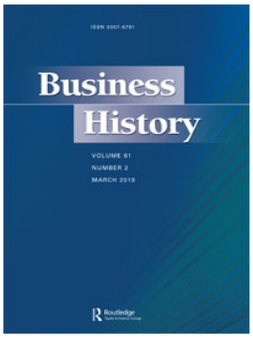

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The business history of the preindustrial world: Towards a comparative historical analysis

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ABSTRACT
The organisation of business transactions in the preindustrial period, once a central concern in scholarly debates about the rise of capitalism, currently plays only a marginal role in the literature on long-run economic development. Our survey of the contents of five top-tier business and economic history journals published in the United Kingdom and the United States from 2000 to 2016 finds that only 20 per cent of the articles concern the entire period before 1800 and that, among those articles, most are national or regional in scope, with a disproportionate focus on Europe, and on England in particular. At the same time, our survey suggests that a strong theoretical foundation and rich empirical data exist on the basis of which we can develop a comparative business history of the preindustrial world. We identify four areas of enquiry that are especially conducive to further comparisons within and beyond Europe: the corporation, the family firms, the economic role of women, and the funding of private businesses.

KEYWORDS
Pre-industrial Europe; institutions; firms; comparative research

1. Introduction

Until the 1970s the history of business forms was central to most grand narratives of the so-called Rise of the West, whether they located Europe's take off in late medieval Italy or in the colonial expansion of the Atlantic economies. Although business history and financial history emerged as specialised sub-disciplines with a strong interest in the industrial era, some of its best and brightest practitioners turned their attention to an earlier period. In an attempt to identify the metrics of modern capitalism, scholars of the calibre of Raymond de Roover, Robert S. Lopez, Frank F. Mendels and Fernand Braudel investigated the accounting practices and funding strategies of late medieval or early modern merchants, their investments in agriculture, mining and industry, and the legal and social arrangements that governed their transactions.[1] Their works, read by non-specialists and specialists alike, firmly established the emergence of deposit banks in the Italian city-states followed by joint-stock

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corporations and stock exchanges in the Low Countries and Britain as key innovations in the rise of capitalism and as distinctively Western features.

This consensus was one reason why, in the 1980s and 1990s, the business history of the preindustrial world lost momentum. Meanwhile, the Cliometric Revolution and the rise of cultural history created a growing gulf between traditional historians and those trained in economics.[2] Historians, for the most part, abandoned economic history, while economists became more and more dependent on large-scale datasets that are amenable to statistical treatment – a dependence that made preindustrial Europe a less-than-suitable terrain of inquiry.[3] The scholarly interest in the Rise of the West, however, died hard. The publication of Kenneth Pomeranz's *The Great Divergence: China, Europe, and the Making of the Modern World Economy* in 2000 reenergised historians' interest in economic themes and provided scholars across the social sciences with an innovative and provocative thesis with which to contend.[4] But those who have followed in Pomeranz's footsteps paint large canvasses and are less interested in the role that business organisation may have played in the Great Divergence than in issues relating to economic growth, living standards and the militarization of early modern European states.[5] A similar trend is visible among the proponents of the 'new history of capitalism', which has gained footing in history departments across the United States in the wake of the 2008 global financial crisis. They are after large-scale, provocative macro interpretations (for example, about the interdependence of capitalism and slavery), even when they come at the expense of accurate reconstruction of economic and business organisations.[6]

This 'Perspectives article' has two goals. It begins with an examination of how the period before the Industrial Revolution has been covered during the first 16 years of the twenty-first century in five premier academic journals of economic and business history, all published in the United Kingdom or the United States. We find, perhaps not surprisingly, that only 20 per cent of all articles are devoted to the period before 1800. Among these there is a preponderance of interest in Europe, and in England more specifically. Studies of other parts of the world, as well as articles that compare countries, regions or continents, are a small minority and are also largely synthetic, not based on primary research. Our second goal is to bring to the fore this minority sub-set of the articles surveyed here, alongside important publications in book format, in order to argue that the time is ripe to put the business history of the preindustrial world back on the agenda of global economic history. Taking stock of the existing literature, we suggest empirical and methodological venues through which we might produce an integrated business and economic history that matters for comparisons on the global scale.

The organisation of business transactions is a key element in at least three influential theories linking economic development to institutional change. The first theory concerns the impact of legal regimes on economic performance, and particularly the superiority of Anglo-American common law. Following Rafael La Porta and his co-authors, most of the literature on this topic concerns the nineteenth and twentieth centuries, but legal differences were greater still before then, and we simply do not know what impact they had on business forms and the economy at large before 1800.[7] Second is what Avner Greif has called 'the fundamental problem of exchange': with the exception of spot transactions, doing business always entails the possibility that the other party might not meet his/her obligations. Ultimately, economic development hinges on the quality of the public- and private-order institutions to mitigate this problem, but again we still know very little about the range and

efficacy of these institutions in the past.[8] Finally, there is the theory of financial revolutions put forward by Douglass North, Barry Weingast and others, which holds that states with limited government can borrow more and at a lower cost, which in turn stimulates the development of private finance. The empirical testing of this theory has largely been confined to the pricing of stocks and bonds issued by a small number of joint-stock corporations and merchant houses, obscuring any possible response from ordinary business owners, either in England or elsewhere.[9]

Implicit in these three theories is the assumption that some business forms are more conducive to the development of modern economic growth than others. To date, however, this assumption is not supported by rigorous empirical enquiry. Bridging the divide between micro and macro, that is, accounting for whether and how decisions at the micro level translate into patterns that matter at the macro level, is one of the great methodological challenges of history and the social sciences alike.[10] In this respect the business history of the preindustrial world holds the same intellectual promise as recent influential work on early modern guilds and households.[11]

A key finding of our literature review is that research in economic and business history conducted during the past 16 years reveals the great heterogeneity of solutions to fundamental problems of exchange that were found in preindustrial Europe. This heterogeneity, we argue, can provide the basis for new, richer comparisons with the business organisation of other regions of the world. Given our specialities and the themes covered in the articles surveyed here, we identify four core areas in which scholars of preindustrial Europe have provided revisionist empirical work that amounts to a basis for further studies and comparisons: the corporation, the family firm, the economic role of women and the funding of private business. Recent work in these four areas demonstrates that older views about the precocious and linear modernisation of European business practices no longer hold true. Ultimately, this paper suggests that by comparing business forms of preindustrial economies around the world to the Europe that we have come to know (rather than to the Europe that we once imagined), business historians can regain the central place they once occupied in debates about patterns of global economic development, except that this time, they can do so from a less teleological, Eurocentric perspective.

2. An overview of English-language academic journals

To explore what kind of research has been done in recent years on the organisation and funding of business in the preindustrial world, we analyse the contents of articles published in five leading journals in economic and business history from 2000 to 2016: *The Journal of Economic History* (*JEH*) and *The Economic History Review* (*EHR*), both general economic history journals, and *Business History* (*BH*), *The Business History Review* (*BHR*) and *Enterprise & Society* (*E&S*). This choice is inevitably partial. Excellent studies of economic and business history appear in journals other than those we survey. In many non-Anglophone countries, new research in economic and business history is published in more or less specialised journals with a national focus (examples would include the *Scandinavian Economic History Review*, the French *Annales: Histoire, Sciences Sociales* [previously *Annales: Économies, Sociétés, Civilisations*] or the Dutch *Tijdschrift voor Sociale en Economische Geschiedenis* and its precursors). This is all the more true for publications in non-European languages, especially in the well-developed field of Japanese economic and business history.

Even among English-language journals, there are some beyond the five we have chosen, including the *International Journal of Maritime History*, *Financial History Review* and *Technology & Culture*, where relevant work for the study of business and economic history of the preindustrial period appears on a regular basis. In 2009, for example, the *Journal of Economic Behavior & Organisation* hosted a special issue on the comparative study of firms across Europe, the Middle East and China.[12] Additionally, for the purpose of our focus on comparisons between Europe and the rest of the world, it is important to recognise that fresh scholarship on the business and economic history of Asia, Latin America, Africa and the Middle East is more likely to be found in area-studies journals, such as the *Journal of the Economic and Social History of the Orient* or the *Journal of Asian Studies*. Finally, some general-interest history journals, of which there are too many to be named, occasionally publish important studies for our theme. In spite of all these caveats, the five journals we selected are arguably the most prestigious in the fields of economic and business history for those wishing to publish in English and attract an international audience.

We review the content of these five Anglophone journals to identify empirical findings that can enrich comparative and global business history and to highlight those contributions in their pages that already move in this direction. In doing so, we are also mindful of the fact that economics as a discipline is more focused on journal articles than history, which is more oriented towards the publication of monographs, and that business historians publish both articles and books. An additional, if less systematic, purpose of this literature review is to engender greater synergy between the scholarship that figures in the journals we survey and contributions to the field of comparative and non-Western economic and business history that appear either in book form or in venues other than those that we scrutinise.

We begin with our first goal: to map the content of the five journals under consideration. Table 1 summarises the chronological scope of the 2,319 articles that have appeared from 2000 to 2016.[13] It makes immediately clear that most studies concern the nineteenth and twentieth centuries. Only 20 per cent of the published articles deal with earlier periods (and the percentage is far smaller if we look at business history journal alone). But these 470 articles covering the preindustrial period are still a significant number.[14] One out of 10 articles in the general economic history journals deals with the ancient and medieval world and a quarter of their pages is devoted to the early modern period (here defined as 1500–1799).[15] The three business history journals have a much stronger focus on the modern period, but even they include 90 articles pertaining to the preindustrial world.

The geographical coverage of the articles we survey shows both the remarkable place occupied by Europe, and Britain in particular, throughout all historical periods and the

Table 1. Chronologic coverage of economic and business history journals, 2000–2016.

