

Title:**Urban geographies of financial convergence: situating Indian financial centres across global production and financial networks****Abstract**

Recent advancements in the global production networks (GPN) literature seek to better emphasise the role of finance by identifying where and how global financial networks (GFNs) intersect with GPNs. Financial centres operate as key sites for articulating financial convergence, understood as the merging of financial and non-financial sectors enacted by cross-sectoral investments. Yet, how such entanglement both feeds upon and impacts inter-city networks, affecting metropolitan hierarchies, remains largely overlooked. Using a novel dataset of 12,147 inter-sectoral, cross-border and domestic merger and acquisition (M&As) deals involving finance and insurance firms throughout the period of 2000-2020, this paper unpacks the sectoral dynamics that underpin the intersection of GFNs with GPNs at the city level in India, the 5th largest economy in the world. Our longitudinal and multiscalar analysis demonstrates how uneven patterns of financial convergence, structured around the rising entanglement between finance and IT, have reshaped inter-city networks and affected the landscape of financial centres in India. If Mumbai remains India's financial capital, Bangalore and New Delhi gained power in domestic and international flows, well ahead of other Indian cities. The paper emphasizes how the IT firms and central governments, through direct interventions and state-hybrid investors, operate as a key driver in articulating GFNs with GPNs through inter-city networks, changing urban geographies of finance, raising questions for future research on financial geography.

Key words: global financial networks, global production networks, IT, finance, Mumbai, Bangalore, New Delhi, India

Introduction

Recent advancements in the global production networks (GPN) literature seek to better emphasise the role of finance in shaping global economic activity (Coe and Yeung 2019). Acknowledging a theoretical lacuna on the causal role of finance (Coe and Yeung 2015), the GPN 2.0 framework, building upon the framework of the global financial networks (GFNs), was developed to examine how financial firms, markets, firms, and logics coordinate the networked geographies of global production and orchestrate the diffusion of “financial discipline” (Yeung and Coe 2015, 29) across other economic sectors, thus participating in a wider process of financialization (Epstein 2005; Klinge, Fernandez, and Aalbers 2021). These two relational frameworks consider financial centres (FCs) as key ‘control centres’ (Friedmann 1986) in the global economy through the spatial clustering of both financial and business services and headquarters of non-financial corporations. The presence of these corporate actors and the financial links established between cities yield a variegated geography of corporate power, which unevenly integrates cities into the global economy,

turning a few dominant nodes such London, New York or Singapore into international FCs (Taylor and Derudder 2016, 201; Wójcik et al. 2019).

If the inter-city networks forged by financial firms' investments are a fundamental topic for economic geography (Wójcik et al. 2022; Faulconbridge et al. 2007), how the intersection of GFNs with GPNs impacts existing networks and hierarchies of FCs remains rather overlooked, despite the call for investigating how finance orchestrate and interact with global production networks (Coe and Yeung 2015). Recent studies, largely quantitative in design, have examined patterns of economic convergence between finance and other sectors, conceptualized as 'corporate financialization' to analyse organizational change and corporate restructuring (Klinge, Fernandez, and Aalbers 2021) or as 'financial convergence' (Keenan, Monteath, and Wójcik 2022). This burgeoning scholarship is mostly supported by international, national and comparative studies across firms, sectors and countries. To the best of our knowledge and despite the fact that both theoretical frameworks emphasize the key role of FCs in articulating GFN with GPN, no studies have unpacked the city networks and urban nodes that drive and result from this economic convergence. This constitutes a problematic research gap in the era of financialized globalization (Bassens and van Meeteren 2015), given that FCs are conceptualised as "vital territories in the spatial articulation and manifestation of intersecting global finance and production networks" (Coe, Lai, and Wójcik 2014, 764).

Uncovering the urban geographies through which GFNs and GPNs become entangled raises empirical challenges. First, such task requires the extension of both the analytical and geographical scope of research. The literature on world city networks or FCs typically adopts a single-sector approach, using descriptive, factorial and network analysis with transaction data or office locations to identify hierarchical patterns and differentiated functions between cities, leaving aside the convergence between GFNs and GPNs. Meanwhile, studies on corporate financialization tend to neglect the geographical dimensions (Klinge, Fernandez, and Aalbers 2021). Second, existing scholarship reflects a long-term preference for the study of cross-border activities, with a two-fold consequence: a neglect of the domestic dynamics and key functions performed by FCs, given that domestic activity is often dominant even in leading FCs (Wójcik et al. 2019). This focus on cross-border flows introduces a methodological bias against cities that structurally and historically account for a lower proportion of the financial flows that circulate across GPNs and GFNs, despite a rising interest for Asian cities (Lai 2012; Taylor, Derudder, and Liu 2021).

Our dual ambition in this paper is therefore to advance a geographical understanding of the intersection of GFNs with GPNs through inter-city networks, and to investigate how such convergence affects the hierarchical landscape of FCs. To that end, we conduct a longitudinal and cross-sectoral analysis of a novel dataset of 12,147 cross-border and domestic merger and acquisition (M&As) deals involving finance & insurance sector, either on the acquisition or target side, throughout the period of 2000-2020, for the country of India. The 5th largest economy in the world, India remains largely off the map of financial geography (Lai et al. 2020). This is despite the fact that India already reflects how the process of convergence between GFNs and GPNs translates into changing urban trajectories, as

evidenced by the global production of services. The offshoring and outsourcing industries, powered by the success of the diaspora-orchestrated, export-oriented software sector (Saxenian, 2005), have indeed turned major Indian cities such as Bangalore, Mumbai, Pune, Chennai and Hyderabad into functional nodes for the global financial industry. Yet the role and position of these cities continues to be described as subordinate in terms of decision-making power, restricted to back- and mid-office tasks (Grote and Täube 2006; Lambregts, Kleibert, and Beerepoot 2018a; Parthasarathy 2004). On the GPN side, sectoral studies that examined the financialization of the pharmaceutical or telecom industries in India (Horner 2014; Bhatia 2022) largely oversee the urban dimension of these processes. As a fast emerging, large economy of the Global South, India provides a unique context to analyse the city networks driving the convergence between GFNs and GPNs. Using descriptive statistics and network visualisations, we ask the following two questions: how does the convergence between finance and other economic sectors unfold across Indian cities? How does the convergence of GPNs with GFNs through cross-border and domestic financial flows reshape the hierarchy of financial centres in India?

