

The business of war untangled: Cities as fiscal-military hubs in Europe (1530s–1860s)

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Abstract

Fiscal-military hubs were cities characterized by the clustering of specific expertise and resources, which became centres where states, and semi-state and non-state actors arranged the transfer of war-making resources in early modern Europe. Using this concept enables the study of the business of war to shift the locus beyond the state towards a transnational history, while integrating political, military, economic, and cultural aspects that have generally been studied separately. By examining the hub, we can untangle the full complexity of this business, and reveal its actors, networks, assets, prices, routes, culture, and rules of conduct.

Keywords

business of war, state formation, fiscal-military state, contractor state, arms trade

The ‘return of the mercenary’ and the role of private military contracting in present-day warfare has been widely noted by political scientists and international lawyers as suggesting that war has become a business.¹ The extent to which military contractors are a

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- 1 Recent contributions include Nir Arieli, *From Byron to Bin Laden: A History of Foreign War Volunteers* (Cambridge: Harvard University Press, 2018); Stig Förster, Christian Jansen and Günther Kronenbitter, eds., *Rückkehr der Condottieri? Krieg und Militär zwischen staatlichem Monopol und Privatisierung* (Paderborn: Schöningh, 2016); Christopher Kinsey, *Corporate Soldiers and International security: The Rise of Private Military Companies* (London: Routledge, 2006); Sean McFate, *The Modern Mercenary: Private Armies and What They Mean for World Order* (Oxford: Oxford University Press, 2015); Sarah V. Percy, *Mercenaries: The History of a Norm in International Relations* (Oxford: Oxford University Press, 2007).

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liability for the state's sovereignty and efficiency, and the challenges they pose to international order are all pressing current concerns.² Likewise, historians have generally viewed contractors and other 'private' elements in sustaining warfare as weaknesses or obstacles to be overcome as the state centralized power and nationalized war-making as a public good.³

Despite their valuable insights, such studies generally frame the early modern business of war along national lines and consequently obscure the transnational character of this activity. One strand looks at the early modern emergence of bureaucratic states through military competition and how states mobilized their resources needed for warfare.⁴ The other focuses on national economies through the activities of individual businessmen trading in specific military resources (mostly weaponry) and how they ran their businesses.⁵ The historical reality is thereby often distorted through the employment of the anachronistic models of a company, as well as that of an economic sector controlled by the state. Consequently, the modern distinction between the 'public' and 'private' is drawn too sharply to understand the early modern context.⁶

Early modern European fiscal-military entrepreneurs operated in loose consortia, supplying a wide range of resources from soldiers to ships, and traded with multiple states, including hostile powers. They were often closely connected to government or held political office (sometimes for different regimes). Some trading companies had semi-sovereign powers to declare war and organized military resources for their own campaigns

2 George Andreopoulos and John Kleinig, *Private Military and Security Companies (PMSCs) and the Quest for Accountability* (London: Routledge, 2017); Lindsay Cameron and Vincent Chetail, *Privatising War: Private Military and Security Companies under Public International Law* (Cambridge: Cambridge University Press, 2013); Simon Chesterman and Angelina Fisher, *Private Security, Public Order: The Outsourcing of Public Services and its Limits* (Oxford: Oxford University Press, 2009); Molly Dungan, *Victory for Hire: Private security Companies' Impact on Military Effectiveness* (Stanford: Stanford Security Studies, 2011); Francesca Francioni, *War by Contract: Human Rights, Humanitarian Law, and Private Contractors* (Oxford: Oxford University Press, 2011); James Pattison, *The Morality of Private War: The Challenge of Private Military and Security Companies* (Oxford: Oxford University Press, 2014).

3 Further discussion of this in P.H. Wilson, 'Foreign Military Labour in Europe's Transition to Modernity', *European Review of History*, 27 (2020), pp. 12–32.

4 See, for instance, Richard Bonney, *The Rise of the Fiscal State in Europe 1200–1815* (Oxford: Clarendon, 1999); B. Yun-Casalilla and P.K. O'Brien, eds., *The Rise of Fiscal States. A Global History, 1500–1914* (Cambridge: Cambridge University Press, 2012).

5 Priya Satia, *Empire of Guns: The Violent Making of the Industrial Revolution* (London: Allen Lane, 2018); Claude Gaier, *Four Centuries of Liege Gunmaking* (Liege; London: E. Wahle, 1976).

6 See G. Bannerman, *Merchants and the Military in Eighteenth-Century Britain. British Army Contracts and Domestic Supply, 1739–1763* (London: Routledge, 2008) and for the Dutch case Peter W. Klein, *De Trippen in de 17e eeuw: een studie over het ondernemerschap op de Hollandse stapelmarkt* (Assen: Van Gorcum, 1965); Michiel de Jong, 'Staat van Oorlog'. *Wapenbedrijf en militaire hervorming in de Republiek der Verenigde Nederlanden, 1585–1621* (Hilversum: Verloren, 2005).

accordingly. Furthermore, military competition was only possible through cooperation between allied, neutral, and even enemy states. The extensive literature on early modernity as a period of 'state-building' focuses attention on institutional development and largely treats states as striving for autarky, obscuring the fact that virtually none of them were able to wage war exclusively from their own resources.⁷ Distracted perhaps by Cicero's famous assertion that 'the sinews of war are endless money', scholars have studied how states raised revenue, and have largely assumed war-making resources were always available provided they could be paid for.⁸ Insufficient attention has been given to how, not just governments but also their agents as well as entrepreneurs obtained the resources they needed. The early modern business of war was an intrinsically transnational phenomenon, which ran through highly elaborate networks of merchants, entrepreneurs, bankers, experts, and agents of all kind, who gathered in specific urban centres across Europe. While the Internet facilitates the modern business of war, early modern military entrepreneurs were depended on face-to-face meetings, whether they went in person or sent a representative instead, as well as acquaintance, kinship, epistolary contacts, and other methods to foster trust and smooth risky, long-distance transactions. Central to the early modern business of war was thus the importance of the place where deals were struck.

This article proposes a truly transnational business history of war through the examination of cities as 'fiscal-military hubs'. These cities are characterized by the clustering of specific expertise and resources, which became centres where states, and semi-state and non-state actors arranged the transfer of war-making resources. The proposed concept of the fiscal-military hub enables the study of the business of war to shift the locus beyond the state towards a transnational history. By examining the hub, we can untangle the full complexity of this business, and reveal its actors, networks, assets, prices, routes, culture, and rules of conduct. Fiscal-military hubs were central to what can be termed the 'Fiscal-Military System' which was a singular phenomenon in European history, evolving in parallel with the European sovereign state order from the 1530s onwards as the nascent states began to tap into its resources, before eventually breaking down by the 1860s as warfare became more fully nationalized.⁹

By identifying the development, role, and significance of European fiscal-military hubs, we take the first step towards a fuller examination of these complex issues. We begin by reviewing the literature on early modern resource mobilization to show how the

7 For example, the literature on mercantilism and inter-state relations as competitions over resources and resource flows: Paul Kennedy, *The Rise and Fall of the Great Powers* (New York: Vintage, 1987).

8 Rosella Capella Zielinski, *How States Pay for Wars* (Ithaca: Cornell University Press, 2016); Thomas A. Meagher, *Financing Armed Conflict* (2 vols. Basingstoke: Palgrave, 2017).

9 The broader chronology of the Fiscal-Military System is set out more fully in P.H. Wilson, 'The European Fiscal-Military System and the Habsburg Monarchy', in *The Habsburg Monarchy as a Fiscal-Military State c.1648–1815*, eds. William Godsey, Petr Mat'a and Thomas Winkelbauer (Oxford: Oxford University Press, 2020), forthcoming. A preliminary sketch appeared as 'The Paradox of European History: How Independence Required Interdependence'. *The Oxford Historian* (Hilary Term 2017) available at <https://www.history.ox.ac.uk/paradox-european-history-how-independence-required-interdependence>.

idea of fiscal-military hubs adds value to existing approaches, before outlining the methodology behind this concept. The next section sketches how hubs emerged with the growing scale and scope of European warfare around the mid-sixteenth century and became integral elements in international relations before disappearing as resource mobilization was progressively nationalized between about 1780 and 1870. Then, the question why some cities emerged as hubs but not others will be addressed by assessing the significance of their geographic, political, economic, and military location. The fifth section considers differences in scale and role between primary and secondary hubs, as well as temporary and permanent ones. These elements in turn help explain how hubs interacted with each other, with states and with non-state and semi-state actors. The final section considers the human dimension, including how people entered the fiscal-military business and how they conducted their activities.

I. Debating the state

The scale, scope, and impact of European warfare increased rapidly from the later fifteenth century, not least due to the incessant rivalry between the ruling dynasties of Spain and France which both established permanent armies by the 1530s.¹⁰ Overall, European armies expanded 10-fold in size across 1500–1800, or more than three times the pace of demographic growth.¹¹ Scholars generally explain this phenomenon by focusing on state's capacity to mobilize resources and sustain warfare, and adopt one of three explanations.