Period	Economic History		Business History		All Journals	
Before 999	18	1.7%	4	0.3%	22	0.9%
1000–1499	81	7.5%	7	0.6%	88	3.8%
1500–1799	281	26.1%	79	6.4%	360	15.5%
1800–1899	410	38.1%	362	29.1%	772	33.3%
1900 and after	279	26.0%	757	60.9%	1,036	44.7%
All periods/method	6	0.6%	35	2.8%	41	1.8%
Total	**1,075**	**100%**	**1,244**	**100%**	**2,319**	**100%**

Source: Database. Under the label "Economic History" we group all articles in *JEH* and *EHR*. "Business History" comprises the articles in *BH*, *BHR* and *E&S*.

Table 2. Geographic coverage in economic and business history journals, 2000–2016.

Region	Pre-1800		Post-1800	
Europe	**298**	**63.4%**	**732**	**40.5%**
British Isles	*199*	*42.3%*	*332*	*18.4%*
Rest of Europe	*99*	*21.1%*	*400*	*22.1%*
Other individual regions	**64**	**13.6%**	**750**	**41.5%**
Global/comparative	**108**	**23.0%**	**326**	**18.0%**
Intra-European	*34*	*7.2%*		
Atlantic world	*34*	*7.2%*		
Europe and Asia	*21*	*4.5%*		
Other	*19*	*4.0%*		
Total	**470**	**100%**	**1,808**	**100%**

Source: database; Not included in this table are 41 methodological and historiographical articles.

predominance of Europe and Britain among the articles concerning the preindustrial period (Table 2). Both trends may not come as a surprise given that we only surveyed Anglophone journals, three published in the United States and two in the United Kingdom. Indeed there is a very strong 'home bias' in the UK-based journals (*EHR* and *BH*), with 55 per cent of their pre-1800 articles dealing with the British Isles and another 25 per cent with the rest of Europe, sometimes in direct comparison to Britain. Even in the US-based journals (*JEH*, *BHR* and *E&S*), articles on Europe make up 55 per cent of those pertaining to the preindustrial period, their coverage about equally divided between Britain and Continental Europe. Still, considering the high reputation of all five journals and, in principle, their comprehensive coverage, as well as the emphasis on impact-factor in the evaluation of academic careers even in most non-Anglophone countries, it seems fair to accept these results as indicative of the research conducted by leading economic and business historians.

In terms of the distribution of economic sectors covered in the pre-1800 articles, Table 3 shows a broad coverage of both general trends in the economy and population, and sector-specific studies of agriculture, trade, industry, finance and other services. There is a difference, however, if we divide the period into two, with the year 1500 as the parting date. The share of articles on agriculture drops from 27 per cent in the pre-1500 period to 13 per cent in the period after 1500, while the share of articles on trade increases from 14 per cent to 23 per cent. This divergence reflects a traditional story line about the rise of capitalism. Although agriculture remained the predominant sector in all preindustrial economies, it is the growth of inter-continental trade after 1500, and the overseas expansion of Europe in particular, that have long attracted the attention of economic and business historians and have fuelled a range of interpretations of the causes and consequences of the early phase of globalisation. In this article we make no effort to redress this trend, except to call attention to the so-called industrious revolution as one of the recent thematic area in which urban and rural markets are seen as closely interdependent.

A closer look at the research topics addressed in these articles reveals two basic approaches to the history of the preindustrial period (Table 4). There is a strong interest in the reconstruction of economic growth and development, with researchers using data on wages, prices and population to estimate gross domestic product and standards of living in different countries. This reconstructive work, which comprises more than a third of the 470 articles, is inspired by old and new growth theories, and thus also attempts to measure human capital formation, resource endowments and technological change. However, the majority of

Table 3. Economic sectors discussed in the articles about the preindustrial period in economic and business history journals, 2000–2016.

Sector	Pre-1500		1500–1799	
General economy	16	14.5%	45	12.5%
Population	9	8.2%	22	6.1%
Agriculture	**30**	**27.3%**	46	12.8%
Industry	5	4.5%	42	11.7%
Trade	15	13.6%	**84**	**23.3%**
Finance	21	19.1%	76	21.1%
Other services	11	10.0%	35	9.7%
Other	3	2.7%	10	2.8%
Total	**110**	**100%**	**360**	**100%**

Source: Database.

Table 4. Thematic coverage in the articles on the preindustrial period in economic and business history journals, 2000–2016.

Research theme	Pre-1500	1500-1799	Total (%)	
Growth and Inequality	**48**	**121**	**169**	**36.0%**
Economic growth	*24*	*35*	*59*	*12.6%*
Inequality	*11*	*41*	*52*	*11.1%*
Population and natural resources	*6*	*16*	*22*	*4.7%*
Technology	*4*	*18*	*22*	*4.7%*
Human capital	*3*	*11*	*14*	*3.0%*
Institutions	**59**	**231**	**282**	**61.7%**
Financial markets	*21*	*72*	*93*	*19.8%*
Business organisation	*15*	*68*	*83*	*17.7%*
Land and labour markets	*8*	*34*	*42*	*8.9%*
Risk and risk management	*8*	*22*	*30*	*6.4%*
Households and consumption	*3*	*18*	*21*	*4.5%*
Political economy	*4*	*10*	*14*	*3.0%*
Cultural beliefs	*0*	*7*	*7*	*1.5%*
Other	**3**	**8**	**11**	**2.3%**
TOTAL	**110**	**360**	**470**	**100%**

Source: Database.

scholars working on the preindustrial period draws inspiration from the new institutional economic history, loosely defined. Over 60 per cent of the articles appearing since 2000 deal with the organisation of business transactions or the development of markets for land, labour and capital. This institutional turn is very profound, affecting studies of the ancient and medieval world as much as the early modern period. Probably because the pre-1500 period is particularly under-represented in business history journals (Table 1), the kind of methodological pluralism that has come to characterise business history is less pronounced in the articles covering the preindustrial period, which are for the most part published in economic history journals, where the institutional turn is most visible. Others may wish to reflect further on this observation. Here, we limit ourselves to emphasise the great promise that this focus on the different ways in which societies can organise agriculture, industry and trade holds for a comparative business history of the preindustrial world.

3. The missing comparative dimension

In light of our overarching concern for the place of business history in debates about comparative economic history, the question is how much comparative research has been done, and to what extent existing work offers empirical evidence to evaluate the theoretical claims of La Porta et al., Greif and others. The initial answer is sobering. The predominance of continental Europe, and Britain in particular, indicates that current work on the economic and business history of the preindustrial period is mostly national, regional or even local in scope. Among all the pre-1800 articles there are only 108 dealing with more than one country or region.[16] As Table 5 shows, one third of these deals with intra-European comparisons, as often as not with Britain as the main point of reference. Another third encompasses the Atlantic: given the primacy of Anglo-American commerce in this set of articles, for all intents and purposes they could be considered as examining British overseas expansion. The main topics of interest in this group of articles are slavery, colonialism, military conquest and globalisation more generally. The final third is equally divided between articles that treat both Europe and Asia, including the early modern origins of the Great Divergence between the two continents, and those that encompass more than one area of the world, including the Middle East, Africa and the Pacific. It is worth noting that many of these 108 studies that embrace a comparative or trans-local perspective constitute what Charles Tilly dubbed 'encompassing comparisons', i.e., studies in which individual regions or countries are described as constituent parts of a broader economic, social or political system.[17] Comparative analyses of specific institutional arrangements are few and far between, and we will review them more closely.

If we dig deeper into the 108 articles that draw comparisons between different parts of the preindustrial world, or between that period and the industrial era, the record is even more troublesome. The business history journals published only 24 articles with a more or less pronounced comparative approach. More than two thirds of these analyse the

Table 5. Thematic coverage of comparative articles on the preindustrial period in economic and business history journals, 2000–2016.

	Intra-European	Atlantic world	Europe and Asia	Other
Growth and Inequality	**15**	**8**	**11**	**7**
Economic growth	*5*	*4*	*4*	*3*
Inequality	*3*	*1*	*4*	*0*
Population and natural resources	*3*	*0*	*0*	*0*
Technology	*1*	*2*	*3*	*3*
Human capital	*3*	*1*	*0*	*1*
Institutions	**19**	**26**	**9**	**9**
Financial markets	*8*	*2*	*1*	*1*
Business organisation	*6*	*10*	*7*	*8*
Land and labour markets	*2*	*12*	*0*	*0*
Risk and risk management	*1*	*2*	*0*	*0*
Households & consumption	*0*	*0*	*1*	*0*
Political economy	*2*	*0*	*0*	*0*
Cultural beliefs	*0*	*0*	*0*	*0*
Other	**0**	**0**	**1**	**3**
TOTAL	**34**	**34**	**21**	**19**

Source: Database

commercial networks that shaped colonial trade with the Americas and Asia, mostly in the eighteenth century. Admittedly, many of these studies describe one or a few individual firms that operated in a global trade system, but at least they offer substantial empirical evidence spanning multiple regions.[18] One article focusing on Greek and British commercial enterprises in the Eastern Mediterranean from the 1740s to the 1820s shows the comparative advantages of ethno-religious networks with local knowledge vis-à-vis hierarchical structures such as the Levant Company.[19]

Clearly, comparative work is spread thinly, and part of it simply adds further examples to the standard narrative crafted by the earlier generation of giants such as De Roover and Braudel. However, the new institutionalism has generated hypotheses that call for more systematic comparisons within and beyond the Western world. In 2009, Naomi Lamoreaux reviewed the existing literature on early modern and modern corporations to highlight the various ways in which companies can protect firm assets against greedy creditors and rulers.[20] While limited to the West in terms of its empirical examples, this article provides the kind of reasoning that can be used even in other contexts. In that spirit, Madeleine Zelin and Tirthankar Roy provide synthetic introductions to various governance structures of private enterprises in India and in China.[21] Their articles take a broad panoramic view but offer both analytical frameworks and an initial empirical basis for more substantial comparative explorations. Other contributions, while not comparative, formulate a number of hypotheses that can be readily tested in other case studies. That is the case of Thomas Safley's study of the formal and informal institutions that shaped the resolution of bankruptcies in the early modern German city of Augsburg during the sixteenth century, which could be paired productively with existing studies of other cities with appropriate sources, including Antwerp, Paris and London.[22]