We find that Indian cities experience a rising, continuous, yet uneven and variegated process of financial convergence, which unfolds through distinctive sectoral patterns and inter-city networks when comparing cross-border and domestic M&A markets. Path-dependent, cross-sectoral investments, especially between finance and the IT sector, have reshaped the geography and scope of cross-border networks, turning Bangalore into an international FC over the last decade. Second, our findings also reveal the key role of central governments in shaping inter-city networks that drive financial convergence, stimulating the rise of New Delhi on a domestic level, and supporting cross-border regional integration through investments in and out of the financial sector. The intersection between GFNs and GPNs has transformed India's financial geography, shifting over the last two decades from a highly centralized system dominated by Mumbai to a polarized, three-headed network, characterized by the relative decline of Mumbai's primacy as Bangalore and New Delhi gained corporate power and consolidated their role as FCs in both domestic and international flows. These urban geographies of financial convergence have established Mumbai, New Delhi, and Bangalore as India's leading FCs, characterized by differentiated profiles, and deepened the gap between this leading trio and the other major Indian cities.

The next section discusses the relevance of the GPNs and GFNs frameworks to analyse the changing geography of FCs, before contextualising the case of India. The following section describes our M&A dataset and the methodology used to capture cross-sectoral trends from a multi-scalar perspective. The analysis is divided into three parts: after charting sectoral patterns of financial convergence at the national level, we investigate the changing position of Indian cities in transnational and domestic flows, and propose a typology of the three leading FCs. The final part concludes and draws implications for future research on the urban geographies of financial convergence resulting from the entanglements of GFNs and GPNs, within and beyond the case of India.

Financial centres at the intersection of GPNs and GFNs

Financial convergence: the missing urban perspective

Global Production Network 2.0 theory seeks to situate the causal mechanisms of finance in the orchestration of the global economy and the resulting patterns of uneven development (Coe and Yeung 2019). As “one of the major gaps in the GPN literature” (Coe, Lai, and Wójcik 2014, 762), this lack of engagement with finance delineated a research agenda to grasp how finance reshapes the networks of global production. A wide range of studies have demonstrated how financialization, understood as a variegated, uneven, and conjunctural process, transforms other economic sectors through the introduction of financial metrics, imperatives, and modes of governance (Pike and Pollard 2010). On the other hand, financial geographers have introduced the concept of global financial networks to map the financial sector through the interlocking structures and agencies of FCs, offshore jurisdictions, financial and business services, and world governments.

Concentrating firms, markets and institutions, FCs operate as “key nodes of decision-making power” (Wójcik et al. 2022, 99). If most studies focus on the financial sector and other advanced producer services to understand the evolution and specialization of FCs (Faulconbridge et al. 2007; Lai 2012; Wójcik et al. 2019), FCs also concentrate headquarters of non-financial corporations, which seek proximity to financial and business services to source funding, receive legal and business advice, and undertake complex transactions such as mergers and acquisitions. As agents of financial discipline and engineers of the world economy, financial and business services are involved at every step of M&As. Through M&As, financial firms enter new markets, invest outside their sector, transfer or acquire corporate control in non-financial corporations, and source new knowledge and technology (Focarelli and Pozzolo 2008). Consolidation or concentration, through which ownership, control, and ultimately power are transferred, affect the hierarchy of FCs (Allen 2010, 2021; Chapman 2003).

In that regard, M&As provide key data to explore the spatial concentration of decision-making power and capture the changing landscape of FCs (Wójcik et al. 2022; Wu et al. 2022; Cardenas Morales and Dubé 2021). Moreover, transaction data allow to measure inter-city networks in terms of financial volume and value, going beyond the use of office networks (Taylor and Derudder 2016), criticized for its “assumption of flows through a mere existence of office location”, especially for cities of the Global South (Kleibert 2017, 2898). The volume, value and institutional anatomy of such complex transactions directly reflect activities and networks that shape FCs at the local level. As illustrations of the significance of M&As to the geography of FCs, consider how the acquisitions of regional and local banks by London-based banks contributed to financial centralisation in the UK (Leyshon and Thrift, 1997) or how M&As contributed to the shift of the leading FCs in Brazil, Canada, and South Africa, from Rio to Sao Paulo, Montreal to Toronto, and Cape Town to Johannesburg, respectively (Contel and Wójcik, 2019).

Perhaps more importantly with regards to research gaps identified in the GPN and GFN literature, M&As offer an insightful proxy to investigate the economic convergence of finance with other sectors. Broadly speaking, economic convergence can be defined as the “blurring of boundaries between industries due to converging value propositions, technologies and markets” (Bröring, Martin Cloutier, and Leker 2006). Tracing the intersection of GFNs with GPNs, Keenan *et al.* (2022, 5) define financial convergence as “the merging of financial and non-financial sectors through intersectoral M&A deals”. While they provide evidence on the rise of cross-sectoral deals in the 2000-2020 period, their analysis is restricted to global and national levels, leaving aside the role of FCs in this process. Most studies in financial geography conducted at the international or national scale do not unpack the “sectoral and geographical complexity” (Coe and Yeung 2015, 24) that arises at the city or at the firm level. Applying the analytical potential of the GFN in conjunction with the GPN 2.0 framework, and building on this definition of financial convergence, we examine how the relational ties of financial firms with GPNs unfold through inter-city networks, affecting the landscape of FCs, using India as a case study.

Indian cities at the intersection of GPNs & GFNs

While Indian cities remain under-represented in economic geography, we can identify two key patterns regarding their position and role across GPNs and GFNs to guide our analysis of financial convergence: the subordinate position of Indian FCs in GFNs, and the role of the IT sector in linking GFNs and GPNs with the support of the central government in facilitating growth and integration.

From a GFN perspective, Indian cities are commonly acknowledged as secondary FCs in the world economy: as recipients of efficiency and technology-seeking M&As (Motis 2007), Mumbai, Chennai and New Delhi feature in the top twenty of the largest net targets by volume over the last decade (Wójcik *et al.* 2022). In a landscape of restricted knowledge, quantitative studies largely relegate Indian cities to the bottom of tables. On a global and regional scale, Mumbai stands out as a “recognised international financial centre” (Kleibert 2017, 2911) and India’s financial capital. This status is inherited from the historical concentration of foreign companies, especially in finance & insurance (Grant and Nijman 2002), and the presence of key regulatory institutions such as the Bombay Stock Exchange or the Reserve Bank of India, relocated from Kolkata to Mumbai in 1937. As an *alpha* city, Mumbai ranks as the most connected city in India for advanced producer services firms (Derudder and Taylor 2018), well ahead of New Delhi and Bangalore (*alpha*-), Chennai (*beta*), Pune, Hyderabad, Kolkata, and Ahmedabad (*gamma*) (GaWC 2020).

