

07-007

Entrepreneurship and Business History: Renewing the Research Agenda

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During the 1940s and 1950s business historians pioneered the study of entrepreneurship. The interdisciplinary Center for Research on Entrepreneurial History, based at Harvard Business School which included Joseph Schumpeter and Alfred Chandler, and its journal *Explorations in Entrepreneurial History* were key institutional drivers of the research agenda. However the study of entrepreneurship ran into formidable methodological roadblocks, and attention shifted to the corporation, leaving the study of entrepreneurship fragmented and marginal. Nevertheless business historians have made significant contributions to the study of entrepreneurship through their diverse coverage of countries, regions and industries, and – in contrast to much management research over the past two decades - through exploring how the economic, social, organizational, and institutional context matters to evaluating entrepreneurship.

This working paper suggests that there are now exciting opportunities for renewing the research agenda on entrepreneurship, building on the strong roots already in place, and benefiting from engaging with advances made in the study of entrepreneurial behavior and cognition. There are opportunities for advancing understanding on the historical role of culture and values on entrepreneurial behavior, using more careful methodologies than in the past, and seeking to specify more exactly how important culture is relative to other variables. There are also major opportunities to complement research on the role of institutions in economic growth by exploring the precise relationship between institutions and entrepreneurs.

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1. Entrepreneurship and Business History

Since the 1980s, entrepreneurship has emerged as a topic of growing interest among management scholars and social scientists. The subject has grown in legitimacy, particularly in business schools (Cooper 2005). This scholarly interest has been spurred by a set of recent developments in the United States: the vitality of start-up firms in high technology industries, the expansion of venture capital financing, and the successes of regional clusters, notably Silicon Valley. Motivated by the goal of understanding these developments, management scholars and social scientists interested in entrepreneurship have tended to focus their attention on studying new business formation, which provides a homogeneous and easily delimited basis for quantitative empirical work (Thornton 1999; Aldrich 1999, 2005; Gartner and Carter 2005). These studies commonly use large datasets of founders or firms and employ rigorous social science methodologies, but give little analytical attention to the temporal or geographical context for entrepreneurial behavior.

In contrast, historical research on entrepreneurship started much earlier, and traces its roots to different motivations and theoretical concerns. The historical study of entrepreneurship has been particularly concerned with understanding the process of structural change and development within economies. Business historians have focused on understanding the underlying character and causes of the historical transformation of businesses, industries and economies. This historical research has typically employed a

Schumpeterian definition of entrepreneurship. Unlike the recent management scholarship, it has not focused primarily on new firm formation, but rather on the varying forms that innovative activity has taken and on the role of innovative entrepreneurship in driving changes in the historical context of business, industry, and the economy.

This working paper begins by providing a brief introduction to the origins and evolution of historical research on entrepreneurship. It then turns to explore a series of different streams of business history research that deal with issues of entrepreneurship and historical change. These sections highlight the ways in which historical context shaped the structure of entrepreneurial activity and how new economic opportunities were pursued, and reveal the wide variation in organizational form and entrepreneurial behavior that historians have found. The working paper concludes by discussing the main contributions of business history to the study of entrepreneurship, and proposes a renewed research agenda.

This paper does not seek to offer a comprehensive survey of all areas of business history which consider entrepreneurship. However it should be emphasized that the extensive literatures on gender (Kowlek-Folland 1998; Goldin 1990), industrial districts (Sabel and Zeitlin 1997), family business (Colli 2003), and globalization (Jones 2005a), among others, have much to say about entrepreneurship.

2. Origins and Motivation

The concept of entrepreneurship played a formative role in the emergence of business history as a distinct academic field. Since the middle of the nineteenth century, economic historians had critiqued the static theories of classical and neoclassical economic

thought by documenting the ways in which the structure of economies had changed over historical time. This early historicism emphasized the ways in which the institutions of capitalism and industrialism evolved (Hodgson 2001).