Economic history journals published three times as many comparative articles (81), but very few of them connect the study of business forms to the institutional research agenda. There are eight articles on technological change, including in textile manufacturing, shipping and water management, but they evaluate its impact on economic development, not the underlying business decisions that led to those innovations. Indeed, there is only one article on eighteenth- and nineteenth-century insurance companies that explicitly compares firms operating in different environments, a topic to which we will return.[23] No fewer than 14 articles deal with Atlantic slavery or other forms of unfree labour in European colonies, but again there is little interest in the business side of things. The dominant theme in comparative economic history is a different one: the Great Divergence. The most important work is on living standards and tests Robert C. Allen's thesis about the role of high wages in promoting industrialisation.[24] Besides half a dozen articles on wages and prices, and one piece on wealth inequality, there are also five articles that measure literacy and numeracy as alternative indicators of inequality. Broaching a classical topic in a comparative vein, we also find work on fiscal systems in different parts of the world.[25] Paolo Malanima outlines an innovative approach in his comparison of energy consumption in England and Italy, while Giovanni Federico tackles the question of market integration on a European scale.[26]

All in all, it would appear that the study of preindustrial business forms has lost its appeal for economic historians working on the relationship between institutional change and economic growth and inequality. However, there is a final strand of comparative work that deals with the impact of institutions on economic growth and that considers the organisation of business transactions, whether in long-distance trade, local craft production, or within the

household economy. One example is the pugnacious exchange between the late Stephen R. Epstein and Sheilagh Ogilvie about the impact of craft guilds in the economic development of early modern Europe, which invokes examples from a great many regions.[27] Another example is the equally acrimonious and even more relevant debate between Avner Greif, on the one hand, and Jeremy Edwards and Sheilagh Ogilvie, on the other, published in the *EHR* in 2012. Their disagreement, at bottom, concerns the degree of effectiveness and autonomy of private-order organisations (Greif's 'coalition' of self-interested and mutually dependent merchants who expelled from their circle anyone who cheated one of them) vis-à-vis the need for the intermediation provided by impartial state tribunals.[28] For Greif, thirteenth-century Genoa represents the antithesis of medieval Egypt and the birth of modern Latin European institutions for the protection of property rights. In Genoa, a new political regime (a city-state dominated by the interests of a merchant oligarchy and a foreign-born judge), new kinship structures (the nuclear family) and the availability of independent judicial authorities led to the diffusion of commenda contracts, which, in turn, allowed for the decline of kin- and ethnic-based commercial associations and the diversification of the range of investors. In short, Greif posits a link between business forms and the path to modern economic growth. The consonance of this thesis with traditional accounts of the Rise of the West has made it largely palatable, but more empirical evidence is needed to support his polarizing interpretation of medieval Mediterranean trade.

Only one other article in our data-set, Timur Kuran's 'The Islamic Commercial Crisis: Institutional Roots of Economic Underdevelopment in the Middle East,' explicitly compares business forms in Europe and the Middle East.[29] Like Greif, Kuran dates the divergence between these two regions to the preindustrial period and places considerable emphasis on the role of kinship structures and limited liability. But unlike Greif or, for that matter, Epstein, Edwards and Ogilvie, Kuran looks at institutional features from above and provides sparing examples from surviving business records of the very institutional features he describes. This is exactly where we believe there is fertile ground for a new comparative business history. The painstaking research of an earlier generation of business historians should not be reduced to a set of stylised facts about the rise of modern, capitalist institutions. Instead, business historians could use the theoretical framework of the new institutionalism to engage in new, primary research that compares the organisation of private enterprises in Europe and other regions of the world. In what follows, we highlight recent work featured in the journals reviewed here and in other publications that already points in this direction. We outline this nascent trend by taking stock of the field in four key subject areas: the corporation, the family firm, the economic role of women and the funding of private enterprises. Of course, the fact that notions like 'family' meant different things in different times and places, as well as the fact that sources documenting these phenomena vary greatly across the cases under review, should be part of the concern of any comparative approach, rather than obscured or minimised in order to create false analogies.

4. The corporation and beyond

Business history emerged as an independent academic field largely to understand the rise of modern corporations, banks and stock markets in the second half of the nineteenth century.[30] This original agenda has left its mark on the interpretation of the business history of preindustrial Europe, which is often depicted as a traditional world dominated by sole

proprietors and family partnerships, topped by a small, capitalist sector of deposit banks and joint-stock companies that were initially active in long-distance trade but later also in public utilities and the insurance market.[31] Business historians thus devote particular attention to the so-called 'giants of an earlier capitalism'.[32] In our data-set, there is a steady stream of work on the legal form, internal organisation and commercial operations of the Dutch and English East India Companies and their counterparts operating in the Atlantic world.[33] Numerous studies also focus on the organisation of early banks and insurance companies in England and the United States, as well as on the emergence of stock markets in London and Amsterdam, notably in the eighteenth century.[34]

This on-going empirical work on the early history of banks, corporations and stock markets has yielded two important, though seemingly contradictory results. On the one hand, early modern entrepreneurs and investors emerge as very competent, rational economic actors. Various studies of the big colonial companies highlight their leaders' ability to develop sophisticated monitoring devices and accounting techniques to organise operations in distant markets.[35] Financial historians working on early stock markets find investors behaving like present-day traders, for instance pledging shares as loan collateral in the years following the establishment of the Dutch East India Company (1602) or buying and selling derivatives in England in the 1690s.[36] Richard Kleer shows directors of the South Sea Company trying to manipulate stock prices in 1720.[37] Stuart Bell describes the ease with which a group of English investors united in the Sword Blade Company moved in and out of markets for army debt, Irish landholdings and English government bonds in the aftermath of England's financial revolution (1689–1694).[38]

On the other hand, several studies of early stock markets reveal the strong social, political and cultural embeddedness of economic decision-making in the preindustrial period. Larry Neal, for instance, points out that Lord Londonderry considered not only the financial risks of his trade on the London Exchange in the early 1700s but also its political consequences.[39] Indeed, many stock traders in London chose to invest in one company only, so as to signal their loyalty and secure access to profitable trade opportunities and political power.[40] If anything, early modern historians have revealed a broad spectrum of motives for investment decisions, ranging from defensive investments in low-yielding assets and a preference for dealing with trusted associates to the deliberate taking of very high risks.[41] Sometimes this realisation comes with a twist, for instance in the analysis of investment behaviour during the South Sea Bubble of 1720. While one group of economists believe they found strong empirical evidence for truly irrational behaviour, a closer examination of the contracts that investors wrote illustrate the careful consideration that went into analysing their terms and conditions.[42]

This apparent discrepancy between the broad conclusions of work on early modern finance points to another achievement of recent scholarship on the preindustrial economy: the application of an analytic framework that takes into account both the economic rationale of doing business and the broader societal context within which this occurred. Surely, this has always been the intention of studies such as Ann Carlos' of the big colonial companies, but this kind of analysis is now permeating other fields as well. Borrowing from theoretical insights developed by Oliver Williamson, among others, Mark Casson has demonstrated that family structures and social networks can be analysed within a transaction costs framework, as long as we accept that considerations of kinship and loyalty are part of the rational choices entrepreneurs make.[43] The benefits of such an approach are very clear from the work of

Robin Pearson and David Richardson on eighteenth-century English traders building business networks to obtain funding, reduce agency problems and mitigate risk. The two authors readily admit their interest in identifying 'precursor[s] of modernising tendencies in business practice in Britain during the industrial revolution', but their analysis never becomes teleological.[44] Indeed, in other work on insurance companies, Pearson is very sensitive to historical variation, for instance in the erratic development of actuarial knowledge, the role of ethno-religious prejudice in assessing risks, as in the case of poor Ashkenazi Jewish buyers of insurance in London, or the existence of informal groups of investors pooling capital to fund early insurance companies.[45]

Timothy Guinnane, Ron Harris, Naomi Lamoreaux and Jean-Laurent Rosenthal have argued for a similar application of the theory of the firm to all corporate solutions. They demonstrate that throughout the nineteenth century, entrepreneurs in England, France, Germany and the United States had recourse to a wide range of enterprise forms and investment options, including various permutations of the basic general partnership, they all used these alternatives intensively regardless of the legal regimes of their respective countries, and that the corporation remained the exception rather than the rule.[46] Several scholars have followed their lead, revealing a similar heterogeneity of forms in early insurance companies and other corporations in the United States at the turn of the nineteenth century.[47] A case in point is a study of British and America marine insurance markets from 1720 to 1844 by Christopher Kingston. He shows that the corporation was neither the inevitable outcome of increasingly complex market nor necessarily the superior choice. In England, the legislation enacted after the Bubble Act forbade the creation of joint-stock companies for underwriters. As a result, the market was dominated by private services. By the time the Bubble Act was repealed in 1824, Lloyd's had become dominant and private underwriters had learned to tame the risks of the business. By contrast, after independence, the United States were not bound by the Bubble Act and a number of underwriters chose incorporation. Although in theory 'corporation ought to drive private underwriters out of business', Kingston demonstrates that the corporation was not uniquely better at curbing the asymmetric information that plagued insurance markets at the time.[48]

This new empirical work on early banks and companies shows how the application of modern economic theory can deepen our understanding of economic decision-making in the past. At the same time, it casts doubt on Kuran's choice of treating the joint-stock company as representative of preindustrial Europe's business organisation and identifying its absence from the Middle Eastern menu of enterprise forms as a chief cause for the economic backwardness of the Islamic world.[49] But there is another approach, too, namely that of 'traditional' historians who seem little inclined to apply insights from economics, or any other social science theory. Their extensive research in primary sources is not featured very often in the journals reviewed here, but remains fundamental to our understanding of the premodern economy. In the next three sections we show that historical work on family firms, the economic role of women and the use of credit to fund businesses can be the basis for very fruitful comparisons between the West and other regions of the world.