Yet, Mumbai’s status as India’s financial capital is inseparable from its role and insertion into GPNs. Due to structural changes both in domestic and global economy with the rise of maritime networks (Jacobs, Ducruet, and De Langen 2010), Mumbai took over Kolkata as India’s gateway city (Grant and Nijman 2002). As a major colonial, cotton-trading hub, Mumbai benefited from the presence of foreign banks specialized in international trade (Bagchi 1987), and a strong connection to British, London-based private capital (Chaudhary,

Gupta, and Roy 2016). Mumbai's role as a trading gateway for India is closely related to the presence of large conglomerates, with textile, steel, and oil in the lead. According to Forbes' 2021 *Global 2000* ranking, Mumbai hosts 28 of India's 50 largest public companies, well ahead of New Delhi (10) and Bangalore (4). Overall, Mumbai's status of financial capital is a telling example of the "close relationship between international trade and cross-border finance" (Wójcik, Knight, and Pažitka 2018, 5) that turn cities into FCs through the close entanglement of GPNs and GFNs.

If India features more prominently in GPN-informed research, sectoral studies do not foreground the urban dimension (Posthuma and Nathan 2010), with the notable exception of the literature on the software and IT-Business Process Outsourcing (BPO) industry highlighting the increasing interplay between the finance and technological industries. Two decades ago, Saxenian's pioneering work emphasized how "venture capital firms are emerging to invest in firms that link Silicon Valley's technology and market access with India's software skills", promoting the economic development of Bangalore (Saxenian, 2002, 194). A wide range of studies have examined how the outsourcing and offshoring industry have established cross-border inter-city networks and investment patterns that supported an early process of convergence between GFNs and GPNs (Grote and Täube 2007; Kleibert 2015; Lambregts, Kleibert, and Beerepoot 2018b; Aranya 2008). From a sample of 219 M&A deals over the 1997-2004 period, Grote and Täuber concluded that "M&A activities of financial institutions are highly concentrated in the very few cities with IT clusters in India" (2006, 1293), with Mumbai attracting the largest share of foreign direct investments made by financial firms, ahead of Bangalore and New Delhi.

Prior research emphasized the key role of the central government through the creation of special economic zones offering tax rebates to the export-oriented IT firms, such as the Software Technology Parks of India established in 1991 by the Ministry of Electronics and Information Technology. While Mumbai's position is linked to the historical concentration of both foreign and domestic financial firms, financial and business services and large non-financial corporations, Bangalore's rise in GFNs is underpinned by the headquarters of outsourcing giants such as Wipro or Infosys, and the numerous offshore campuses opened by foreign financial firms since the early 1990's (Aranya 2008). Yet, even in the case of the offshore industry, little is known about the actual volume, value and sectoral composition of the financial flows that drive financial convergence and affect the role and position of Indian cities in GPNs and GFNs. This paper therefore seeks to disentangle how the process of financial convergence both builds upon and affects the hierarchical networks of FCs in India.

Tracing financial convergence across cities with M&A data

We use proprietary data on M&As sourced from the Zephyr database by Bureau Van Dijk. Using the North American Industry Classification System (NAICS), we extracted all cross-border and domestic deals involving firms in the finance & insurance sector, either on

the acquisition or target side, for the period 2000-2020. The finance & insurance sector (NAICS code 52) includes banks, insurance companies, asset management companies, pension funds and other financial institutions.

A key issue was to geolocate all companies on the target and acquisition side at the city level. We manually located about 2,800 deals for which the city was unknown, using Bloomberg, Zaubacorp, and corporate websites. Locations were aggregated to the larger metropolitan area, using the latest spatial data on built-up areas compiled by the Geopolis research program (Denis and Marius-Gnanou 2010). For instance, a company headquartered in Gurugram or Noida would be located in New Delhi, using the boundaries of the National Capital Territory of Delhi. To ensure accuracy of the data, we manually checked and corrected the locations stated by Bureau Van Dijk for the largest deals in terms of value, and for all deals where either the target or acquiring company was located outside of the main eight metropolitan areas (Ahmedabad, Bangalore, Chennai, Delhi, Hyderabad, Kolkata, Mumbai, Pune). To combine sectoral and geographical analysis and take into account domestic hierarchies, we categorized deals into *domestic, inbound* (foreign firms investing in India) and *outbound* (Indian firms investing abroad).

We also paid particular attention to the sectoral dimension of M&As and the variegated nature of finance as an analytical category. Using the NAICS, we broke down the “Finance & Insurance” category into the following subsectors: “Commercial Banking”, “Insurance”, and “Other Finance”. To better capture the centrality of the IT industry, we broke down the NAICS sector 51 “Information” into: “IT”, with companies involved in data processing, software publishers and other computer services; and “Information & Communication”, covering telecommunications, television broadcasting and newspapers. Acquisition from “Executive Offices” were coded as “Public Administration”. We categorize deals into 3 types to analyse financial convergence: *outward* (financial firms investing in non-financial sectors); *inward* (non-financial firms investing in the financial sector); and *intra-sectoral*, where the deal involves only financial firms.

Using a GDP deflator sourced from the World Bank’s World Development Indicators, we adjusted all deal values to constant 2015 US dollars. To account for missing deal value, we used median imputation, computing the annual median value depending on the type of deal (inward, outward, domestic). We removed all deals valued under 1m US\$. We also removed deals involving private individuals identified by their names, and deals involving Hindu Undivided Family, a type of legal entity similar to a family trust.

The final sample contains 12,147 geolocated deals from 2000 to 2020 covering 17,600 city-pairs. To capture the evolutionary dimension of intersecting GPNs and GFNs, we use longitudinal analysis through a combination of descriptive statistics and data visualisation of investment networks. Considering cities as nodes and the number, value, and types of deals as edges, we built a network visualized through Sankey diagrams, a type of plot particularly relevant to presenting weighted flows across categorical variables, yet largely underused in economic geography. While our analysis is driven by quantitative data, our understanding of financial centres in India is also informed by interviews with 31 financial and business services executives and policy makers, conducted in Mumbai and Bangalore in January 2020.

The uneven structure of financial convergence in India

INSERT FIGURE 1, 2 & 3 HERE

INSERT TABLE 1 HERE

All figures and tables are described after the references

As Figures 1 and 2 show, outward deals dominate the M&A market at the domestic and cross-border levels. Both foreign and Indian financial firms have intensified their consolidation with other economic sectors, with a remarkable growth in the inbound market, and the modest, yet rising investments made by Indian financial firms abroad during the 2010s (see also Table 1). The aftermath of the global financial crisis only temporarily reduced the activity of foreign firms in India's fast rising economy. By 2015, the total value of inbound deals recovered from the recession and have since constantly exceeded figures from the 2003-2007 boom years, when the country was recording an 8% annual GDP growth. The relative slowdown of the economy since 2016 did not hinder this trend with a record of US\$37,5bn invested by foreign firms in 2020. Outward deals account for the largest share (89%).