By the early twentieth century, however, a number of historians and historical sociologists had moved beyond the institutional perspective to emphasize the mentality and agency of entrepreneurs in the process of economic change. German historical sociologists explored the role of religion and social relations in the development of modern capitalist attitudes toward economic gain and economic opportunity (Weber 1904, English translation 1930; Simmel 1908, English translation 1950; Sombart 1911). By the middle decades of the century economic and business historians were very engaged in researching the careers of influential eighteenth-century entrepreneurs as a way of understanding the causes of the Industrial Revolution (Ashton 1939; Wilson 1955; McKendrik 1959, 1964). These studies focused attention on the creative agency and subjectivity of individuals in the process of economic change.

This growing attention to entrepreneurs as agents of historical change was bolstered by the theoretical work of Joseph Schumpeter. The Austrian economist's ideas helped establish entrepreneurship as a substantive area of historical research and deepened the significance of the business historians' endeavors by linking entrepreneurship to a theory of economic change. Schumpeter argued that the essence of entrepreneurial activity lay in the creation of "new combinations" that disrupted the competitive equilibrium of existing markets, products, processes and organizations (Schumpeter 1947). The creation of such new combinations, he elaborated, was a constant source of change within markets, industries, and national economies. It underlay the "creative destruction" that replaced old

forms of economic transaction with new forms in capitalist economies (Schumpeter 1942). In the decade leading up to his death in 1950, Schumpeter repeatedly stressed that the empirical study of entrepreneurship was an inherently historical endeavor because the phenomenon was best understood in retrospect as a critical element in the process of industrial and economic change. Social scientific investigation of entrepreneurship needed to focus not only on entrepreneurs and their firms but also on temporal changes in the industries, markets, societies, economies, and political systems in which they operated, an eclectic approach that history could provide (McCraw 2006).

By the 1940s a number of historians, inspired in large part by the Schumpeterian concept of entrepreneurship as an agent of change in the economy, began to push empirical business history beyond the earlier biographical studies of entrepreneurs to higher levels of conceptualization. The group was led in the United States by the economic historian Arthur Cole. In 1948, he organized the Center for Research on Entrepreneurial History, based at Harvard. Affiliates of the Center included economists and sociologists as well as historians and Cole encouraged a wide range of approaches to “entrepreneurial history,” including socio-cultural studies of entrepreneurial origins, neoclassical economic approaches, and work that focused on the evolution of industries and organizations. While research in entrepreneurial history took an eclectic set of directions, the Center and its journal, *Explorations in Entrepreneurial History*, provided the institutional mechanisms for bringing this wide-ranging empiricism together in ways that informed common concepts and theories of entrepreneurship (Sass 1978). Cole (1959, 1968) also published several articles and books that attempted to synthesize the empirical research and use it to address theories of entrepreneurship (Hughes 1983).

By the 1960s, however, a distinctive shift among American business and economic historians led them away from “entrepreneurial history” and its eclecticism. In part, this was due to declining financial and institutional support for the Center, which closed its doors in 1958. Moreover, younger business historians were increasingly drawn to the more focused organizational and managerial studies that Chandler (1962) had pioneered. Chandler was ambivalent about the autonomous role of entrepreneurs in shaping the trajectory of business development. By 1970 a clear shift had taken place in American business history research toward building an “organizational synthesis” of the emergence of the modern, multi-divisional corporation (Galambos 1970). At the same time, American economic historians increasingly adopted orthodox neoclassical economic theory and quantitative methods in their research, rejecting the eclecticism of “entrepreneurial history” and adopting neoclassicism’s traditional skepticism of entrepreneurship as a concept. Emblematic of this change, the defunct *Explorations in Entrepreneurial History* was revived as *Explorations in Economic History*, a publication devoted to the new quantitative, neoclassical studies (Livesay 1995).

