2002. These archival copies were generously provided by the Exchange.[40] Next, the researcher reviewed the AIM Rules and all AIM-related notices published

[40] Some documents are missing, as is often the case with archival data – see Appendix, Section III, Table 7.1, for a description of the missing data and an assessment of why this does not materially undermine the study. Significant missing data are early copies of the Nomad Eligibility Criteria (1999-2005) and Disciplinary Procedures and Appeals Handbooks (2002-2006). By counting the number of material rules introduced in the first copies of these documents, the researcher determined how many material revisions could have occurred during these periods. The discussion in the Appendix, Section III, Table 7.1 explains that at most six major revisions (there are 26 in the

by the Exchange, making notes regarding consequential revisions over time and emerging themes.[41] Following this high-level perspective of the AIM Rules, the researcher identified variables to code for in the text, drafted coding criteria to set out how the variables would be consistently coded, and composed a detailed methodology for the study. The main methodological choices are described in *Table 6.1* below, and an overview of the variables and their definitions are articulated in *Table 6.2* below.

Table 6.1: Methodological Choices

Methodological question	Methodological choice
• What constitutes one 'rule'?	• The numbering in the AIM Rules is relied upon. One numbered rule in the AIM Rules equals one 'rule'. • The advantage of this approach is ensuring consistency and minimising researcher bias. The disadvantage is that some 'rules' have sub-clauses and contain more regulatory obligations than others.
• What constitutes a rule revision?	• Only 'material' amendments to rules and introductions or deletions of rules are counted as rule revisions. Material changes are those which a reasonable investor would consider to be material and affect the governance of AIM companies.

dataset) could be absent, and that this does not rebut the principal findings of the study. This is because if anything, the missing data would strengthen the researcher's finding that rule revision on AIM is front-loaded in the first half of AIM's history (1995 to 2007).

[41] See the Appendix, Section III, Table 7.5, for a list of all the AIM-related publications reviewed by the researcher.

	• The advantage of this approach is that de minimis revisions are excluded from the dataset, eliminating noise. The disadvantage is the possibility of over- or under-inclusion of material revisions.

Table 6.2: Variables Coded for in Dataset

Variable	Coding criteria
• Major revision or minor revision	• Major revisions create new and substantial compliance obligations for issuers, or substantially alter the disciplinary or supervisory powers of the Exchange. A reasonable investor would consider these revisions to have a significant impact on the governance of AIM companies. • Minor revisions do not substantially alter the rule compliance obligations of issuers, or the Exchange's disciplinary or supervisory powers. A reasonable investor would not consider these revisions to have a significant impact on the governance of AIM companies, but would consider these revisions to exceed a de minimis materiality threshold.
• Topical category of rule revised	• Revisions are coded with one topical category and one sub-category based on the predominant subject matter of the rule. Revisions are not coded with multiple categories to avoid double counting. • 1 – Eligibility 1.1 Admission eligibility 1.2 Ongoing eligibility 1.3 Both (admission and ongoing eligibility) • 2 – Disclosure 2.1 Disclosure at admission 2.2 Continuous/periodic disclosure 2.3 Both (initial and continuous disclosure) • 3 - Corporate governance

	3.1 Insider dealing 3.2 Corporate transactions 3.3 Related party transactions 3.4 Directors 3.5 Shareholder voting 3.6 Securities • 4 - Investing companies • 5 – Nomads 5.1 Nomad sanctions 5.2 Issuer sanctions 5.3 Both (Nomad and issuer sanctions) • 6 – Discipline 6.1 Nomad eligibility 6.2 Nomad responsibilities 6.3 Nomad independence and conflicts of interest • 7 – Supervision 7.1 Nomad reporting obligations 7.2 Issuer reporting obligations 7.3 Exchange reporting obligations
• Explicit public ordering	• *Concept*: Public ordering refers to instances when the AIM Rules adopt requirements stemming from a legislative source (i.e., UK or EU legislation or regulations). It is interesting to observe the instances of public ordering in an environment of private ordering. • *Criteria*: Variable is assigned a 1 if explicit reference to a legislative source is made in the text of the rule, a definition referenced in the rule, or in an AIM-related notice published by Exchange when explaining the rule change. Variable is assigned a 0 if no explicit reference is made to a legislative source.
• Mandatory or voluntary public ordering	• *Concept*: Legislative rules are sometimes voluntarily incorporated into the AIM Rules by the Exchange, and other times mandatorily imposed. • *Criteria*: Variable is assigned a 1 if incorporation of the legislative source was mandatory, and a 0 if incorporation

	of the legislative source was voluntary (i.e., the Exchange chose to adopt the legislative rule).
• Mandatory or enabling nature of revision	• *Concept*: Revisions may be enabling in nature (i.e., they expand issuers' compliance options) or mandatory (i.e., the rule may not be opted out of). • *Criteria*: Variable is assigned a 1 if the revision does not expand the compliance options of the issuer, a 0.75 if the revision expands the compliance options of a mandatory rule (e.g., rule may be satisfied by complying with option x, y or *new option z*), and a 0 if the revision expands the compliance options of an enabling rule.
• High, moderate, or no discretion	• *Concept*: Rule revisions may increase or decrease the ex ante certainty of rule compliance and the consequences of rule violation. High discretion revisions provide the Exchange with more ex post discretion to determine compliance, whereas 'no discretion' revisions provide black and white rule compliance. • *Criteria*: Variable is assigned a 1 if the Exchange has high discretion in determining rule compliance or determining the consequences for rule violation. Variable is assigned a 0.5 if the Exchange has moderate discretion in determining ex post rule compliance or consequences for rule violation. Variable is assigned a 0 if the terms of rule compliance or consequences of rule violation are black and white.
• Rule or principle	• *Concept*: AIM is an example of a principles-based regulation. The AIM Rules can be divided into 'rules' and 'principles' depending on the specificity of rule content.[42] • *Criteria*: Variable is assigned a 1 if the numbered AIM Rule possesses conditions or consequences triggered by evaluative judgments (principle). Variable is assigned a 0 if the numbered AIM Rule possesses binary empirical conditions that can be objectively answered yes or no (rule).

[42] The previous variable coded for the discretionary nature of the *revision* to the rule, to determine whether rules' compliance obligations become more or less discretionary over time. This variable categorizes each numbered AIM rule as a rule or principle based on whether it contains binary or evaluative conditions. See Appendix, Figure 7.1 for discussion on the overlap between these variables.

After the methodological choices and variables were identified, the researcher read through the AIM Rules and AIM-related publications by the Exchange a second time. A dataset consisting of material revisions was compiled in Microsoft Excel, and explanatory commentary was included where granular methodological choices were made. The dataset was reviewed a final time in the months following completion to account for minor adjustments to the methodology. In total, the dataset consists of 126 material revisions to the AIM Rules from 1995 to 2020, and more than a thousand manually coded data points describing the characteristics of each rule revision.[43]

B. *Contextualising the data*

The frequency of rule revision is dependent, to a degree, on the quality of the initial set of rules. Recognising that although rules may change for a number of reasons, all things being equal, rules that are fit for purpose are in less need of change than rules that do not achieve regulatory goals. This is accentuated in environments of private ordering, where private rule-makers often bear a high proportion of the costs and benefits of the market and have strong incentives to ensure that the rules achieve the desired regulatory goals.

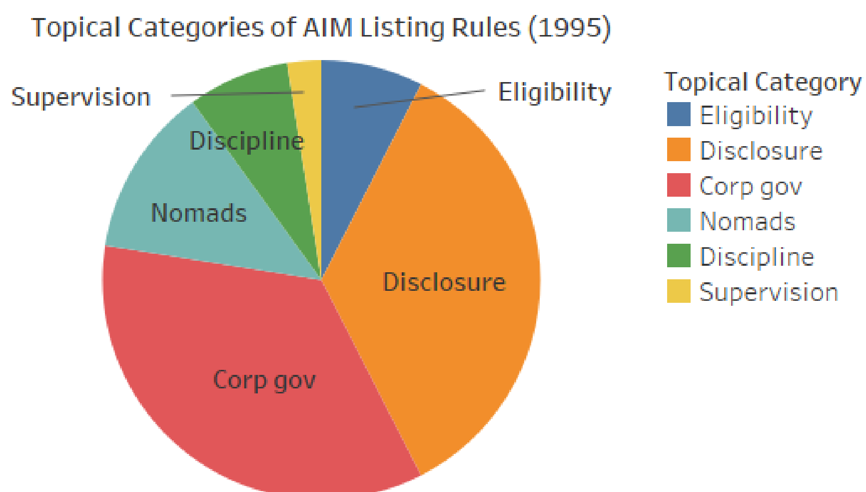
AIM was launched in June 1995. The 'AIM admission rules' did not comprise a standalone rulebook, but instead formed a single chapter of the broader *Rules of the London Stock Exchange*.[44] The AIM Rules were accompanied by the 'Model Code', a separate set of rules on insider dealing.

[43] 126 rule revisions multiplied by nine variables results in 1134 data points (topical sub-category and legislative source are coded as separate variables).

[44] Legal practitioners comment in a 1996 report: 'Chapter 16 of the Rules of the London Stock Exchange contains the AIM Rules, which are the equivalent, for AIM companies, to the Listing Rules for companies listed on the London Stock Exchange. The AIM Rules, which run to less than 30 pages, are a great deal more concise than the Listing Rules, although the provisions of the POS Regulations governing the contents requirements of a prospectus or an admission document should be read in conjunction with the AIM Rules.' See Jonathan Blake and John Daghlian, *AIM and EASDAQ: The New Enterprise Markets: A Specially Commissioned Report* (FT Law & Tax 1996) 6.

The 1995 Rules consisted of a baseline of 40 rules in the AIM admission rules, plus an additional 20 rules in the Model Code.[45] More than two-thirds of the AIM Rules at inception (excluding the Model Code) related to disclosure and corporate governance, as shown in *FIGURE 6.1* below.

FIGURE 6.1: Topical Categories of AIM Listing Rules, 1995



The regulatory philosophy underlying AIM, according to a former Head of AIM, was that 'we should allow as much choice and freedom as compatible with a reasonable level of investor protection.'[46] The attractiveness of AIM as a listing venue for SMEs is predicated on a regulatory delta from listing venues that impose higher regulatory costs, and the Exchange relies on a system of principles-based regulation and delegated Nomad governance to walk the tightrope between regulatory flexibility and robustness.

[45] The 1995 Rules required AIM companies 'to adopt a code of share dealing in terms no less exacting than the Model Code', without having to adopt the Model Code itself. See ibid 68.

[46] Philip Roscoe, 'The Rise and Fall of the Penny-Share Offer: A Historical Sociology of London's Smaller Company Markets' (2017) 53 <https://research-repository.st-andrews.ac.uk/handle/10023/11688>. Simon Brickles was Head of AIM from 2001 to 2003.

The 1995 Rules were neither so comprehensive as to preclude the need for future revisions, nor so deficient as to require a complete overhaul. The 1995 Rules required issuers' prospectuses to include the same information as required under *The Public Offers of Securities (POS) Regulations 1995*, even when the issuer was not making a formal 'offer of securities to the public' where the POS Regulations would have been triggered regardless.[47] This is an example of 'voluntary public ordering', one variable coded for in the dataset, referring to the Exchange choosing to transplant legislative rules implemented for another context into the AIM Rules when not legally mandated to do so. Although AIM has always positioned itself to have a lower regulatory burden than the Official List – particularly because its predecessor, the Unlisted Securities Market, had closed in part due to its regulatory position becoming too similar to the Official List[48] – the presence of significant voluntary public ordering in the initial AIM Rules contradicts claims of complete regulatory arbitrage and demonstrates a commitment to some level of investor protection.[49]

Critiques of the 1995 Rules being inadequate from an investor protection standpoint could largely also be leveled at the current AIM Rules for Companies. The core rules on directors, Nomads, and disciplinary sanctions have fundamentally remained the same, as have the general

[47] AIM admission rules (August 1995), rule 16.10.

[48] Roscoe (n 46) 52. Roscoe writes that '[t]he Exchange was mindful that the USM's failure to establish its own market position had led to its closure. A central question for any new market, therefore, was how to differentiate itself from the Official List.' See also ibid 83. '… AIM's move to opt-out of the EU Prospectus Directive allowed the market to continue under the Exchange's supervision and avoid a repeat of the cycle that had led to the closure of the USM.'

[49] Rules were not necessarily robust across the board: e.g., copies of the admission document only needed to be made available to the public for a minimum of 14 days after listing, which seems light in terms of investor protection. See AIM admission rules (August 1995), rule 16.13. Other rules however, such as the Model Code rules prohibiting directors and employees from dealing in the company's securities during close periods, appear relatively comprehensive in prohibiting directors and employees from trading when in possession of material unpublished information.

principles on disclosure. One conspicuous absence from the 1995 Rules is having any requirement for shareholder approval of related party transactions. The 1995 Rules, like the 2019 AIM Rules, delegate a high degree of responsibility for governance and shareholder protection to directors and Nomads. The 1995 Rules require company directors to 'accept full responsibility, collectively and individually, for the issuer's compliance with this chapter [the AIM rules]',[50] which remains unchanged in the present AIM Rules. The 1995 Rules set out the core of Nomad responsibilities – to confirm at admission that the rules have been complied with and the directors have been advised, and to undertake to advise the directors at all times with rule compliance – which remain fundamentally the same. Even the broad disclosure principle requiring issuers to notify markets of changes likely to lead to 'substantial' price movements in their securities has remained fundamentally similar.[51] The core disciplinary sanctions permitting the Exchange to fine, censure, cease trading or de-list the issuer have hardly evolved since 1995, despite a much higher degree of rule formalization and articulation of procedure once a separate Disciplinary Procedures and Appeals Handbook was created. It is therefore worth remembering in the context of many rule revisions that the core regulatory framework has not evolved drastically over time. When asked about the most significant revisions over time, one interviewee with decades of experience remarked that there are 'pretty much the same rules since AIM came about'. This reflects a perception that despite an explosion in the number of AIM Rules over time, as depicted in *Table*

[50] AIM admission rules (August 1995), rule 16.8.

[51] In May 2014, the 'substantial' price movement standard was replaced by a 'significant' price movement standard. In explaining this revision, the Exchange stated: 'We do not consider this to change the standard of disclosure but is intended to bring this more in line with the terminology used in the Financial Services and Markets Act 2000.' See AIM Regulation, 'AIM Notice 38' (27 January 2014) 2, <https://docs.londonstockexchange.com/sites/default/files/documents/aimnotice38.pdf> accessed May 2020.

6.3 below, there have been relatively few fundamental changes in the structure of AIM governance.[52]

Table 6.3: Number of Rules Over Time

Date	Total Number of AIM Rules
June 1995	60
April 2005	85
March 2006	89
February 2007	202
June 2009	213
July 2019	351

SECTION IV Analysis and discussion

A. *The data are consistent with Hypotheses 1 and 2*

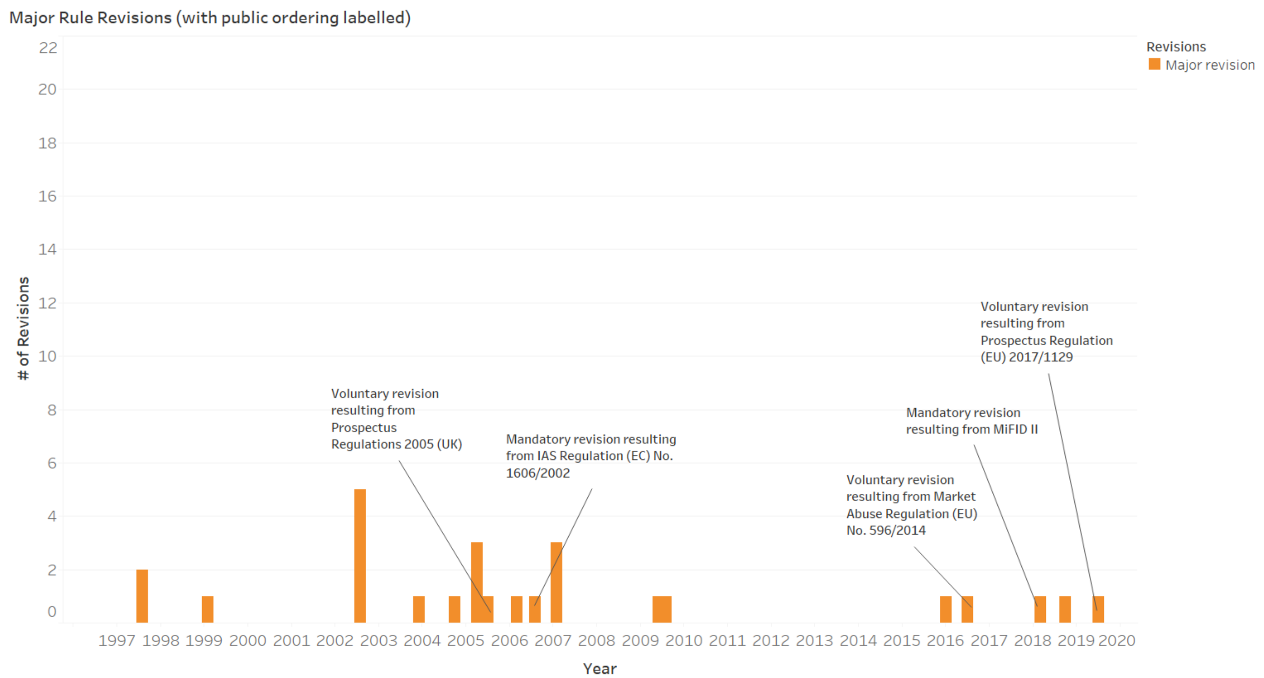
Hypothesis 1: Major revisions occur episodically rather than in consistent time intervals. On the whole, major revisions are clustered in relatively close time periods following extended periods of regulatory stasis. These trends are illustrated most clearly in *FIGURE 6.2* below.