The domestic market reveals contrasting patterns with a remarkable recent spike in the value of inward deals, and a rise of intra-sectoral M&As. The growth of the domestic market means that the position of Indian cities should also be assessed in the light of internal dynamics rather than just a function of foreign-driven financial flows. In both 2018 and 2019, the total domestic deal value significantly surpassed that of inbound M&As.

Figure 3 reveals differentiated sectoral patterns of financial convergence between GFNs and GPNs within and into India. The evolution of inbound-outward deals underlines that foreign financial firms increasingly targeted 3 sectors, mostly by acquiring or raising minority stakes rather than concluding full acquisitions. IT, information, and pharmaceuticals attracted respectively 24%, 13% and 7% of the total value from 2011 to 2020. Comparing the two decades, the share of manufacturing and utilities declined to 11 and 6%. In comparison, the Indian financial industry remains less attractive for foreign financial firms: intra-sectoral deals only represent a fifth of the total annual value of inbound deals, despite an increase since 2015. The domestic market differs in terms of cross-sectoral investments: manufacturing remains the main sector for Indian financial investors, ahead of IT and utilities.

Finally, the convergence between GPNs and GFNs cannot be reduced to inbound dynamics (figure 1). Albeit modest in numbers and value, outbound M&As are on the rise with a record of 37 outward deals in 2019. Most of this activity bears the marks of financial convergence: Indian financial firms invest in non-financial sectors, in particular IT, targeting firms based in the US (171 deals), Singapore (35 deals) and other South Asian countries (China, Malaysia, Indonesia).

These uneven sectoral evolutions are explained by structural changes in the domestic economy but also by regulatory steps undertaken by the national government continuing the economic and financial liberalization initiated in the early 1990s. In 2016, new provisions relaxed the regulation for cross-border M&As in the pharmaceutical industry, with government approval being required only when foreign ownership exceeds 74%. In 2017, the government also abolished the Foreign Investment Promotion Board, “relaxing FDI restrictions” (Rao and Dhar 2021, 165). Full foreign ownership is permitted in mining, petroleum and natural gas, telecommunication services, aviation, satellite establishment and operation, broadcasting carriage services, and the entire manufacturing sector including pharmaceuticals, medical devices, computers, and arms industries. In contrast, banking and insurance fall under restrictive caps in terms of FDI and foreign ownership (Bhatia 2022), which have been relaxed only in recent years. While foreign participation is limited to 20% for public banks, the Reserve Bank of India increased the limit to 74% for private banks in 2015 (2015). Similarly, foreign companies were allowed to increase their shares from 26% to 49% in the insurance sector, which consequently witnessed a steep increase of inbound M&As. Amazon, for instance, invested in an online, Mumbai-based vehicle insurance provider in 2018. Finally, the recent peak of inward M&As in the domestic market stems directly from the consolidation of public sector banks undertaken by the national government, with a spectacular growth of commercial banking as the main targeted sector (Figure 3).

With these inter-sectoral patterns reflecting the increasing entanglement between GFNs and GPNs both at the domestic and cross-border scale, the next section analyses the urban geography of financial convergence and its consequences for Indian financial centres.

IT and finance driving financial convergence

INSERT FIGURE 4 HERE

The geography of cross-border deals reveals the central role of the IT sector in supporting financial convergence, strengthening existing cross-border relationships between cities on a global level, and forging new connections on a regional level. These financial flows have affected the hierarchy of financial centres in India, with the spectacular rise and changing role of Bangalore over the last two decades.

The rise of Bangalore as an international financial centre

As shown in Figure 4, Mumbai remains India’s financial gateway for foreign investors, attracting 45% of the total value of inward deals for both decades. The USA retains its leadership as the largest origin of inbound M&As, with 37% of deal value between 2011-2020. Looking at the city-dyads that structure networks of investments (see Table B in Appendices), New York-based financial firms remain the most important source of

investments over the last decade, targeting non-financial sectors in Mumbai and Bangalore. Deals involving a UK acquirer are in decline in both absolute and relative terms. Investments from the Middle East and Asia increased significantly. On the receiving end, Mumbai, New Delhi, and Bangalore lead. The next five metropolitan areas of Ahmedabad, Chennai, Hyderabad, Kolkata, and Pune combined account for only 17% of the total inbound value in 2011-2020, a proportion similar to the previous decade.

The rise of Bangalore across inter-city networks is spectacular and results from investments in the IT industry. With a 480% growth of invested value between the two decades, Bangalore catapulted its share of foreign investments from 8% to 18%, closing the gap with New Delhi (21% in 2011-20). In the context of a relative decline of manufacturing and utilities, Bangalore concentrated more than half of all foreign investments into the IT sector during the 2010s, with US investors accounting for 60% of all inbound deals targeting Bangalore. Significant deals underline patterns of IT-driven financial convergence. Flipkart, a Bangalore-based e-commerce platform received investments from: Tokyo-based Softbank Group (through a holding registered in Jersey, UK), venture capital firm Accel Management Company (in San Francisco Bay Area), private equity fund Tiger Global Management (New York), GIC (a sovereign wealth fund from Singapore), and the Qatar Investment Authority, to name the main players. Flipkart was eventually acquired by Walmart in 2018. Representative deals include ANI Technologies, the parent company for the ride-sharing start-up Ola Cabs, and Think&Learn, an exam preparation platform, whose investors include BlackRock (New York), Silver Lake Technology Management (Bay Area) and the private equity firm General Atlantic (New York).

The trajectory of Bangalore as a receiving node confirms the key role of IT in reshaping the geographies of FCs through path-dependency effects exemplified by the historical connections to US investors and firms based in the Bay Area. The cross-border, inter-sectoral flows that connect Indian cities to San Francisco and Silicon Valley became an umbilical cord of the M&A market during the 2010s: while in terms of value, New York-Mumbai and New York-Bangalore remain the top city-dyads for the inbound market, the San Francisco-Bangalore dyad accounted for the highest volume of activity with 362 deals during in 2011-20.

Compared with Bangalore, Mumbai and New Delhi exhibit a more diversified sectoral profile (Figure 4). For New Delhi, inbound foreign investments target mainly utilities (42%), information & communication, and manufacturing. As India's historical financial capital, Mumbai attracts foreign investment in commercial banking (77% of total investments in this sector), finance (58%), insurance (73%), but also captures 80% of investments into the pharmaceutical industry. In 2018, for example, HDFC Bank raised US\$1.8bn from JP Morgan. In 2015, Sun Pharma received investments from Goldman Sachs (through its Singapore branch), GIC, and the Mauritius-based Aranda Investments, a wholly-owned subsidiary of Temasek Holdings, another Singaporean sovereign wealth fund. Insurance companies such as Reliance Capital, ICICI Lombard General Insurance, and Birla Sun recently concluded numerous deals with investors headquartered in New York, Singapore, Toronto, Tokyo and Mauritius. Mumbai also attracts foreign investments in information &

communication, and in the IT sector, with the presence of Jio Platforms, owned by the conglomerate Reliance Industries, which experienced the largest IPO in 2020. Investors included Silver Lake Technology Management, the Abu Dhabi Investment Authority, the Public Investment Fund from Riyadh, and the venture capital firm Intel Capital (San Francisco).