The Chandlerian shift of the research agenda towards the corporation did not entirely displace entrepreneurial history research, but it became marginal to the main research agenda of business history. Entrepreneurship and innovation continued to be explored, but entrepreneurship rarely occupied center stage in such studies. There was little traction behind using historical research to seek broader theoretical conceptualizations of entrepreneurship. Hence entrepreneurship research in business history today is rarely considered a single coherent field, but rather is dealt with as part of many different subtopics.

Meanwhile the older tradition of writing historical biographies of leading entrepreneurs has continued. Although most such biographies are hagiographical, this genre continues also to contribute well-researched and deeply contextualized studies of major entrepreneurial figures such as Dudley Docker (Davenport-Hines 1984), Sir William Mackinnon (Munro 2003), Werner von Siemens (Feldenkirchen 1994), Kiichiro Toyoda (Wada and Yui 2002), Marcus Wallenberg (Olsson 2001), and August Thyssen (Fear 2005). These studies offer compelling insights into how entrepreneurial opportunities were identified and exploited. For example, the biography of Robert Noyce, co-founder of Fairchild Semiconductor and Intel, explores in depth the networks of information and financing which permitted the growth of the Silicon Valley technology cluster (Berlin 2005). From a methodological perspective, the primary drawback with such studies arises from deriving meaningful generalizations about entrepreneurship from individual cases. The growing research on entrepreneurial cognition in the management literature may provide an opportunity to revisit the research in these biographies from that perspective, to the benefit of both literatures (Mitchell et al. 2002; Tripsas and Gavetti 2000).

3. Culture and Values

As the historical scholarship on entrepreneurship emerged in 1940s and 1950s, much of the early work in the field attempted to frame the research around a particular historical question: why, over the previous three centuries, had some countries grown extraordinarily rich and productive while others remained relatively poor? Schumpeter had theorized that entrepreneurial innovation was the source of productivity growth in capitalist societies. By the 1950s, historians were actively engaged in studying variations

in the character and supply of entrepreneurship in the historical record of various countries and attempting to link their findings to the long-run economic performance of nations.

These national studies of entrepreneurial character were pioneered in the United States by Cochran, Jenks, and few other historians associated with Cole's Research Center. Jenks and Cochran adapted the "structural functionalism" of Parsonian sociology in order to push historical research on entrepreneurship beyond the heroic Schumpeterian entrepreneur of individual case studies and to embed the study of entrepreneurs within particular historical and social contexts. "The theory of innovations is neither a 'great man' nor a 'better mousetrap' theory of history," Jenks explained in a landmark study of the railroad entrepreneurs in nineteenth-century America. "The innovator is a person whose traits are in some part a function of his socio-cultural environment. His innovation is a new combination of factors and elements already accessible" (Jenks 1944, 1949; Cochran 1950, 1960). The approach led to multiple "national studies" of how social roles and sanctions had conditioned the emergence of entrepreneurship in particular countries.

The approach was extended, most notably by Landes, by linking the socio-cultural examination of entrepreneurship to the long-term economic performance of particular countries. Landes (1953) made the case that culture was a consistent determinant of the supply of entrepreneurship and hence of long-term economic growth. In a classic study, he argued that France's allegedly poor economic performance in the nineteenth century could be attributed to the conservativeness and timidity of French entrepreneurs, who saw business as an integral part of family status rather than as an end in itself (Landes 1949). In a series of studies over half a century, Landes has continued to make the case for the importance of national cultural factors, values, and social attitudes in explaining the

development of entrepreneurial activity, and in turn the economic performance of nations (1969, 1999, 2003).