The first emphasizes institution-building and focuses on the supposed relationship between different forms of resource mobilization and types of states. This approach posits a variety of routes to the modern state. Most common is a dichotomy between commercial/industrial states and largely agrarian ones. The former is generally seen as governed by 'men of persuasion' and often ascribed to maritime powers. Navies were used to project power and protect commerce, while relatively small armies of citizens-in-arms or part-time militias were deployed for home defence. Venice, the Dutch Republic, Britain, and the United States are typically cited as examples of this route. Those in the latter type are understood as 'garrison states' ruled by 'men of coercion' and characterized by authoritarian politics. Generally, garrison states are believed to be less highly developed economically and rely on scale and mass, rather than quality in force, which results in large conscript armies. The typical examples are Prussia, Russia, and Austria.¹² More recently, scholars have identified a third, middle path: medium to large states with mixed economies. Such

10 Geoffrey Parker, *The Army of Flanders and the Spanish Road 1567–1659* (Cambridge: Cambridge University Press, 1975); Ferdinand Lot, *Recherches sur les effectifs des armées française des Guerres d'Italie aux Guerres de Religion* (Paris: S.E.V.P.E.N., 1962); John A. Lynn, 'Recalculating French Army Growth in the Grand Siècle 1610–1715', *French Historical Studies*, 18, no. 4 (1994), pp. 881–906.

11 P.H. Wilson, 'Warfare Under the Old Regime 1648–1792', in J. Black, ed., *European Warfare 1453–1815* (Basingstoke: Macmillan Press, 1999), pp. 69–95 at 79.

12 Otto Hintze, 'Military Organization and the Organization of the State', in Felix Gilbert, ed., *The Historical Essays of Otto Hintze* (New York: Oxford University Press, 1975), pp. 178–215; Frederic C. Lane, *Venice and History* (Baltimore, MD: Johns Hopkins University Press, 1966); Harald Lasswell, 'The Garrison State', *The American Journal of Sociology*, 46 (1941), pp. 455–68.

states were commercializing, but still relied significantly on inefficient forms of agriculture bordering on subsistence and/or attempted to be both land and sea powers simultaneously. France and Spain are the typical examples for this middle path. In Charles Tilly's influential version of this typology, the three routes to modernity are labelled respectively 'capital-intensive', 'coercion-intensive', and 'capital-coercion'.¹³

The second approach emerged in response to these ideas and is associated with the concept of a 'fiscal-military state' coined by John Brewer.¹⁴ Brewer drew on the development of the early modern 'tax state' from the medieval 'domain state' first suggested by Joseph Schumpeter and developed by Erling Petersen.¹⁵ Brewer's key point was the shift of attention away from the conventional preoccupation with administrative and military institutions and towards representative and consultative assemblies. What mattered was the ability to raise money efficiently without political opposition, social discontent, or economic disruption. Brewer added 'military' to the 'fiscal state' in recognition that the overwhelming proportion of revenue was raised to wage war and repay debts contracted on past conflicts. He focused on the case of Britain and more specifically, on the pact of 1688 between the monarchy (William III) and the landed and commercial elites dominating Parliament. Parliamentary approval of taxes lent legitimacy to revenue and credit raising and enabled Britain to raise far more money per capita from its population than France, despite having a much smaller state infrastructure. Brewer, as well as Phillip Hoffman and Kathryn Norberg, argues that the presence of representative institutions reduced friction and assisted resource mobilization.¹⁶ These states were more effective war-makers than 'absolute' monarchies relying on coercion. The publication of Brewer's book in 1989 coincided with the critique of 'absolutism' that noted the role of consultation with elites to reduce the friction of governing, and allow those with regional and local influence to act as conduits between the centre and the localities.¹⁷ Across the past two decades, the term 'fiscal-military state' has partially displaced that of 'absolutism' and is increasingly applied to the history of other parts of the world.¹⁸

13 Charles Tilly, *Coercion, Capital and European States AD990–1992* (Oxford: Blackwell, 1992).

14 John Brewer, *The Sinews of Power: War and the English State, 1688–1783*. (New York: Knopf, 1989).

15 J.A. Schumpeter, 'The Crisis of the Tax State', *International Economic Papers*, 4 (1954), pp. 5–38; E.L. Petersen, 'From Domain State to Tax State', *Scandinavian Economic History Review*, 23, no. 2 (1975), pp. 116–48.

16 Philip T. Hoffman and Kathryn Norberg, eds., *Fiscal Crises, Liberty, and Representative Government, 1450–1789* (Stanford: Stanford University Press, 1994).

17 Nicholas Henshall, *The Myth of Absolutism: Change and Continuity in Early Modern European History* (London: Longman, 1992); Ronald G. Asch, Heinz Duchhardt, eds., *Der Absolutismus – ein Mythos? Strukturwandel monarchischer Herrschaft in West- und Mitteleuropa (ca. 1550–1700)* (Cologne: Böhlau, 1996); P.H. Wilson, *Absolutism in Central Europe* (London: Routledge, 2000).

18 C. Dunning and N.S. Smith, 'Moving Beyond Absolutism. Was Early Modern Russia a "Fiscal-Military State?"', *Russian History*, 33 (2006), pp. 19–43; William D. Godsey, *The Sinews of Habsburg Power: Lower Austria as a Fiscal-Military State* (Oxford: Oxford University Press, 2018); Tsegaye Tegenu, *The Evolution of Ethiopian Absolutism: The Genesis of the Fiscal Military State (1696–1913)* (Uppsala: Ubsaliensis S. Academiae, 1996).

The third and most recent approach is that of the ‘contractor state’.¹⁹ This shares some historiographical roots with the fiscal-military state, a term which it seeks to build upon rather than reject, as well as overlapping with the recent critique of older interpretations of absolutism through its examination of the ‘informal’ within the formal practice of official financial and military policy. The contractor state literature broadly accepts the conclusions of those writing about fiscal-military states that war was the primary purpose of revenue but shifts discussion from how governments obtained money to how they spent it.

Conventionally, historians have followed the money through official channels, examining how states developed administrative institutions, which disbursed funds to raise, equip, clothe, feed, pay, accommodate, and deploy armies and navies. The focus on institutions flowed logically from the custom of writing political history as a story of national development in which states expanded by nationalizing and centralizing previously private and localized activities. Some examples of this were certainly impressive: the Corderie Royale naval rope factory in Rochefort was the largest industrial building in seventeenth-century France, while the Lagerhaus in Berlin that employed 5,500 workers to make army uniforms had a similar status in eighteenth-century Prussia.²⁰ However, closer examination has revealed a more complex picture in which the lines between public administration and private enterprise were often blurred and frequently crossed, rendering it questionable whether such distinctions make any analytical sense.²¹ For example, the Lagerhaus was financed by Johann Andreas Krautt who secured the exclusive right to supply cloth to the Prussian army and later used his influence to secure an official government post, which he used in turn to shape state economic policy to his commercial advantage. Perhaps more fundamentally, the contractor state literature has demonstrated the extent to which governments relied on entrepreneurs to supply and often manage their armed forces.

Proponents of the contractor state approach remain divided as to whether recourse to ‘private’ supply helped or hindered early modern state development, war-making, and economic growth, as well as how far contractors’ practices can be identified as ‘corrupt’.²² These debates offer valuable insights, but their focus remains on the state, its inhabitants,

19 The term originates with Roger Knight and Martin Wilcox, *Sustaining the Fleet, 1793–1815: War, the British Navy and the Contractor State* (Woodbridge: Boydell and Brewer, 2010). The idea has been developed by R. Harding, and S. Solbes Ferri, eds., *The Contractor State and its Implications (1659–1815)* (Las Palmas de Gran Canaria, 2012); S. Conway and R. Torres Sánchez, eds., *The Spending of States: Military Expenditure during the Long Eighteenth Century Europe and the Mediterranean, 1300–1800* (Leiden: Brill, 2014); J. Fynn-Paul, ed., *War, Entrepreneurs, and the State in Europe and the Mediterranean, 1300–1800* (Leiden: Brill, 2014); Rafael Torres Sánchez, *Military Entrepreneurs and the Spanish Contractor State in the Eighteenth Century* (Oxford: Oxford University Press, 2016).

20 Erika Herzfeld, *Preußische Manufakturen. Grossgewerbliche Fertigung von Porzellan, Seide, Gobelins, Uhren, Tapeten, Waffen, Papier u. a. im 17. und 18. Jahrhundert in und um Berlin* (Bayreuth: Verlag der Nationen, 1994), pp. 72–7; Theodor Schieder, *Frederick the Great* (Harlow: Longman, 2000), p. 70.

21 A. Graham and P. Walsh, eds., *The British Fiscal Military States 1660–c.1783* (Farnham: Ashgate, 2016).

22 Further discussion in Graham, Aaron, *Corruption, Party and Government in Britain, 1702–13* (Oxford: Oxford University Press, 2015).

and resources, and concentrates on individual contractors supplying their 'own' states, and thus framing the early modern business of war within histories of national economies.