5. The family firm

The family firm is at once something specific (an enterprise run by relatives, often transmitted from father to son, and governed by a bundle of more or less specified obligations) and the

ideal-type alternative to corporations. In both senses, it is a staple of scholarship on preindustrial Europe, even though business and economic history journals approach the topic from different angles. The *BH*, *BHR* and *E&S* are concerned with the structure, capitalisation and longevity of family firms, as well as with debates concerning their advantages (lower monitoring costs of partners' behaviour, in-built incentives to provide long-term investments, etc.) and their drawbacks (recruitment decisions made with dynastic motives rather than competence in mind, disincentives to use debt capital, etc.) in comparison with alternative forms of organisation, beginning with the corporation. The *EHR* and *JEH*, by contrast, do not include individual firm-level studies and publish instead a few contributions that seek to establish a causal relation between family organisation and macro-economic trends, whether the rise of agrarian capitalism or, more frequently, the role of consumption and proto-industry in the path to industrialisation.[50]

In reviewing these articles, it is important to note that research on premodern family firms is often published in books, not journals. Particularly numerous are studies of merchant families in early modern Europe. These monographs invariably offer detailed, empirically rich descriptions of the close cooperation between relatives and the large international networks they built to organise business transactions. Rarely, however, do they examine family firms and commercial networks alongside complementary or alternative solutions that were available via market bargains, partnership contracts or in court. This trend is regrettable considering that family firms and trading networks can be found virtually anywhere in the world and often bridged geographical if not also legal and political boundaries. They are thus ideal candidates for further comparisons and can provide business historians with new tools with which to engage the theoretical propositions of Greif and La Porta et al. and to identify the legal, economic, social or cultural factors that led the owners of those firms to organise and finance their business in one way rather than the other.

The sources documenting the organisation of firms in preindustrial societies are notoriously scarce. In some fortunate cases, surviving account books and business correspondence provide enough detailed information to compare the governance of trade and manufacturing by a single merchant in different locations.[51] Equally promising are archives that cover multiple generations of one family, as they reveal the ability of such families to defy the Buddenbrooks syndrome, i.e., the difficulty for family firms to survive beyond the third generation.[52] Three articles featured in *Business History* address this question of inter-generational continuity with statistical samples, all three in the context of early industrialisation in England.[53] Available sources are partially to blame for this limited testing ground: only from the mid-eighteenth century onwards and primarily in England do we find trade almanacs and newspapers advertising the formation, dissolution and bankruptcy of small partnerships. Last wills, another favourite type of records for these investigations, are more ubiquitous, but alone are not able to generate the same kind of serial data: they are harder to select and contain much exogenous information. Finally, even small-scale firms that involved non-kin were not regularly registered in public records, making their identification very unsystematic.

These considerations about the surviving archival trail matter for two reasons: they make us aware of how limited our knowledge of small-scale firms still is even for the most well-studied areas of preindustrial Europe (such as England in the late eighteenth century) and how dependent we are on available sources (not to mention secondary literature) in comparing those firms across regions of Europe and the world. But in pursuing these comparisons and

examining the variety of legal forms used to define ownership and agency relations within and outside firms, we should also remember that, as noted above, not all problems facing small- and medium-size entrepreneurs could be solved via incorporation. In the absence of publically funded vocational training or relatively open guilds, for example, the transmission of know-how was just as important a challenge for firms as permanence.[54] Moreover, dissolution was not always the end of a non-incorporated firm, which could be reconstituted with different contractual obligations by the same investors. At the same time, small-scale entrepreneurs did not always have a wide menu of choices for organising a concern. In Great Britain, for instance, only after 1855 could corporations chartered by the general public acquire limited liability, and only after 1907 was the same right extended to non-incorporated partnerships.[55]

For Kuran, Islamic law's demand that a partnership be dissolved at the death of one of the partners was a principal cause of the Middle East's stalled economic development next to the lack of indigenous provisions for the constitution of joint-stock companies before the nineteenth century.[56] While acknowledging the 'bewildering diversity' (430) of inheritance practices that existed across early modern Europe, Kuran singles out primogeniture as the cost-effective means through which families in Europe were able 'to keep their assets intact' (431). If this conclusion is widely shared with regard to large landholdings in England and southern Europe, it is rarely invoked to explain inter-generational transmission of small- and medium-firms. For one, partible inheritance rather than primogeniture is generally seen as freeing entrepreneurial energy and propelling the United Provinces into its golden age.[57] Male partible inheritance was also the norm in late imperial China, but there, lineage trusts (*tang*) proved to be effective vehicles for capital accumulation and defences against capital dispersion and dissolution.[58] In Zelin's interpretation, the extended family (rather than Greif's nuclear family) facilitated more than it checked the perpetuation of the family firm. Lineage trusts were de facto native substitutes for the corporation. They invested in business assets or land and their shares could be traded.[59] In Kuran's characterisation, by contrast, Islamic pious foundations (*waqfs*) were not only the sole legal means to establish a trust in the Middle East, but were also devoted exclusively to charitable (rather than entrepreneurial) activities.[60]

At a minimum, we ought to conclude that kinship structures and inheritance regimes cannot be abstracted from the environments in which they operated, since partible inheritance and trusts that shared some characteristics with European corporations appear to have been used for different purposes in the Middle East and in late imperial China. Overall, it appears that incorporation and limited liability were rare features in preindustrial Europe and that a range of substitutes existed both across Europe and elsewhere. Limited liability is the legal mechanism though which firms are assumed to have been able to draw on investments from non-kin. However, the real impact of limited liability, with the property right protection it granted passive investors, remains to be tested and would provide a useful ground for comparisons both within and beyond Europe. After all, limited partnerships were legally recognised in Tuscany since the fifteenth century but did not become the preferred business form there, while they were not sanctioned by English and Dutch codes until much later, and yet these regions developed at a more rapid pace than Tuscany after the sixteenth century.[61] In the end, comparisons between Europe and regions of the world where limited liability was not inscribed in indigenous legal codes should not ignore the fact that the

majority of firms in preindustrial Europe were not incorporated and probably did not include limited liability clauses.

6. The economic role of women

Given the importance that business historians attribute to family firms in the preindustrial period, it is surprising that they devote little attention to the role of women, marriage and dowry in the formation and funding of those very firms. A partial exception is Ioanna Minoglou's study of the place of women in the financing and management of Greece family firms. We say partial exception because, although her intent is to cover the entire temporal arc from 1780 to 1940, during which Greece transitioned from being a poor peasant economy to becoming a capitalist country with standards of living on par with other European regions, available sources lead her to concentrate on the nineteenth and twentieth centuries. It is in the *société anonyme* borrowed from the Napoleonic commercial code and introduced after the independence of Greece in 1822 that she locates the autonomous role of women as investors and managers.[62] Still, Minoglou's article is the only one in business history journals that explores the inner workings of early modern family firms; other business historians interested in gender turn instead to the presence of women as a measure of incipient impersonality in preindustrial markets.[63]

It is economic rather than business historians who in the past two decades have revitalised the study of the economic roles played by women and have put it in the service of grand narratives of preindustrial paths of economic development. The turning point came with the publication of Jan de Vries' *Industrious Revolution* in 2008, which attributes to the household as a unit of both production and consumption a causal function in the process of industrialisation. In defiance of prevailing supply-side explanations of the Industrial Revolution, de Vries proposes that consumption drove the process: households chose to spend more hours working for wages or producing goods for sale, and fewer hours producing goods for home consumption in order to improve their purchasing power. In the process, they acquired sophisticated tastes for goods available on the market.[64] This argument has its roots in the literature on proto-industry and consumption of the 1980s, to which de Vries himself contributed ground-breaking studies.[65] But it also hinges on two additional features: the rise of the nuclear family and the increasing participation of women in the labour force in the United Provinces and England during the late seventeenth and eighteenth centuries.

Both developments have been the subject of intense debate. Since the late nineteenth century, some of the most influential social theorists of Western modernity have advanced strong claims about the superiority of certain demographic configurations, and the nuclear family in particular. Since the mid-1960s, the so-called European Marriage Pattern (late marriage, high level of celibacy and low fertility) has functioned as the dominant paradigm among economic historians of preindustrial Europe.[66] As a fundamentally comparative paradigm, it functions on two axes by contrasting northern and southern Europe, as well as Europe as a whole vis-à-vis the rest of the world, notably Asia and Africa. The presumed uniqueness of the European Marriage Pattern to north-western Europe is once again been scrutinised after more than three decades of relative silence on the topic.[67] A belligerent disagreement is on display in the *EHR* and *JEH* between the supporters (Tine de Moor and Jan Luiten van Zanden) and the detractors (Ogilvie and Tracy Dennison) of the empirical

validity of the European Marriage Pattern, its supposed effects of empowering women (including unmarried women) and the concomitant benefits for the economy as a whole.[68]

According to de Vries, for the Industrious Revolution to take off, women had to reallocate their labour input from the household to the market economy, a trend he identifies in north-western Europe from 1650 to 1850. There, motivated by the desire to increase the non-durable goods their families could consume, women worked more for wages and appeared more often in marketplaces. As a result, women also acquired greater decision-making power within the household, at least until the return of domesticity in Victorian England. Several economic historians, Allen and Ogilvie in particular, have taken issue with the importance of the Industrious Revolution in leading to British early industrialisation and with De Vries' optimistic portrayal of women's economic role in it.[69] Meanwhile, the debate continues whether the preindustrial period was a 'golden age' for women or rather a period of continued oppression, perhaps even of further marginalisation.[70]

There is no trace of these debates in the business history journals. A few articles highlight the activities of female investors on London's stock exchange from the late seventeenth century onwards, but these women constituted a very specific group within early modern society.[71] This absence is unfortunate and yet the likely result of the fact that the division of labour between men and women is nowhere better on display than in account books, business correspondence, or contracts of various kinds, in which women are largely absent. Firms –like households, families or guilds – are the very places where the behaviour of individuals is congealed into durable social arrangements that shape economic outcomes. The few articles that do consider, however briefly, the role of women in the governance of preindustrial businesses do so overcoming great evidentiary barriers but reveal women's assistance in settling debts, cementing social ties between agents in different locations, and continuing to operate businesses upon the death of their husbands.[72] If we were to look more closely at how many women took on such roles under different legal, social, cultural and economic circumstances, comparing different parts of Europe and the world, we would learn a great deal about the determinants and consequences of female economic agency.[73]

At present, in the articles surveyed here, there is no echo of this global dimension, in spite of the importance that Pomeranz placed on comparative levels of consumption in the most advanced areas of eighteenth-century England and China, and specifically on the development of craft manufacturing, in which women were highly involved, in rural areas of both continents.[74] For studies of the economic impact of kinship structures and women's participation in the economy we need to look at other publications. There, these issues remain as fraught as they were a century ago. Greif and Guido Tabellini recently spoke of a 'cultural and institutional bifurcation' between Europe and China and attributed it to the persistence of clans in the latter.[75] As in the case of the debate about medieval Mediterranean trade, the value of Greif's analysis resides in drawing out the implications of specific social and business formations. The drawback, however, is that Greif abstracts the comparisons from the thickness of empirical evidence that is now available for Europe and relies on a second-hand knowledge of non-European sources.[76] Scholars with better linguistic training will be able to make an important contribution on this and related subjects, for example by comparing the business activities of women across time and place, as well as the legal boundaries, notably with regard to the transfer of wealth at marriage and death, within which women had to operate.