Outbound activities underline that Bangalore became an international FC for India over the last decade: the city accounts for the largest number of deals (92) in India and represents 30% of the total value, compared to 7% in the previous decade. New Delhi almost doubled its outbound market activity (24 to 43 deals) but its share of value remains stable, around 15%. Mumbai's enduring prominence (see Appendices) is due to large investments made by the Mittal family in its own Luxembourg-based subsidiary ArcelorMittal in 2013. Leaving this deal aside, Bangalore would stand as the largest node for outbound investments, with 38% of the total value, ahead of Mumbai (27%).

Shifting regional connections

This hierarchical evolution on a domestic scale is correlated with two geographical shifts on a global and regional level. First, San Francisco became the largest partner for Bangalore and Mumbai-based investors (18 deals) during the last decade, with Bangalore making half of the total US\$1.8bn of investments. Value-wise, these outbound flows remain limited but demonstrate the changing position of Bangalore in GFNs. A few Indian financial companies, such as private equity firms PremijInvest (the family office of Azim Premji, chairman of the IT and consulting Bangalore-based company Wipro), Blume Venture Advisors (Mumbai) or Sequoia Capital India Advisor (Bangalore) now have the scale, knowledge and legitimacy to position themselves as international investors and driving financial convergence: Indian financial firms targeting US-based companies in IT (32% of outward investment value), but also in finance and insurance (14%).

Offshore and mid-shore jurisdictions articulate the convergence between GPNs and GFNs. As shown on Figure 4, the 'Mauritius route', with financial firms registered in Port Louis, remains a central feature of financial convergence in India, accounting for 15% of the total value of deals in 2011-20. Since 2000, Mauritius has been the largest source of FDI into India. A Double Taxation Avoidance Agreement signed in 1982 stipulated that Mauritius based companies selling shares of Indian companies were exempt from capital gains tax in India. Significant deals include Goldman Sachs, through its Singapore entity, and Citigroup, through a subsidiary in Mauritius, investing in Mumbai-based Axis bank. Following the treaty's renegotiation in 2017, the 'Mauritius route' was eventually surpassed in 2018 by Singapore and the USA, as confirmed by city-dyads. This rising role of Singapore (from 7% to 16%) and the presence of Hong-Kong (about 3% in both decades) further confirms the key role of FCs and offshore jurisdictions in driving financial convergence: a closer look at the data reveals that most inward deals involve holdings or investment funds located in Port Louis, such as Mauritius-registered subsidiaries from Morgan Stanley or Franklin Templeton,

and state-owned firms from Singapore acquiring shares in non-financial sectors in India. Our analysis also confirms the continuing presence of other central nodes such as Luxembourg and the Netherlands which feature among the top 15 sources of FDI (Reserve Bank of India, 2021).

Finally, financial convergence is brought upon by the clear emergence of Asian cities in inter-city networks, including Bangkok, Bayan Lepas, Beijing, Hangzhou, Ho Chi Minh City, Seoul, Shanghai, Suzhou, Taipei, and Yokohama. If financial flows between India and Chinese cities remain low compared to other destinations - notwithstanding the established connection to and from Hong-Kong - they confirm the influence of IT, which attracted the bulk of Chinese investors. The largest deal involved in 2015 Alibaba Capital Partners (Hangzhou) investing in One97 (New Delhi), the parent telecommunication company of the FinTech firm Paytm. New dyads have also appeared, strengthening connections to Europe (Dublin, Geneva, Hamburg, Luxembourg, Frankfurt) and North America (Denver, Los Angeles, Washington, Vancouver, Raleigh, Tampa, Toronto). India's connections in the African and South American continent remain rare and decreased over time, with only two deals targeting Johannesburg and Dar es Salam.

Overall, the network of cross-border investments remains extremely polarized among three cities, but the perception of Mumbai's as India's financial gateway to the world economy needs to be nuanced given the changing role of Bangalore as an international FC in the city networks created by the convergence of GFNs with GPNs. The next section explores financial convergence from the perspective of the domestic M&A market and examine the resulting changes for FC hierarchy in India.

Changing domestic hierarchies: the most visible hand of the state

Domestic networks appear structurally different from the cross-border dynamics, both from a sectoral and institutional perspective (figure 3). Characterized by the overwhelming primacy of Mumbai between 2000 and 2010, the domestic network recently evolved into a bipolar structure due to the rise of New Delhi (figure 5). This changing landscape underlines how the evolution of FCs is deeply embedded in the changing geography or power orchestrated by the central government.

INSERT FIGURE 5 HERE

Mumbai remains the largest node of the domestic M&A market, with US\$78bn worth of investments in 2011-2020, a 121% growth compared to 2000-10. This prominence is engraved in the city's internal market that account for the largest share of the domestic value (see Table A in Appendices). On the acquiror side, Mumbai dominates across all sectors, hosting the head offices of commercial banks (Kotak Mahindra, HDFC, ICICI Bank), insurance companies (Life Insurance Corporation of India), private equity funds (Blume Venture Advisors, India Quotient Advisors, Mumbai Angel Venture Mentors), and other

powerful, large financial firms such as the HDFC group, Tata Capital, and Reliance Capital. Life Corp, a state-run entity, was the largest Mumbai-based acquirer during both decades, with a diversified, cross-sectoral portfolio, investing in Yes Bank, Axis Bank & IDBI Bank (Mumbai), Infosys (Bangalore), the Indian Oil Corporation (Mumbai), ITC Limited (Kolkata), NTPC Limited (the government-control electricity company based in New Delhi) and Tata Motors (Mumbai). On the target side, Mumbai remains the largest node for intra-sectoral deals that consolidate the financial industry, but also for investments in manufacturing, pharmaceutical, and utilities.