Hypothesis 2: Major revisions are front-loaded and the number of major revisions to the AIM Rules decreases over time. Nearly three-quarters of major revisions on AIM occur between 1995 to 2007, as illustrated by *FIGURE 6.2* below. There were 20 major revisions in the first half of

[52] The AIM Rules balloon from a meager 60 rules at inception to over 350 rules in 2020. This expansion is primarily related to the introduction of a Disciplinary Procedures and Appeals Handbook in 2007 (124 'rules'), later expanded to 255 rules in 2018. Almost all of the disciplinary rules are procedural in nature and do not meet the materiality threshold for rule revisions included in the dataset.

AIM from 1995 to 2007, while there were only six major revisions from 2008 to 2020. The data are consistent with an account of the Exchange acquiring rule-making expertise as fewer major revisions are needed over time. The total number of all rule revisions (major and minor) is higher between 1995 to 2007 (80 or 63% of revisions) than between 2008 to 2020 (46 or 37% of revisions).

FIGURE 6.2: Major Rule Revisions, 1995-2020



Major revisions were implemented in fits and starts from 1995 to 2007, with periods of rapid change in August 2002 (five major revisions) and from April 2005 to February 2007 (eight major revisions). There are only two major revisions from March 2007 to December 2015. This relatively long period without major revisions is consistent with rule-makers' theorised preference for regulatory stasis. However, it is not so infrequent as to suggest the Exchange was not attentive in self-regulation. An account of the Exchange's self-regulatory attentiveness is consistent with the 35 minor revisions between February 2007 to January 2016, as illustrated in *FIGURE 6.4*

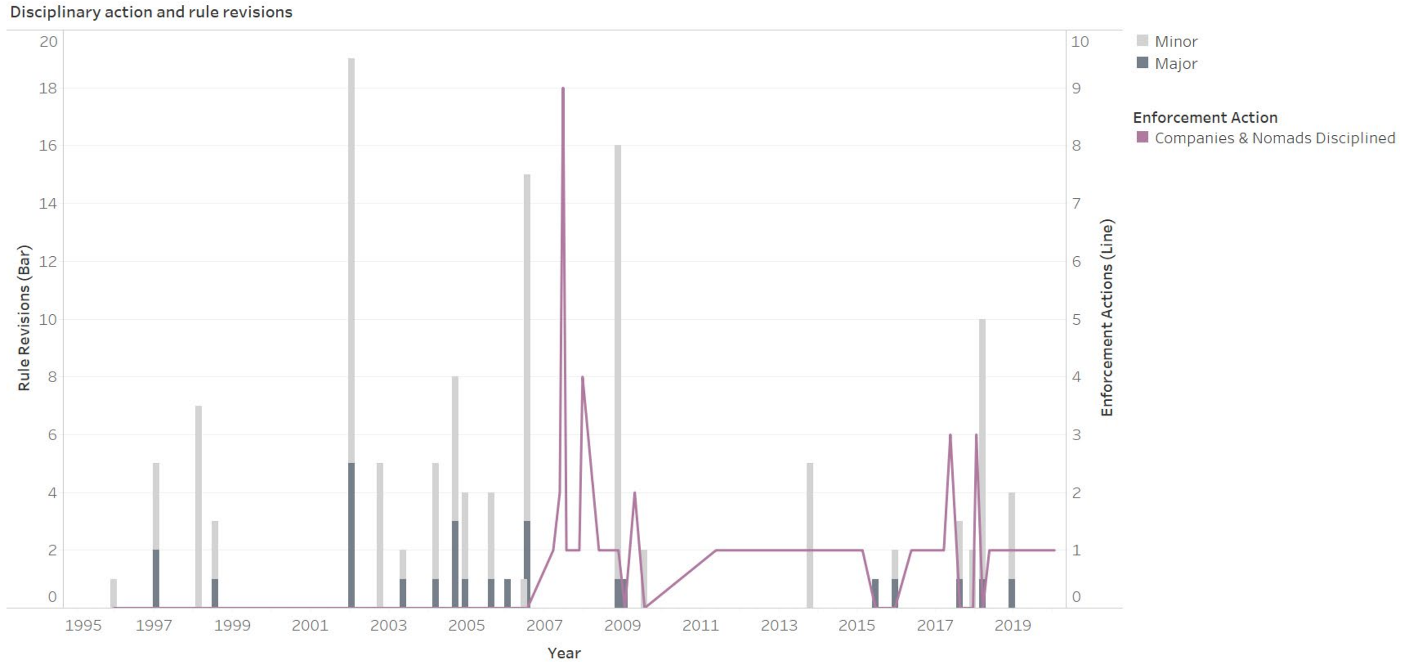
below. The frequency of these minor revisions is not necessarily indicative of rule tinkering, as the cumulative effect of these revisions is not insignificant.[53] Furthermore, the Exchange was more active in regulatory enforcement during the initial years of regulatory stasis, with there being a peak in disciplinary actions against companies and Nomads between October 2008 to February 2009.[54] This is illustrated in *FIGURE 6.3* below.

The nearly nine-year period of regulatory stasis, with only two major revisions from 2007 to 2015, is followed by a period of more intense change where five major revisions occur between January 2016 to July 2019. These revisions do not occur at consistent intervals. Much of the rule revision activity from 2016 to 2019 may be attributed to changes in the wider European regulatory environment, as three of five major revisions incorporate legislative rules from the Market Abuse Regulation (EU) No 596/2014, MiFID II, and the Prospectus Regulation (EC) 2017/1129.

[53] A case can be made for significant rule evolution in the long period of regulatory stasis following February 2007 until January 2016. One might point to the governance improvements made to ‘investing companies’ (companies whose primary business is to invest in securities or other businesses) in 2009, the prohibition of AIM companies trading on non-approved trading venues in 2009, and the requirements in 2014 for Nomads to re-apply for Nomad status following a deemed change of control, and to notify the Exchange of material adverse changes in its financial and operating positions.

[54] There is no publicly available enforcement data prior to 2007. The first reference to a separate Disciplinary Handbook is in August 2002 (that the researcher has come across), and the first publicly available copy of a Disciplinary Handbook is in February 2007. There is also publicly available consultation document from October 2006, that reveals draft amendments to an earlier, undated copy of the Disciplinary Handbook. It is therefore difficult to ascertain the extent of formal disciplinary enforcement prior to 2007.

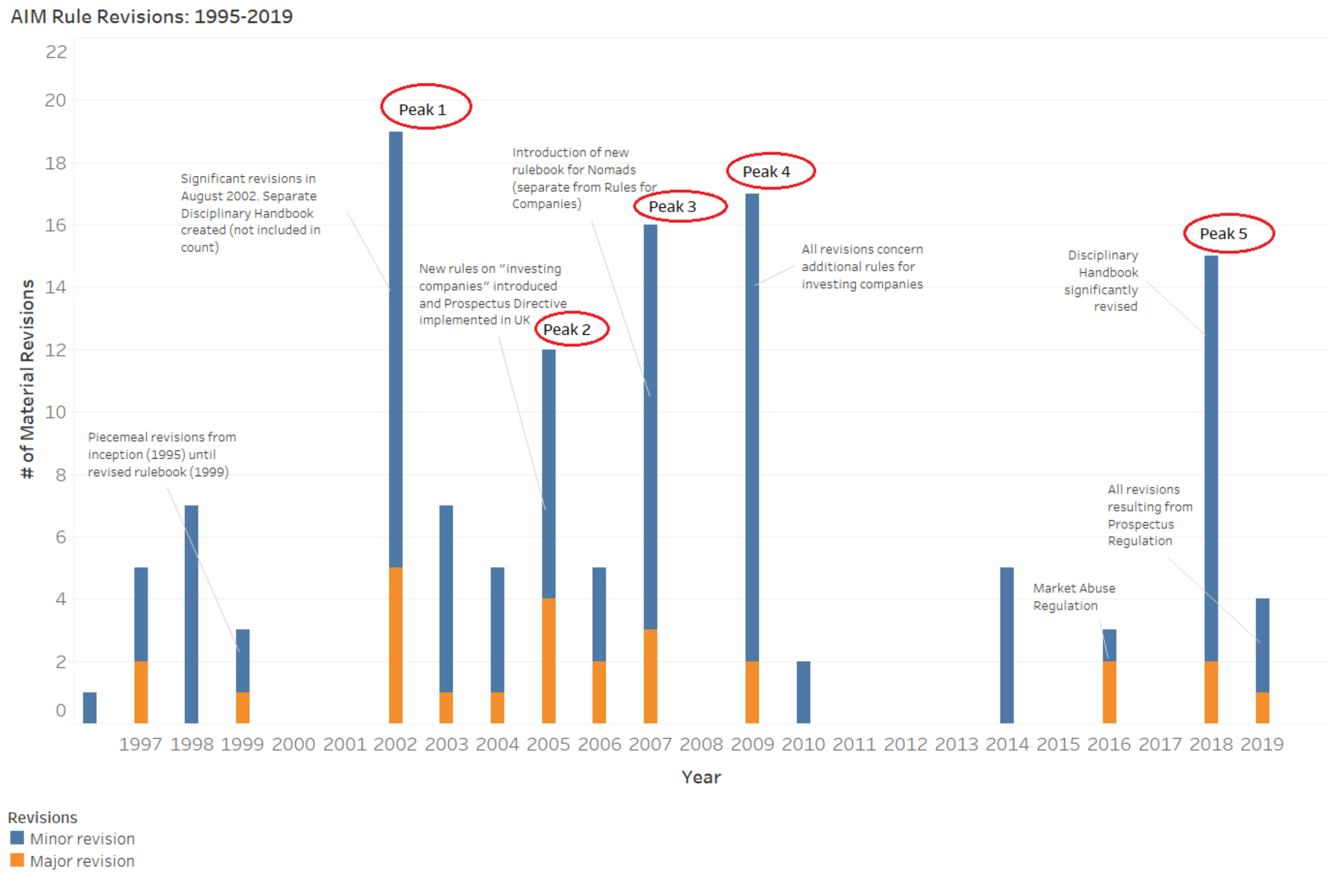
FIGURE 6.3: Formal Disciplinary Actions and Rule Revisions, 1995-2020



When the view is widened to take both major and minor revisions into account, a trend of rule revision activity in higher peaks and troughs becomes clear. This trend is consistent with a reactive theory of rule evolution, as well as the punctuated equilibria theory of evolutionary path dependence.

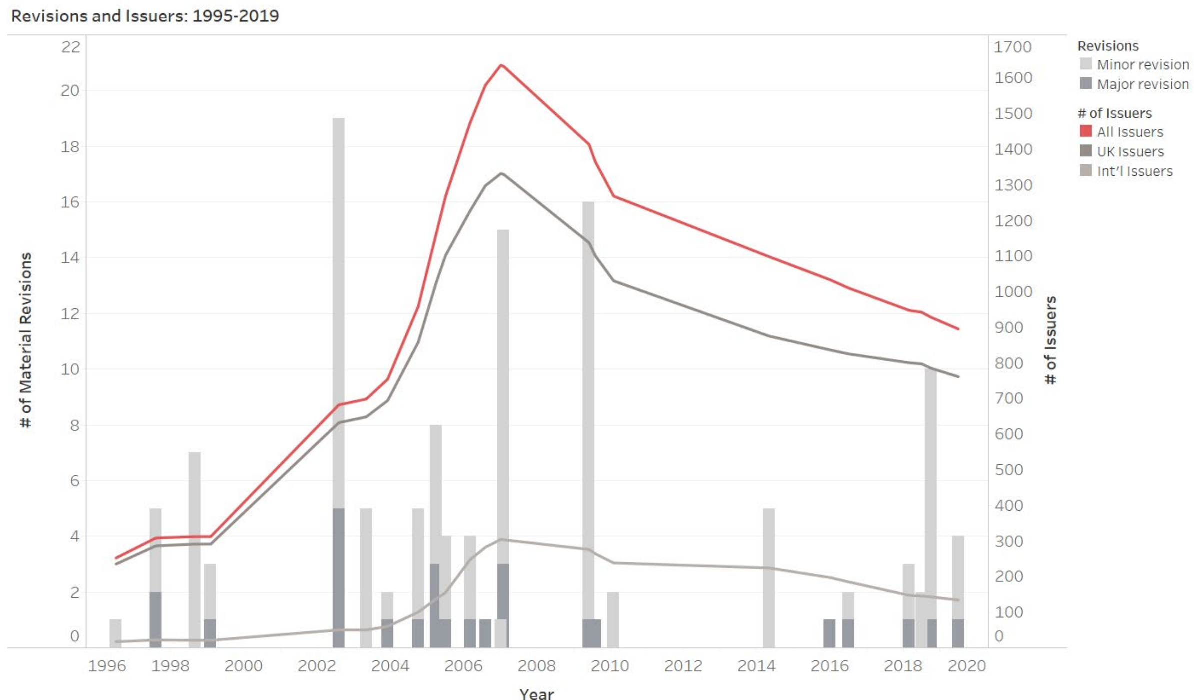
FIGURE 6.4 below shows five peaks in rule revisions. Each of these peaks constitutes approximately 10% or more of the total rule revision activity (both major and minor) on AIM across the 25-year time period.

FIGURE 6.4: Major and Minor Rule Revisions, 1995-2020



Peak 1**:** AIM experienced a surge of flotations in the three years prior to Peak 1. This peak may be a response to challenges posed by a surge of flotations due to the tech bubble in 1999. The number of issuers on AIM leapt from 312 in February 1999, when a revised company rulebook was published, to 682 in August 2002, when the company rulebook was significantly amended. The rapid rise in the number of issuers during the tech bubble can be observed in *FIGURE 6.5* below.

FIGURE 6.5: Rule Revisions and Number of Issuers, 1995-2020



However, the flotations between 1999 to 2002 were of lower quality – market capitalisation on AIM tripled between 1998 to 1999, only to lose nearly a third of its value by August 2002 (Peak 1).[55] This account is consistent with a market maker's description of AIM during the dot-com boom:

> AIM was a slow burner, institutions were not invested initially, [just] retail investors, and there were some very odd little companies floated. Then gradually a few brokers realised the potential of it, so some slightly better companies were floated on the market and *in 1999 there was a rush, there was certainly a lot of technology exposure through the AIM market… All you had to do was to have a knitting pattern and put .net and people would buy the shares and that worked for three years.*[56]

[55] AIM market capitalisation was £4,437.9 million at year end 1998, £13,468.5 million at year end 1998, and only £10,148.1 million at August 2002.

[56] Roscoe (n 46) 61 (emphasis added). Interestingly, Dr. Roscoe observes that there was only one large institutional investor on AIM when it opened in June 1995.

Peak 2**:** Peak 2 consists of two separate periods of rule revision in April and July 2005. This is more clearly illustrated in *FIGURE 6.5*. Reputational concerns over empty cash shells listing on AIM may have triggered the April 2005 revisions. Half of the revisions in April 2005 involve rules on investing companies (four of eight revisions), including a minimum £3 million fundraising requirement for investing companies to list on AIM. The Exchange acknowledged that prior to this requirement, companies with 'limited cash balances' could list on AIM without having to undertake any investments or acquisitions, and voiced concern over 'whether the admission of such companies is in the best interests of shareholders and the reputation of the market as a whole.'[57]

The July 2005 revisions were in direct response to regulatory change in the wider European regulatory environment, although the revisions implemented were partially justified by the Exchange on the basis of reputational concerns. In July 2005, the Prospectus Directive (EU Directive 2003/71/EC) was implemented in the UK through the Prospectus Regulations 2005 (SI 2005/1433) (amending the FSMA 2000) and the POS Regulations 1995 were repealed. This forced the Exchange to choose between adopting the Prospectus Directive Rules with certain 'carve-outs' or copying the POS Regulations into the AIM Rules, which were already implemented by reference into the AIM Rules.[58] The Exchange chose to adopt a lighter version of the Prospectus Directive Rules, and three of the four revisions result directly from the Prospectus Regulations 2005. The Exchange partially appealed to reputational justifications by stating that the 'POS will

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[57] AIM Regulation, 'AIM Notice 11' (31 January 2005) 3, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-11-final.pdf> accessed May 2020. A further revision in April 2005 gave the Exchange discretion to refuse to list companies where detrimental to the reputation of AIM.

[58] A third but less realistic option was to wait for an updated POS regime to replace the old POS Regulations, should the UK government have updated the regime.

no longer be a recognisable standard and this could damage the reputation of AIM from an investor perspective.'[59] This demonstrates that a reputational trigger theory of rule evolution is not inconsistent with change caused by changes in the wider regulatory environment.

Peak 3**:** In February 2007 the Rules for Companies and the Disciplinary Handbook were revised, and the rules governing Nomads, formerly contained in the company rulebook, were introduced into a separate rulebook titled Rules for Nomads.

Draft versions of the February 2007 rule changes were initially circulated in an October 2006 consultation document, which elicited feedback from nearly 50 AIM constituents.[60] One obvious regulatory trigger – the devastating Langbar scandal which dominated the press in the final months of 2005 – may have caused the rule evolution in Peak 3. Langbar International was an AIM-quoted cash shell that raised money with the promise of lucrative overseas investments, from construction contracts in Argentina to oil and gas projects in Russia. However, it came to light in November 2005 that its purported cash reserves of more than $600 million USD did not exist. An outright fraud was exposed resulting in investor losses estimated at £100 million, an investigation by the Serious Fraud Office and the imprisonment of Langbar's CEO, as well as a £250,000 fine slapped on the Nomad for its oversight failures.[61] The Langbar scandal was

[59] See AIM Regulation, 'AIM Notice 12' (31 January 2005) 7, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-12-final.pdf> accessed May 2020. Another important justification was that confusion could arise for Nomads and investors if the Prospectus Directive rules (with carve-outs) were not adopted, since the POS and Prospectus Directive standards could apply at different times.