7. The funding of business

The financial dealings of entrepreneurs in preindustrial Europe have always captured the imagination of scholars exploring the rise of capitalism. Classic examples are de Roover's study of the banking operations of the Medici, Richard Ehrenberg's description of the Fugger imperium and the manifold studies of England's first industrialists.[77] This kind of work is still published in economic and business history journals, which include case studies of the money transfers made by Italian merchants in late medieval Bruges and Antwerp,[78] the short-term loans contracted by Flemish and Dutch traders in the seventeenth century,[79] and the investment strategies of English merchants in London and the British colonies.[80] These articles are exemplary in their careful reconstruction of earlier business practices, but their exclusive focus on the capitalist core of the preindustrial economy makes for only a partial contribution to current debates on economic growth and inequality. If Braudel was right, and financial centres like Antwerp or Genoa in the sixteenth century and Amsterdam and London in the seventeenth and eighteenth centuries were capitalist enclaves, studying credit markets and long-distance trade in these hubs is not enough to understand how preindustrial economies functioned.[81]

Few financial historians have taken up the challenge to expand the purview of business history beyond the capitalist core. In the journals we surveyed, only two articles explore links between the top and the bottom of the financial pyramid.[82] Many more deal with lending to medieval rulers in Tuscany,[83] Flanders,[84] and England,[85] and to early modern governments in Spain,[86] Holland,[87] England,[88] Burgundy,[89] and Denmark.[90] The inspiration for much of this work comes from North and Weingast's claim that England's Glorious Revolution led to more secure property rights, which in turn pushed down public and private interest rates.[91] However, the dominant theme in studies inspired by this idea of a financial revolution has been the bargaining between rulers and their creditors, while the key contention that by securing property rights, limited government stimulated private enterprise remains largely unexplored.[92] Only a handful of authors have used loan portfolios of merchants and bankers to measure the effect of government borrowing on the volume and price of private credit.[93] Other authors chart the geography of sovereign debt markets, for instance Christiaan van Bochove, who analyses the trade in government bonds in different parts of the Dutch Republic, or Mark Potter and Rosenthal, who demonstrate that the greater liquidity of the Parisian credit market led the Estates of Burgundy in Dijon to seek new lenders in the capital city.[94]

As a result, while most financial historians remain strongly wedded to the idea that countries have to go through a financial revolution in order for a wider variety of instruments and strategies to develop and interest rates to decline, there is very little empirical work that actually explores the financing of business operations before and after such major shocks.[95] For more granular explorations of financial dealings in preindustrial Europe we have to turn to the work of social historians. Inspired by Craig Muldrew's innovative study *The Economy of Obligation*[96] and dissatisfied with the application of modern economic concepts to the study of preindustrial societies, these historians examine the social inequalities and cultural prescriptions that shaped credit relations in early modern Europe. Consonant with the more general *cultural turn* in historical research, their work found a ready audience in general history journals, but left scant traces in business and economic history journals.[97] However,

the few articles about the finances of ordinary businessmen in our data-set show the potential of future research in this vein.

Take for instance Daniel Vickers''Errors Expected,' published in the *EHR* in 2010. Using the personal notebooks of three petty traders and artisans in New England in the eighteenth century, Vickers is able to show that these businessmen switched very easily from a fully monetised exchange of goods to an equally sophisticated daily exchange of services accounted through careful written records of the various activities carried out for other members of the communities. He thus demonstrates that two arrangements that may be conceived as analytically very distinct, perhaps even contradictory, went hand-in-hand in actual business practice.[98] The specificity of past cultures of credit also animates Natasha Glaisyer's analysis of the business operations of John Castaing, a famous London publisher of financial information at the turn of the eighteenth century. Castaing always signed the books he sold to add credibility to their contents.[99]

Instead of making sweeping theoretical claims about the motivation of economic actors, scholars like Vickers or Glaisyer choose to scrutinise their very rich primary materials. An equally rewarding empirical strategy is the reconstruction of financial dealings from probate inventories. For a long time these sources were only used to analyse material culture and consumption patterns, but they also reveal the financial behaviour of lower and middle class groups.[100] Thus, for the rural community of Wildberg in southern Germany, Ogilvie, Küpker and Maegraith show that broad segments of society were able to obtain credit to fund (small) investments, to smooth consumption, or to facilitate the transfer of resources from one generation to the next. Interestingly, not all these loans depended on personal relationships between borrowers and creditors –credit was also extended between relative strangers using the debtor's house and the tiny plot of land on which it stood as collateral.[101]

This kind of in-depth exploration of financial behaviour of ordinary people need not be limited to early modern Europe. In an analysis of probate inventories very similar to that of Ogilvie et al., Johan Fourie documents the indebtedness of Dutch farmers in South Africa.[102] Admittedly, the records documenting European colonial enclaves survive in greater number, or at least are more accessible to Western scholars and often more amenable to comparative analysis than those produced by non-European societies. Even with this caveat in mind, the obvious next step would be to draw comparisons between regions for which similar source material survives. One topic that would lend itself very well to such an endeavour is the use of trade credit. In a 2005 *JEH* article Jeremy Baskes analyses the administration of the *repartimiento* credit system in eighteenth-century Mexico, that is, 'the purchase and sale of goods by Spanish district magistrates to their Indian charges in colonial Spanish America'. Often considered a cornerstone of the Spanish oppression of local populations, according to Baskes' provocative thesis, these standardised loans actually benefited local producers. The *repartiemento* made it easier to vet prospective borrowers and to ensure repayments of the loans, and the ensuing increase in credit stimulated trade.[103] If we compare Baskes' work to a study by John Smail of England's textile industry in the eighteenth century, the potential for comparative analysis is immediately apparent. Smail uses the business accounts of textile merchants to explain why some of them found good economic reasons to offer cash rebates to customers who paid right away, while others allowed several weeks to pass. Smail then argues that this differential use of rebates reveals different attitudes towards credit. Ultimately, what he shows is the variety of ways in which basic funding problems may be solved.[104]

Perhaps predictably, this review of recent work on private, rather than public finance in early modern Europe shows that we need three things for a comparative business history of the preindustrial world to succeed. The first is access to high-quality primary source material, whether letters, account books, probate inventories, or tax registers.[105] The second is a clear theoretical understanding of the problems –financial or otherwise– that business owners tried to solve. The third is an equally strong grasp of the wider social, political, legal and cultural context within which these men and women operated. The combination of these three elements will allow authors to reconstruct the financial behaviour of business owners in very different environments and the economic motives, or otherwise, that guided their decisions.

8. Conclusion

In 2009 the Business History Conference established the *Mira Wilkins Prize* for the best article published in *Enterprise & Society* pertaining to international and comparative history. The prize is awarded every year, both to pay tribute to Mira Wilkins' broad-ranging scholarship and to encourage business historians to engage in comparative work. To date, all prizewinners have written articles devoted to the nineteenth and twentieth centuries – a result that will not come as a surprise to our readers.[106] From our perspective, comparisons should not merely consist of applying contemporary notions to the preindustrial period in order to tease out emergence of modern forms in earlier times.[107] What we need is a business history that applies deep empirical knowledge of the heterogeneity of enterprise forms and credit arrangements in the preindustrial world to examine general theoretical claims about the impact of legal, political and social institutions on economic growth and development.

The challenge, we recognise, is considerable. After all, heterogeneity resists modelling and makes it difficult to design even the most basic comparisons. The unevenness of archival sources and the need for exceptional linguistic competence compound the problems posed by the heterogeneity of historical reality. While we have no intention of denying that these stumbling blocks exist, we find inspiration in a small number of comparative studies that reject dogmatism and at the same time provide solid theoretical foundations. In addition to the work of Neal, Carlos, Casson and Lamoreaux cited earlier, an important article published by Lamoreaux, Daniel Raff and Peter Temin in the *American Historical Review* in 2003 argues against the unidirectional development of hierarchical governance.[108] In a recent special issue of *Business History*, Abe de Jong, David Higgins and Hugo van Driel further advocate a theory-oriented business history in which the traditional primacy of case study analysis is complemented by hypothesis-testing.[109] More generally, while the approach advocated in this article is indebted to the theory of the firm, we recognise that the greater methodological eclecticism of business history, as compared to economic history, is conducive to outlining comparisons between worlds that functioned according to different logics and produced different primary sources.