Yet, the increasing weight of New Delhi is visible on the investor side. During the 2010s, the city accounted for 37% of the total value invested across Indian cities, compared to 11% in the 2000s. In the meantime, Mumbai's share declined from 66% to 46%. In terms of sectoral dynamics, while the upward trajectory of Bangalore in cross-border investments resulted from outward deals, the rise of New Delhi is due to numerous inward deals: the central government invested in commercial banking, mostly in the forms of acquisitions through capital injections. Since 2011, the government of India invested US\$47bn in a total of 160 deals targeting commercial banks headquartered in major cities around the country (see outward deals in Table A). In addition, multiple mergers took place between commercial banks over the last 20 years, with the government approving the merger of 10 state-run banks into four larger public sector banks in 2020. These waves of mergers conducted in the name of consolidation, global competitiveness, and restructuring in response to the accumulation of non-performing assets (Kadanda and Raj 2018) have been driven by the central government. This emphasizes how New Delhi gained in terms of power and decision making within domestic networks. In contrast, Bangalore records low levels of activity: this is related to the distinctive sectoral patterns of the domestic market, where IT companies attract only a minor proportion of Indian investors (9% of the total value in the last decade). As a consequence, Bangalore ranks far behind the leading duo of New Delhi and Mumbai in domestic inter-city networks.

Urban geographies of financial convergence: towards a more polycentric structure of financial centres in India

Having analysed different parts of India's M&A market involving financial companies, we are now ready to draw a broad picture of the evolving hierarchy and typology of India's major cities as shaped by financial convergence. This is based on three groups of measures: a) the evolution of a city's rank over the last two decades in terms of market share on the target and acquisition side (Figure 6); b) the sectoral breakdown of flows for each city (Table 2) c) the geographical breakdown of flows in terms of outgoing and incoming values (also in Table 2).

INCLUDE FIGURE 6 HERE
INCLUDE TABLE 2 HERE

Mumbai remains India's main financial centre, as a net acquirer in the domestic market and with the second highest ratio of outgoing to incoming flows. The fact that the latter ratio is higher for New Delhi (0.72) is due to the involvement of the central government. Taking all types of deals into account, Mumbai ranks first on the acquisition (46% share) and target side (42%) during the 2010s. This prominence is rooted in the city's diversified financial profile, with investments to and from key sectors such as commercial banking, insurance, and other types of financial firms, but also results from the concentration of various conglomerates' headquarters, particularly in manufacturing and utilities.

Financial convergence has established Bangalore as India's second leading financial centre, driven by cross-border outward deals targeting the IT sector. 65% of the value invested in Bangalore comes from foreign investors - the highest ratio among the eight largest cities of India. On the acquisition side, and in contrast to Mumbai, Bangalore's own financial sector is less diverse, without dominant players in commercial banking or insurance, except for the government-owned Canara Bank. The city, however, has strengths in private equity and venture capital (88% of outgoing flows), which mainly invest in local IT firms. More importantly, Bangalore displays distinctive connections to other international FCs such as San Francisco through cross-sectoral networks (see outward deals in Appendices, Table C): Bangalore provides a stepping stone for Indian investors: 20% of the outgoing value goes abroad, in stark contrast with Mumbai (%%) which caters mainly for the domestic market. Put differently, while Bangalore does not yet compete with Mumbai in terms of size, the geographical pattern of investments reveals a higher exposure to transnational flows, particularly through the strengthening of historical connections to global FCs with New York and the Bay Area in the lead.

New Delhi appears as India's third leading financial centre, with a dual profile highlighting the variegated entanglement between GFNs and GPNs. On the one hand, the rising status of New Delhi seems conjunctural and orchestrated by the central government's investments into the domestic financial sector. The state accounts for a staggering 68% of the outgoing value of deals. Compared with Mumbai and Bangalore, commercial banks and other types of financial firms play a much smaller role on the acquisition side. On the other hand, New Delhi's rise is also rooted in long-term structural economic changes. A net target in cross-border, cross-sectoral deals, New Delhi hosts the headquarters of energy, finance, telecommunication, and IT companies, attractive to foreign (Figure 4) and domestic financial firms (Figure 5). This new status goes hand in hand with patterns of urban development: New Delhi's rise is largely underpinned by the growth of Gurgaon, a satellite city which became a hub for finance (e.g. Indiabulls Housing Finance) and telecommunication (e.g. Bharti Group). On its own Gurgaon, which grew from 0.86% to 2.8% of the total value on the acquisition side and from 4.7% to 6% on the target side, would overtake Ahmedabad, Hyderabad, or Pune.

The next 5 major cities rank far behind this leading trio. Kolkata and Chennai display similar shares on the acquisition (3% of the total value) and target side (4%). Kolkata's position is mainly attached to inward investments through which financial firms invest in the

local manufacturing and utility industries - the IT sector being almost non-existent - and a few intra-sectoral deals due to the presence of the National Insurance Company and the Bandhan Bank, which received investments from a Singapore sovereign fund, Merrill Lynch and Goldman Sachs. Yet, Kolkata's position remains mostly restricted to the domestic scene, with very low levels of cross-border activities. Chennai's position is linked to a few key actors in the financial industry: the Indian Bank, the Indian Overseas Bank and various Tamil-controlled private equity and financial firms, such as the Shriram Group. Hyderabad, Ahmedabad, and Pune rank further behind with contrasting profiles highlighting the intersection of GFNs with GPNs. While Pune hosts an attractive IT sector, Hyderabad and Ahmedabad receive domestic and foreign investments that mainly target the industrial sector. Pharmaceutical companies account for the second largest incoming value for Hyderabad (15%), behind utilities (30%). Ahmedabad engages in outgoing flows through small, local private investment firms, while Gruh Finance, specialized in rural housing finance, was acquired in 2019 by the Kolkata-based Bandhan Bank.

Conclusions and implications

This paper sought to address two research gaps in the era of financial convergence: tracing the inter-city networks that both support and result from the increasing entanglement of GFNs with GPNs to examine the evolution of FCs; the lack of representation of Indian cities in financial geography beyond the literature on offshoring. One of our primary contributions in this paper is to reveal how the city-networks of financial convergence changed the landscape of FCs in India, most specifically through two dynamics: the transnational, path-dependent dynamics of the IT sector, which attracted investments of foreign financial firms; the strong involvement of the central government in promoting foreign investments in finance and other sectors, and in consolidating the domestic banking industry. The cross-border nature of investments, in and out of the financial sector, confirm how the contemporary geography of FCs needs to be understood in the context of inter-sectoral dynamics and financial convergence in particular.

Measuring the entanglement between GPNs and GFNs allowed us to identify the sectoral trends that reshape inter-city networks and drive financial convergence. The integration of Indian cities into the global economy is taking place mostly through deals targeting non-financial sectors: over the last two decades, foreign financial firms gradually shifted their investments from manufacturing and utilities towards the IT, telecommunication and pharmaceutical industries. Our findings emphasize the dual role of IT firms as both recipient and source of transnational investments, which turn them into a linchpin of the networks that unevenly connect FCs. Indian IT companies attracted a rising share of inward deals, not only for developing offshoring facilities, but also to source new technologies, while strategically investing in the booming mass-consumption domestic market driven by e-commerce and digital platforms (Reserve Bank of India 2021, 95).