[60] AIM Regulation, 'AIM Notice 27' (20 February 2007) 2, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-27.pdf> accessed May 2020.

[61] See Simon Bowers, 'Langbar International: The Greatest Stock Market Heist of All?' *The Guardian* (24 June 2011) <https://www.theguardian.com/business/2011/jun/24/langbar-international-fraud-history> accessed May 2020. The public censure and fine of Nabarro Wells, which went under in July 2009, was the first public disciplinary notice by the Exchange.

described by one journalist writing for *The Guardian* as ‘by far the biggest suspected fraud to hit Aim [sic], which has been relatively free of scandal since it was set up in 1995’,[62] and that ‘Those close to Aim [sic] are extremely concerned about the reputational damage that a suspected fraud of this scale will bring.’[63] In a follow-up article in 2011, this same journalist even claimed that the Langbar scandal ‘helped prompt’ the AIM Rules to be revised.[64]

Peak 3 represents the most qualitatively significant evolution in the AIM Rules because of the impact of the new Nomad rulebook. Peak 3 does not contain the highest number of rule revisions because the separate rulebook did not contain a higher number of new and material ‘rules’ for Nomads, and because the revisions to the Disciplinary Procedures and Appeals Handbook were largely procedural and *de minimis*.[65] However, the effect of a separate Nomad

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[62] Simon Bowers, ‘Fraud Inquiry Starts into Shell Firm’s Missing Millions’ *The Guardian* (26 November 2005) <https://www.theguardian.com/business/2005/nov/26/3>. Other journalists have described Langbar as ‘one of the worst scandals ever to hit the Aim market…’ See Rowena Mason, ‘Langbar Chief Stuart Pearson Jailed over ‘grand Scale’ AIM Fraud’ *The Telegraph* (21 June 2011) <https://www.telegraph.co.uk/finance/financial-crime/8587952/Langbar-chief-Stuart-Pearson-jailed-over-grand-scale-AIM-fraud.html> Simon Bowers, ‘Langbar International: The Greatest Stock Market Heist of All?’ *The Guardian* (24 June 2011) <https://www.theguardian.com/business/2011/jun/24/langbar-international-fraud-history> accessed May 2020..

[63] Bowers (n 62).

[64] ‘The affair remains a shocking reminder of the worst excesses of London's "light touch" approach to regulation, a philosophy which has now been abandoned. <u>So brazen was the Langbar sham that it eventually helped prompt a rewriting of the requirements from companies listed on the Aim</u>.’ See Bowers (n 61) (emphasis added).

In the researcher’s view, threats to the Exchange’s reputational capital were the highest in AIM’s history between November 2005 (Langbar) and March 2007. In March 2007, SEC commissioner Roel Campos famously critiqued AIM as being ‘like a casino’, stating that ‘'I’m concerned that 30% of issuers that list on Aim are gone in a year.’ This prompted a defensive reply from the Exchange that Commissioner Campos’ comments were ‘completely outrageous’ and ‘entirely wrong’. Exchange officials at the time emphasised that 2-3% of AIM companies fail annually, a similar rate to the Main Market. See Jill Treanor, ‘City Hits out over US “casino” Jibe at Aim’ *The Guardian* (10 March 2007) <https://www.theguardian.com/business/2007/mar/10/1> accessed May 2020; see also ‘AIM Stock Market “like a Casino”’ *BBC* (2007) <http://news.bbc.co.uk/1/hi/business/6433637.stm> accessed May 2020.

[65] One reason that the number of rule revisions is not higher for Peak 3 is that few *new* and *material* ‘rules’ were introduced – see the methodology for counting described above at Section III, Table 6.1 and elaborated in Chapter 3, Section IV(E). The Nomad rulebook was described as ‘primarily a consolidation of the existing obligations on nominated advisers currently contained in the AIM Rules for Companies and in the Nominated Adviser Eligibility Criteria.’ The Exchange further stated that ‘No substantive changes have been made to the [Nomad] eligibility criteria themselves’, and that the new Nomad rulebook was a codification of existing, good market practice. See

rulebook would considerably improve the quality of Nomads as gatekeepers, perhaps signalling that the Exchange was taking Nomad governance more seriously. Some of the revisions in Peak 3 were particularly salient. These include the introduction of Rule 26 to the Rules for Companies, requiring extensive new disclosures by issuers maintained on a website accessible to the public. Another salient revision was the requirement that Nomads should inform the Exchange 'as soon as practicable' if a company has breached the rules, which may have increased companies' rule compliance given the increase in probability of the Exchange detecting a rule violation.[66] Symbolically, the rule requiring AIM companies to retain a Nomad at all times was moved from near the end of the company rulebook to the very first rule, symbolic of the qualitative shift towards more responsible Nomad gatekeeping.

Peak 4**:** All of the rule revisions in Peak 4 concern investing companies, when a separate set of rules (the AIM Note for Investing Companies) was introduced in June 2009. The Exchange introduced the definition of an 'investing company' in 2002,[67] and implemented further rules increasing fundraising requirements and strengthening the corporate governance of investing companies in April 2005 (Peak 2). These companies posed a governance risk, and therefore reputational problem, because they 'were regarded as "cash shells"'.[68] By year end 2005 there

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AIM Regulation, 'AIM Notice 24' (2 October 2006) 1-2, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-24.pdf> accessed May 2020. When describing the revisions to the Disciplinary Handbook in a rule consultation document, the Exchange only lists three proposed revisions (indicating the *de minimis* nature of most of the revisions). See ibid 4-5.

[66] The Rules for Nomads also required Nomads to contact the Exchange when 'it has a concern about the reputation or integrity of AIM'. This revision is consistent with the reputational trigger theory of rule-making on AIM, because Nomads' regulatory obligations are revised to safeguard the Exchange's critical regulatory goal. See AIM Rules for Nominated Advisers (February 2007) rule 19.

[67] Investing companies were defined as 'Any AIM company which, in the opinion of the Exchange, has as a primary business the investing of its funds in the securities of other companies or the acquisition of a particular business.' See AIM Rules for Companies (August 2002) 1-24 (Glossary).

[68] AIM Regulation, 'AIM Notice 30' (18 December 2008) 1, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-30.pdf> accessed May 2020.

were 95 AIM-quoted companies each with a market capitalisation of less than £1 million, a negligible difference compared with the 96 sub-£1m issuers at year end 2002. The Exchange circulated proposed rule changes in December 2008 when the number of sub-£1m issuers was at an all-time peak of 196 issuers.[69] The revisions were effective at eliminating cash shells; the number of sub-£1m issuers more than halved to 74 by year-end 2009 and has continued to decline ever since.[70]

Peak 4 may have been a regulatory response to the reputational and governance problems of cash shells, with a similar regulatory trigger to Peak 2. Cash shells are a ticking time bomb for reputational risk (remember Langbar), without any significant revenue upside for the Exchange. Reputation aside, having so many poorly capitalised companies listed on AIM is not indicative of good governance. Despite the higher number of total rule revisions, Peak 4 is less significant from a rule evolution perspective than Peak 3, as the revisions were limited to cleaning up the high number of cash shells on the Exchange and strengthening the corporate governance of investing companies.[71]

***Peak 5*:** Peak 5 primarily consists of rule revisions to the Disciplinary Procedures and Appeals Handbook published in October 2018.[72] The procedural rules in the Disciplinary Handbook skyrocketed and the Disciplinary Handbook nearly doubled in length, yet very few of

[69] All-time peak comparing year-end figures.

[70] There were 27 sub-£1m issuers in April 2020.

[71] The proposed rule changes to investing companies elicited feedback from ten AIM constituents, far fewer than the nearly fifty AIM constituents that commented on proposed rule changes in Peak 3. Less interest in the revisions from market participants also suggests that Peak 4 was less consequential from a rule evolution perspective than Peak 3. See AIM Regulation, 'AIM Notice 31' (1 June 2009) 2, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-31.pdf> accessed May 2020.

[72] One-third of the revisions Peak 5 are from revisions to the AIM Rules for Companies (March 2018) and AIM Rules for Nominated Advisers (July 2018).

the revisions were material.[73] The regulatory trigger for these revisions may have been the decision in *ZAI* decisions discussed in Chapter Four, where a Nomad was denied a disciplinary proceeding in public and initial legal action over the Exchange's interpretation of the Disciplinary Handbook.[74] The High Court decision was heard, with judgment rendered, in April 2017, and a general rule consultation paper soon followed in July 2017 (seeking feedback on revisions to the AIM Rules, including the Disciplinary Handbook). The Exchange referenced the *ZAI* decision in the notice accompanying the Disciplinary Handbook revisions, and it is theorised that *ZAI* acted as a regulatory trigger.[75] The Exchange may have then sought to make the rules much clearer to prevent future reputationally-damaging lawsuits over the Disciplinary Handbook.

C. *Discussion on the topical category of rule revised*

As described in *Table 6.2* above, rules were assigned to a unique 'topical category' depending on their predominant subject matter. Rules could be assigned to one of the following categories: (1) Eligibility, (2) Disclosure, (3) Corporate governance, (4) Investing companies, (5) Discipline, (6) Nomads, and (7) Supervision.

A reactive theory of rule evolution does not necessarily imply that rules in certain topical categories will change more than others, since governance failures in all rule categories could lead to reputational sanctions. For example, threats to reputational harm could be posed equally by rules on disclosure and rules on corporate governance. However, if the Exchange revises rules on an ad hoc basis in response to reputational threats, one would expect revisions not to occur equally across

[73] The number of 'rules' skyrocketed from 124 rules in May 2014 to 243 rules in October 2018. The word count nearly doubled from 8,435 words to 16,660 words.

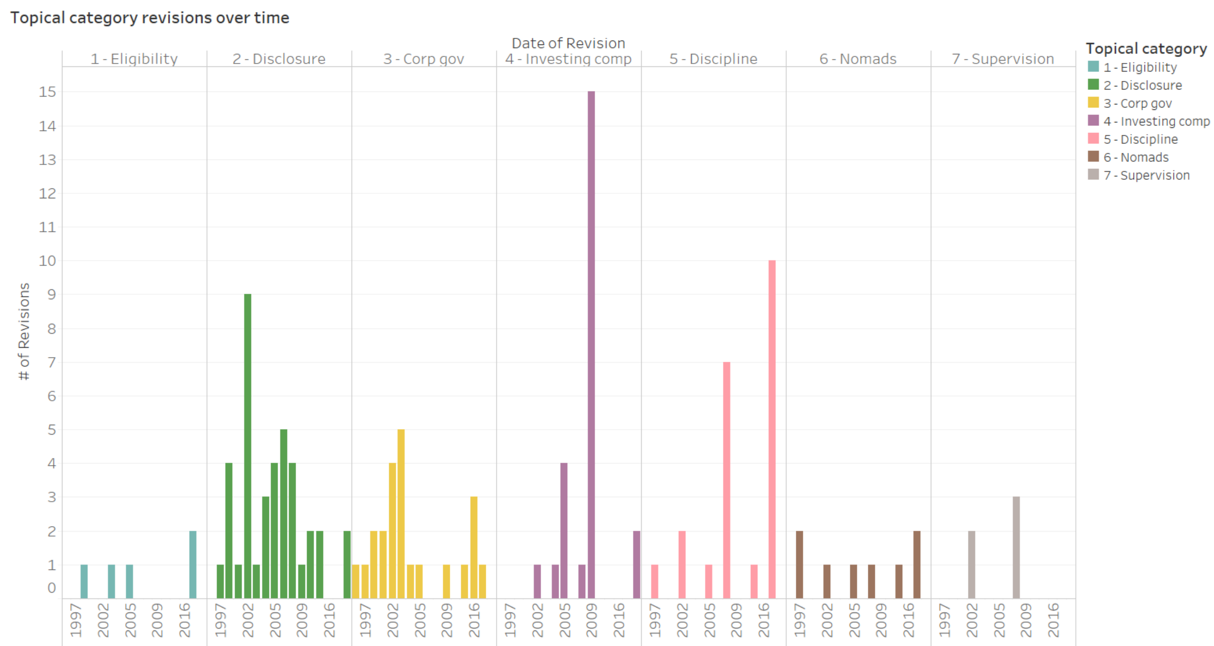
[74] See Chapter Four, Section II.

[75] See AIM Regulation, 'AIM Notice 54' (1 October 2018) 3, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-notice-54.pdf> accessed May 2020.

all topical categories. If rules in all topical categories evolved at the same rate, this would suggest that revisions were not punctuated responses to reputational triggers, but were the result of consistent, systematic revision. Conversely, observing uneven rule change across categories would be consistent with the reactive theory, because threats to a regulator's critical goals would not be expected to trigger a relatively even number of revisions across topical categories.

The data presented in *FIGURE 6.6* below visualises the distribution of revisions by topical category over time. It clearly shows that some topical rule categories evolve much more significantly than others. For example, rules on investing companies, a topical category with rules only introduced from 2002, constitute a remarkable 19% of revisions in dataset. Other rules experience little revision, such as rules on issuer eligibility or rules concerning the Exchange's supervisory powers over companies and Nomads, each of which respectively constitute 4% of total revisions.

FIGURE 6.6: Rule Revisions by Topical Category, 1995-2020

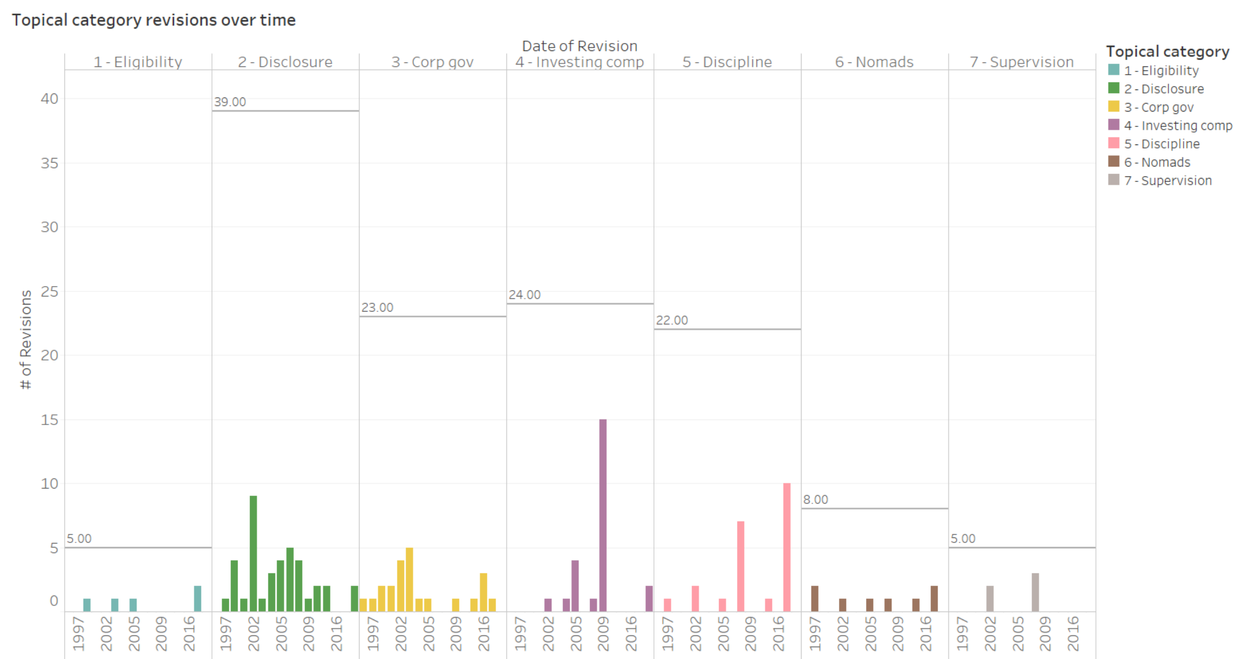


Different types of rules evolve at different rates. Some categories of rules evolve much more in the first half of AIM's history, from 1995 to 2007. For example, 82% of revisions to disclosure rules, 74% of revisions to corporate governance rules, and 60% of the smaller number of revisions to eligibility rules and 100% of the smaller number of revisions to supervision rules occur from 1995-2007. At least 73% of revisions to the disciplinary rules and 83% of revisions to the Nomad rules also take place from 1995-2007.[76] Other rules evolve more rapidly during the second half of AIM's history, from 2008 to 2020, such as 75% of revisions to investing company rules (although these rules were only introduced as late as August 2002).

FIGURE 6.7 below includes a reference line showing the total number of revisions in each category, allowing for more straightforward comparison between the number of rules being revised in each category.

[76] It is difficult to ascertain the exact number of revisions to rules on discipline (from 2002-2006) and Nomads (from 1999-2005) because of the missing data described at n (40). During these periods the researcher can observe the introduction of 19 material new rules in the Disciplinary Procedures and Appeals Handbook (only two major) and 10 material new rules in the Nomad eligibility criteria (only four major), revealing that *at least* 73% and 83% of revisions to rules on discipline and Nomads took place in the first half of AIM's history.

FIGURE 6.7: Rule Revisions by Topical Category Showing Totals, 1995-2020



The different rates of rule evolution are consistent with the reactive theory proposed, but can also be explained in part by the distribution of rules versus principles in each topical category. For example, rules on supervision and eligibility are revised infrequently, each on five occasions. However, 80% of the revisions relating to supervision and eligibility were concerned with 'principles' rather than 'rules'. Since rules have more circumstantially prescriptive content than principles, rules will need to be revised more frequently than principles in response to changing circumstances. Principles, in turn, will be revised less frequently. The lower number of revisions in the supervision and eligibility categories may be explained by the high number of principles.