To date, the number of articles on early modern business on the basis of which to build larger comparisons remains very small. But the impact of the literature we have discussed is cause for optimism. Several articles, notably on trading firms, analyse the organisation of business transactions with explicit references to the theory of the firm or offer detailed historical descriptions of these transactions, which tick all the boxes of the approach advocated by Casson, Lamoreaux and others and allows for further comparisons.[110] In addition,

scholars of international trade and finance are in a particularly good position to bridge the historiographical divide between the preindustrial and industrial period. Especially for the seventeenth and eighteenth centuries, they have abundant sources to document how merchants and financiers used markets, networks and hierarchies to organise their transactions, and they have developed a keen eye for the ability of individual traders and investors to move back and forth between a familial world of longstanding social ties and the more competitive environment of increasingly sophisticated stock markets.[111]

Can we replicate this kind of analysis in other sectors of the preindustrial economy, or in other parts of the world? Ulrich Pfister argues that the theory of the firm can also be used to study craft guilds, but in the journals we surveyed no such work appears.[112] That may be because archival sources are lacking, or because historians think of preindustrial manufacturing as an economic realm very different from the world of trade and finance. In our view, that conclusion is unwarranted. Regardless of the sector in which they operated, business owners were confronted with similar challenges, whether it was monitoring employees and trading partners, supplying capital, or transmitting firm assets to the next generation. In the paradigmatic Sino-European case, it is now clear that ideological blind spots long obstructed what R. Bin Wong and Pomeranz call 'reciprocal comparisons'.[113] Once historians of China began to search for features that resemble those existing in the West, they found them. Thus, detailed descriptions of non-kin based partnerships financed by external investors and tradable stocks are now available for early modern China, in sectors as diverse as small-scale agriculture and salt mines.[114]

In a more recent volume, Rosenthal and Wong have developed a complementary but different approach. They are more comfortable than Pomeranz with the asymmetry of empirical evidence that plagues most comparisons between Chinese and European economic systems and outline plausible scenarios that remain to be tested. With regard to the topics of our review, they shatter the Orientalist portrait that depicted imperial China as antithetical to Europe because it never developed a public debt and only possessed clannish and localised private financial organisations. They reason that China's agrarian empire required a different taxation system and no public debt. Moreover, they highlight how both formal and informal incentives and sanctions to compel trading partners to follow through on their commitments shaped the modalities of long-distance trade in early modern China and Europe because the legal environments in which merchants operated was remarkably different (centralised in China and highly fragmented in Europe).[115]

Ultimately, Rosenthal and Wong's contribution consists in demonstrating that comparative history needs not search for identical institutions across time and place but should rather understand why different societies may have either developed different solutions to the same problem (in this case, state capacity, legal institutions and sources of public and private finance) or simply faced different problems. It would be in keeping with the spirit of Rosenthal and Wong's approach to investigate in greater empirical and analytical detail some of the hypotheses that they put forth, including their argument that there is no necessary relationship between public debt and private money markets. In their story, moreover, kinship structures and the corporation play no role, while the political economy of warfare and patterns of urbanisation are decisive. Business historians may wish to disagree, but to do so they will need to carry out further research in order to advance our understanding of what led to the preindustrial Great Divergence.[116]

It is not by coincidence that we close this literature review with a book co-authored by an economist (Rosenthal), who specialises in the economic history of Old Regime France and financial markets, and a historian (Wong) with a broad expertise in the economic history of pre-modern China. The kind of comparative work that we envision and advocate may be best pursued through collaborative work. In spite of the fact that granting agencies for the humanities and social sciences, especially in Europe (one thinks of the European Science Foundation, but also a host of national organisations), encourage collaborative research and multi-authored publications, traditional historians as well as business historians are not trained and rarely become versed in genuinely collaborative work. That is yet another task, of the tallest order, that ought to become part of our shared academic training and culture if we wish to revitalise business history on a truly global scale.

Notes

1. Particularly influential was and remains the work of the Belgian accountant turned scholar Raymond de Roover: *Money, Banking and Credit*; *L'évolution de la lettre de change*; *The Rise and Decline of the Medici Bank*. A rich collection of business records in English translation is included in Lopez and Raymond, *Medieval Trade in the Mediterranean World*. Lopez later outlined a synthetic argument about the rise of merchants in late medieval Italian city-states in his *Commercial Revolution of the Middle Ages*. Fernand Braudel was not a business historian *per se* but his wide-ranging studies, first of the Mediterranean and then of the early modern European economy in a world perspective, provide deep insights into the organisation of business: *The Mediterranean and the Mediterranean World*; *Civilization and Capitalism*. An early and important exception to this focus on the business organisation of late medieval Europe was Abraham L. Udovitch, who wrote a path-breaking book on business forms drawing from both Islamic legal commentaries and the business records of the so-called Cairo Geniza: *Partnership and Profit in Medieval Islam*.
2. For an account of the intellectual and academic changes in the place of economic history in Europe and the United States over the past 70 years, see Drukker, *The Revolution That Bit Its Own Tail*; Lamoreaux, 'Beyond the Old and the New'.
3. Some economists went as far as to dismiss the relevance of the preindustrial period for the study of modern economic growth. See Clark, *Farewell to Alms*.
4. Pomeranz, *The Great Divergence*. Some of the measures used by Pomeranz to assess wages, living standards and productivity in the Yangzi Delta River region during the eighteenth century have been disputed. But his remains a remarkable attempt to synthesise microeconomic data with a large-scale thesis about the birth of industrialisation. For a previous, compelling outline of a comparative framework, see Wong, *China Transformed*.
5. Parthasarathi, *Why Europe Grew Rich*; Studer, *The Great Divergence Reconsidered*; O'Rourke and Findlay, *Power and Plenty*; Allen, *The British Industrial Revolution*; van Zanden, *The Long Road to the Industrial Revolution*; Hoffman, *Why Did Europe Conquer the World?*; Vries, *State, Economy and the Great Divergence*; Andrade, *The Gunpowder Age*.
6. The leading figure is Sven Beckert, whose *Empire of Cotton* has been celebrated as much as criticised. Criticism has come from both economists and USA historians. See Olmstead and Rhode, *Cotton, Slavery, and the New History of Capitalism*; Oakes, *Capitalism and Slavery and the Civil War*; Hilt, *Economic History, Historical Analysis*.
7. La Porta et al., 'Law and Finance.'
8. Greif, 'The Fundamental Problem of Exchange.'
9. North and Weingast, 'Constitutions and Commitment.'
10. On the importance of bridging the micro-macro divide, see Trivellato, 'Is There a Future for Italian Microhistory.' For an exploration of the issue in economics, see Acemoglu et al., 'Microeconomic Origins of Macroeconomic Tail Risks.' For a recent, still rough attempt to account for the role of business forms in large-scale patterns of economic growth, see Zan and Denog, 'Micro

Foundations.' Later in the article, we stress the local variance of primary sources available to the study of preindustrial firms. A microhistorical perspective takes this idiosyncrasy for granted and shows how even a non-representative case can lead to productive hypotheses for comparisons and generalisations. On the possible uses of microhistory for economic and business historians, see Decker, 'Mothership Reconnection' and Wickham, 'Economic History and Microhistory.'

11. On the organisation of households, see de Vries, *The Industrious Revolution*. On the organisation of guilds, see Ogilvie, *Institutions and European Trade*.
12. Harris, 'The Institutional Dynamics'; Zelin, 'The Firm in Early Modern China.'
13. By 'article' we mean only those pieces that the journals themselves classify (explicitly or implicitly) as research studies. Our survey excludes book reviews, review essays, dissertation summaries, and the like. As important as doctoral dissertations are in assessing emerging trends in the literature, no comprehensive repository allowed us to take them into systematic consideration. Wherever possible and relevant, we refer to monographs in addition to journal articles.
14. For sake of classification, we define 'preindustrial' as the period ending in 1800, although we are all too aware that the chronological divide has a Eurocentric bias. In the history of Europe, industrialisation tended to coincide with higher-quality public information and the expansion of franchise. By contrast, poor public information and lack of universal freedom of contractual choice, even for adult men, were defining features of preindustrial societies, and also affected the organisation of business. In many regions of the world, industrialisation was not underway until the nineteenth century or later, and primary sources are scarce before 1800. Lydon, *On Trans-Saharan Trails*, for example, is the ground for fertile comparisons between preindustrial Europe and nineteenth-century Africa. A case in point in the journals we surveyed is an article by Liu et al., 'Fellow-townsmenship', published in *Business History*, which highlights how common local origins helped Chinese entrepreneurs to develop their businesses in areas to which they were strangers. Another example is Juliette Levy's work ('Notaries'), published in *Business History Review*, on nineteenth-century Mexican notaries acting as financial intermediaries much in the way Parisian notaries did in the seventeenth and eighteenth centuries.
15. What is more, our classification system inflates the number of pre-1800 articles because we categorise articles according to the earliest chronological period covered in each of them. Thus, a study spanning the eighteenth and nineteenth centuries is counted as belonging to the 1500–1799 range. This particular example is important because several articles that we count as early modern (1550–1799) are in fact tilted towards the later part of this period and spill well into the nineteenth, if not the twentieth century. Some of these are discussed at greater length later in this survey, including Pérez and Puis, 'Knowledge and Training in Family Firms'; Minoglou, 'Women and Family Capitalism'; Zelin, 'Chinese Business Practice'; Roy, 'Trading Firms in Colonial India'; Lorandini, 'Looking Beyond the Buddenbrooks Syndrome.' But the problem is widespread in our data-set. Warren E. Weber collects data on some 2,000 banks active in the United States before 1861. In his data-set only 15 banks were established between 1782 and 1800: 'Early State Banks in the United States.' See also Wang, 'Banks, Credit Markets'; Wilkins, 'Dutch Multinational Enterprises'; Andrew Lorenz, 'Robust Strategies.'
16. Note that we grouped together under the heading 'Global/Comparative' articles that transcend the boundaries of one of the regions as we defined them (Europe, Middle East, Africa, Asia, North America, Central and South America, Pacific Australasia) as well as those that are explicitly comparative.
17. Tilly, *Big Structures*, 125–143.
18. Forestier, 'Risk, Kinship and Personal Relationships'; Vlami and Mandouvalos, 'Entrepreneurial Forms'; Webster, 'An Early Global Business'; Pearson and Richardson, 'Social Capital, Institutional Innovation'; Buchnea, 'Transatlantic Transformations'; J. Haggerty and S. Haggerty, 'Visual Analytics'; Safley, 'Business Failure'; Hancock, 'The Trouble with Networks'; Marzagalli, 'Establishing Transatlantic Trade Networks.'
19. Vlami and Mandouvalos, 'Entrepreneurial Forms.' Note that the Greek merchant community is more represented in our data-set than any others, including Jewish or Huguenot analogues, which, we assume, are discussed in area-studies journals. In an important contribution, David

Hancock cautions us against idealizing the degree of homogeneity and reliability of 'networks,' if nothing else because relatives can be incompetent even when they are not intentionally fraudulent: 'The Trouble with Networks.' Curiously, the term 'network' and its cognates rarely appear in the titles of articles covering the preindustrial period. The count in both economic and business history journals is as follows: network (17), networks (6), networking (1).