II. Methodology of the hub: demand, people, and resources

Methodological and empirical differences lie behind the three predominant approaches to the early modern business of war. The idea of tracing different roots to the modern, sovereign state stems from political science discussions of typologies of political organization and their historical development. The concept of the fiscal-military state rests largely on examination of official tax and financial documents, while the contractor state approach draws on the archival record of interactions between state officials and contractors. The glaring absence is the lack of business records which are, indeed, sadly hard to find for this period. The individuals involved in military supply can often be identified, but it is usually challenging to follow the money beyond state institutions and official channels through the chains of contractors and subcontractors to suppliers and consumers.²³ Three strategies have evolved to address this difficulty.

One investigates states from the perspective of 'demand' side as the primary consumers of war-making resources. Much work remains to be done in quantifying demand and in assessing the rationale and criteria used to determine costs and to select contractors.²⁴ A second approach studies individual agents from the perspective of economic and social history, generally presenting their protagonists as 'military enterprisers' acting largely on their own account to raise, equip, and often command troops. Compelling examples are Albrecht von Wallenstein and Ernst von Mansfeld, who raised entire armies in the Thirty Years' War.²⁵ There are promising signs that such studies are moving beyond conventional 'cost-benefit' material analyses to incorporate cultural perspectives.²⁶

A third strategy is to determine which fiscal-military resources were involved and how they were transferred. Several distinct categories of resource can be identified. Human resources comprised personnel (manpower) and expertise. The use of foreign manpower increased dramatically during the early sixteenth century and continued to grow as armies and navies became permanent around 1650 and required recruits in peace as well as war. Foreigners constituted one in seven of the 2 million soldiers serving France between 1700

23 As stated by Richard Harding and Sergio Solbes Ferri, 'Introduction', in *The Contractor State and Its Implications, 1659–1815*, eds. Richard Harding and Sergio Solbes Ferri (Las Palmas de Gran Canaria: Universidad de Las Palmas, 2012), pp. 9–19, (p. 12); and by Knight and Wilcox, *Sustaining the Fleet*, p. 67.

24 See for example, P.H. Wilson, 'Financing the War of Spanish Succession in the Holy Roman Empire', in *The War of Spanish Succession: New Perspectives*, eds. Matthias Pohligh and Michael Schaich (Oxford: Oxford University Press, 2018), pp. 267–97.

25 Fritz Redlich, *The German Military Enterpriser and His Work Force, 14th to 18th Centuries* (2 vols. Wiesbaden: Steiner, 1964–1965).

26 In addition to Parrott, *The Business of War*, examples include G. Hanlon, *The Hero of Italy: The Duke of Parma and the Thirty Years' War* (Oxford: Oxford University Press, 2014); Stephanie Haberer, *Ott Heinrich Fugger (1592–1644)* (Augsburg: Wissner Verlag, 2004).

and 1763, while the foreign proportion in the Austrian, Prussian, and Savoyard armies varied between one- and two-thirds during the eighteenth century.²⁷ Expertise included the knowledge and experience brought by military or naval officers, as well as the know-how associated with new or developing technologies, for example, brought by marine architects and engineers serving Sweden and Russia.²⁸ Information was itself a valuable resource exchanged in written, printed, and oral form through the developing postal networks, Europe's burgeoning 'public spheres', and through systematic intelligence gathering.²⁹ Seventeenth-century Europe witnessed the growth of particular cities as information hubs, including Amsterdam and Regensburg.³⁰ Financial resources were a fourth category including cash, credit, payments, loans, and financial assistance notably subsidies. Studies have moved beyond subsidies' political and financial significance, and the motives for their use by both payer and recipient, to consider their influence on domestic politics and political culture.³¹ Material resources comprised weaponry and shipping, and the means to maintain these, as well as food, fodder, clothing, and equipment.³² The final category encompassed services, such as transit, access, or use of specialist facilities like docks or hospitals. Early modern logistics remain understudied and we still know relatively little about the process of moving troops, material, and supplies to where they were needed.³³ The need for armies

27 G. Rowlands, 'Foreign Service in the Age of Absolute Monarchy: Louis XIV and His *Forces Étrangères*', *War in History*, 17 (2010), pp. 141–65; P.H. Wilson, 'The Politics of Military Recruitment in Eighteenth-Century Germany', *English Historical Review*, 117 (2002), pp. 536–68.

28 Mary E. Ailes, *Military Migration and State Formation. The British Military Community in Seventeenth-Century Sweden* (Lincoln: University of Nebraska Press, 2002); Daniel G. Harris, *Fredrik Henrik af Chapman: The First Naval Architect and His Work* (London: Conway, 1989).

29 Matthias Pohlig, *Marlboroughs Geheimnis: Strukturen und Funktionen der Informationsgewinnung im Spanischen Erbfolgekrieg* (Cologne: Böhlau, 2016); Wolfgang Behringer, *Im Zeichen der Merkur: Reichspost und Kommunikationsrevolution in der Frühen Neuzeit* (Göttingen: Vandenhoeck und Ruprecht, 2002).

30 Clé Lesger, *The Rise of the Amsterdam Market and Information Exchange* (Aldershot: Ashgate, 2006); Susanne Friedrich, *Drehscheibe Regensburg: Das Informations- und Kommunikationssystem des Immerwährende Reichstags um 1700* (Berlin: Akademie Verlag, 2007).

31 Peter-Claus Hartmann, *Geld als Instrument europäischer Machtpolitik im Zeitalter des Merkantilismus 1715–1740* (Munich, 1978); P.H. Wilson, 'The German "Soldier Trade" of the Seventeenth and Eighteenth Centuries: A Reassessment', *The International History Review*, 18 (1996), pp. 757–92; Svante Norrhem, *Mercenary Swedes: French Subsidies to Sweden 1631–1796* (Lund: Nordic Academic Press, 2019); Peter Lindström and Svante Norrhem, *Flattering alliances: Scandinavia, Diplomacy, and the Austrian-French Balance of Power, 1648–1740* (Lund: Nordic Academic Press, 2013).

32 For example, see the studies of the Spanish navy: David Goodman, *Spanish Naval Power, 1589–1665* (Cambridge: Cambridge University Press, 1997); John T. Wing, *Roots of Empire: Forests and State Power in Early Modern Spain, C. 1500–1750* (Leiden: Brill, 2015).

33 For an interesting attempt with a national focus: Guy Rowlands, 'Moving Mars: The Logistical Geography of Louis XIV's France', *French History*, 25 (2011), pp. 492–514.

to cross the patchwork of European states and jurisdictions is a neglected factor encouraging ideas of neutrality.³⁴

Often two or more types of resources might be combined in the same transaction. Transit rights, for instance, might be required to allow auxiliary troops to march from their original provider to where they were intended to serve another power. Thus, individual transactions might involve multiple parties, while individual entrepreneurs might be involved in many related exchanges. The Dutch merchant Louis de Geer supplied Sweden with credit and held the monopoly on the Swedish copper trade in Amsterdam. Another example is the business of Jean Hoeufft, who was involved in both the transfer of subsidies (credit) and weaponry (arms trade) between France and Sweden.³⁵ Specific contractual forms emerged to facilitate the exchange/transfer of these resources by easing the problems arising from distrust, risk, or distance.³⁶

The concept of the 'fiscal-military hub' addresses the methodological problems by allowing the three elements of demand, people, and resources to be studied together. This combination brings four advantages. First and foremost, it is appropriately transnational and suited to examine a period before the national, sovereign state was fully formed. It broadens the scope beyond the record left in official documents to examine the roles played by non-state and semi-state actors. Such actors included bankers, financiers, agents, merchants, manufacturers, and others who might be involved in supply or facilitating resource transfer. However, they could also be among those seeking resources for their own war-making, such as the English and Dutch East India companies with their own armies and fleets, or semi-sovereign powers like the German and Italian princes, who both supplied forces to the major power and acted on occasion as belligerents themselves.

Second, the examination of hubs helps break down anachronistic and unhelpful divisions between 'public' and 'private', as well as between political, military, economic, social, and cultural history. In addition, all resources involved in the war business can be examined rather than focusing on a particular industry or resource type. Last, this approach expands research to take greater account of peacetime as well as war. The conventional focus on the state tends to draw attention to wartime, because this was when states were most under pressure and the demand for revenue and resources was highest. Coverage of peacetime tends to be limited to the problems of post-war debt management.³⁷ The shift to hubs offers a different perspective, because they were quasi-neutral cities, like Hamburg

34 Axel Gotthard, *'Der liebe vnd werthe Fried': Kriegskonzepte und Neutralitätsvorstellungen in der Frühen Neuzeit* (Cologne: Böhlau, 2014).

35 M.B. Klerk, 'The "Fiscal-Military Hub" of Amsterdam: Intermediating the French War Subsidies to Sweden during the Thirty Years' War', in *Subsidies, Diplomacy and State Formation in Europe, 1494–1789: Economics of Allegiance*, eds. Erik Thomson and Svante Norrhem (Lund: Lund University Press; Manchester: Manchester University Press, 2020), pp. 213–33.

36 P.H. Wilson, 'Mercenary Contracts as Fiscal-Military Instruments', in *Subsidies, Diplomacy and State Formation*, eds. Norrhem and Thomson, pp. 68–92.