Similar arguments about the role of national culture in determining the supply of entrepreneurship and long-run growth were used to try to explain a remarkably diverse set of historical conditions and outcomes. Sawyer (1954) pointed to the persistence of Puritan values and the frontier spirit in American society to suggest the relatively high level of encouragement for entrepreneurship in the United States. There was a lengthy debate concerning whether the remarkable modernization of Meiji Japan in the late nineteenth century could be ascribed to “community-centered” entrepreneurs who put the interests of national development before all else (Ranis 1955; Hirschmeier 1964). Cultural factors, particularly the “gentrification” and complacency of British entrepreneurs in the Victorian Era, became a favorite subject for those interested in explaining the perceived relative economic decline in that era and later (Wiener 1981; Hannah 1984).

The national culture approach has been widely critiqued. Subsequent research suggested that the “community-centered” Meiji entrepreneurs were rather similar to entrepreneurs elsewhere (Yamamura 1968, 1978). In several cases, the underlying premise of research agenda has proven questionable. Landes launched French economic historians on a four decade long search for the causes of France’s slow economic growth and the failure of French entrepreneurship before it was established that the initial premise of failure was at least partly misleading, and based on the preconceived expectation that big business was equated with entrepreneurial success. Recent business history research has shown that French industry was more technologically advanced than had been imagined (Smith 2006).

Similarly, the premise of a Britain blighted by anti-entrepreneurial culture, at least until rescued by the Thatcher government of the 1980s, has been widely critiqued. On the one hand, while British firms lagged behind American and German firms in the mass-production industries of the Second Industrial Revolution, McCloskey and Sandberg (1971) provided the celebrated riposte that the technological choices of Victorian entrepreneurs were rational responses to resource endowments and exogenous technological possibilities from the perspective of neo-classical theory. On the other hand, the arguments that there was a significant “anti-industrial” spirit in Britain, and that the British situation differed from that in the United States or Germany, have been challenged on several grounds (Bergoff and Möller 1994; Coleman and Macleod 1986; Collins and Robbins 1990; Thompson 2001).

The overall argument that national culture and norms can determine a national supply of entrepreneurial activity was strongly criticized by Gerschenkron (1962b, 1966). He noted that the notion of “national culture” envisioned in such studies was essentially static and rigidly functionalist, making it difficult for it to truly account for the dynamic nature of entrepreneurial activity. If such studies conceptualized entrepreneurs purely as products of their national cultural environment, they were inherently limited in their ability to understand how these entrepreneurs could act as agents of change in that environment. Gerschenkron also pointed out that there were many examples of historical settings in which entrepreneurial activity had flourished outside or even against prevailing national social norms. The socio-cultural perspective, he insisted, had missed Schumpeter’s basic premise that entrepreneurs often acted as agents of change rather than as captives of their environment. As Nicholas (2004) has discussed in the case of alleged British

entrepreneurial failure, the function of entrepreneurs is to upset status quos by unlocking predetermined paths of development.

Nevertheless, the persistent patterns of wealth and poverty in the world has in recent years led to a renewed interest in identifying variations in entrepreneurial performance caused by culture. The economist Mark Casson has suggested that countries vary in their entrepreneurial cultures. In particular, Casson (1991, 1995) points to variations in trust levels within cultures, which in turn affects the level of transactions costs on which overall economic performance depends. The impact of national culture on entrepreneurship has recently been tested historically by Godley (2001) in a comparative study of eastern European Jews who emigrated to London and New York in the late nineteenth century. Godley argues that the Jewish immigrants to New York were much more likely to move into entrepreneurial occupations than those in London, despite coming from similar backgrounds. He suggests that in both countries the Jews assimilated some host country values. The novel methodology of using Jewish immigrants as the control group seems to provide robust evidence that American and British cultures varied in how they valued entrepreneurship. Godley suggests that entrepreneurs in Britain faced additional costs arising from conservative craft values among the working class, which erected hurdles not faced elsewhere to introducing new technologies and working practices.