The GFN framework proves relevant to assess the intersection of finance with the structures of GPNs, as our analysis reveals clear links between the largest Indian cities and international FCs such as New York, Singapore and the San Francisco Bay Area. Our results also highlight the key role of offshore jurisdictions, like Port Louis in Mauritius, for cross-sectoral investments. If our findings reveal path-dependent proximities between Indian cities and the west coast of the USA, they also highlight weak connections between Chinese and Indian financial firms. Yet, recent transactions between Chinese and Asian cities signal how the IT-finance nexus generates powerful mechanisms of change over the links that structure the global economy, and orchestrate the integration between GFNs and GPNs, producing new inter-city networks that support urban geographies of financial convergence.

These cross-sectoral dynamics unevenly integrate Indian cities within the corporate networks and financial flows of the M&A market. While the hierarchy of Indian FCs remains relatively stable and highly polarized, it has evolved from a singular structure characterized by the primacy of a Mumbai, to a more polycentric, three-headed structure: following two decades of cross-border and domestic investments that translate into a changing distribution of corporate power, Bangalore and New Delhi emerged as FCs both on a domestic and international level, alongside Mumbai, which remains India's financial capital. In terms of volume, value and geographical connections with the rest of the world, there is a clear gap between this leading trio and the other major Indian cities. Mumbai, Bangalore and New Delhi operate as basing points for global capital in two ways: by becoming leading nodes in domestic capital flows through inter-sectoral deals; by strengthening established and developing new connections with investments banks, VC firms, and state-owned funds located in global financial centres, mostly due India's comparative advantages in the IT sector. These findings confirm the influence of the tech-finance nexus in knitting GPNs with GFNs and shaping metropolitan patterns of globalization (Derudder and Taylor 2020).

Our evidence on M&As facilitating a more polycentric growth of India's FCs is an important counterpoint to studies showing how M&As drive spatial concentration in finance (Leyshon and Thrift 1997; Contel and Wójcik 2019). Our results are a reminder that firm-level consolidation, and international financial integration, do not have to lead to spatial concentration. With the established FC (Mumbai), seat of government (New Delhi), and centre of IT industry (Bangalore) in different parts of a large country with a fast-growing economy, India appears as a special case. It also remains to be seen how the emerging trio of FCs in India affects financial development and investment in other parts of the country.

The increasing volume and value of acquisitions by foreign financial firms across Indian cities corroborates how the changing distribution of corporate power affects the subordinate position of Indian FCs for an emerging economy (Bonizzi, Kaltenbrunner, and Powell 2022). Yet, despite the fact that outward activities from Indian FCs remain small, Mumbai, Bangalore and New Delhi cannot not be conceptualized as passive subjects of western financial interests. A net target in the M&A market, Bangalore also emerged as a major gateway for Indian firms seeking to position themselves as international investors, building on established connections with the USA and the San Francisco Bay Area to invest across the IT and financial sectors.

These transnational patterns captured here at the city and firm level underline that future research is necessary to illuminate how corporate actors collaborate and compete when articulating GFNs and GPNs. An important question concerns the relationships between the flows of money examined in the paper, and the related circulation of people and knowledge. Seen from India, financial convergence highlights the major role played by the migration of entrepreneurs and cross-border investments that support the rise of Indian FCs. The GFNs through which IT services or digital platforms access funding from private equity, venture capital and investment banking results from closely-knit relationships forged in campuses and diaspora' social networks (Chacko 2007). The cross-border nature of these flows, in and out of the financial sector, confirm how the contemporary geography of FCs, in terms of links and functions, also needs to be understood by paying attention to inter-sectoral dynamics forged by professional trajectories. In that regard, the new availability of fine-grained data on employment and career hubs (Bühlmann et al. 2023) opens up productive lines of enquiry to further examine how the inter-city networks of corporate elites correlate with inter-city networks of firms' location and investments, and ground the intersection of GFNs with GPNs.

From the vantage point of India, this paper confirms how uncovering the sectoral and institutional trends that shape the evolution of financial centres benefits from the quantitative measurement of value, using transactional data to investigate where and how GFNs intersect with GPNs. Yet, such an approach might become complicated if empirical markers such as sector codes become less relevant over time: on the one hand, financial convergence blurs the boundary between financial and non-financial firms. On the other hand, the state, through its apparatus, intervenes directly in financial markets, affecting the hierarchical position and differentiation of FCs, and orchestrating urban geographies of financial convergence. The intersection of GPNs with GFNs highlight the key role of central governments in shaping urban networks and FCs, especially in emerging economies such as India or China (Petry, Koddenbrock, and Nölke 2023; Pan et al. 2020).

Government influence manifests itself in the provision of policies to foster or restrict financial integration (Töpfer 2018), particularly in the case of M&As, as such transactions directly influence patterns of foreign ownership. In India, the effects of tax rebates in the IT sector or of FDI relaxations in the insurance industry provide a telling example on the formative effect of legislation over the evolution of FCs. New Delhi's command and control functions gained prominence through the recent large-scale and repeated state-driven investments, driving consolidation in the network of public banks, echoing the wider set of state interventions in the Global South. Singapore, Dubai and Abu Dhabi through their sovereign wealth funds, subsidiaries of private equity firms, and central banks invested US\$4bn in Mumbai. As these "state-capital hybrids" become "increasingly integrated into transnational circuits of capital" (Alami and Dixon 2020, 70), the sectoral activities of these state-linked investors (Haberly 2011) deserve more attention.

As state interventions change the nature of financial actors, this evolution of finance (O'Connell and Elliott 2023), along with the increasing digitalization of the industry, is likely to challenge the classification systems used by economic geographers in their quantitative research designs. It will also require an extension of the analytical scope beyond financial and

business services to capture the inter-city networks of corporate power and investments that shape the landscape of FCs on a domestic and international level. Overall, future research could be informed by and contribute to the expanding scholarship on state capitalism, complementing the (inter)national scale of analysis in exploring the role and position of FCs in articulating the convergence between GPNs and GFNs.