37 James C. Riley, *The Seven Years War and the Old Regime in France. The Economic and Financial Toll* (Princeton: Princeton University Press, 1987).

during the Thirty Years' War (1618–1648), which catered to a multitude of states that were fighting at different times.³⁸ The rhythm of war and peace still matters, but it can be tracked differently than through the state's balance sheet, since, as we shall see below, the interests of states and entrepreneurs could diverge sharply.

It might be objected that network theory already provides a potential analytical tool to explore fiscal-military transactions. However, while network analyses employ the concept of 'nodes', it sees these as links in chains, rather than examining the interactions taking place within and between them. The focus is on the network and does not explain why one location developed as a hub, while another did not.³⁹ Moreover, network studies concentrate on people, examining the connections between individuals, such as those within the Republic of Letters.⁴⁰ They generally presuppose one or more key figures as centres for web-like networks. This suits studies where one or a few individuals are the primary subject of interest, but it does not capture the complexities inherent in the transnational business of war which involved relationships operating in several directions simultaneously and involving multiple partners. Networks also pose their own methodological problems and are notoriously difficult to unravel.⁴¹

By contrast, hubs are relatively easily identifiable and served as the loci for multiple transactions. Focusing on hubs offers a better way to gauge overall the flow of resources, the interaction between the different actors and the pressures under which they operated. Hubs also served as clusters for innovation, investment, and as sites of activity and not just of connections.⁴² The process of exchange transformed both the character and quality of the resource and impacted on the hub's own development in what was a more dynamic and complex situation than that suggested by the idea of networks and nodes. The concept of a hub extends rather than replaces network analysis by adding the focus on places as well as people and connections.

This method combines insights from transportation, especially aviation (airport hubs) with aspects of business studies/economics (stock market).⁴³ The concept of an aviation hub (pioneered by Delta Air from 1955 out of Atlanta) emphasizes transit: the hub as the

38 Herman Kellenbenz, 'Hamburg und die französisch-schwedische Zusammenarbeit im 30jährigen Krieg', *Zeitschrift der Vereins für Hamburgische Geschichte*, 49–50 (1964), pp. 83–107.

39 Claire Lemerrier, 'Formal Network Methods in History: Why and How?', in Georg Fertig, ed., *Social Networks, Political Institutions, and Rural Societies* (Turnhout: Brepols, 2015), pp. 281–304.

40 Available at <http://republicofletters.stanford.edu/>.

41 A. Caracausi and Christian Jeggle, eds., *Commercial Networks and European Cities, 1400–1800* (London: Pickering & Chatto, 2014); B. Latour, 'On Actor-Network Theory. A Few Clarifications Plus More Than a Few Complications', *Soziale Welt*, 47 (1996), pp. 369–81, and his *Reassembling the Social. An Introduction to Actor-Network Theory* (New York: Oxford University Press, 2005).

42 E. Buchnea, 'Networks and Clusters in Business History', in *Routledge Companion to Business History*, eds. J.F. Wilson, S. Tome, A. De Jong and E. Buchnea (Abingdon: Routledge, 2016), pp. 259–73.

43 Gerald N. Cook and Jeremy Goodwin, 'Airline Networks: A Comparison of Hub-and-Spoke and Point-to-Point Systems', *Journal of Aviation/Aerospace Education and Research*, 17 (2008), pp. 51–60.

point of exchange where passengers or air freight transfer from one flight to another. Thus, the hub is a mechanism to connect different points of origin with multiple potential destinations and a means of building a more elaborate route network efficiently without having to create numerous binary point-to-point routes linking every possible point of origin to every destination. Fiscal-military hubs were the gateways to networks of well-connected specialists, allowing those seeking resources to access multiple potential sources of supply more easily and efficiently. The key point behind the model of a stock market is that the location of exchange transforms the value of the goods traded there. Borrowing from these insights, we can see that early modern hubs facilitated the trade in a diversity of military resources in continuous action from one central site, where the dynamics between supply and demand and other determinants like intelligence alters the value of the transacted goods.⁴⁴ For example, many war-making resources (such as subsidies or cannons) were not actually transferred physically through the hub, but their exchange was brokered there using various contractual forms and instruments such as bills of exchange which lowered the transaction costs. This aspect captures an additional side of what we regard as fiscal-military instruments, as well as the broader Fiscal-Military System, neither of which are encompassed by the metaphor of the aviation hub alone.

III. The rise of the Fiscal-Military System

The Fiscal-Military System and its hubs rose and fell in line with the wider pattern of European warfare and changes in how war-making resources were mobilized. The sixteenth century saw the emergence of hubs linked to the growing scale and scope of warfare, as well as the character of European states and their conflicts. A key marker of new developments was the shift to hubs as fixed, permanent centres available at any time for fiscal-military transactions. This was part of the broader change from conducting commerce and exchange in temporary fairs or markets held only on certain days of the year, often in the open, or through individual merchants or agents who travelled to the ruler's camp or court which itself was often still itinerant into the early sixteenth century.⁴⁵

Warfare ranged across wide geographical areas and involved numerous belligerents on multiple fronts, such as the Italian Wars (1494–1559) and the long-running sequence of conflicts between France and the Habsburgs from 1477.⁴⁶ The increased scale and dispersed pattern of warfare was directly related to the composite-dynastic character of European states. Sovereignty and territory were both fragmented, as rulers and subjects held differing powers and rights in the (often) scattered possessions which frequently lacked contiguous frontiers or homogeneous populations.⁴⁷

44 D.K. Levine, 'Learning in the Stock Flow Model', in *Money, Markets and Method: Essays in Honour of Robert W. Clower*, eds. P. Howitt, E. de Antoni and A. Leijonhufvud (Cheltenham: Edward Elgar, 1999), pp. 236–46.

45 Stephen Epstein, 'Regional Fairs, Institutional Innovation and Economic Growth in Late-Medieval Europe', *Economic History Review*, 47 (1994), pp. 459–82.

46 Michael E. Mallett and Christine Shaw, *The Italian Wars 1494–1559: War, State and Society in Early Modern Europe* (London: Routledge, 2012).

47 J.H. Elliott, 'A Europe of Composite Monarchies', *Past and Present*, 137 (1992), pp. 48–71.

European conflicts encompassed both external and internal wars. External wars were fought to demarcate each ruler's territory and jurisdiction, especially structurally induced wars of succession caused by the role of dynasticism in legitimating authority. In addition, Europe witnessed incessant internal warfare, fought to determine governance within each state. This was fuelled by the resistance of peripheral provinces to central rule and by conflicts among elites for influence. Internal conflicts over governance were exacerbated by questions of religion. The permanence of religious schism after 1517 broke the medieval unity of faith and law, while the assumption by rulers, such as Henry VIII, to determine their subjects' faith represented a huge expansion of monarchical authority. Confessional solidarity forged new connections with previously geographically and politically distant groups, while violence and persecution displaced refugees whose relocation to cities helped disseminate commercial practices and establish new communication networks.

This resulted in the interweaving of international and civil wars, beginning most clearly in the French Wars of Religion after 1562 and the Dutch Revolt or Eighty Years' War from 1568.⁴⁸ With central authority contested, it became much harder to raise troops and resources by conventional means, such as negotiating with lords who might now be in armed opposition. The intermingling of internal and external wars continued well into the following century, exemplified by the Thirty Years' War (1618–1648) which was simultaneously a civil war in the Holy Roman Empire and an international conflict.⁴⁹ Thus, the emergence of a transnational system of fiscal-military exchange developed *alongside and as part of* the much-known process of internal state institution-building. States certainly expanded their capacity to raise resources from their own populations, but these were rarely sufficient quantitatively, and also often fell short qualitatively, for instance, in terms of expertise or weaponry which could not be home-produced. States had to develop methods to secure resources from outside their jurisdictions, and for this, they needed places where this could be arranged speedily, reliably, and effectively.

Economic historians generally regard war as disrupting trade and retarding urban growth, focusing instead on industrialization and global commerce as factors promoting growth.⁵⁰ This is understandable given the small size of the state as 'public sector' in this period relative to that after 1914. No early modern state drew more than 10 per cent of gross domestic product (GDP) in taxes, compared to the norm of 20 to 25 per cent by 1960 and the current proportion of 25 to 35 per cent.⁵¹ Nonetheless, early modern states

48 Mack P. Holt, *The French Wars of Religion 1562–1629*, 2nd ed. (Cambridge: Cambridge University Press, 2005); J.S. Pollmann, 'Internationalisering en de Nederlandse Opstand', *Bijdragen en Mededelingen betreffende de Geschiedenis der Nederlanden*, 124 (2009), pp. 515–35.

49 P.H. Wilson, *Europe's Tragedy. A History of the Thirty Years War* (London: Allen Lane, 2009).

50 For a rare exception, see Mark Dincecco and Massimiliano Gaetano Onorato, *From Warfare to Wealth: The Military Origins of Urban Prosperity in Europe* (Cambridge: Cambridge University Press, 2017).