A second partial explanation for why some categories of rules evolve more than others is the distribution of topical categories in the original 1995 Rules. The more rules there were in any one category to start with, the more likely revisions will occur in that category over time. Rules relating to disclosure are not revised more disproportionately than other categories when compared

to the initial prevalence of these rules. However, the low number of revisions related to supervision may be explained by their fewer number in the AIM Rules to begin with. The relatively small percentage of revisions to corporate governance rules (compared to their initial prevalence) may be explained by the surprisingly high proportion of revisions relating to investing companies. This is because many of the rules in the investing companies category relate in substance to corporate governance.[77] The high number of investing companies revisions are consistent with the reputational trigger hypothesis, given the possible explanations for the investing company rule changes in Peak 2 and Peak 4.

Table 6.4: Breakdown of Categories at Inception and Overall

Topical Category	**% of 1995 Rules[78]**	**% of All Revisions**
Eligibility (1)	8%	4%
Disclosure (2)	35%	31%
Corporate governance (3)	35%	18.2%
Investing companies (4)	0%	19.1%
Discipline (5)	13%	17.4%
Nomads (6)	8%	6.3%
Supervision (7)	3%	4%

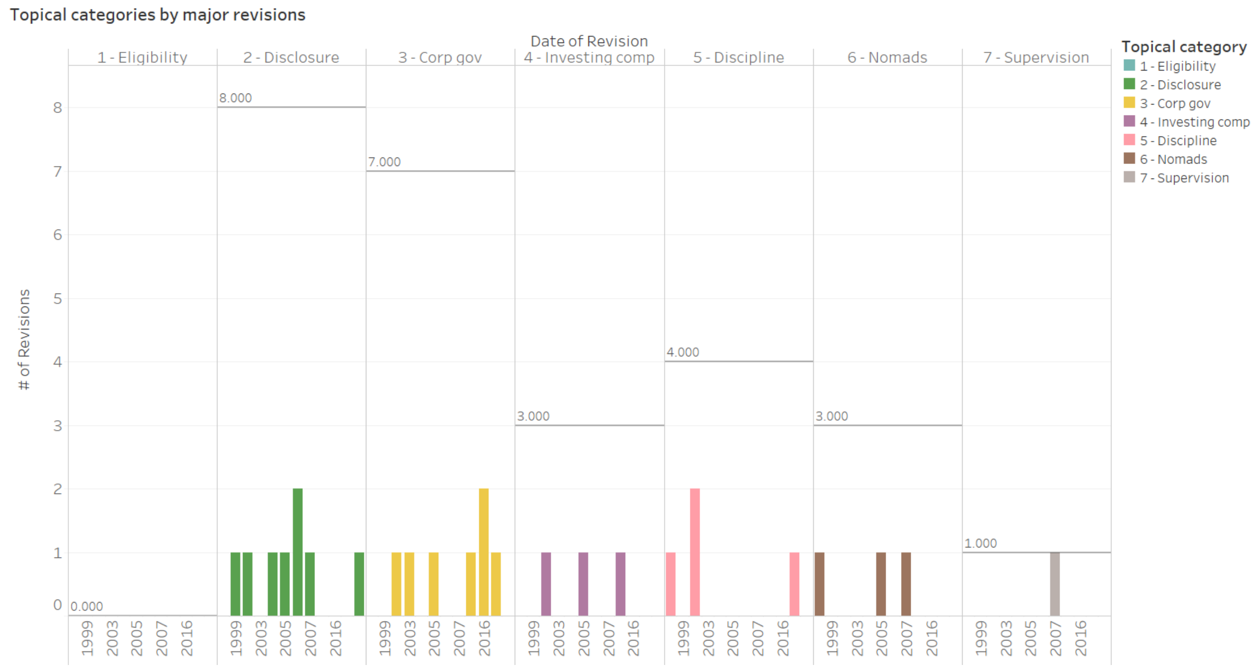
The disparity in rule evolution between categories diminishes when filtered by major revisions, as depicted in *FIGURE 6.8* below. For example, the number of major revisions involving

[77] In order to avoid overlap between categories 3 and 4, the coding criteria prescribed that rules involving investing companies are always categorised under topical category 4, even if they contain corporate governance obligations.

[78] Excluding the 20 rules in the 1995 Model Code, which concerned rules on director and insider dealing.

disclosure and corporate governance is nearly equal (eight and seven respectively), while the disparity in total number of revisions between these categories is substantial (39 and 23 respectively).

FIGURE 6.8: Major Rule Revisions by Topical Category, 1995-2020

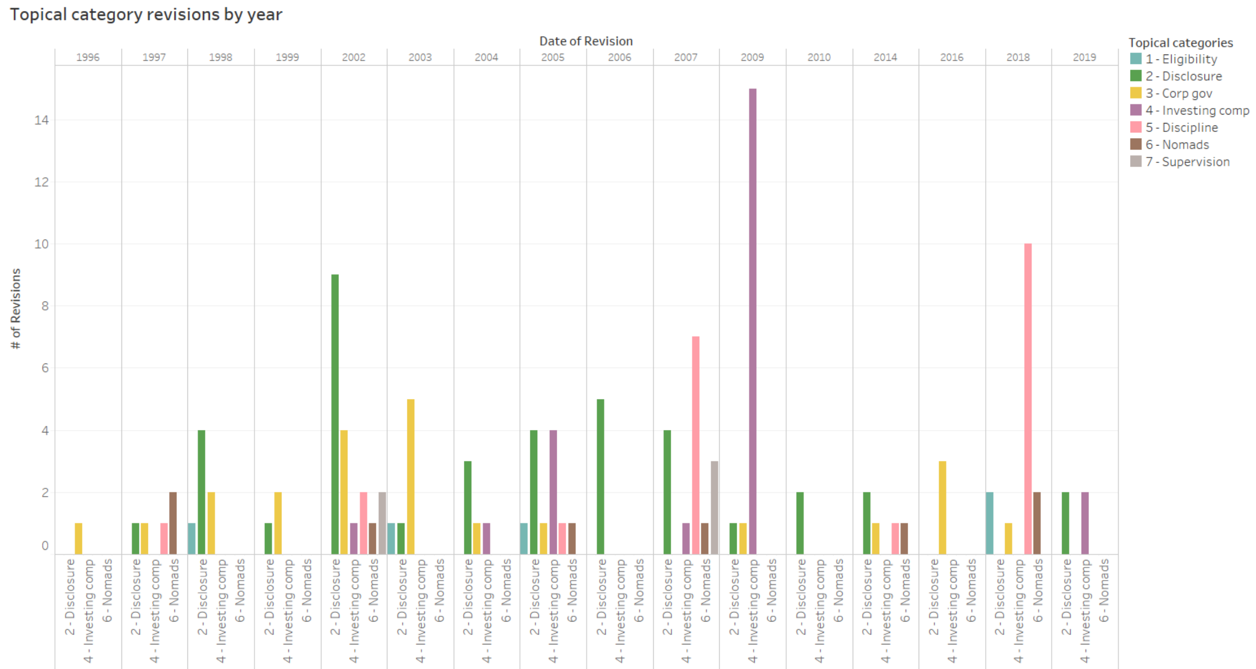


It is also interesting to observe that rule revisions in different categories often occur together rather than in one category at a time. Rule revisions occurred in 16 of 24 years from 1995 to 2020, and *Table 6.5* and *FIGURE 6.9* presents the frequency of rule revisions in different categories being implemented together. These findings are consistent with an episodic, reactive theory of rule evolution where in some years only one category of rule is revised and in others more wide-ranging revisions are implemented.

Table 6.5: Grouping of Rule Revision Categories

Number of Topical Categories Revised	Frequency
1 category	4 of 16 years (25%)
2 categories	2 of 16 years (12.5%)
3 categories	4 of 16 years (25%)
4 or more categories	6 of 16 years (37.5%)

FIGURE 6.9: Topical Category Rule Revisions Organised by Year, 1995-2020



D. *Discussion on the prevalence of private v. public ordering*

A 'voluntary public ordering' variable is coded for in the dataset when the Exchange voluntarily adopts legislative rules that do not by default apply to AIM. Voluntary public ordering can be contrasted with 'mandatory public ordering', or instances where the Exchange is forced to revise the AIM Rules to incorporate legislative rules that apply to AIM. The terms 'legislative rules' or 'legislative sources' are used to denote rules with obligations stemming from UK or EU legislation or regulations, highlighting the distinction between public (legislative) rule-making and private rule-making drafted by the Exchange.

The overall proportion of revisions to the AIM Rules that voluntarily adopt legislative rules applicable to other contexts is expected to be low, consistent with the Exchange seeking to maximise the degree of self-regulatory autonomy amidst the regulatory backdrop of company and securities laws within which AIM operates.[79] It is expected that there will be some voluntary public ordering because of the positive reputational signalling effects of co-opting legislative rules from other contexts, or because legislative rules applicable in other contexts (such as the Main Market of the LSE) may also be appropriate for AIM.[80]

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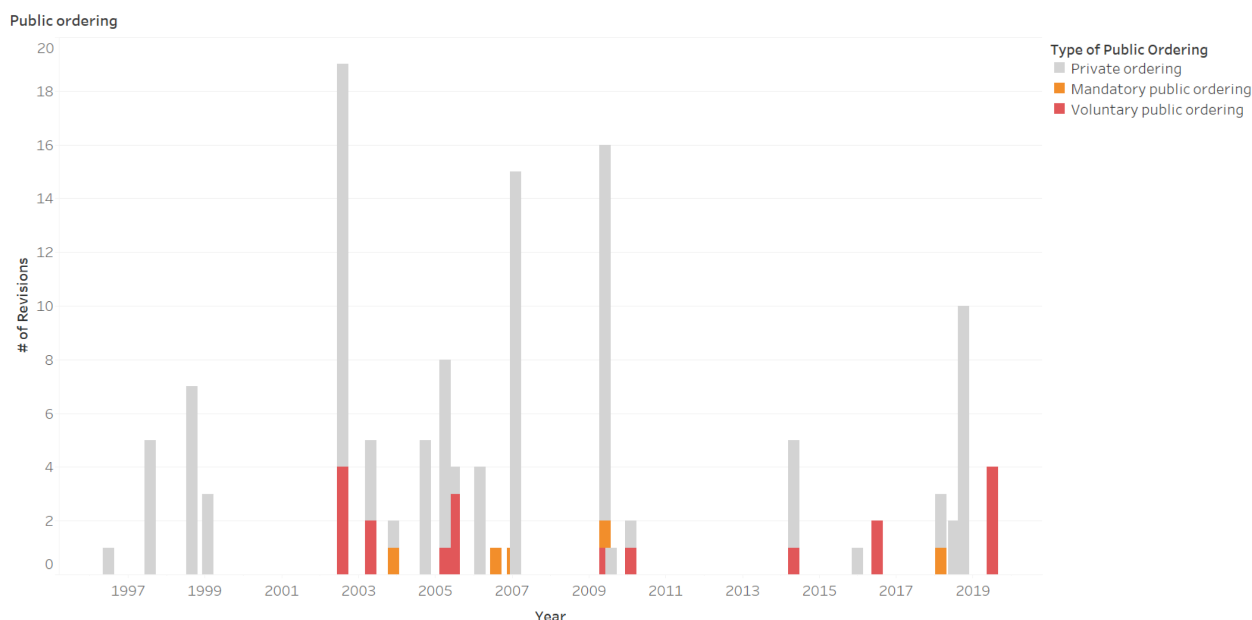
[79] See Chapter 4, Section III(C), Table 4.1 for a summary of the principal legislative rules that apply to AIM. Private ordering on AIM is a complement to these legislative rules (public ordering).

[80] The voluntary adoption of mandatory corporate law rules has been described as the 'market consistency hypothesis', suggests that 'when given the choice, parties will adopt the same rules that mandatory legislation imposes.' See Anita I Anand and Edward M Iacobucci, 'An Empirical Examination of the Governance Choices of Income Trusts' (2011) 8 Journal of Empirical Legal Studies 147, 148. Anand and Iacobucci list possible reasons for the market consistency hypothesis, such as network benefits, or that mandatory corporate law rules may mirror what parties would have chosen on their own.

FIGURE 6.10 below shows that the vast majority of revisions result from private ordering rather than public ordering.

FIGURE 6.10: All Rule Revisions Incorporating Public Legislation, 1995-2020



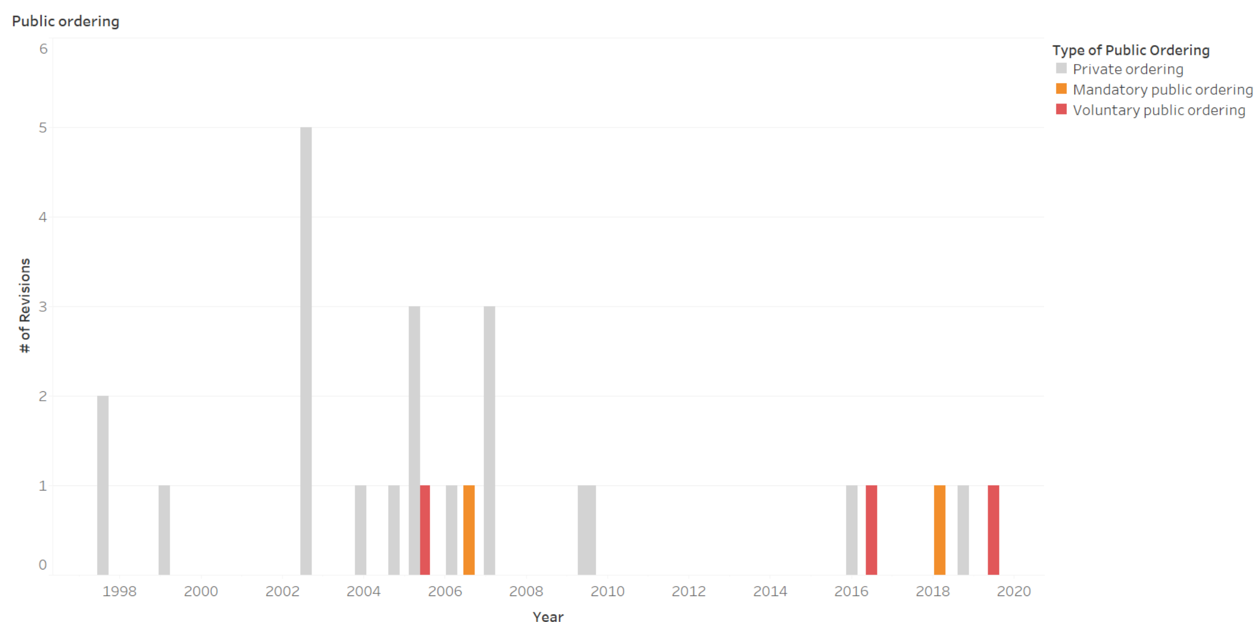
The vast majority (81%) of rule revisions constitute private ordering rather than public ordering. These rule revisions are depicted by the grey bars in *FIGURE 6.10*, indicating that they do not incorporate any form of legislative rules. There are only 24 instances of public ordering amidst 126 rule revisions, indicated by the coloured bars, which total 19% of all revisions. Revisions that voluntarily adopted legislative rules that were not by default applicable to AIM are depicted by the orange bars in *FIGURE 6.10*. These results show that nearly 80% of all public ordering is voluntary (19 of 24 instances, and 15% of all major and minor revisions). Across all rule revisions in the dataset, there are five instances of mandatory public ordering and 19 instances of voluntary public ordering.

The Exchange might voluntarily adopt legislative rules applicable to other contexts for a number of reasons. For example, voluntary public ordering could lower AIM companies'

compliance costs because of pre-existing familiarity with the rules and network benefits (e.g., legal and financial advisers' familiarity with the rules). Alternatively, the Exchange may voluntarily adopt legislative rules applicable to other contexts because of the perceived efficacy of these rules and their appropriateness for AIM. Voluntary public ordering may increase the Exchange's reputational capital if market participants form the perception that the Exchange is opting into more rigorous regulation.

FIGURE 6.11 below depicts major rule revisions only. It is noteworthy that of the 26 major revisions, only five major revisions were due to public ordering. The Exchange voluntarily adopted three major revisions stemming from external legislation and mandatorily adopted two. The two major revisions that mandatorily imposed legislative rules were the IAS Regulation (EC) No. 1606/2002, which mandated certain accounting standards, and MiFiD II in 2018, which required the publication of certain documents and notifications made in the past twelve months to the company's website. Overall, the vast majority (81%) of major revisions are taken at the initiative of the Exchange and do not involve public ordering or the incorporation of external legislation.

FIGURE 6.11: Major Rule Revisions Incorporating Public Legislation, 1995-2020



D. *Discussion on the proportion of mandatory v. enabling rule revisions*

Enabling rules provide more freedom than mandatory rules to issuers to contract as they please. Corporate law theorists with a contractarian perspective advocate enabling provisions to allow parties to optimally contract for their circumstances since 'no one set of terms will be best for all'.[81] However, more enabling rules means less control for the Exchange over issuers' governance, and therefore greater potential for issuer conduct that may deviate from the Exchange's goals, including AIM company failures which harm the Exchange's reputation.

Because of this, one might expect that the proportion of revisions that are mandatory in nature (i.e., do not expand issuers' compliance options) will be high in order to minimise the risk of threats to the Exchange's regulatory goals.[82] In order to maximize the Exchange's control over

[81] Frank H Easterbrook and Daniel R Fischel, 'The Corporate Contract' (1989) 89 Columbia Law Review 1416, 1418.