20. Lamoreaux, 'Scylla or Charybdis?'.
21. Zelin, 'Chinese Business Practice'; Roy, 'Trading Firms in Colonial India.'
22. Safley, 'Business Failure.' On Antwerp: de Ruysscher, 'Designing the Limits of Creditworthiness'; Puttevils, *Merchants and Trading*. On Paris: Kessler, *A Revolution in Commerce*. On London: Hoppitt, *Risk and Failure*. On failures in London's colonial trade, see also Webster, 'An Early Global Business.'
23. Kingston, 'Marine Insurance in Philadelphia.'
24. Hoffman et al., 'Real Inequality in Europe since 1500'; Allen, 'Progress and Poverty'; Broadberry and Gupta, 'The Early Modern Great Divergence'; Allen, 'Agricultural Productivity'; Allen et al., 'Wages, Prices, and Living Standards in China'; Allen, 'Why the Industrial Revolution was British'; Clark et al., 'Malthus, Wages, and Preindustrial Growth.' Comparisons aside, the validity of Allen's wage data has been questioned for England itself: Humphries, 'Childhood and Child Labour'; Humphries, 'The Lure of Aggregates'; Allen, 'The High Wage Economy.'
25. Balla and Johnson, 'Fiscal Crisis and Institutional Change'; Karaman and Pamuk, 'Ottoman State Finances.'
26. Malanima, 'Energy Consumption in England and Italy'; Federico, 'How Much Do We Know About Market Integration in Europe?'.
27. Epstein, 'Craft Guilds, Apprenticeship'; Ogilvie, 'Guilds, Efficiency and Social Capital'; Epstein, 'Craft Guilds in the Pre-Modern Economy'; Ogilvie, 'Rehabilitating the Guilds.'
28. Edwards and Ogilvie, 'Contract Enforcement, Institutions, and Social Capital'; Greif, 'The Maghribi Traders.'
29. Kuran, 'The Islamic Commercial Crisis.'
30. For classic work on the rise of banks and the corporation, see Cameron, *Banking in the Early Stages of Industrialization*; Chandler, *The Visible Hand*. See also the special issue of *Business History Review* 82, no. 2 (2008) commemorating Alfred D. Chandler (1918–2007).
31. For a recent reiteration of this view, see Landes et al., eds., *The Invention of Enterprise*.
32. We borrow the term 'giants of an earlier capitalism' from Ann Carlos and Stephen Nicholas, who were among the first to apply modern economic theory to the governance of colonial trade in 'Giants of an Earlier Capitalism.'
33. On the English East India Company: Bowen, 'Sinews of Trade and Empire'; Hejeebu, 'Contract Enforcement in the English East India Company'; Freeman et al., 'Law, Politics and the Governance.' On the Dutch East India Company: Metaxas, 'Path Dependence, Change'; Gelderblom et al., 'The Formative Years of the Modern Corporation.' Similar work on the financial operations and business organisation exists for other colonial companies, including Carlos and Lewis, 'Marketing in the Land of Hudson Bay'; Rodrigues and Sangster, 'Public-Private Partnerships'; Mitchell, 'Legitimate Commerce.'
34. English studies that deal with the financing, internal organisation and risk assessment practices of early companies for marine, fire and life insurance include Pearson, 'Mutuality Tested'; Pearson, 'Moral Hazard and the Assessment of Insurance Risk'; O'Brien and Fenn, 'Mutual Life Insurers.' American studies focus on the emergence of the first companies for marine insurance: Crothers, 'Commercial Risk and Capital Formation'; Mulcahy, 'Weathering the Storms'; Kingston, 'Marine Insurance in Philadelphia.' On insurance practices in the Dutch Republic, see Go, 'The Amsterdam Chamber of Insurance.'
35. Arnold and McCartney, 'Veritable Gold Mine'; Hejeebu 'Contract Enforcement'. On accounting practices in Renaissance Italy, see Goldthwaite, 'Practice'. Compare the annual listing of new accounting history articles and books in the *Accounting History Review* since 1989.
36. On the use of shares as loan collateral, see Gelderblom and Jonker, 'Completing a Financial Revolution.' On early options trading, see Murphy, 'Trading Options before Black-Scholes.'
37. On the activities of the South Sea Company directors, see Kleer, 'Riding a Wave.'

38. S. Bell, 'A Masterpiece of Knavery?'.
39. Neal, 'The Money Pitt.'
40. Carlos et al., 'Share Portfolios.'
41. On the importance of personal relations, see Laurence, 'The Emergence of a Private Clientele.' Note, however, that same banks may have foregone the safety net of insider lending, deliberately seeking out high-risk-high return investment projects: Brunt, 'Rediscovering Risk.' On the formalisation of trust in legal prescriptions for the operation of early deposit banks, see Kim, 'How Modern Banking Originated.'
42. Dale et al., 'Financial Markets Can Go Mad'; Shea, 'Financial Market Analysis Can Go Mad.'
43. M. Casson and C. Casson, 'The History of Entrepreneurship.' For a clear statement of this theory, see M. Casson and Rose, eds., *Introduction, Institutions and Evolution of Modern Business*, 1–8. On the role of social networks in the governance of family firms, see also M. Casson, 'The Economics of the Family Firm.'
44. Pearson and Richardson, 'Business Networking in the Industrial Revolution'; Pearson and Richardson, 'Social Capital, Institutional Innovation.'
45. Pearson, 'Moral Hazard and the Assessment of Insurance Risk'; Pearson, 'Mutuality Tested.'
46. Guinnane et al., 'Putting the Corporation in its Place.' See also Lamoreaux and Rosenthal, 'Legal Regime and Contractual Flexibility.'
47. Hilt, 'Shareholder Voting Rights'; Hilt and Valentine, 'Democratic Dividends.' For the nineteenth century, see also Aldous, 'Avoiding Negligence and Profusion'; Aldous, 'Rehabilitating the Intermediary.'
48. Kingston, 'Marine Insurance in Britain and America,' 398.
49. Kuran, 'The Islamic Commercial Crisis.'
50. Shaw-Taylor, 'The Rise of Agrarian Capitalism.'
51. Gelderblom, 'The Governance of Early Modern Trade.'
52. Lorandini, 'Looking Beyond the Buddenbrooks Syndrome.'
53. Owens, 'Inheritance and Life Cycle of Family Firms'; Solar and Lyons, 'The English Cotton Spinning Industry'; Barker and Ishizu, 'Inheritance and Continuity.'
54. Pérez and Puis, 'Knowledge and Training in Family Firms.'
55. Owens, 'Inheritance and Life Cycle of Family Firms.'
56. Kuran, 'The Islamic Commercial Crisis.'
57. De Moor and van Zanden, 'Girl Power.' For a more complicated view of primogeniture and entails in the land transfer of late medieval England, see Payling, 'The Economics of Marriage in Late Medieval England.' See also Casari and Lisciandra, 'Gender Discrimination in Property Rights.'
58. Zelin, 'Chinese Business Practice,' 773–774.
59. Zelin, *The Merchants of Zigong,* 60–63.
60. Kuran, 'The Islamic Commercial Crisis,' 430. Note that other scholars have shown the importance of cash-waqfs for the financing of speculative and mercantile enterprises: Çızakça, 'Cash Waqfs of Bursa.'
61. The Tuscan case is discussed by an older literature. See Carmona, 'Aspects du capitalisme toscan.' Francesca Trivellato is compiling a full data-set of all limited partnerships registered in Florence from 1445 to 1808. Future work with Oscar Gelderblom will use this data-set to develop comparisons with entrepreneurial forms found in Amsterdam.
62. Minoglou, 'Women and Family Capitalism.' The special issue of *Enterprise and Society* 2, no. 1 (2001), titled 'Gender and Business History', does not include any articles directly relevant to our survey but signals the interest in the topic at large.
63. S. Haggerty, 'The Structure of the Philadelphia Trading Community.' One article in the *EHR* echoes this concern but refers to women as 'non-mercantile' bank customers: Laurence, 'The Emergence of a Private Clientele.'
64. De Vries, *The Industrious Revolution*. Earlier versions of his thesis had appeared as 'Between Purchasing Power and the World of Goods' and 'The Industrial Revolution and the Industrious Revolution.'
65. De Vries, *The Dutch Rural Economy*; de Vries, *Barges and Capitalism*. Seminal works on early modern consumption include: Thirsk, *Economic Policy and Projects*; McKendrick et al., *Birth of*

a Consumer Society; Shammas, *Pre-Industrial Consumer*; Brewer and Porter, eds., *Consumption and the World of Goods*. The term 'proto-industrialisation' was popularised by Frank F. Mendels in his 'Proto-Industrialisation: The First Phase of the Industrialization Process.'