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Figure captions

Figure 1: Annual value of M&A deals from 2000 to 2020

Figure 2: Annual volume of M&A deals from 2000 to 2020

Figure 3: Sectoral composition of domestic and inbounds M&A deal (2000-2020)

Figure 4: The network of inward M&A deals (based on value)

Figure 5: The network of domestic M&A deals (based on value)

Figure 6: The ranking of leading Indian cities in M&A deals

Tables

Table 1: M&A deals by sectoral and geographical trends (2000-2020)

	2000-2010			2011-2020			Growth in value
	Value in US\$Bn	In %	Number of deals	Value in US\$Bn	In %	Number of deals	
Domestic deals							
Intra	18.63	35.2	525	45.75	27.1	666	145.6
Inward	5.11	9.6	183	53.79	31.9	384	952.6
Outward	29.25	55.2	1536	69.16	41.0	3415	136.5
<i>Total</i>	53	100	2,244	169	100	4,465	—
Inbound deals							
Intra	13.21	18.0	414	33.08	17.7	585	150.4
Inward	1.34	1.8	52	7.24	3.9	123	441.8
Outward	58.67	80.1	1683	147.09	78.5	3644	150.7
<i>Total</i>	73	100	2,149	187	100	4,352	—
Outbound deals							
Intra	1.74	32.3	36	0.49	6.0	22	-71.7
Inward	0.52	9.6	24	0.94	11.3	12	80.4
Outward	3.14	58.1	74	6.83	82.7	208	117.7
<i>Total</i>	5	100	134	8	100	242	—

Source: Zephyr database by Bureau Van Dijk, author's own calculations.

Table 2: Profiles of leading Indian cities by sectoral distribution and geography of M&As (2000-2020)

	Ahmedabad	Bangalore	Chennai	Hyderabad	Kolkata	Mumbai	New Delhi	Pune
Incoming flows								
Commercial Banking	0.1	10.7	16.7	11.5	47.1	27.9*	7.6	18.4
Other Finance	7.2	3.5	30.4	6.6	5	15.2	11	4.4
Information	0.7	1.4	2.1	2.3	0.2	9.2	16.3	0.1
IT	5.2	56.6	8.6	10.2	0.8	4.5	15.8	35.3
Manufacturing	26.9	6.2	10.4	6.8	22.4	13.4	11.2	23
Utilities	18.5	0.8	3.1	24.6	13.3	4.8	13.7	2.3
Other Sectors	41.4	20.8	28.7	38	11.2	25	24.4	16.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total value in US\$ bn	11.3	61.3	26.3	16.4	27.3	210.1	101.5	7.5
Outgoing flows								
Commercial Banking	0.6	11.0	28.0	1.0	55.2**	13.6	1.7	12.9
Other Finance	97.9	88.2	54.8	52.5	29.5	51.5	25.5	68.7
Insurance	0.2	0.2	7.5	0.5	5.3	31.1	0.3	6.4
Other Sectors	1.3	0.7	9.7	46.1	10.1	3.7	72.5	12.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total value in US\$ bn	2.0	14.0	6.0	3.9	5.6	122.9	72.7	2.3
Geography of flows								
Ratio of outgoing to incoming flows	0.18	0.23	0.23	0.24	0.21	0.58	0.72	0.31
Inbound deals as % of incoming flows	56%	66%	58%	26%	48%	58%	45%	48%
Outbound deals as % of outgoing flows	5%	20%	3%	1%	12%	10%	0,1%	2%

* For Mumbai, 27,9% of the incoming value goes to commercial banking
 ** For Kolkata, 55.2 % of the outgoing value comes from commercial banking

Source: Zephyr database by Bureau Van Dijk, author's own calculations.

Appendices

Table A: Top 10 city dyads for domestic deals

Type of deal	Acquiror	Target	Value in US\$Bn	Number of deals
2000-2010				
Intra	Mumbai	Mumbai	12.34	192
Outward	Mumbai	Mumbai	7.57	349
Outward	Mumbai	New Delhi	4.08	150
Outward	Mumbai	Hyderabad	2.07	101
Outward	New Delhi	Mumbai	1.47	55
Inward	Hyderabad	New Delhi	1.48	3
Outward	Mumbai	Chennai	1.35	69
Outward	Mumbai	Bangalore	1.29	81
Intra	Mumbai	New Delhi	1.16	38
Outward	New Delhi	New Delhi	1.18	83
2011-2020				
Intra	Mumbai	Mumbai	23.49	241
Inward	New Delhi	Mumbai	20.93	64
Outward	Mumbai	Mumbai	15.03	636
Outward	Mumbai	New Delhi	9.58	434
Inward	New Delhi	New Delhi	8.43	61
Inward	New Delhi	Kolkata	7.33	33
Outward	Mumbai	Bangalore	6.62	329
Outward	New Delhi	New Delhi	6.58	255
Outward	Mumbai	Kolkata	6.19	57
Inward	New Delhi	Chennai	4.53	13

Source: Zephyr database by Bureau Van Dijk, author's own calculations.

Table B: Top 10 city dyads for inbound deals

Type of deal	Acquiror	Target	Value in US\$Bn	Number of deals
2000-2010				
Outward	New York	New Delhi	5.96	91
Outward	Port Louis	Mumbai	5.64	135
Outward	New York	Mumbai	3.73	85
Outward	London	Mumbai	3.25	68
Outward	Port Louis	New Delhi	2.61	111
Outward	San Francisco	Mumbai	2.51	36
Intra	New York	Mumbai	2.07	38
Outward	New York	Bangalore	1.74	37
Intra	London	Mumbai	1.71	31
Outward	Los Angeles	New Delhi	1.49	4
2011-2020				
Outward	New York	Mumbai	11.04	194
Outward	New York	Bangalore	9.95	151
Outward	Singapore	New Delhi	8.04	149
Outward	Singapore	Mumbai	7.59	139
Outward	Port Louis	Mumbai	6.27	201
Outward	New York	New Delhi	5.70	142
Outward	San Francisco	Bangalore	4.89	362
Outward	Port Louis	New Delhi	4.67	154
Intra	Port Louis	Mumbai	4.01	50
Outward	Paris	Mumbai	3.61	21

Source: Zephyr database by Bureau Van Dijk, author's own calculations.

Table C: Top 10 city dyads for outbound deals

	Acquiror	Target	Value in US\$Bn	Number of deals
2000-2010				
Outward	Lucknow	London	0.79	1
Intra	Mumbai	Riyad	0.62	1
Outward	New Delhi	Singapore	0.46	1
Outward	Chennai	Oslo	0.33	1
Outward	Mumbai	Hamilton	0.26	1
Intra	New Delhi	San Francisco	0.22	2
Outward	Bangalore	San Francisco	0.19	13
Outward	Mumbai	San Francisco	0.16	9
Outward	Mumbai	Bologna	0.16	1
Inward	Mumbai	Birmingham	0.12	1
2011-2020				
Outward	Mumbai	Luxembourg	1.8	1
Outward	Bangalore	San Francisco	0.83	38
Outward	Lucknow	New York	0.59	1
Inward	Bangalore	Tampa	0.46	1
Outward	Bangalore	Boston	0.32	4
Intra	New Delhi	Seattle	0.32	3
Outward	Mumbai	San Francisco	0.23	18
Outward	Mumbai	Singapore	0.22	12
Outward	Chennai	Virgin Islands	0.16	1
Outward	Mumbai	Beijing	0.15	1

Source: Zephyr database by Bureau Van Dijk, author's own calculations.