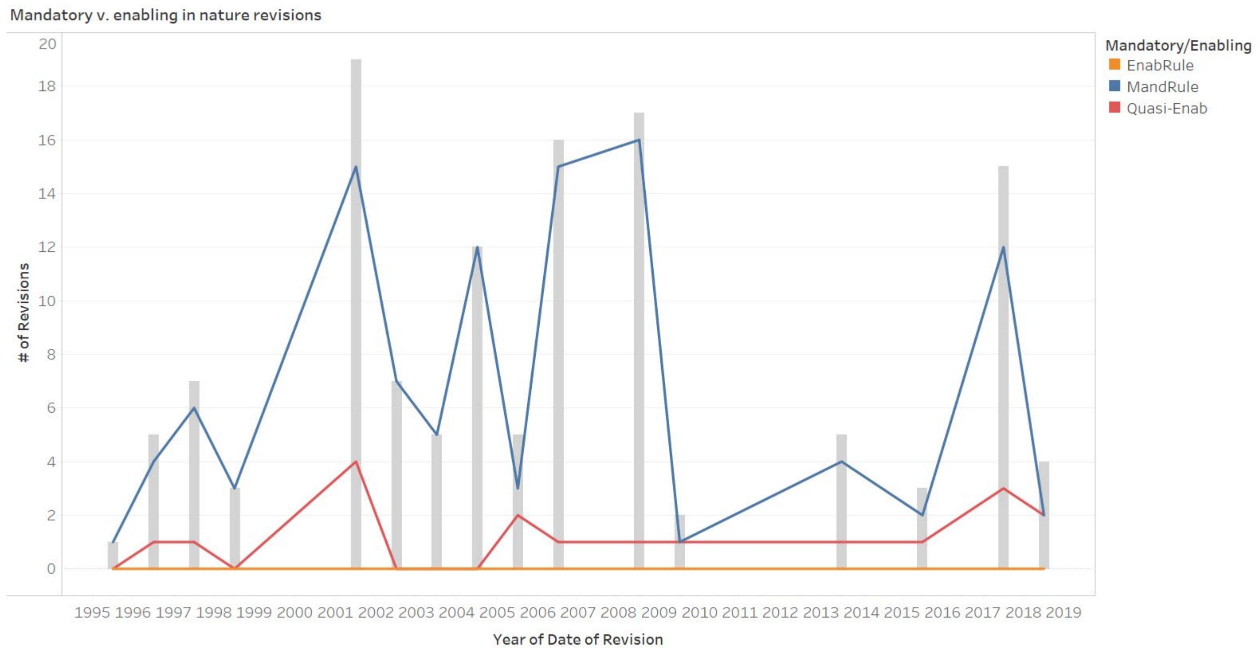
[82] Some legal regimes, such as Delaware corporate law, provide rules that are overwhelmingly enabling. The difference in why the Exchange would prefer a more mandatory regime may be explained by harm to regulatory

issuer conduct, one might also expect that the proportion of revisions that are enabling in nature (i.e., rules that expand issuers' compliance options) will remain low over time, despite possible regulatory demand for more contractual freedom and to avoid the costs associated with 'one size fits all' regimes.

FIGURE 6.12 below depicts the number of mandatory and enabling rule revisions over time. It distinguishes between revisions that were mandatory, enabling, or 'quasi-enabling', meaning that the revision permits a new action without requiring it or the revision expands the compliance options of an otherwise mandatory rule. Overall, *FIGURE 6.12* shows that the proportion of mandatory revisions (which do not expand compliance options) is high, and the proportion of enabling or 'quasi-enabling' revisions (which expand compliance options) is extremely low. The proportion of revisions that are enabling in nature, as indicated by the red line, is always outnumbered by mandatory revisions which do not expand issuers' compliance options.

goals. The enabling design of Delaware corporate law is predicated on the view that promoting managerial creativity and discretion will generate shareholder wealth. However, corporate failure and bankruptcy are not typically attributed to the rule-makers of Delaware corporate law (the state legislature and judiciary) but to the decisions of corporate managers themselves. The risks of enabling rules may not threaten the regulatory goals of the Delaware legislature and judiciary as directly as they endanger the regulatory goals of the Exchange, which (perhaps unfairly) experiences losses to reputational capital when corporate managers of AIM companies exercise discretion permitted by the rules that results in company failure. On the purposes of Delaware's enabling regime, see Leo E Jr Strine, 'The Delaware Way: How We Do Corporate Law and Some of the New Challenges We (and Europe) Face' (2005) 30 Delaware Journal of Corporate Law 673, 675.

FIGURE 6.12: Mandatory v. Enabling in Nature Rule Revisions, 1995-2020



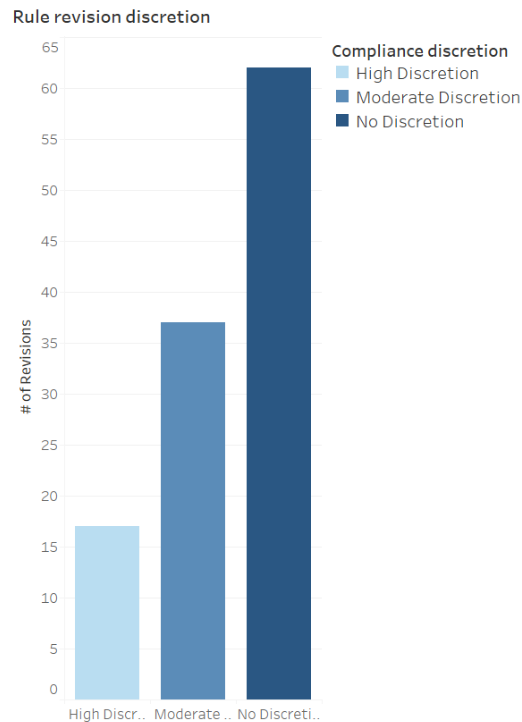
The data are consistent with the notion that the Exchange maximizes regulatory oversight and minimizes the risk of companies deviating from desired regulatory outcomes and potential reputational loss. The flat orange line at the bottom of *FIGURE 6.12* shows that none of the AIM Rules are enabling in the strict sense – i.e., none of the rules may be contracted out of or set aside in favour of alternate arrangements. This is not altogether surprising, since pursuing a regulatory goal or reacting to a regulatory threat requires the Exchange to decide between a formal regulatory response (e.g., a mandatory rule change or disciplinary action) or an informal regulatory response (e.g., an offline conversation or private warning). Enabling rule revisions may less effectively advance regulatory goals or respond to regulatory threats than rule revisions which mandate precise terms of compliance.

E. *Discussion on the proportion of 'high' v. 'low' discretion rule revisions*

The initial AIM Rules contained a mix of rules with objective, black and white terms of compliance, as well as 'grey' rules or principles where the Exchange had a moderate or high degree of discretion to determine compliance ex post. One might expect that regardless of the initial mix of rules, given a choice between rule revisions that set out the terms of compliance objectively (ex ante) versus subjectively (by the Exchange's assessment ex post), the Exchange over time will undertake more discretionary revisions. This is because more ex post discretion maximises the Exchange's rule-making autonomy to make decisions protecting its reputational capital.[83] Although more discretionary rules are undesirable for issuers because they provide less regulatory certainty, AIM companies once listed may be in a weaker bargaining position to contest the imposition of more discretionary rules.

The data presented below in *FIGURE 6.13* and *FIGURE 6.14* show that the Exchange does not revise rules to become more discretionary over time, and that there are generally no trends indicating revisions to the AIM Rules become either more or less discretionary in their rule compliance obligations over time.

[83] While too much ex post discretion would make the AIM Rules less attractive for issuers, the intuition is that the gains from more discretionary revisions (in safeguarding reputational capital) would offset the losses (fewer issuers) up to a high point. This is because the benefit of reducing the risk of reputational harm may outweigh the cost of short-term financial losses on AIM (which constitutes a very small portion of LSEG's balance sheet).



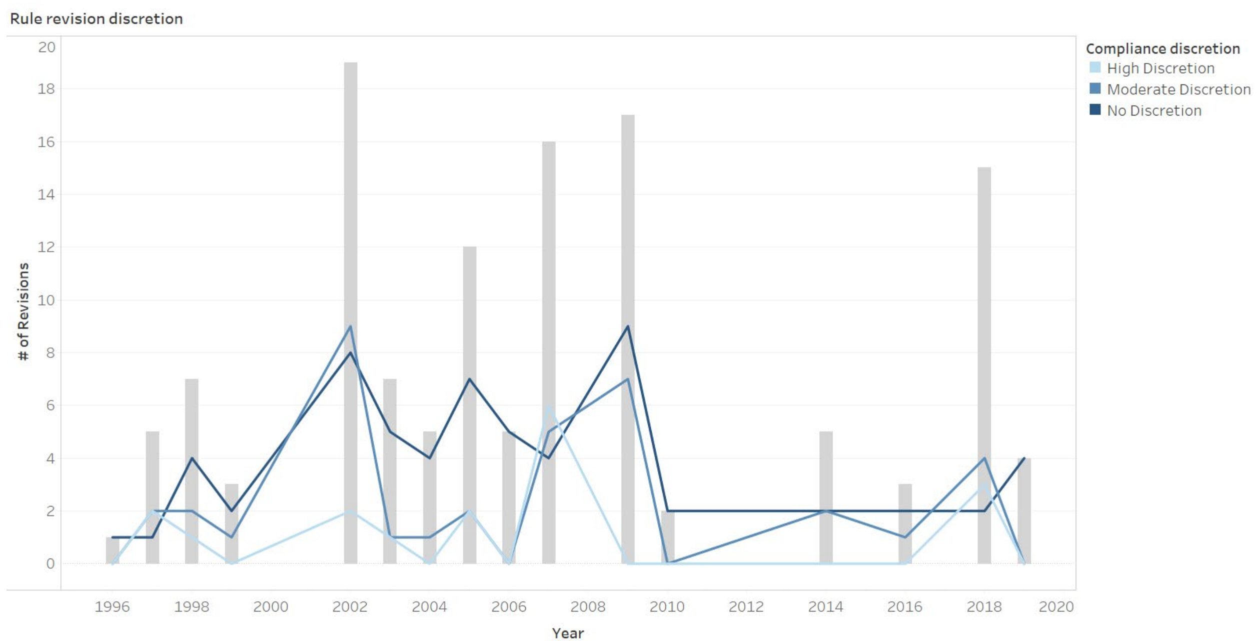
The vast majority of revisions were to rules with no discretion, i.e., rules which contained objective terms of *ex ante* rule compliance.[84] *FIGURE 6.13* shows that roughly 50% (62 of 126) of material revisions occurred to rules with no discretion at all. 29% of revisions (37 of 126) involved moderate discretion – i.e., rules where the Exchange has some discretion in judging rule compliance or meting out sanctions – and only 11% of revisions (14 of 126) implemented high discretion.

The low number of 'high discretion' revisions may be explained by the greater number of 'principles' (defined as obligations with consequences or conditions requiring evaluative

[84] The nature of the revision (high v. low discretion) almost always matches the nature of the numbered rule (principle v. rule). A rare example of when a low discretion rule was revised to become a high discretion principle was Rule 16.29 of the AIM Rules for Companies (February 1999): 'A nominated adviser must be entered on a list maintained by the Exchange, having completed all necessary application forms… <u>[and must comply] with any special condition of which the Exchange has informed the nominated adviser</u>' (emphasis added for new text added via revision).

judgment) than 'rules' (which possess binary, yes/no conditions). 28% of the numbered rules in the initial 1995 AIM admission rules could be classified as principles because of their grey nature with respect to rule compliance, compared with 23% in the 2019 Rules for Companies. However, as *FIGURE 6.14* shows below, the number of high discretion revisions has not increased over time and has always remained consistently low. These findings suggest that the Exchange *does not* after all protect its reputational capital is by revising rules over time to have less objectively clear terms of compliance. These findings also provide evidence of a principles-based system increasing the specificity of its regulatory compliance obligations over time, rather than becoming more and more open-textured as time goes on.

FIGURE 6.14: Number of High, Moderate, and Low Discretion Rule Revisions, 1995-2020



SECTION V Conclusion

In order to better understand the private rule-making incentives of stock exchanges, this chapter has focused on AIM as a case study and first asked: *How do the AIM Rules evolve over time?* Relying on a hand-compiled dataset of the material revisions to the AIM Rules from inception in June 1995 to June 2020, this chapter has shown that major rule revisions are front-loaded on AIM, with nearly three-quarters of major revisions occurring between 1995 to 2007. The finding that rule revisions occur episodically supports the reactive theory of rule evolution put forth, and is consistent with Hypotheses 1 and 2.

Analysis of further characteristics of the Exchange's rule revisions over time yields other noteworthy findings. Rules belonging to different topical categories evolve at different rates, and rule revisions tend to concern multiple categories at once rather than only one category at a time. Public ordering and private ordering are intimately intertwined in the Exchange's rule-making, as the Exchange voluntarily adopted a small but significant number of legislative rules that would not otherwise apply to AIM (15% of all revisions). Rule revisions are predominantly mandatory rather than enabling in nature, and the Exchange has *not* revised the AIM Rules to become more discretionary. AIM is therefore an example of a principles-based regime that has increased the specificity of its regulatory compliance obligations over time.

Rule revision occurs episodically in peaks after periods of stasis or rule-making inactivity, which is consistent with a punctuated equilibria theory of path dependence. This leads to a second, more difficult question: *Why have the AIM Rules evolved in this way?* This chapter has suggested that rule revisions are regulatory responses triggered by threats to private or public goals of the regulator. In the context of AIM, it was proposed that revisions to the AIM Rules are triggered by the threat or existence of harm to the Exchange's reputational capital. Five rule revision peaks

were identified, and a reputational trigger account for why these periods of rapid change disrupt the regulatory stasis was proposed. These findings present, rather than a decisive conclusion, a beginning for further study on how best to measure legal evolution, and for garnering further insight into the causes and dynamics of rule evolution.

CHAPTER SEVEN

CONCLUSION

This final chapter provides an opportunity to look back and ask what lessons on reputation and self-regulation can be gleaned from 25 years of the London Stock Exchange's regulation of AIM. It also provides an opportunity to look forward and consider what challenges and regulatory obstacles lie ahead for AIM, not least among them the financial distress inflicted by COVID-19, and how the Exchange could chart tomorrow's uncertain waters.

Building on established traditions of legal and economic thought, this dissertation has suggested that a holistic conception of regulation in securities markets requires understanding how formal and informal regulation influence the conduct of market participants. If the predominant concern of effective self-regulation might fairly be described as 'incentives, incentives, incentives', this dissertation has shown that it is imperative to focus not only on the private rule-maker's incentives, but also on those of gatekeepers and other key players in the regulatory system. Its main contribution, which we have arrived at through considering the widest range of evidence to date on AIM, has been demonstrating how reputational considerations are at the heart of the inquiry into self-regulatory incentives. Reputational incentives have profoundly influenced the Exchange's formal regulation and rule-making on AIM for the past 25 years. They have also prevented the quality of regulation on AIM from deteriorating in the second half of its history, as Nomad-brokers have become more incentivised to perform their roles diligently. Reputational incentives constitute an unwritten core of regulation that has done the regulatory heavy-lifting on AIM, providing an example that market integrity need not decline in lower-cost regulatory environments.

The first concrete lesson learned is that the more reputational capital a gatekeeper has at stake, the stronger the incentives it will have to perform its role well. The more future business a Nomad-broker has to lose in the event of a gatekeeping failure, the less likely it is to succumb to a conflict of interest, and the better its gatekeeping will be. AIM is a much different market today than at its peak in 2007, when it hosted more than twice the number of companies. It is now characterised by fewer, larger issuers, and has starkly shifted towards the vast majority of funds being raised through secondary offerings rather than IPOs. The increase in repeat interactions between issuers and investors in secondary offerings would be expected to reduce demand for lax Nomads and cause them to exit the market, which is consistent with evidence that the number of Nomads has declined by at least two-thirds since 2007. In the years following the global financial crisis, a time which inaugurated a period of reform in AIM's history, it appears that the Exchange took steps to increase the reputational incentives of its gatekeepers by managing down the number of Nomads and publicly censuring Nomads and issuers for the first time. These efforts have strengthened reputational incentives, prevented a race to the bottom in the quality of regulation, and alleviated the conflict of interest of reputable Nomad-brokers.

Several necessary conditions for effective self-regulation emerge from this lesson. Theory holds that regulation that relies on honest and diligent gatekeepers only works in a market of repeat players. Repeated interactions between the same market participants are needed to provide long-term payoffs for maintaining reputational capital. AIM is a market characterised by repeated interactions amongst a tight knit community in 'the City', London's financial district, and its delegated self-regulatory model might be less effective in regulatory environments with fewer repeat players and where the threat of exclusion is weaker. Reputational mechanisms work best when norms and reputational sanctions are imposed by local market participants such as Nomads

and brokers, who are based in the City and derive most of their business there. Local gatekeepers can impose discipline on globally dispersed market participants such as issuers, which lack strong reputational incentives but need gatekeepers to join and remain in the market. For stock exchanges in similar localized contexts, gatekeeper-based listing regimes may provide a promising avenue to overcome the problems of fragmented reputational information that characterize global capital markets. Understanding a market's reputational dynamics also has implications for how discipline is carried out. The Exchange could increase the number of public censures and publicized disciplinary actions, which have historically been very low, in order to leverage the power of reputational sanctions in preventing misconduct. Further research needs to be done on the strength of reputational sanctions for micro-cap companies and preventing misconduct at the low end of the market. Micro-cap companies tend to have little or no institutional shareholdings, less reputable Nomad-brokers, and their share price can fluctuate wildly as retail investors, speculators and pundits offer the latest opinion on bulletin boards or other online fora.