51 Arjun Chowdhury, *The Myth of International Order: Why Weak States Persist and Alternatives to the State Fade-Away* (Oxford: Oxford University Press, 2017), pp. 14, 102; Marjolein 't Hart, Joost Jonker, and Jan Luiten van Zanden, *A Financial History of the Netherlands* (Cambridge: Cambridge University Press, 1997), pp. 10, 93; Hans Peter Ullmann, *Der*

were disproportionately significant, because they demanded taxes in cash in what was an under-monetised economy, while the growth of public debt – deriving almost entirely from war – proved central in promoting European banking and exchange systems. British military spending averaged 7 per cent of gross national product (GNP) across the eighteenth century, rising to 9 per cent for both the Spanish Succession conflict (1702–1713) and Revolutionary and Napoleonic Wars (1792–1815), and peaking at 16.3 per cent during the Seven Years' War (1756–1763). Meanwhile, debt relative to GNP rose from 70 per cent after the Spanish Succession to 185 per cent following the Napoleonic Wars – equivalent to Greece during the 2014 debt crisis and significantly above the 110 per cent in 1918.⁵²

These figures are important to our story, because government debt represented one of the few attractive investment opportunities prior to the mid-nineteenth century. Usury laws and tight regulation of interest rates restricted the growth of commercial investment, while holding down the cost of government borrowing. The London Stock Exchange listed only 93 joint-stock companies with a combined capital of £2.2m in 1694, and these included the new Bank of England and the East India Company which were increasingly vehicles for servicing government debt which, at that point, hovered around £14m to £16m. The relative stability of British debt attracted foreign investors seeking to place surplus capital, and government bonds remained the primary business of stock exchanges. War similarly dominated investment in the Dutch Republic where foreign loans were raised from 1613. Government bonds dominated foreign securities which totalled around 575m florins by 1790, or twice the republic's GDP, compared to the annual turnover of the famous Dutch East India Company (VOC) at 35m.⁵³ Foreigners held nearly 60 per cent of Danish debt by 1800, including the Dutch whose holdings averaged 18.9m florins between 1763 and 1800.⁵⁴

Initially, several cities emerged as centres trading in specific resources, such as Antwerp, Augsburg, and Genoa which were all renowned for banking and credit. Amsterdam established itself as Europe's first major hub between about 1580 and 1620 dealing in all categories of war-making resources, and it remained the premier centre until around 1720.⁵⁵ Meanwhile, many secondary hubs of regional importance emerged, including Genoa, Geneva, Hamburg, Vienna, Danzig, and Riga. The emergence of London as a second primary hub occurred rapidly after 1688 when parts of Amsterdam's

deutsche Steuerstaat: Geschichte der öffentlichen Finanzen vom 18. Jahrhundert bis heute (Munich: C.H. Beck, 2005), pp. 36, 41, 64, 79, 81, 100.

52 Robert J. Barro, 'Government Spending, Interest Rates, Prices and Budget Deficits in the United Kingdom, 1701–1918', *Journal of Monetary Economics*, 20 (1987), pp. 221–47 at 226, 235–9. The post-1815 debt relative to GDP was 275 per cent.

53 James C. Riley, *International Government Finance and the Amsterdam Capital Market, 1740–1815* (Cambridge: Cambridge University Press, 1980).

54 Patrik Winton, 'Politics of Debt, War and Peace: Scandinavia 1800–1830', *Scandinavian Journal of History*, 38 (2013), pp. 458–79; Christiaan van Bochove, *The Economic Consequences of the Dutch: Economic Integration around the North Sea, 1500–1800* (Amsterdam: Aksant, 2008), p. 105. See generally Ranald Michie, *The Global Securities Market: A History* (Oxford: Oxford University Press, 2006).

55 Klerk, 'The "Fiscal-Military Hub" of Amsterdam'.

war business followed the Dutch stadholder William of Orange to Britain during the Glorious Revolution.

The Fiscal-Military System matured during the prolonged international warfare between 1662 and 1721 and continued with the mid-eighteenth-century wars between 1733 and 1779. However, governments increasingly sought to nationalize war-making, not necessarily reducing their dependency on contractors, but certainly trying to exclude foreign ones, while simultaneously seeking to prevent their own subjects from engaging in 'extra-territorial violence'. These efforts were assisted by the new ideologies of the nation, as well as institutional development. The abolition of local and social privileges following 1789 removed many of the legal barriers to the fuller exploitation of what were increasingly now claimed as 'national' resources. For instance, what had previously been regarded as the right to choose honourable service abroad, now became treason to the nation and was increasingly curbed during the early nineteenth century.⁵⁶ The wars between 1792 and 1870 also removed most of Europe's minor states and semi-sovereign powers like those in the Empire which had provided the bulk of the transnational military personnel during early modernity. States continued to seek external support in wartime, but other than the purchase of selected armaments, they now did this only through formal alliances with partners who were also sovereign powers.

IV. The significance of place

One of the most striking findings of this research is that there was no direct link between the centre of political power and a city's development as a fiscal-military hub. The preoccupation with states and high politics has focused attention on cities as political capitals where the decisions for war or peace were taken.⁵⁷ Some capitals did become hubs, such as London and Vienna, but conversely many, like Paris, Lisbon, Stockholm, or Warsaw, did not. The same is true for civic republics, several of which became important fiscal-military hubs like Genoa, Geneva, Danzig, or Hamburg.⁵⁸ Political history stresses their political autonomy and relative ability to remain neutral, all of which certainly made them attractive for the war business, but there were many more autonomous cities which did not become significant hubs.⁵⁹ Cities characterized by openness and inclusivity were generally better able to attract business, such as Amsterdam which treated all merchants, regardless of

56 Janice E. Thomson, *Mercenaries, Pirates and Sovereigns: State-Building and Extra-Territorial Violence in Early Modern Europe* (Princeton: Princeton University Press, 1994); Nir Arielli, Gabriela A. Frei, and Inge van Hulle, 'The Foreign Enlistment Act, International Law, and British Politics, 1819–2014', *The International History Review*, 38 (2016), pp. 636–56.

57 Peter J. Taylor and Ben Derudder, 'Tales of Two Cities: Political Capitals and Economic Centres in the World City Network', *Glocalism. Journal of Culture, Politics and Innovation*, 3 (2014), p. 5. DOI: 10.12893/gjcp.2014.3.5.

58 We use the term 'republic' in its early modern sense as a self-governing community, rather than necessarily a fully sovereign state with republican government.

59 Hendrik Spruyt, *The Sovereign State and Its Competitors: An Analysis of Systems Change* (Princeton: Princeton University Press, 1994).

origins, as equal before the law as early as the fifteenth century.⁶⁰ However, the exchange of fiscal-military resources was always political and subject to more than purely commercial considerations which even more fully autonomous cities like Genoa could not ignore.

These findings are similar to the conclusions about why some cities became financial centres, whereas other did not, with the crucial factors being the concentration of specialist expertise and access to valuable and often sensitive information.⁶¹ For example, during the War of Spanish Succession, the English had three ports to land supplies to support their armies and allies in Northern Italy: Onegelia, Villa-Franca, and Genoa. They also had two locations where they could raise money (Livorno and Genoa), while all four towns were relatively close together along the Ligurian coast. Although English agents and diplomats continually grumbled about how poorly the Genoese treated them and how they wished they could use other ports, they nonetheless always conducted their fiscal-military business in Genoa because of its larger, expansive informational network and neutral protection for shipping.⁶²

A city's general development was an important prerequisite, and all the major hubs had already passed the minimum threshold as viable economic centres before they became known for fiscal-military business.⁶³ Geography was another factor and all hubs were on existing trade and communication routes. Many fiscal-military resources were bulky, such as grain, or naval stores like timber and hemp. It was not necessary for a potential hub to be a production centre, and thus proximity to natural resources and other factors affecting development as an industrial centre were only of secondary significance. Moreover, the 'production' of many fiscal-military resources such as manpower, expertise, and finance was not industrial. Rather, it was the relations between the hub (as a transaction centre) and centres of production that mattered, and a hub's location was often more significant for those travelling there to conduct business, than for the physical movement of the resources they were exchanging.

Nonetheless, hubs were generally close to sources of fiscal-military assets. These could indeed be production centres, like the arms manufacturing towns of Delft, Gouda, and others connected to Amsterdam. Financial resources were especially important, such as the rich population of Amsterdam's rural and urban willing to lend money or buy bonds.⁶⁴ Resources did not always have to 'move'. The tendency in much of the current literature, including network analyses, is to track movement. For example, the current

60 Oscar Gelderblom, *Cities of Commerce: The Institutional Foundations of International Trade in the Low Countries, 1250–1650* (Princeton: Princeton University Press, 2013).

61 Charles P. Kindleberger, *The Formation of Financial Centers: A Study of Comparative Economic History* (Princeton: Princeton University Press, 1974); Thomas Gehrig, 'Cities and the Geography of Financial Centres' (CEPR discussion paper no. 1894, University of Vienna, Vienna, June 1998).

62 Our thanks to Michael Martocchio for sharing his research on this.

63 For urban development more generally, see Paul M. Hohenberg and Lynn Hollen Lees, *The Making of Urban Europe 1000–1994*, 2nd ed. (Cambridge: Harvard University Press, 1995); Andrew Lees and Lynn Hollen Lees, *Cities and the Making of Modern Europe, 1750–1914* (Cambridge: Cambridge University Press, 1997).