66. Hajnal, 'European Marriage Patterns in Perspective.'
67. Peter Laslett and the Cambridge Population Group championed research aimed to demonstrate the prevalence of the nuclear family in early modern England. Evidence from other regions of Europe challenge the exclusivity of this model. Fifteenth-century Florence is a notable example. There, scholars identified two demographic regimes: one dominated by the nuclear family among the working classes and one by the extended family among the wealthy elites. Herlihy and Klapisch-Zuber, *Tuscans and their Families*.
68. De Moor and van Zanden, 'Girl Power'; Ogilvie and Dennison, 'Does the European Marriage Pattern Explain Economic Growth?'.
69. Allen and Weisdorf, 'Was there an 'Industrious Revolution;" Ogilvie, 'Consumption, Social Capital, and the 'Industrious Revolution.".
70. Ogilvie, *A Bitter Living*.
71. Laurence, 'The Emergence of a Private Clientele'; Spicksley, 'Usury Legislation'; Carlos et al., 'Share Portfolios'; Carlos and Neal, 'Micro-Foundations of the Early London Capital Market.' For an earlier and a recent book-length study, see Dickson, *The Financial Revolution in England*, 281–282 and Froide, *Silent Partners*, respectively.
72. On the role of women in commercial networks: Minoglou, 'Women and Family Capitalism'; Buchnea, 'Transatlantic Transformations'; Webster, 'An Early Global Business,' 131; Mitchell, 'Legitimate Commerce,' 574. On the settlement of debts: Safley, 'Business Failure,' 47. On the continuation of businesses: Barker and Ishizu, 'Inheritance and Continuity,' 231; Owens, 'Inheritance and Life Cycle of Family Firms.'
73. De Vries' thesis concerned primarily the so-called Little Divergence between north-western and southern Europe but de Vries borrowed the term 'industrious revolution' (though not the precise definition) from a specialist of Tokogawa Japan. De Vries, *The Industrious Revolution*, xi. Akira Hayami's work has since become available in English: Hayami, *Japan's Industrious Revolution*.
74. Pomeranz. *The Great Divergence*, 86–106.
75. Greif and Tabellini, 'Cultural and Institutional Bifurcation'; Greif and Tabellini, 'The Clan and the Corporation.'
76. Two scholars of East Asia advance an opposite argument, which stresses both the similarities and differences of the Industrious Revolution in the history and historiography of Europe, Japan and China: Sugihara and Wong, 'Industrious Revolutions in Early Modern World History.'
77. For de Roover's work, see footnote 1. Ehrenberg, *Das Zeitalter der Fugger*. On entrepreneurship in England's First Industrial Revolution: Hoppit, *Risk and Failure*, 1–17 (with reference to an older literature).
78. Bolton and Bruscoli, 'When did Antwerp Replace Bruges.'
79. Gelderblom, 'The Governance of Early Modern Trade'; Gelderblom et al., 'Direct Finance in the Dutch Golden Age.'
80. S. Haggerty, 'The Structure of the Philadelphia Trading Community'; Vlami and Mandouvalos, 'Entrepreneurial Forms'; Webster, 'An Early Global Business'; Mitchell, 'Legitimate Commerce.' See also the detailed reconstruction of the governance of a Spanish plantation firm, which does refer to Chandler's work but otherwise takes Max Weber's rationalisation thesis as the point of departure: Sánchez-Matamoros and Cuevas-Rodríguez, 'Organisational Structure of Spanish New Settlements.'
81. Braudel, *Civilization and Capitalism*.
82. Gelderblom et al., 'Direct Finance in the Dutch Golden Age' documents how two leading merchants in Amsterdam in the 1660s monopolised the import of Swedish tar and pitch through the extension of credit to primary producers. For eighteenth-century London, Brunt, 'Rediscovering Risk' shows how banks behaved like modern venture capitalists, funding high-risk, high-return investment projects in the English countryside.
83. Botticini, 'A Tale of 'Benevolent' Governments.'
84. Bolton and Bruscoli, 'When did Antwerp Replace Bruges.'

85. Nightingale, 'Alien Finance'; A. Bell et al., 'The Credit Relationship.'
86. Álvarez-Nogal and Chamley, 'Debt Policy under Constraints'; Drelichman and Voth, 'Duplication without Constraints'; Pezzolo and Tattara, 'Una fiera senza luogo.'
87. Gelderblom and Jonker, 'Public Finance and Economic Growth'; van Bochove, 'Configuring Financial Markets in Preindustrial Europe.'
88. Chamley, 'Interest Reductions'; Cox, 'Marketing Sovereign Promises'; Murphy, 'Trading Options before Black-Scholes'; Carlos et al., 'Share Portfolios.' See also, on Scotland, Goodare, 'The Debts of James VI of Scotland.'
89. Potter and Rosenthal, 'The Development of Intermediation in French Credit Markets'; Potter, 'Good Offices.'
90. Van Bochove, 'External Debt and Commitment Mechanisms.'
91. North and Weingast, 'Constitutions and Commitment.'
92. An important exception is Summerhill, *Inglorious Revolution*.
93. Quinn, 'The Glorious Revolution's Effect'; Neal and Quinn, 'Networks of Information'; Temin and Voth, 'Private Borrowing'; Sussman and Yafeh, 'Institutional Reforms, Financial Development.'
94. Van Bochove, 'Configuring Financial Markets in Preindustrial Europe'; Potter and Rosenthal, 'The Development of Intermediation in French Credit Markets'; Potter, 'Good Offices.'
95. On financial revolutions as a prerequisite for financial development, see for instance Sylla, 'Financial Systems and Economic Modernization.' Beyond papers that detail early stock trading, or explore early banks' loan portfolios, there are only a few articles that analyse the funding operations of private businesses, notably Gelderblom and Jonker, 'Completing', and Brunt, 'Rediscovering risk'.
96. Muldrew, *The Economy of Obligation*.
97. To be sure, many articles acknowledge the importance of personal relations and trust in the governance of credit relations but few explore the issue in depth. See Pearson and Richardson, 'Business Networking in the Industrial Revolution'; Pearson and Richardson, 'Social Capital, Institutional Innovation'; Gelderblom, 'The Governance of Early Modern Trade.' Laurence Fontaine reviews eighteenth-century French evidence to point out that the extension of credit constituted both a social commitment and an economic obligation: 'Antonio and Shylock.' See also Holt and Popp, 'Emotion, Succession, and the Family Firm.'
98. Vickers, 'Errors Expected.'
99. Glaisyer, 'Calculating Credibility.'
100. In an article in *EHR* Anne McCants uses probate inventories to explore how colonial products reached poor consumers, but in related work published in *Explorations in Economic History*, McCants shows that these sources also reveal the access these groups had to credit: 'Poor Consumers as Global Consumers'; 'Inequality Among the Poor.'
101. Ogilvie et al., 'Household Debt in Early Modern Germany.'
102. Fourie, 'Remarkable Wealth of the Dutch Cape Colony.'
103. Baskes, 'Colonial Institutions and Cross-Cultural Trade,' 186–187, note 1. Unfortunately, some of Baskes' evidence does not provide strong support for his argument. He maintains that the *repartiminento* increased trade between Spaniards and indigenous people, and that its abolition in 1786 'contributed to the decline of the cochineal production' (203), but only documents the volume of cochineal exports for the period after 1786 (193).
104. Smail, 'The Culture of Credit.' For important work about the role of notaries in the development of private credit market based on real estate collateral, see Hoffman et al., *Priceless Markets*.
105. See, for instance, Warde's use of a survey of grain stocks kept by rural households in England in 1622 to estimate the extent of subsistence farming: 'Subsistence and Sales.' See also Zuijderduijn and De Moor, 'Spending', which uses tax registers to reconstruct the composition of household wealth of the entire population of a small Dutch town.
106. The list of winners can be found here: http://www.thebhc.org/wilkins.
107. We detect this problematic framework in a few business history articles, including Moore and Lewis, 'Multinational Enterprise,' which suggests that 'early Canaanite traders were architects of the first truly intercontinental multinational enterprise, spanning parts of Asia, Africa and Europe' (17). See also Bell and Dale, 'The Medieval Pilgrimage Business,' which applies the

modern concepts of franchise and branding to suggest that medieval pilgrimage can be considered a business enterprise, and two articles by, Juha Kansikas, which use contemporary taxonomy to analyse the career paths of Finnish businessmen over nearly two and a half centuries: 'The Business Elite in Finland'; 'Career Paths.' We are also sceptical of the revival of culturalist explanations that attribute a superior economic rationality to certain religious denominations (notably, the Puritans of Weberian fame): McKinlay and Mutch, 'Accountable Creatures.' On the revival of cultural explanations of economic change, with reference to literature that intersects only marginally with our data-set, see Jones, *Cultures Merging*.

108. Lamoreaux et al., 'Beyond Markets and Hierarchies.'
109. De Jong et al., 'Towards a New Business History?'.
110. A case in point is the very descriptive account Tony Webster gives of a trading firm in Calcutta. Without making any reference to more theoretical approaches, Webster nevertheless asks exactly the kinds of questions proposed by Lamoreaux, Raff and Temin: Webster, 'An Early Global Business.' For an explicit application of the theory of the firm to early modern businesses, see Gelderblom, 'The Governance of Early Modern Trade.'
111. See, for instance, Carlos et al., 'Share Portfolios,' which shows how Jewish stockbrokers, despite their marginal position in society at large, entered the bustling market for South Sea shares in 1720.
112. Pfister, 'Craft Guilds, the Theory of the Firm."
113. Wong, *China Transformed*, 1–4; Pomeranz, *The Great Divergence*, 8–10.
114. Pomeranz, '"Traditional" Chinese Business Forms'; Zelin, *The Merchants of Zigong,* 27–49.
115. Rosenthal and Wong, *Before and Beyond Divergence*.
116. In his review of Rosenthal and Wong's *Before and Beyond Divergence*, Jan de Vries concluded: 'Unfortunately, historical evidence that might actually test their theories is largely unavailable. The reader is left with an account of how imperial China was economically efficient in theory, but not in fact.' De Vries, Review of *Before and Beyond Divergence*, 165. This criticism is largely warranted but also misconstrues the book's overall message. In fact, in our reading, Rosenthal and Wong would readily admit that their empirical bases are thin, as long as this criticism were turned into an encouragement to test or reject their hypotheses.

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