A second lesson is that a reliance on informal regulation concentrates regulatory authority in the hands of the private rule-maker, who may be tempted to exercise power discriminatorily or arbitrarily. This creates a lack of certainty for market participants who, as Chapter Four explained, may have expectations of procedural or other entitlements with the Exchange. It also has legal ramifications, because if Exchange is exercising power that is 'public in nature', it must do so in accordance with the administrative law requirements of procedural fairness. The lack of regulatory transparency that comes with relying on unwritten rules and informal regulation is likely to frustrate market participants and attract additional claims for judicial review of decisions by the Exchange, despite its attempt to insulate its private regulation from judicial review by vastly complexifying its disciplinary procedural rules.

A third generalizable lesson from this study is the need to clearly articulate the priority of regulatory objectives and be explicit about required trade-offs. AIM illustrates the pronounced tension between providing SMEs with access to capital and achieving other regulatory objectives, such as market integrity or financial stability.[1] One of the regulatory objectives of SME growth markets is 'to facilitate access to capital for [SMEs]',[2] a priority that is echoed by the Exchange.[3] However, high growth companies pose higher investment risk, and the more the Exchange makes AIM accessible for SMEs, the more likely it will attract criticism when these companies fail. This brings the objective of facilitating SME growth directly into conflict with the Exchange's goal of prioritising market integrity and its reputational interests.[4]

The Exchange appears to have delivered on its goal of preserving market integrity: the evidence presented in Chapter Five suggests that it has prevented a decline in market integrity following the financial crisis of 2007-08. But at what cost? AIM has performed less well with its

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[1] For discussion of this tension, see Iota Kaousar Nassr and Gert Wehinger, 'Opportunities and Limitations of Public Equity Markets for SMEs' (2015) 1 OECD Journal: Financial Market Trends 71 <https://www.oecd-ilibrary.org/content/paper/fmt-2015-5jrs051fvnjk>.

The European Capital Markets Union faces the same regulatory tension between providing access to capital for SMEs, reducing regulatory burdens, and achieving other objectives such as investor protection and minimising financial risk. The ESMA Securities and Markets Stakeholder Group has conceded that '[t]here isn't a single point of reference that explicitly defines the objective of SME growth markets, or how their success can be measured or assessed.' See ESMA Securities and Markets Stakeholder Group, 'Report: Access to Public Capital Markets for SMEs' (November 2017) 11 <https://www.esma.europa.eu/sites/default/files/library/esma22-106-535_smsg_report_on_access_to_public_capital_markets_for_smes.pdf>.

[2] MiFID II, recital 132.

[3] The Exchange seeks to ensure 'that AIM is a market accessible to small and medium sized growth companies and entrepreneurs', and 'AIM's market model seeks to provide growth companies with the opportunity to join a public market.' See AIM Regulation, 'AIM Notice 46: Discussion Paper, AIM Rules Review' (11 July 2017) 4, <https://docs.londonstockexchange.com/sites/default/files/documents/aim-discussion-paper-july-2017.pdf> accessed May 2020.

[4] 'London Stock Exchange operates AIM with an overarching objective of maintaining the integrity and reputation of its growth market.' See London Stock Exchange, 'AIM Regulatory Landscape - Who's Who' <https://perma.cc/YYV8-7B7G>.

other regulatory objective of providing access to capital for SMEs. AIM companies are larger than ever before, with the mean market capitalization increasing by more than half since 2007, and the number of companies declining by half. The Exchange has sacrificed accessibility for SMEs in order to preserve its reputation and market integrity. Therefore, when asked ‘Is AIM a success?’, a thoughtful answer begins with another question in response: ‘Measured according to which regulatory objective?’. To prioritise access to capital for ‘small SMEs’, defined as those with annual revenue of less than €10 million and fewer than 50 employees, the Exchange would need to rely on more and smaller Nomads, as it did back in its pre-financial crisis heyday.[5] However, smaller companies pose a higher supervisory burden for Nomads, according to one interviewee, and are less profitable for the broking side. There are many reasons why the Exchange should *not* want to increase reliance on a higher number of small Nomads. Smaller Nomad-brokers may have weaker reputational incentives because less future business is at stake, and they may experience a more acute gatekeeping conflict of interest due to tighter short-term financial pressures. In order to remain effective, the Exchange must walk a delicate balance between not having too few Nomads on the register, which would decrease access to the market for small SMEs, and not having too many, which would decrease Nomads’ rewards for being strict rather than lax gatekeepers. Nomad governance has always been and will continue to be of the utmost importance on AIM, since the quality of AIM regulation is only as good as its gatekeepers.

Looking ahead, a significant challenge for the Exchange will be how to balance these inevitable regulatory trade-offs. AIM cannot be all things to all investors. The trajectory of AIM

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[5] See Commission Recommendation of 6 May 2003 concerning the definition of micro, small, and medium-sized enterprises (2003/361/EC), Annex, art 2.

has been towards courting larger SMEs rather than start-ups even from its initial years.[6] The regulatory burden for AIM companies has increased due to a rising tide of public financial regulation and the Exchange's private rule-making, as Chapters Four and Six have detailed. This narrows the relative benefits of AIM's lower costs of compliance. The less differentiation AIM retains from the LSE Main Market and other 'regulated markets', the less attractive it is for companies to list. This poses serious cause for concern. The demise of AIM's predecessor, the Unlisted Securities Market, was hastened by narrowing regulatory differentiation between the USM and the Main Market. The USM was also crippled by the persistent effects of the 1987 Black Monday crash, as Chapter Five explained. AIM has the same raison d'être as the USM once did – to provide a more accessible, less onerous regulatory environment for smaller companies – and the USM should provide a cautionary example of the consequences of SME listing venues that no longer serve their purpose.

The financial distress inflicted by COVID-19 will constitute a major challenge for AIM. The Exchange will need to ensure that any drop in fundraising does not cause Nomad-brokers to exit the market, and to reverse the trend of very few of companies joining the market. IPOs are one measure of the health of any public securities market, akin to a canary in the coal mine. Although AIM should not return to its peak of more than 250 IPOs per year from 2004 to 2007, it is problematic that there have been fewer than 10 IPOs in 2019 and 2020, down from 42 and 49 IPOs in 2017 and 2018.[7] The Exchange will need to find ways to minimise the regulatory costs of

[6] The authors of a treatise on AIM for legal practitioners, writing in 2002, noted that 'In the early days, a market capital of £2m to £5m would have been sufficient and, indeed, there was a place for start-ups, but this has changed and the usual minimum required by Nomads is £10m to £12m.' Keith Hatchick, Keith Smith and Paul Watts, *The Alternative Investment Market Handbook* (2nd edn, Jordan Publishing 2002) xi.

[7] See Tom Howard, 'Aim Endures Its Worst Year Ever for IPOs' *The Times* (27 December 2019) <https://www.thetimes.co.uk/article/aim-endures-its-worst-year-ever-for-ipos-d5vkdjqv8>; LSEG, 'London IPO

the market for AIM to brave its competition, which comes primarily from private equity and other corporate buyers who purchase high-growth companies and keep them private.

Finally, should Nomads be prevented from also acting as brokers, given the conflict of interest in policing the source of their paycheque? The most realistic assessment came from a Nomad interviewee with decades of experience on AIM: 'The market is characterised by integrated houses… it's been that way for 300 years and is not about to change.' It is true that brokers have always had the potential for significant conflicts of interest. When organised securities trading began in London more than 300 years ago, the functions of brokers and jobbers (i.e., dealers) were not initially separated.[8] To incentivise good behaviour, City officials licensed a limited number of brokers, who were required to take an oath to 'enter into a bond of good behaviour'.[9] It was not until 1878 that the LSE rules prevented member firms from acting in a double capacity as brokers and dealers,[10] however this was later abolished by the Exchange in the so-called 'Big Bang' of 1986.[11] Learning from the past, the history of the LSE has proven that managing conflicts of interest is a more tenable long-term strategy than attempting to eliminate them. Indeed, Nomad

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Market Soars in 2017' <https://www.lseg.com/resources/media-centre/press-releases/london-ipo-market-soars-2017> accessed November 2020.

[8] Jobbers were dealers who dealt in their own account as principals, unlike brokers who only acted as agents for clients. Jobbers historically played a market making role in quoting current quote bid and ask prices. E Victor Morgan and WA Thomas, *The Stock Exchange: Its History and Functions* (2nd edn, Elek Books Limited 1969) 21. See also WA Thomas, *The Big Bang* (Philip Allan 1986) 4.

[9] Morgan and Thomas (n 8) 21–23.

[10] Thomas (n 8) 3–5. The LSE introduced further rules in 1908 and 1909 preventing members from changing between broker and jobber roles without the LSE's consent, as well as introducing rules on commission to reinforce the double capacity separation.

[11] The 'Big Bang' refers to the Exchange abolishing fixed commissions and the restriction of members acting in a double broker-dealer capacity. It has also come to describe the 'revolution' in the operation of financial markets in the City of London in this period. See Ranald Michie, *The London Stock Exchange: A History* (Oxford University Press 1999) 560.

retainer fees only 'keep the lights on', and the vast majority of Nomads serve this regulatory role in order to receive profits on the broking side. Preventing Nomads from acting as brokers would eliminate not only their conflict of interest, but also their incentives to act as Nomads in the first place.

The critical challenge of self-regulation is achieving outcomes and goals that are aligned with the public interest. In the past, the 'high reputation' of issuing houses like Rothschild 'ensure[d] that their interests [were] in a great measure identical with those of the investing public.'[12] In the future, successful regulation on AIM will require the Exchange to continue strengthening Nomads' reputational incentives and long-run payoffs for diligent gatekeeping, thereby reducing the conflict of interest. Nomads' private interests must align with the Exchange's regulatory objectives, all the while without neglecting the public interest in providing SMEs with public equity financing. History is a wise teacher, and the best way ahead much resembles the path taken before.

[12] F Lavington, *The English Capital Market* (Methuen & Co Ltd 1921) 195.

APPENDIX

SECTION I Sample Interview Questions

For all constituents

1. **Background:** Can you describe your background and experience working with AIM companies?

2. **Governance on AIM:** How was AIM evolved during your time in the market? Do you believe AIM governance has improved or deteriorated in the years since you have worked in the market?

3. **Governance on AIM:** Do you have any comments on AIM's regulatory environment? What are some of the regulatory challenges you face as a [director or company manager]/[Nomad]/[etc.]?

For directors and managers

4. **Nomads:** How did you choose your Nomad? What factors did you consider?

5. **Brokers:** How did you choose your broker? What factors did you consider?

6. **Rules:** How often do you contact your Nomad for guidance on whether your company's actions comply with the Rules?

For Nomads

7. **Clients:** How does your firm attract clients?

8. **Business:** Do you consider regulatory advisory services as a means to attract more lucrative corporate finance business?

For all constituents

9. **Integrated houses:** Do you perceive a tension between firms providing both Nomad advisory services and corporate broking services?

10. **Compliance:** Do you believe some Nomads are stricter at supervising issuers, encouraging rule compliance, and reporting rule breaches to the Exchange than others? If so, how is this known?

11. **Compliance:** What is your perception of enforcement of the Rules by AIM Regulation?

SECTION II Approved Ethics Forms – Participant Information Sheet

INFORMATION SHEET

Ethics Approval Reference: R60653/RE002

Title: Reputation and self-regulation in securities markets: A study of the London Stock Exchange's Alternative Investment Market

1. Research overview and participation

This research involves a case study of regulation on the Alternative Investment Market (AIM) and seeks to understand the key drivers contributing to or hindering the quality of governance on AIM. You are being asked to participate in a short interview (approx. 20 to 30 mins) to *confidentially* share your perspective, *without being named.* You have been invited to take part because of your professional expertise and familiarity with AIM market practice.

2. *Information confidentiality*

No individually identifying information will be published. Your permission is requested to use direct quotes in such a way that your individual identity cannot be guessed but that your AIM constituency is identified (e.g., qualified executive, company director, etc.). Due to the small sample size of certain AIM constituencies, complete anonymity (i.e., zero information potentially identifying the interviewee) cannot be guaranteed, although interviewee names and individually identifying information will *not* be published. Confidentiality cannot be fully guaranteed for non-encrypted forms of communication (e.g., telephone conversations). You will *not* be individually identified in dissertation-related publications and direct quotes will *not* be personally attributed to you. Your participation in the interview will be kept strictly confidential.

3. Benefits and risks to participating in the research

The principal benefit of taking part is the chance to contribute to the paucity of academic research on AIM that contribute to a deeper understanding of AIM's self-regulatory model. Participants will also receive and be provided with the opportunity to comment on a summary report highlighting the study's key research findings and recommendations.

No preparation is required on your part for the interview. No social risks (harm to your social welfare) and minimal economic risks (harm to your economic welfare) are involved in your taking part. At most, participants may reflect on the regulation of AIM and the conduct of their organisation as it relates to AIM.

4. Expenses and payments

There will be no payment for taking part in this study. Any food and beverage expenses incurred during the interview will be covered by the researcher.

5. Data security (GDPR)

Consistent with obligations under the EU General Data Protection Regulation (GDPR), only minimal personal data will be stored. Personal data includes your name and organisation details, along with audio recordings. Only the researcher will have access to this personal data stored confidentially on the researcher's secure, password-protected computer. All research data (i.e., the information you provide)

will also be stored confidentially using the researcher's password-protected computer and encrypted electronic storage device.
In addition to the researcher, the researcher's supervisors may have access to the research data and limited personal data (only audio recordings) in order to verify the accuracy of the research data (e.g., pseudonymised transcripts). Any files that need to be shared with the researcher's supervisors will be encrypted prior to transferring them. All research data and records will be privately stored for at least three years after publication or public release of the work of the research, after which all audio recordings, full transcripts, and identifying information will be deleted.
The University of Oxford is the data controller with respect to your personal data, and as such has regulations that determine how your personal data is used.

The University will process your personal data only for the purpose of the research outlined above. Research is a task that we perform in the public interest.

Further information about your rights with respect to your personal data is available from

https://compliance.admin.ox.ac.uk/individual-rights.

6. ***Research publication***

The research will be presented in the researcher's dissertation document which will be deposited in the University of Oxford archives. In addition, the research may be published in a book or academic journal articles.

7. ***Research ethics approval***

This study has been reviewed by, and received ethics clearance through, the University of Oxford Central University Research Ethics Committee (Reference number: R60653/RE002). If you wish to make a formal complaint, please contact the University of Oxford's Social Sciences & Humanities Interdisciplinary Research Ethics Committee at ethics@socsci.ox.ac.uk.

8. ***Questions or concerns about the study***

If you have a concern about any aspect of this study, please speak to the researcher (Jonathan Chan, phone ●) or his supervisors (john.armour@law.ox.ac.uk; luca.enriques@law.ox.ac.uk), who will do their best to answer your query. The researcher will acknowledge any concern raised by you within 10 working days and give you an indication of how he intends to deal with it. Please contact the researcher if you wish to discuss the research beforehand or should you have any questions afterwards.

If you remain unhappy or wish to make a formal complaint, please contact the chair of the Social Sciences & Humanities Interdisciplinary Research Ethics Committee at the University of Oxford who will seek to resolve the matter in a reasonably expeditious manner: Email: ethics@socsci.ox.ac.uk; Address: Research Services, University of Oxford, Wellington Square, Oxford OX1 2JD.

SECTION III Coding Criteria for Leximetric Study (Chapter Six)

TABLE 7.1: ADDITIONAL NOTES ON DATASET

Composition of dataset	The dataset consists of a Microsoft Excel spreadsheet with separate tabs for each iteration of the AIM Rules for Companies. For a complete list of documents comprising the dataset, see the 'List of AIM Documents Reviewed for Dataset' in this Appendix at *Table 5*. The dataset begins with the earliest set of AIM Rules governing the inception of the market in August 1995. The full text of each rule is presented in a separate row entry. For subsequent sets of AIM Rules, only material revisions to rules are presented in separate row entries, unless a new rulebook is being introduced (e.g., the 2007 Nomad Rules), in which case the full text of each rule is presented. Rules that do not change are not re-presented in the dataset. Consequently, some versions of the AIM Rules with few rule revisions only contain a handful of row entries in the worksheet (e.g., the May 2003 worksheet lists five changes to the rules), and some versions (e.g., the 2018 Nomad Rules) have only one row entry indicating there were no material changes.
Summary of a revision description in the dataset	For each iteration of the AIM Rules (apart from August 1995), each rule revision has an individual row entry containing a description of the rule amendment written by the researcher. A summary of the revision or a subject matter keyword is presented in bold font, followed by a brief description or quotation of the revised rule. For example, one entry in the February 1999 worksheet reads: '**Fairness statement by directors for related party transactions:** the requirement for an announcement of RPTs is modified to include a statement from the directors that, having consulted with the Nomad, the 'terms of the transaction are fair and reasonable' to the shareholders (16.24).'
Missing data	A challenge of working with archival documents – in this case, early non-public copies of the AIM Rules – is that pieces will be missing. More detailed methodological notes are contained in the researcher's Excel database, but a summary of missing data is presented below. 1. The researcher does not possess a copy of the 1995 Model Code (containing rules on director independence and insider dealing) which complements the 1995 Company Rulebook. Accordingly, none of the rules contained in the 1999 Model Code are counted as revisions.