64 Marjolein 't Hart, *The Making of a Bourgeois State. War, Politics and Finance during the Dutch Revolt* (Manchester: Manchester University Press, 1993).

Atlantic paradigm stresses flows, exchange, and transfer in a physical sense, including unintended consequences like the spread of disease.⁶⁵ Yet, fiscal-military resources often remained in the hub, like the arms stockpiled in the Amsterdam and Venetian arsenals which could be released to fulfil bulk orders placed by foreign clients, or supplied to the domestic armed forces in wartime.⁶⁶ Expertise also tended to remain in the hub, and indeed was a major attraction of doing business there, while credit instruments and the presence of stock exchanges removed the need for money to be transported in specie.

The decisive factor in determining why a city became a fiscal-military hub, rather than simply financial centre, was the relative proximity to warfare. To function effectively as a hub, a city needed to be near enough to battlefields to be convenient as a place to transact fiscal-military business, yet sufficiently distant to avoid being disrupted by military action. This is illustrated by the contrast between Antwerp (sacked 1576, then permanently blockaded) and Amsterdam. After Antwerp fell into Spanish hands, most businessmen fled, taking their trade, expertise, and networks with them to Amsterdam.⁶⁷ Amsterdam maintained its dominance as Europe's primary hub until it too fell victim to war when the French invaded the Dutch Republic in 1795. Moreover, war was an important factor 'forcing' the development of certain cities as hubs. Thus, hubs could not be consciously or deliberately created; they emerged organically from places which already had some economic importance due to their location. Here we see the accumulative effect of interactions between geography, economics, individuals, and political/military events.

An illustrative example of the significance of place is France's payment of subsidies to Sweden during the Thirty Years' War.⁶⁸ The Swedes organized their military campaigns in the Empire from Hamburg, due to its geographical position and importance as an established fiscal-military hub.⁶⁹ Yet France transferred the subsidies – through bills of exchange – via Amsterdam to Hamburg.

Why Amsterdam? First, the city was Europe's financial and commercial centre. With its innovative institutions such as the Bank of Exchange (1609), Bank of Credit (1609), and the Stock Exchange (1602), Amsterdam forged an excellent reputation for the business of credit. Most of the bills of exchange drawn in Amsterdam were from other cities rather than from Amsterdam itself, particularly since the city offered interest rates that were both relatively stable and the lowest in Europe.⁷⁰ The subsidies were transferred and

65 Bernard Bailyn, *Atlantic History: Concept and Contours* (Cambridge: Harvard University Press, 2005).

66 De Jong, *Staat van Oorlog*, pp. 170–8.

67 Oscar Gelderblom, *Zuid-Nederlandse kooplieden en de opkomst van de Amsterdamse stapelmarkt (1578–1630)* (Hilversum: Verloren, 2000).

68 Klerk, 'The "Fiscal-Military Hub" of Amsterdam'.

69 Martin Knauer and Sven Tode, eds., *Der Krieg vor den Toren: Hamburg im Dreißigjährigen Krieg 1618–1648* (Hamburg: Verein für Hamburgische Geschichte, 2000).

70 Pit Dehing, 'Geld als Water? Amsterdam en de internationale kapitaalstromen. (1600–1730)', in *De Republiek tussen zee en vasteland: buitenlandse invloeden op cultuur, economie en politiek in Nederland 1580–1800*, eds. Karel Davids, Marjolein 't Hart, Henk Kleijer and Jan Lucassen (Leuven; Apeldoorn: Garant, 1995), pp. 229–49 (pp. 229–35); Markus A. Denzel, *Das System des bargeldlosen Zahlungsverkehrs europäischer Prägung vom Mittelalter bis 1914* (Stuttgart: Steiner, 2008).

cashed in Amsterdam where the arms trade was a primary business sector and cash was needed for purchasing weaponry and munitions. Moreover, Amsterdam facilitated the Swedish Crown's sale of grain and copper, which the Swedish agents often used as a collateral for credit to purchase war resources. Above all, Amsterdam housed an elite of merchant-financiers with extensive, transnational networks and extensive expertise in the fiscal-military business.⁷¹ Given the ambiguous regulation and operation of stock exchanges and market transfers, a lot of it depended on who you knew.⁷² Together with the close connection between government, commerce, and diplomacy, Amsterdam offered virtually perfect conditions for the war business.⁷³

In their Treaty of Bärwalde (1631) with Sweden, the French stipulated that the subsidies had to be remitted in Paris or Amsterdam, while later treaties named Amsterdam and Hamburg. France already ran subsidy payments through Amsterdam as early as 1593, and thus had an established social infrastructure to call on when paying Sweden. In this case, France employed Jean Hœufft who already worked for them and the Dutch and was handling French subsidies to the Dutch Republic. Both sets of payments were remitted by his nephew Mattheus Hœufft in Amsterdam.⁷⁴

The importance of local contacts and expertise is exemplified by the fall of Swedish agent Erik Larsson who coordinated the sale of Swedish copper and grain, and managed other financial operations, including the transfer of subsidies in Amsterdam. King Gustavus Adolphus suspected Larsson of misusing his office for personal profit and for being too closely and dangerously connected with Amsterdam's merchant elite. His dismissal, however, meant the loss of his networks and subsequently the favourable conditions resulting from these. The new agents had to coordinate Sweden's dealings in Amsterdam as well as to inspect Larsson's dealings. Their inability to handle both challenges precipitated a dramatic fall in Sweden's financial credit.⁷⁵

V. Scales and scopes of hubs

It was, however, the level and diversity of the human capital that really determined whether a city was a major or a minor fiscal-military hub. This can be illustrated with Amsterdam. The status of this city as Europe's primary entrepot has obscured its centrality for the war business. The growth of the Dutch economy is usually told as a positive story of economic innovation facilitated by republican liberty, religious toleration, and manifest in a cultural 'golden age'. If there is a 'dark side', then it is portrayed as far away in the asymmetrical and often violence encounters with non-Europeans.⁷⁶ Yet, the Dutch Republic was scarcely

71 Parrott, *The Business of War*, pp. 212–3.

72 See especially Pepijn Brandon, *War, Capital, and the Dutch State (1588–1795)* (Leiden: Brill, 2015), pp. 41–82.

73 Parrott, *The Business of War*, pp. 212–3.

74 Klerk, 'The "Fiscal-Military Hub" of Amsterdam'.

75 Thomson, 'Jean Hœufft and the Thirty Years' War', p. 7.

76 Ulrich Ufer, *Welthandelszentrum Amsterdam. Globale Dynamik und modernes Leben im 17. Jahrhundert* (Vienna: Böhlau, 2008); Jonathan I. Israel, *Dutch Primacy in World Trade, 1585–1740* (Oxford: Clarendon, 1989); Jan de Vries, Ad van der Woude, *The First Modern*

a neutral or non-aligned power in Europe, at least prior to 1748, while arms exports contributed as much to the national economy between 1600 and 1650 as the East Indies trade.⁷⁷ Moreover, rising demands from the army, navy, colonial companies, civic guards, militias, fortifications, private men, and foreign buyers made the arms industry an essential part of the economy within two decades, making up at least 5 per cent of Dutch GNP.⁷⁸

Major hubs were distinguished by the ability to conduct multiple fiscal-military transactions in different resource categories. Like modern airline hubs, the scope and volume of business created 'economies of scope arise where two or more products can be produced more cheaply together than separately'.⁷⁹ For example, Amsterdam arms merchants, like Elias Trip and his sons, could offer foreign buyers a remarkable level of flexibility and velocity by acting as intermediaries between arms producers, the sources of raw materials, and buyers to provide a regiment with all equipment needed.⁸⁰

One of the most far-reaching innovations was the package deal's involvement of merchants as intermediaries between arms producers, sources of raw materials, and foreign buyers to provide a regiment with all the equipment needed.⁸¹ As Sweden prepared to intervene in the Thirty Years' War, Dietrich von Falkenberg, a senior courtier, signed a contract with Elias Trip in Amsterdam on 17 May 1629. The scale and scope of this deal, together with the tight delivery time, exemplifies the flexibility of Amsterdam's arms market: 40,602 muskets, 4,602 helmets, 3,456 pieces of armour, 3,456 pikes, 72 drums, 100 halberds, 24 partisans, 500 cuirasses, 4,500 units of gunpowder, 4,500 fuses, 4,500 musket balls, and 8,058 rapiers. Half the material was to be delivered within two weeks, with the rest no later than a month after that. Falkenberg would commission an 'express man' in Amsterdam to whom Trip delivered the arms and ammunition. Within nine days after delivery, he would pay Trip 190,000 guilders 'in banco', that is, using money drawn on the city's Bank of Exchange.⁸² Six days after signing the contract, Sweden placed a

Economy: Success, Failure and Perseverance of the Dutch Economy, 1500–1815 (Cambridge: Cambridge University Press, 1997).