	2. The researcher's archival copy of the August 1995 Rules does not contain the definitions or glossary section. Accordingly, definitions in the February 1999 Rules were not reviewed for material revisions. 3. The researcher's archival copy of the August 1995 contains the 'AIM admission rules' but does not contain the guidance notes (which were not formally part of the rules at this time). 4. The researcher does not possess copies of the 'AIM trading rules' referenced in the February 1999 Rules for Companies. 5. The researcher does not possess a copy of the Nomad eligibility criteria prior to April 2005. The February 1999 Rules for Companies reference Nomad eligibility criteria for the first time; these may have been introduced in August 1997 when rule 16.29 referencing Nomad eligibility was amended. The eligibility criteria (presumably on Nomad independence requirements) were produced in a separate Nomad Eligibility Criteria booklet rather than contained in the body of the listing rules. Accordingly, revisions to the Rules for Nomads are counted from 2005 onwards. 6. The researcher does not possess copies of Disciplinary Handbooks prior to October 2006; however, the first reference to a 'Disciplinary Procedures and Appeals Handbook' is in the August 2002 AIM Rules for Companies. (The Exchange published a consultation document in October 2006 with proposed revisions to the Disciplinary Handbook. It is not clear whether the blackline showing proposed changes is against a 2006 copy of the Disciplinary Handbook or from an earlier date.) Accordingly, revisions to the Disciplinary Handbook are counted from 2007 onwards, and revisions to the 2007 Handbook are compared with the Handbook upon which the October 2006 consultation document sought feedback. These missing data do not materially undermine the analysis in Chapter Six. <u>Data at points 1 and 2.</u> The data identified at 1 and 2 result in (at most) a four-year gap of revisions. However, this gap is unlikely to contain a high number of revisions because the rules contained in the Model Code and glossary are less likely to be material (applying the coding criteria) than those contained in the listing rules. <u>Data at point 3.</u> The data identified at 3 is not material since guidance notes are not counted as rules under the methodology. However, guidance notes help the researcher to understand how the rules are interpreted.

Data at point 4. The data identified at 4 does not appear to relate to the company rulebook, but rather to the LSE's rules broker rules for trading AIM securities. At present, these rules are contained in the *Rules of the London Stock Exchange*. The only material rules in this rulebook (to the rule evolution study and applying the coding criteria) are those restricting the trading of AIM securities to 'AIM primary and secondary registered organisations' (meaning that AIM securities can only trade on venues approved by the LSE). This change was instituted in 2009 and is captured in the dataset. It is therefore unlikely that the February 1999 trading rules would have contained material revisions.

Data at points 5 and 6. The absence of Nomad eligibility criteria prior to 2005 and the Disciplinary Procedures and Appeals Handbook prior to 2006 are the most significant missing data, since this represents a gap of possible revisions for six years (1999-2005) for the Nomad rules and four years (2002-2006) for the Disciplinary Handbook. It is not clear exactly when these rulebooks came into existence, and the above dates are estimates based on the earliest references to the Nomad eligibility criteria and Disciplinary Handbook in other archival documents.

The materiality of these absences is lessened by several observations.

First, the Nomad rules and Disciplinary Handbook were significantly revised in 2007, and these rule revisions are included in the dataset.

Second, only 20% of major revisions from 2007 to 2019 involved the Nomad rules and Disciplinary Handbook, although 35% of all revisions during this period concerned Nomads and discipline. The study's significant findings are predicated on major revisions, and it is unlikely (given the pattern of revisions from 2007 to 2019) that more than a quarter of major revisions would have been missed during the periods 1999-2005 and 2002-2006. For example, the Disciplinary *Procedures and Appeals* Handbook relates to predominantly procedural rules that largely do not meet the materiality criteria (this is true even of the recent handbooks).

Third, the researcher reviewed the earliest copies of the Nomad rules and Disciplinary Handbook to see how many material rules they contained that were not present in the 1999 company rulebook, in order to arrive at an estimate of how many material revisions to these rulebooks occurred from 1999-2005 and 2002-2006. The researcher found 4 major (material) rules and 6 minor (material) rules in the Nomad rules, and 2 major (material) and 17 (material) minor rules in the Disciplinary Handbook. These rules are not included in the dataset because the date of the revisions is not known. However, they do indicate that approximately 6

	major revisions (there are 26 in the dataset) and 23 minor revisions (there are 100 in the dataset) occurred during these years. Fourth, and most importantly, the missing data does not undermine the researcher's principal findings because, if anything, the missing data would strengthen the researcher's finding that rule revision on AIM is front-loaded in the first half of AIM's history (1995-2007). Thus, while the researcher acknowledges that approximately 6 major revisions are not included in the dataset, these revisions would have enriched the analysis but would not rebut the principal findings of the study.

TABLE 7.2: NON-MATERIAL RULE REVISIONS

Original language	**Revised language**	**Reason not counted as rule change**
• 'there must be no issued securities of the same class that are not admitted to trading on AIM' (August 1995 Rules, 16.1(c))	• 'all other issued securities of the same class must be admitted' (February 1999 Rules, 16.1(c))	• Formal, no substantive change
• 'an applicant must pay the AIM fee and submit to the Exchange six copies of its admission document, and a completed application form.' (December 2003 Rules, 4)	• 'an applicant must pay the AIM fee and submit to the Exchange ~~six copies of its admission document, and~~ a completed application form [new text] *and an electronic version of its admission document*.' (October 2004 Company Rules, 5)	• Substantive change, but not material from perspective of reasonable investor
• 'An AIM company must issue notification without delay of: … the reason for the application for admission or cancellation of any AIM securities.' (February 2010 Company Rules, 17)	• 'An AIM company must issue notification without delay of: … the reason for the application for admission or cancellation of any AIM securities [new text] *and consequent number of AIM securities in issue*' (May 2014 Company Rules, 17)	• Substantive change, but not material from perspective of reasonable investor
• 'An applicant must produce an admission document disclosing the information specified by	• 'An applicant must produce an admission document disclosing the information specified by Schedule Two.	• Substantive change, but not material because revision does not alter companies/investors' legal obligations.

Schedule Two.' (February 2010 Company Rules, 3)	[new text] *An applicant must take reasonable care to ensure that the information contained in the admission document is, to the best of the knowledge of the applicant, in accordance with the facts and contains no omission likely to affect the import of such information.*' (May 2014 Company Rules, 2)	Omissions from admission documents were not formerly permissible under the legal regime governing AIM companies, so the AIM Rules now setting this out explicitly is not a material change.

TABLE 7.3: TOPICAL CATEGORIES ASSIGNED TO RULE REVISIONS

Category	Sub-category	Description and coding criteria
1. Eligibility	**1.1** Admission eligibility **1.2** Ongoing eligibility **1.3** Both (admission and ongoing eligibility)	Rule is assigned to category 1 if the rule content predominantly relates to an issuer's eligibility for admission to AIM or requirements to maintain an AIM listing. Rules prescribing content for both admission and ongoing eligibility are classified under sub-category 1.3.
2. Disclosure	**2.1** Disclosure at admission **2.2** Continuous/periodic disclosure **2.3** Both (initial and continuous disclosure)	Rule is assigned to category 2 if the rule predominantly relates to an issuer's disclosure obligations. Rules prescribing the contents of an issuer's admission document are assigned to the sub-category 2.1. Rules requiring notification of information to the public on a continuing or ad hoc basis are assigned to sub-category 2.2. Rules relating to the preparation of half-yearly and annual accounts are assigned to sub-category 2.2. Rules requiring disclosure at admission and on a continuing or ad hoc basis are assigned to sub-category 2.3.
3. Corporate governance	**3.1** Insider dealing **3.2** Corporate transactions **3.3** Related party transactions **3.4** Directors **3.5** Shareholder voting **3.6** Securities	Rule is assigned to category 3 if the rule predominantly relates to an issuer's corporate governance and shareholding arrangements. Rule is assigned to sub-category 3.1 if it predominantly relates to insider dealing (i.e., the trading of securities by corporate insiders). Rule is assigned to sub-category 3.2 if it predominantly relates to a 'substantial transaction', 'reverse take-over', or 'disposal resulting in a fundamental change of business' as defined in the AIM Rules, or to any corporate transaction (other than related party transactions) where the applicability of rules is calculated with reference to one of the 'class tests' as defined in the AIM Rules (e.g., a transaction is only a fundamental disposal if a certain % of gross assets, gross capital, etc. is

Category	Sub-category	Description and coding criteria
		involved). Rule is also assigned to sub-category 3.2 if it predominantly relates to the issue of securities. Rule is assigned to sub-category 3.3 if it predominantly relates to related party transactions (RPTs). Rule is assigned to sub-category 3.4 if it predominantly relates to directors' obligations. Rule is assigned to sub-category 3.5 if it predominantly relates to shareholder voting on subject matter excluding corporation transactions and related party transactions (sub-categories 3.2 and 3.3). Rule is assigned to sub-category 3.6 if it predominantly relates to the issue or admission of securities, the properties of eligible securities, or the trading venue of securities. Revisions that predominantly relate to a substantive change in sub-categories 3.1-3.6, but where the rule also requires disclosure, are assigned to category 3 (Corporate governance) rather than category 2 (Disclosure) so long as the revision does not require disclosure outside the scope of sub-category. For example, company information required to be displayed on the issuer's website under AIM Rule 26 is categorised under 2.3. However, when the rule was amended to require issuers to comply or disclose against a recognised corporate governance code, the new substantive obligation predominantly relates to corporate governance (3.4) rather than disclosure (2.3), although disclosure is also required.
4. Investing companies	-	Rule is assigned to category 4 if the rule applies to 'investing companies' as defined under the AIM Rules.

Category	Sub-category	Description and coding criteria
		Rule only applying to investing companies (but otherwise concerning another category) are assigned to category 4.
5. Discipline	**5.1** Nomad sanctions **5.2** Issuer sanctions **5.3** Both (Nomad and issuer sanctions)	Rule is assigned to category 5 if the rule sets out disciplinary measures or sanctions. Rules that are predominantly procedural but relate to disciplinary measures (e.g., the appeals process) are assigned to category 5. Rule is assigned to sub-category 5.1 if nominated advisers (Nomads) are the subject of discipline, to sub-category 5.2 if issuers or directors are the subject of discipline, and to sub-category 5.3 if Nomads and issuers (or directors) are subject of disciplinary measures.
6. Nomads	**6.1** Nomad eligibility **6.2** Nomad responsibilities **6.3** Nomad independence and conflicts of interest	Rule is assigned to category 6 if the rule applies to Nomads and it does not relate to Nomad discipline (sub-category 5.1) or Nomad involvement in a rule predominantly relating to the issuer's corporate governance (category 3). Rule is assigned to sub-category 6.1 if it predominantly relates to eligibility criteria to become and remain listed as a Nomad on the official Nomad register maintained by the Exchange. Rule is assigned to sub-category 6.2 if it sets out responsibilities or duties that a Nomad is required to carry out or prohibited from carrying out. Rule is assigned to sub-category 6.3 if it prescribes Nomad independence or conflict of interest requirements.
7. Supervision	**7.1** Nomad reporting obligations **7.2** Issuer reporting obligations **7.3** Exchange reporting obligations	Rule is assigned to category 7 if the rule sets out reporting or information sharing requirements between (in any combination) Nomads, issuers and AIM Regulation/the Exchange.[1] Rule revision in category 7 do not concern issuers' reporting obligations to the

[1] AIM Regulation is the regulatory team at the Exchange responsible for creating and administering the AIM Rules.

Category	Sub-category	Description and coding criteria
		public (which fall under category 2); rather, these provisions facilitate supervision of Nomads and issuers by AIM Regulation/the Exchange. Rule is assigned to sub-category 7.1 if the reporting or information sharing obligations apply to Nomads (reporting to the Exchange or AIM Regulation). Rule is assigned to sub-category 7.2 if the reporting or information sharing obligations apply to issuers (reporting to Nomads or the Exchange or AIM Regulation). Rule is assigned to sub-category 7.3 if the reporting or information sharing obligations apply to the Exchange (reporting to the competent authorities).

TABLE 7.4: UNDERLYING CONCEPTS AND CODING CRITERIA FOR REMAINING VARIABLES

Indicator or variable	**Underlying concept and coding criteria**
Explicit public ordering	<u>Concept:</u> Public ordering is a variable of interest because it indicates instances where, in a regulatory environment largely governed by private ordering, the Exchange either exercises discretion to co-opt legislative rules (or parts of rules, such as definitions) or is mandatorily required to adopt them. <u>Criteria:</u> This indicator measures instances where the AIM Rules adopt substantive requirements stemming from a 'legislative source' (i.e., UK or EU legislation or regulations) *and* make explicit reference to the legislative source, either in the text of the AIM Rules themselves or in an accompanying notice published by the Exchange. Variable is assigned a value of 1 if material, explicit reference is made to a legislative source in: a) the text of the rule, b) the text of a definition referenced in the rule, or c) in any of the AIM-related publications listed in Appendix 1 (e.g., a notice accompanying a suggested or implemented rule revision). A material reference imports content from a legislative source into the rule, either directly (by referencing the legislative rule) or indirectly (by adopting substantially similar wording to the legislative rule and providing a rationale in an AIM-related publication). Variable is assigned a value of 0 if no explicit reference is made to a legislative source. Rule is also assigned a value of 0 if a non-material reference is made to a legislative source (e.g., a rule stating that a Nomad is *not* responsible for an issuer's compliance with certain company law legislation). The variable captures instances where legislative sources are incorporated into the AIM Rules through revisions – it does not capture instances where a rule with legislative content is revised but the content of the revision does not predominantly relate to legislative content. For example, the AIM Rules may explicitly reference another legislative source. The August 1995 Rules provide that issuers must publish an admission document 'containing the information required by the POS Regulations [The Public Offers of Securities Regulations 1995]' (16.10). In other instances, reliance upon public ordering is not made expressly in the text of a rule itself, and a rule may be revised to substantially incorporate a legislative source without

	explicitly referencing the source. For example, the May 2014 Rules revised the ad hoc disclosure standard to require notification of information that would likely lead to a 'significant movement' (formerly a 'substantial movement') in the price of securities (11). This revision is assigned a value of 1 (presence of public ordering) because a notice published concurrently to the amendments explained that the rule was amended to harmonize AIM's standards with the terminology in the FSMA 2000 (AIM Notice 39, p. 3).
Voluntary or mandatory public ordering	<u>Concept:</u> The voluntary/mandatory nature of public ordering is a variable of interest because it indicates how often rule revisions result without choice from external (governmental) imposition and how often rules revisions reflect purer instances of private ordering. Legislative rules that are voluntarily adopted provide evidence regarding the Exchange's self-regulatory incentives. <u>Criteria:</u> This is a sub-indicator of the 'Explicit public ordering' variable – rule changes are only classified into instances of 'voluntary' or 'mandatory' when there is explicit public ordering. Mandatory public ordering refers to instances where incorporation of the legislative source was mandatory (i.e., the Exchange did not possess a choice between adoption and non-adoption of the legislative rule). Voluntary public ordering refers to instances where incorporation of the legislative source is voluntary (i.e., the Exchange chose to adopt the legislative rule or standards that would otherwise not be applicable). When a legislative source is explicitly referenced in the rules or an AIM notice or publication commenting on the rules, the source is reviewed to determine whether the Exchange had a choice to adopt the legislative rule (mandatory public ordering) or whether the Exchange voluntarily adopted the rule or provided issuers with a choice of complying with the external legislative rule (voluntary public ordering). The researcher has reviewed all historical official AIM publications and notices. Variable is assigned a value of 1 if public ordering is mandatory. Variable is assigned a value of 0 if public ordering is voluntary. Where the explicit public ordering indicator is 0, the voluntary/mandatory nature of public ordering will always be blank ('-'). Mandatory public ordering example: the definition of 'prospectus' was revised in the July 2019 Rules to incorporate changes stemming from the Prospectus Regulation (EU) 2017/1129 which came into force on 21 July 2019.

	Voluntary public ordering example: issuers may choose between International Accounting Standards, UK Accounting Standards, or US Accounting Standards to prepare their accounts.
Rule voluntariness	Concept: Enabling rules permit a greater degree of private ordering for issuers' corporate governance than mandatory rules, but simultaneously reduce the Exchange's regulatory autonomy over issuers' corporate governance. The purpose of this indicator is to track whether the AIM Rules become more enabling or mandatory over time. Criteria: A mandatory rule is one that mandates or restricts an arrangement, whereas a default or enabling rule may be set aside by the parties in favour of an alternate arrangement.[2] Compliance with mandatory rules is non-discretionary, with the exception of menu rules (e.g., rule may be satisfied by complying with option x or y or z). Compliance with default or enabling rules is discretionary, whether by opting-out of the rule altogether or modifying the standard of compliance. The dataset does not distinguish between default and enabling rules. None of the AIM Rules are enabling in the strict sense – none of the rules may be contracted out of or set aside in favour of alternate arrangements. However, some of the rules are 'enabling in nature', i.e. the rule or revision permits an action without requiring it (e.g., a party may appeal a disciplinary decision), or a revision expands the compliance options of an otherwise mandatory rule (e.g., adding Japanese GAAP to the list of acceptable accounting standards). This indicator captures whether the content of the revision is mandatory or enabling in nature, and whether the rule as a whole is mandatory or enabling. Variable is assigned a value of 1 if a mandatory rule is revised with an obligation that is mandatory in nature. Variable is assigned a value of 0.75 if rule is enabling in nature (i.e., a mandatory rule is revised with an option that is enabling in nature).

[2] Holger Spamann, 'On the Insignificance and/or Endogeneity of La Porta et Al's "Anti-Director Rights Index" Under Consistent Coding' (2006) Discussion Paper No. 7 6. Spamann notes that opt-in/out default rules 'can be achieved either by provisions which explicitly allow a particular clause (specific enabling provisions), or by general standards (whether embodied in an explicit provision or unwritten principles) which allow alternative contractual arrangements for a broad range of issues (general enabling standards).'

<table>
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<tr><th></th><th>Mandatory Rule</th><th>Enabling Rule</th></tr>
<tr><td>Revision expands compliance options (enabling in nature)</td><td>0.75</td><td>None</td></tr>
<tr><td>Revision does not expand compliance options (mandatory in nature)</td><td>1</td><td>None</td></tr>
</table>
Examples of revisions that are enabling in nature include: adding an option to a mandatory menu rule such that compliance may be satisfied by former options x or y or new option z; the introduction of a procedural rule that now allows parties to request a record of a disciplinary hearing; or a requirement to ‘comply or explain’ against a recognised corporate governance code.
Rules that do not contain affirmative compliance obligations or sanctions for non-compliance, but that issuers may not modify or opt-out of, are assigned a value of 1. Rules that are enabling only if both the Exchange and issuer or Nomad agree are assigned a value of 1, since the issuer or Nomad cannot opt-out of the default in their sole discretion.
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<tr>
<td>Discretionary v. bright-line rule compliance</td>
<td>
<u>Concept:</u> Rules that provide less ex ante certainty on the terms of rule compliance effectively grant the Exchange more regulatory autonomy, since the Exchange has more discretion ex post to determine whether a party has breached the rules. This variable allows for analysis of whether self-regulating actors revise rules to afford themselves with more rule compliance discretion.[3]
<u>Criteria:</u> This variable identifies how much discretion the Exchange has in determining a party’s rule compliance or the consequences for rule non-compliance. This variable does not identify how much discretion a rule generally provides the Exchange; rather, it identifies from an issuer or Nomad’s perspective whether the terms of rule compliance and the consequences of rule non-compliance are fully set out ex ante or whether the Exchange has discretion to determine compliance and consequences ex post.
Variable is assigned a value of 1 if the Exchange has high discretion
</td>
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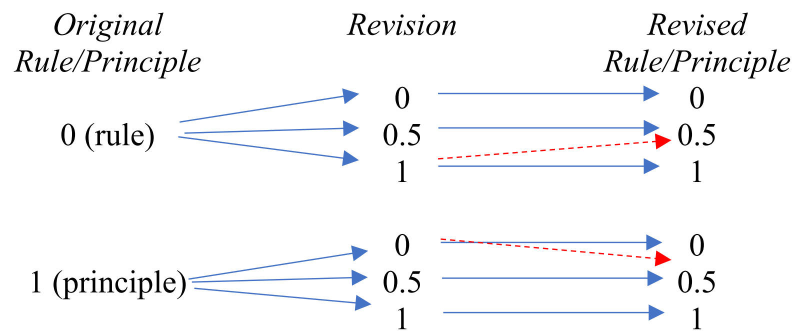
</table>

[3] For discussion on the significance of how much discretion rules permit, see Paul G Mahoney and Chris William Sanchirico, ‘General and Specific Legal Rules’ (2005) 161 Journal of Institutional and Theoretical Economics (JITE) 329, 345. ‘A rule may be vague and give the enforcers and interpreters substantial discretion or highly detailed so as to reduce discretion.’

	in judging *ex post* whether the party has complied with the rule or high discretion in choosing the sanctions for rule non-compliance. Variable is assigned a value of 0.5 if the Exchange has some discretion in judging rule compliance or moderate discretion[4] in choosing the sanctions for rule non-compliance. Variable is assigned a value of 0 if the Exchange has no discretion in judging rule compliance or no discretion in choosing the sanctions for rule non-compliance (i.e., the rule prescribes an objective, bright-line standard for determining compliance, such as a strict deadline). If a rule's compliance obligations are bright-line other than requiring action 'without delay', the rule is still assigned a value of 0 because compliance 'without delay' does not permit the Exchange any meaningful discretion. It is only possible in only one scenario for the discretionary value of a revision to differ from the discretionary value of the rule as a whole: this occurs when a revision to a rule (principle) has high (zero) discretion, but viewed as a whole the effect of the revision is not enough to turn the rule to a principle (or vice versa).[5] This scenario is illustrated by the dotted line in *Figure 7.1* below. FIGURE 7.1: CODING FOR RULE DISCRETION  In the dataset, revisions to rules are coded according to the discretionary value of the revision itself. This is done in order to test the hypothesis whether the nature of revisions more or less discretionary over time.

[4] I define moderate discretion to mean not 'untrammelled discretion'. Cass Sunstein defines untrammelled discretion as 'the capacity to exercise official power as one chooses, by reference to such considerations as one wants to consider, weighted as one wants to weight them.' Cass R Sunstein, 'Problems with Rules' (1995) 83 California Law Review 953, 960.

[5] One exception is the amendment to Rule 28 in the July 2019 Company Rules, and methodology comments explaining this revision are included in the Excel dataset.

	Rules which do not contain compliance obligations or do not prescribe sanctions for non-compliance are not coded. For example, a rule stating that a party may appeal decisions of the Exchange, while leaving the appeals procedure open to the Exchange to determine, is not coded in the dataset because it does not set out an affirmative compliance obligation (despite affording the Exchange with considerable discretion). If compliance with a rule (Rule A) is dependent upon the discretionary standards of another rule (Rule B), Rule A is assigned the same value as Rule B.
Rules v. principles[6]	Concept: This indicator is permits analysis of how frequently rules v. principles are revised in a self-described regime of principles-based regulation. The rules v. principles classification is related to the discretionary v. bright-line variable. 'Rules' with binary empirical conditions will have more *ex ante* certainty regarding rule compliance than 'principles'. There are other methods of classifying rules v. principles.[7] This indicator permits the following analysis: 1) the researcher can observe 'rules' that are relatively principle-like (lower specificity) and vice versa when the discretionary variable is 0.5; 2) although directives with discretionary variables of 0 are always 'rules' and 1 are 'principles', this indicator codes every directive as a rule or principle whereas the discretionary variable only codes for directives with compliance obligations; and 3) despite some duplication with the discretionary variable, the binary nature of this indicator (rule/principle) allows the researcher to observe at a glance the proportion of rules v. principles revised over time. Criteria: Rules and principles are distinguished based on the specificity of the conditions and consequences of the directive (i.e.,

[6] On the interchangeable use of 'principles' and 'standards' in legal literature, see Lawrence A Cunningham, 'A Prescription to Retire the Rhetoric of Principles-Based Systems in Corporate Law, Securities Regulation, and Accounting' (2007) 60 Vanderbilt Law Review 1409, 1418. Lawrence Cunningham contrasts rules with principles (rather than rules with standards) because, in his view, the term standards 'increasingly is used to designate performance or conduct measures, not legal provisions that are contrasted with rules.' See ibid 1419.

[7] Cunningham identifies different methods of classifying rules v. principles: 1) analysing certainty (whether content is provided ex ante or ex post), 2) conceptually assessing the attributes of 'relative generality versus specificity, abstractness versus concreteness, and universality versus particularity', and 3) the amount of discretion afforded to the regulated party. Scholars such as Louis Kaplow and Russell Korobkin distinguish between rules and standards based on ex ante/ex post temporal certainty. See Louis Kaplow, 'Rules Versus Standards: An Economic Analysis' (1992) 42 Duke Law Journal 557; Russell B Korobkin, 'Behavioral Analysis and Legal Form: Rules vs. Standards Revisited' (2000) 79 Oregon Law Review 23.

	the rule or principle). Rules are defined as directives triggered by one or more empirical conditions that can be clearly answered 'yes/no'. Principles are defined as directives with conditions or consequences triggered by evaluative judgments that require considering inter-related factors.[8] Rules contain more specificity than principles. When a directive (a numbered AIM rule) contains both empirical and evaluative conditions (e.g., in separate clauses), classification is made based upon assessment by the researcher whether the empirical or evaluative conditions have more relative significance to the directive as a whole.

[8] Pierre Schlag describes legal directives (i.e., rules or standards) as having an 'if this, then that' structure. Directives have a 'trigger' (a phenomenon) causing the rule or standard to apply, and a 'response' (a legal consequence) when the phenomenon is triggered. Schlag suggests that rules have empirical triggers whereas standards have evaluative triggers. Pierre Schlag, 'Rules and Standards' (1985) 33 UCLA Law Review 379, 380–383. Clermont expands upon Schlag's work, suggesting that a directive can be expressed as 'if p is true and/or…, then r.' For Clermont, rules have one or more binary propositions such that p (all conditions) can be answered as 'yes/no', whereas standards are triggered by 'scalar' conditions such that p is not a 'yes/no' condition but requires considering inter-related factors. Kevin M Clermont, 'Rules, Standards, and Such' (2019) 10–11.

TABLE 7.5: LIST OF AIM DOCUMENTS REVIEWED FOR DATASET

	AIM Notice #	Title	Issue Date
1.	Archival copy (not publicly available)	AIM Admission Rules	August 1995
2.	Archival copy (not publicly available)	AIM Rules for Companies	February 1999
3.	AIM 01	(N27) Consultation - AIM Rules for companies	27/07/2002
4.	AIM 02	August 2002 Update	19/08/2002
5.	AIM 03	Disciplinary procedures and appeals handbook consultation	11/11/2002
6.	AIM 04	AIM Disciplinary procedures and appeals handbook	17/02/2003
7.	AIM 05	Consultation - AIM Rules for companies	18/03/2003
8.	AIM 06	May 2003 Update	28/05/2003
9.	AIM 07	Consultation - AIM Rules for companies	25/07/2003
10.	AIM 08	December 2003 Update	28/11/2003
11.	AIM 09	Consultation - AIM Rules for companies	16/06/2004
12.	AIM 10	October 2004 update	07/10/2004
13.	AIM 11	AIM investing companies and other rule changes consultation	31/01/2005
14.	AIM 12	AIM Rules - consultation	31/05/2005
15.	AIM 13	AIM Rules update	18/03/2005
16.	AIM 14	AIM Rules update	03/05/2005
17.	AIM 15	IAS Confirmation and Consultations	21/12/2005
18.	AIM 16	Guidance notes for Mining, Oil and Gas	16/03/2006
19.	AIM 17	Reminder of Investing Company Rules	17/03/2006
20.	AIM 18	Proposed Changes to the AIM Rules in respect of Third Party Trading Platforms	06/04/2006
21.	AIM 19	Settlement of AIM Reg S Securities and SIS	26/05/2006
22.	AIM 20	Update on AIM Notice 18	04/07/2006
23.	AIM 21	Confirmation of Settlement of AIM Reg S Securities and SIS[9]	28/07/2006
24.	AIM 22	Confirmation of Permissible Accounting Standards	22/08/2006
25.	AIM 23	AIM Rules - Update on AIM Notice 22	31/08/2006
26.	AIM 24	AIM Rules for Nominated Advisers and Other Proposed Rule Amendments - Consultation - AIM Rules for Nominated Advisers - Consultation (AIM24) - AIM Rules for Companies - Consultation (AIM24)	02/10/2006

[9] The researcher does not possess a copy of the accompanying Stock Exchange Notice N44/06 (31 July 2006).

	AIM Notice #	Title	Issue Date
		- AIM Disciplinary Procedures and Appeals Handbook - Consultation (AIM24)	
27.	AIM 25	Changes to the Disclosure of Significant Shareholders	30/11/2006
28.	AIM 26	AIM Rules (MS Word 484Kb)	12/01/2007
		AIM Rules marked copy (MS word 391Kb)	
		Update on AIM Notice 25 and Discussion of Other Legislative Changes	
29.	AIM 27	Confirmation of new AIM Rules and feedback on AIM Notice 24	20/02/2007
		- AIM Rules for companies	
		- AIM Rules for companies (mark-up)	
		- AIM Rules for Nominated Advisers	
		- AIM Rules for Nominated Advisers (mark-up)	
		- AIM Disciplinary Procedures and Appeals Handbook	
30.	AIM 28	Registered organisations for AIM securities	23/04/2007
31.	AIM29	Update on Rule 26 (Websites) and Stock Exchange AIM Disciplinary Notice	10/01/2008
32.	AIM30	Proposed New AIM Rules for Investing Companies and other changes	18/12/2008
		- AIM Note for Investing Companies	
		- AIM Note for Mining, Oil and Gas Companies	
33.	AIM31	AIM Rule amendments relating to Rights Issue Subscription Periods	10/02/2009
34.	AIM32	Changes to Disclosure of Significant Shareholders	28/05/2009
35.	AIM33	Confirmation of new AIM Note for Investing Companies and feedback on AIM Notice 30	01/06/2009
		- AIM Rules for Companies - June 2009	
		- AIM Note for Investing Companies	
		- AIM Note for Mining, Oil & Gas Companies	
		- AIM Rules for Companies - mark-up	
		- AIM Note for Investing Companies - mark-up	
36.	AIM34	Update on AIM Notice 28 (Registered Organisations for AIM Securities)	18/08/2009
37.	AIM35	Proposed AIM Rules for Disclosure of Directors' Remuneration and Electronic Communication with Shareholders	15/12/2009
38.	AIM36	Update on AIM Notice 35 (Disclosure of Directors' Remuneration and Electronic Communication with Shareholders)	17/02/2010
		- AIM Rules for Companies – February 2010	
		- AIM Rules for Companies – mark-up	

	AIM Notice #	Title	Issue Date
39.	AIM37	Minor changes to the AIM Rules for Companies	06/06/2011
40.	AIM38	Consultation on proposed changes to AIM Rules for Companies and Nominated Advisers	27/01/2014
		- AIM Rules for Companies - Consultation (AIM38)	
		- AIM Rules for Nominated Advisers - Consultation (AIM38)	
41.	AIM39	Confirmation of rule books and feedback to AIM Notice 38	13/05/2014
		- AIM Rules for Companies - May 2014	
		- AIM Rules for Companies - mark up	
		- AIM Rules for Nominated Advisers - May 2014	
		- AIM Rules for Nominated Advisers - mark up	
		- AIM Disciplinary Procedures and Appeal Handbook - May 2014	
		- AIM Disciplinary Procedures and Appeal Handbook - mark up	
42.	AIM40	Reminder to AIM companies and nomads after developments in Ukraine	18/09/2014
43.	AIM41	Minor changes to the AIM Rules for companies arising from the CSD Regulation	07/08/2015
44.	AIM42	Consultation on proposed changes to AIM Rules for Companies	15/10/2015
		- AIM Rules for Companies (Extract) - Consultation mark up (AIM42)	
		- AIM Rules for Companies (Extract) - Consultation (AIM 42)	
		- AIM Note for Investing Companies (Extract) - Consultation mark up (AIM 42)	
45.	AIM43	Confirmation of new rulebooks and feedback on AIM Notice 42	22/12/2015
		- AIM Rules for Companies - January 2016	
		- AIM Rules for Companies (mark up)	
		- AIM Note for Investing Companies - January 2016	
		- AIM Note for Investing Companies (mark up)	
46.	AIM44	Consultation on proposed changes to AIM Rules for Companies	13/04/2016
		- AIM Rules for Companies - Consultation mark up (AIM44)	
47.	AIM45	Confirmation of new rulebooks and feedback on AIM Notice 44	14/06/2016
		- AIM Rules for Companies – July 2016	

	AIM Notice #	Title	Issue Date
		- AIM Rules for Companies (mark-up)	
		- Extract – AIM Notice 45	
		- AIM Rules for Nominated Advisers – July 2016	
		- AIM Note for Investing Companies – July 2016	
48.	AIM46	Discussion Paper - AIM Rules Review	11/07/2017
		Discussion Paper - AIM Rules Review - July 2017	
49.	AIM47	LEI Requirement for AIM Companies	13/10/2017
50.	AIM48	Application for SME Growth Market Status	05/12/2017
		- Extract - AIM Notice 48	
51.	AIM49	AIM Rules Review - Feedback Statement & Consultation	11/12/2017
		- Feedback Statement & Consultation	
		- AIM Rules for Companies - Consultation mark-up	
		- AIM Rules for Nominated Advisers (Extract) - Consultation mark-up	
52.	AIM50	Confirmation of new rulebooks and feedback on AIM Notice 49	08/03/2018
		- AIM Rules for Companies – March 2018	
		- AIM Rules for Companies (mark up)	
		- AIM Rules for Nominated Advisers - March 2018	
		- AIM Rules for Nominated Advisers (mark up)	
53.	AIM51	Consultation on proposed changes to the AIM Rules for Nominated Advisers	26/04/2018
		- AIM Rules for Nominated Advisers (mark up)	
54.	AIM52	Confirmation of changes to the AIM Rules for Nominated Advisers and feedback on AIM Notice 51	04/07/2018
		- AIM Rules for Nominated Advisers - July 2018	
		- AIM Rules for Nominated Advisers (Mark up)	
55.	AIM53	Consultation on changes to the AIM Disciplinary Procedures and Appeals Handbook	24/07/2018
		- AIM Disciplinary Procedures and Appeals Handbook (proposed new)	
56.	AIM54	Confirmation of changes to the AIM Disciplinary Procedures and Appeals Handbook	01/10/2018
		- AIM Disciplinary Procedures and Appeals Handbook (clean)	

	AIM Notice #	Title	Issue Date
		- AIM Disciplinary Procedures and Appeals Handbook (mark-up)	
		- Extract to AIM Notice 54	
57.	AIM55	Brexit: Amendments to AIM Rulebooks	07/03/2019
58.	AIM56	The New Prospectus Regulation: Updates to the AIM Rulebooks	20/06/2019
59.		- AIM Rules for Companies (mark-up)	
60.		- AIM Note for Investing Companies (mark-up)	
61.		- AIM Note for Mining, Oil and Gas Companies (mark-up)	
62.		- Prospectus Rules - AIM Annex document	

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