77 H. Vogel, 'Arms Production and Exports in the Dutch Republic, 1600–1650', in M. van der Hoeven, ed., *Exercise of Arms: Warfare in the Netherlands (1568–1648)* (Leiden: Brill, 1998), pp. 197–210; P. Puype and M. van der Hoeven, eds., *The Arsenal of the World: the Dutch Arms Trade in the Seventeenth Century* (Amsterdam: Batavian Lion International, 1996).

78 Marjolein 't Hart, *The Dutch Wars of Independence. Warfare and Commerce in the Netherlands 1570–1680* (London; New York: Routledge, 2014), p. 181.

79 Cook and Goodwin, 'Airline Networks', p. 53.

80 Klein, *De Trippen in de 17e eeuw*, pp. 205–8; Marjolein 't Hart, *The Dutch Wars of Independence. Warfare and Commerce in the Netherlands, 1570–1680* (London; New York: Routledge, 2014), p. 184.

81 Peter H. Wilson, 'War Finance, Policy and Strategy in the Thirty Years' War', in *Dynamik durch Gewalt? Der Dreißigjährige Krieg (1618–1648) als Faktor der Wandlungsprozesse des 17. Jahrhunderts*, eds. Michael Rohrschneider and Anuschka Tischer (Münster: Aschendorff, 2018), pp. 229–50; Peter W. Klein, *De Trippen in de 17e eeuw: een studie over het ondernemerschap op de Hollandse stapelmarkt* (Assen: Van Gorchum, 1965), pp. 205–8; 't Hart, *The Dutch Wars of Independence*, p. 184.

82 Contract printed: 'Contract tusschen Elias Trip en Diderik van Vackenburgh, over de levering van wapenen aan Gustaaf Adolf. 17 mei 1629', in *Kroniek van het Historisch Genootschap VI 31* (Utrecht: Kemink en Zoon, 1876), pp. 151–4.

request to the Dutch States General to export 8,000 pounds of gunpowder, 8,000 pounds of fuses, and weaponry for 9,000 men. The material was destined for troops in the Holy Roman Empire which was still formally at peace with the Republic. At first, the States granted the request on the condition that Sweden would pay the usual duties. Despite subsequent difficulties with Falkenberg over the Swedish recruitment of soldiers on the Dutch frontiers, the States waived the duties, no doubt because Swedish intervention in the Empire aligned with the Republic's desire to keep the Austrian Habsburgs preoccupied.⁸³

Lesser hubs had regional significance and could be connected to larger hubs or might be embedded in a subset of the wider Fiscal-Military System, such as Genoa where Spain transacted the credit, transportation, and supply arrangements required to move troops between its various possessions, as well as to fight wars against France, the Ottomans, and the Dutch. Genoese entrepreneurs also transacted other fiscal-military business, but Spain remained their primary client into the 1690s when it was increasingly displaced by France and Austria.⁸⁴

A hub's scale and scope were also influenced by the relationship of its entrepreneurs and clients to the city authorities and to any relevant higher authorities, such as a monarch. It is through these relationships that we see the significance of *war* in shaping the war business. Relations between states and contractors were symbiotic and often monopolistic. Governments and urban magistrates wanted their cities to prosper, but they were also concerned to safeguard their own resource needs and were concerned if valuable know-how or weaponry might pass into the hands of potential enemies. State contracts were often large and represented reliable, steady business, especially with the growth of permanent armies and navies. In addition, the authorities had the legal power to regulate trade and impose sanctions, thereby increasing their leverage over entrepreneurs and agents. For states, peace meant a relaxation of financial pressure, but for entrepreneurs, it could spell disaster as business dried up. The authorities were often mindful of this and recognized that the presence of multiple entrepreneurs could drive prices down and improve quality through competition. Above all, the existence of multiple providers represented spare capacity available to meet sudden wartime needs, and some states deliberately continued to favour a few, trusted contractors in peacetime to keep them in business.⁸⁵

83 Klerk, 'The "Fiscal-Military Hub" of Amsterdam'; See Resolutions 4, 23 May 1629 and for the conflict 1, 13 April 1629; 1, 31 May 1629; 3/5, 6 June 1629; 3, 7 June 1629; 3/21 12 June 1629, *Resolutiën Staten-Generaal 1626–1630*, eds. I.J.A. Nijenhuis, P.L.R. De Cauwer, W.M. Gijssbers, M. Hell, C.O. van der Meij and J.E. Schooneveld-Oosterling (Huygens Instituut Online Publications) available at <http://resources.huygens.knaw.nl/>.

84 Céline Dauverd, *Imperial Ambition in the early modern Mediterranean: Genoese Merchants and the Spanish Crown* (Cambridge: Cambridge University Press, 2014); Thomas Allison Kirk, *Genoa and the Sea. Policy and Power in Early Modern Maritime Republic, 1559–1684* (Baltimore: Johns Hopkins, 2005).

85 Luca Mocarelli and Giulio Ongaro, 'Weapons' Production in the Republic of Venice in the Early Modern Period: The Manufacturing Centre of Brescia between Military Needs and Economic Equilibrium', *Scandinavian Economic History Review*, 65 (2017), pp. 231–42; Knight and Wilcox, *Sustaining the Fleet, 1793–1815*, p. 11.

Such state patronage was rarely sufficient to maintain profitability, while some activities, like arms production which required expensive, specialist plant and expertise, could not switch easily to supplying civilian customers. However, the supply of war materials was not something to which governments were indifferent, since it affected their own security and relations with other states. During the Dutch Revolt, the States General and its regional naval authorities (the 'admiralties') issued bans on the export of arms to Spain. However, merchants circumvented these by filing false destinations; making detours through French ports, Hamburg, or other Hanseatic cities; using false passports; or simply hiding contraband weaponry under other cargo. The Twelve Years' Truce (1609–1621) freed trade with Spain, but the States General nonetheless rejected some export requests, since the Dutch remained at war in the Spanish colonies in Asia and the Americas.⁸⁶

For example, on 15 January 1619, the States General discussed reports of the Spanish organization of an armada of 150 ships which, despite the Spanish–Dutch truce, was perceived as a threat. They agreed to send letters to the different Admiralty boards to investigate and advise how to prevent the export of naval stores. Several boards reported a Spanish captain was on his way to Amsterdam with 16,000 ducats to purchase ropes and masts for three galleons docked in Havana. The States concluded in March that 'Since the country could be severely affected by this, the sale and export of these goods should be prohibited in the most appropriate manner'. A month later, Amsterdam tried to soften the ban by only prohibiting such exports to Havana, but the States General held their ground and the general ban of these shipping goods remained in place.⁸⁷

VI. The human dimension

The presence of what David Parrott calls the 'fiscal-military elite' was vital to a hub's development.⁸⁸ This group was distinguished by their specialized expertise, experience, connections, and, above all, their reputation as reliable businessmen who could act discretely if required. The presence of reputable individuals raised a city's profile as a place to transact fiscal-military business, in turn attracting more people to base themselves there or enter this type of work.

The motives and circumstances surrounding entry into the war business shared much with other commercial activities. People were drawn by the possibility of combining material profit with social advancement.⁸⁹ It was already common for an individual to

86 Johannes H. Kernkamp, *Handel op de vijand (1572–1609)* (Utrecht: Kemink, 1935); De Jong, *Staat van oorlog*, pp. 172–4.

87 See Resolutions 94 (15 January 1619); 384 (5 March 1619); 553 (30 March 1619), *Resolutiën Staten-Generaal 1626–1630*, eds. I.J.A. Nijenhuis, P.L.R. De Cauwer, W.M. Gijsbers, M. Hell, C.O. van der Meij and J.E. Schooneveld-Oosterling (Huygens Instituut Online Publications), available at <http://resources.huygens.knaw.nl/>.

88 Parrott, *The Business of War*, pp. 213–4.

89 Richard Grassby, 'Social Mobility and Business Enterprise in Seventeenth-Century England' in *Puritans and Revolutionaries: Essays in Seventeenth-Century History Presented to Christopher Hill*, eds. D. Pennington and K. Thomas (Oxford: Clarendon Press, 1978), pp. 355–81; Robert Lee, *Commerce and Culture: Nineteenth-Century Business Elites* (Farnham: Ashgate, 2013).

start out in one sector of business and then diversify into others. Moreover, some categories of fiscal-military resources, like grain, wine, hemp, horses, and even ships were traded generally. The arms merchant Elias Trip collected a fortune worth 1,000,000 florins making him the eighth of the 250 richest individuals of the Dutch Golden Age.⁹⁰ He came from a family of iron traders in Dordrecht – who also traded in herring, paper, wine, and cheese – and moved together with his brother Jacob to Amsterdam in 1615. The pair set up shop in Amsterdam selling grain, iron, and other resources as cheese and wine to the Dutch Army. Together with his brother-in-law Louis de Geer (fourth on the list with 1,500,000 florins), he entered the arms business. For Elias Trip, it was a relatively easy step to diversify into shipping, war, and politics.

Nonetheless, the urgency of war imposed tight schedules, while fiscal-military transactions were a high risk, especially as war costs virtually always exceeded states' capacity to pay, increasing the likelihood of default. Spain defaulted or unilaterally renegotiated its debts 13 times between 1500 and 1900, including nine occasions between 1557 and 1652. At the 1571 bankruptcy, Genoese investment in Spanish debt represented 40 per cent of the total wealth of the city's elite, indicating a dangerous level of exposure.⁹¹ That this was not simply 'usual business' is indicated by the presence of additional risks with death, injuries, or imprisonment just around the corner. Yet, by its very nature, involvement not only provided opportunities for large profits but brought those who engaged in it into the 'great affairs' of state. The Genoese banker Ambroglio Spinola rose to become Spain's senior general after he entered its military service to safeguard the investments he had made in recruiting troops in 1602.⁹² Many knowingly entered into financially unprofitable agreements, gambling that the social and political connections they brought would bring other rewards. The Spaniard Martin de Arana signed a loss-making contract with Philip IV in 1625 to build six galleons, but later received the military governorship of Santander and a knighthood in the military Order of Santiago for his son.⁹³

The character of fiscal-military resources also provided ways to move from civilian into military trading, as well as from dealing in one category to diversifying into others. For example, large-scale arms production required costly, specialized plant, making it a venture for those who had already accumulated capital through other business activities, or continued these alongside their new business. Conversely, the weapons trade often facilitated access into related sectors like mining, steel production, credit, and the trade in high-value raw materials like copper, especially since these activities also often involved long-distance connections. Louis de Geer has been called the father of the Swedish

90 Stadsarchief Amsterdam, not. S. Cornelisz, (NA 5075, inv. 24–645), 24 March 1620; Thomson, 'Jean Hoeufft and the Thirty Years' War', pp. 5–6; Parrott, *The Business of War*, p. 38; Kees Zandvliet, *De 250 rijksten van de Gouden Eeuw: kapitaal, macht, familie en levensstijl* (Amsterdam: Rijksmuseum Publishing, 2006), p. XL.

91 Mauricio Dreilichmann and Hans-Joachim Voth, *Lending to the Borrower from Hell: Debt, Taxes and Default in the Age of Philip II* (Princeton: Princeton University Press, 2014); Kirk, *Genoa and the Sea*, pp. 66–8.

92 Antonio Rodríguez Villa, *Ambrosio Spinola, primer marques de los Balbases* (Madrid: Fortanet, 1905).

93 Carla R. Phillips, *Six Galleons for the King of Spain* (Baltimore: Johns Hopkins University Press, 1986), p. 89.

industry by acquiring the biggest ironworks in Sweden and turning these into a highly productive workshop industry. He effectively owned a monopoly on Swedish iron as well as on Swedish copper production, both of which he acquired by exchanging credit to the Swedish Crown.⁹⁴ Through his industrial conglomerate, de Geer produced weapons in Sweden with Swedish raw materials, and shipped them to Amsterdam to be sold to the Swedish troops fighting in the German lands. Individual experience of course varied, but it is possible to identify a specifically fiscal-military ladder to social advancement: (1) expertise and connections, leading to (2) entry in the arms business, thus (3) expanding expertise, connections, and gaining reputation and credit, opening access to (4) credit and banking, thus (5) expanding the range of clientele – both geographically, but also and especially socially – to dealing with royalty and princes, culminating in (6) elevations in social status, and the purchase or acquisition of landed estates and grand houses.

The business of war provided opportunities for religious minorities to whom other doors were frequently closed at home. The international connection, including to foreign governments of varying religious confession, opened some room to manoeuvre and the chance for special favours. For example, despite being a Calvinist, Hans de Witte was able to live lavishly in Counter-Reformation Catholic Prague in the 1620s while he worked as Wallenstein's banker.⁹⁵ Members of minorities often shared common bonds of exile or persecution, in addition to those of kinship and community of faith. These ties substituted for the absence of a legal framework to enforce contractual obligations between business partners operating under different political jurisdictions, since those who proved unreliable could be named and shamed within their community.⁹⁶ Additional sanctions could be sought by appealing to notaries, involving panels of fellow merchants who could be convened to arbitrate disputes.⁹⁷

VII. Conclusion

This article has introduced the concept of the 'fiscal-military hub' to enhance our understanding of the relation between state formation, warfare, and business in early modern Europe. It builds on insights from the various perspectives on the state, war, and entrepreneurs, but shifts attention from the chancellery, battlefield, or counting house and refocuses it on the location where political, military, and entrepreneurs conducted the business of war. In doing so, it integrates aspects which have generally been studied

94 F. Breedvelt Van Veen, *Louis de Geer, 1587–1652* (Amsterdam: H.J. Paris, 1935).

95 Anton Ernstberger, *Hans de Witte: Finanzmann Wallensteins* (Wiesbaden: Franz Steiner, 1954).

96 R. Schulte, 'Rüstung, Zins und Frömmigkeit. Niederländische Calvinisten als Finanziers des Dreißigjährigen Krieges', *Bohemia*, 35 (1994), pp. 45–62; Michaela Schmölz-Häberlein, 'Beziehungen und Konflikte zwischen jüdischen Handelsgesellschaften und obrigkeitlichen Akteuren in Franken um 1700', in *Eigennutz' und 'gute Ordnung': Ökonomisierungen der Welt im 17. Jahrhundert*, eds. Sandra Richter und Guillaume Garner (Wiesbaden: Hassarowitz, 2016), pp. 113–32.

97 Johannes G. van Dillen, 'Amsterdamsche notarieele acten betreffende den koperhandel en de uitoefening van mijnbouw en metaalindustrie in Zweden', in *Bijdragen en Mededeelingen van het Historisch Genootschap*, 58 (1937), pp. 211–301.

separately, and allows each to be viewed in its broader context. It also avoids the risk of viewing the war business anachronistically as simply the 'arms trade', or as separate sectors, like weapons production. Instead, by tracing transactions through the places where they were made, and by exploring the relationships between those involved, we can see the connections between different areas of activity, as well as the fluidity of the boundaries between what were subsequently labelled 'public' or 'private'.

Nonetheless, fiscal-military transactions were always more than simply 'just business'. War was central in determining which cities became fiscal-military hubs, as well as profoundly influencing the behaviour of those involved. The early private business of war was conducted in the open instead of hiding in the shadows like the present private military sector. It was a prestigious business since warfare had been one of the essential tasks of the nobility. The mounting demand in resources from the early sixteenth century created new possibilities, not just for profit, but for financier-merchants to be involved in the 'business' of kings and aristocrats. The Trip family made no secret of their activities and success. Several of them had their portraits painted by Rembrandt, including Jacob and his wife. Their house – built to order for Jacob's two sons – was the largest private residence in seventeenth-century Amsterdam and consisted of two houses behind an impressive seven-window-wide facade proudly embellished with cannons, cannonballs, and mortars, as well as olive branches to illustrate the family motto 'De Bello Pax'.⁹⁸ The message was clear: the Trips were among the city's leading merchants engaged in a transnational business that was both honourable and connected them with the affairs of states.

Contemporary private military and security companies (PMSCs) in some respects echo early modern conditions while displaying important differences. New hubs have emerged to facilitate a business which prefers to operate secretly and, many would argue, illegally.⁹⁹ One example is Panama where Longifolia, a Russian PMSC, is registered, and where the US firm Triple Canopy used a Panamanian shell company to buy a Dubai-based military contractor operating a variety of subsidiaries in the British Virgin Islands.¹⁰⁰

98 Tatjana van Run, 'Nieuw licht op het Trippenhuis: De verhelderende blik van de dichterglazenmaker Salomon Oudart (1633–1699)', *Oud Holland: Journal for Art of the Low Countries*, 132 (2019), pp. 3–50.

99 International lawyers are divided over the continued validity of current regulatory mechanisms and the extent to which PMSCs operate beyond the law: Christine Bakker and Mirko Sossai, *Multilevel Regulation of Military and Security Contractors: The Interplay between International, European and Domestic Norms* (Oxford: Hart, 2012); Erika Calazans, *Private Military and Security Companies: The Implications under International Law of doing Business of War* (Newcastle-upon-Tyne: Cambridge Scholars, 2016); Kateri Carmola, *Private Security Contractors and New Wars: Risk, Law and Ethics* (London: Routledge, 2010); Amy Eckert, *Outsourcing War: The Just War Tradition in the Age of Military Privatisation* (Ithaca: Cornell, 2016); Chia Lehnardt, *Private Militärfirmen und völkerrechtliche Verantwortlichkeit* (Tübingen: Mohr Siebeck, 2011); Hin-Yan Liu, *Law's Impunity: Responsibility and the Modern Private Military Company* (London: Bloomsbury, 2015); Evgeni Moyakine, *The Privatised Art of War: Private Military and Security Companies and State Responsibility for Their Unlawful Conduct in Conflict Areas* (Cambridge: Intersentia, 2015).

100 Kimberley Marten, 'Russia's Use of Semi-state Security Forces: The Case of the Wagner Group', *Post-Soviet affairs*, 35 (2019), pp. 181–204; <https://fusion.tv/story/289615/panama-papers-leak-military-contractor-triple-canopy/> (accessed 13 April 2016).

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