The role of religious values in the supply of entrepreneurship has attracted research since Weber (1904, trs 1930) famously argued that that certain types of Protestantism favored rational pursuit of economic gain and gave worldly activities a positive spiritual and moral meaning. The link between religion and entrepreneurship has continued to be

debated ever since. R. H. Tawney (1926) rejected a link between Protestantism and economic growth in sixteenth century England. Many other scholars have since questioned a meaningful connection between Protestantism and modern capitalism. However this was not prevented Landes (1998) from re-asserting the case that Protestantism which explains “the triumph of the West.”

The specific correlation between Protestant sects and entrepreneurship during the initial and later stages of modern economic growth in Britain has attracted much research (Jeremy 1988, 1998). There has been a long tradition of research on the apparent over-representation of Protestant Dissenters among the successful entrepreneurs of that era (Hagen 1962). Although there is evidence that this overrepresentation may have been exaggerated (Howe 1984), it would seem that this group did provide many first generation entrepreneurs, although this was probably explained by social constraints on alternative career paths rather than their religious values (Bergoff 1995). There were also powerful advantages from belonging to networked groups. The large number of successful Quaker entrepreneurs seems to be explained by access to mutual systems of support which provided access to information and capital (Kirby 1993). Minority status alone was certainly insufficient to stimulate entrepreneurship. Foreman-Peck and Boccaletti (2002) identified a disproportionate lack of minority Roman Catholics among entrepreneurs in nineteenth century Scotland.

Protestantism is not alone in its alleged influence on entrepreneurship. Morris, for instance, helped popularize the notion that the Indian subcontinent suffered from a perpetual “Hindu rate of growth” – reflecting Indians’ “other worldly” concerns stemming

from mystical religious values that ostensibly made them less interested in material gain (Morris 1967).

The Weberian “values” approach to understanding the influence of religion and culture on entrepreneurial activity has clearly suffered from casual empiricism, unclear causal relationships, and excessively broad generalizations about the influence of formal values on the behavior of subjects. However the literature has the merit that it addresses an issue that is critical for understanding the entrepreneurial process – the subjectivity of the entrepreneur.

In recent decades, historians have increasingly sought to ground the study of how culture and nationality affect entrepreneurship by examining how specific social structures and relationships shape the influence of entrepreneurial culture. They have examined how social group affiliation – whether ethnicity, race, gender, family or class – mediates entrepreneurial culture by constraining or providing specialized access to entrepreneurial opportunities and resources. Walker, for instance, has documented the influence of race relations in the United States in shaping the particular ways in which entrepreneurship came to be expressed among African Americans. She shows how slavery and institutionalized racism severely limited entrepreneurial opportunities for blacks, but also how they fostered certain types of entrepreneurial responses among African Americans designed to undermine the legitimacy of these institutions (Walker 1986). Others have emphasized the ways in which certain social group affiliations and relationships have been important sources of entrepreneurial information and resources. Studies of Jewish immigrant entrepreneurs in the United States by historical sociologists (Morawska 1996; Tennenbaum 1993), for instance, substantiate this finding, which has now become a

common conclusion in many “ethnic entrepreneurship” studies in the social sciences (Aldrich and Waldinger 1990).

Historians have also found ethnic group affiliation and identity to be critical for understanding certain forms for international entrepreneurship. Research on the history of international business has identified the role of diaspora networks in enhancing trust levels and creating conduits for information and resources among its members, in turn reducing barriers to trade over long distances. Diasporic links facilitated the flow of information and credit and helped guarantee the enforcement of contracts among members. A large portion of new international market development over the last two centuries has been created by networks of entrepreneurs within such diasporas, including Jews, Greeks, Indians, Arabs, Chinese and others (McCabe, Harlaftis and Minoglou 2005; Dobbin 1996).

In recent years, historians have used biographical and firm-level data to examine the influence of religion, nationality, and social group affiliation on entrepreneurship. In the United States, historians have used a range of sources, most notably the Dun and Bradstreet records, to examine patterns of entrepreneurship and access to resources by race, ethnicity, and gender (Kenzer 1989; Olegario 1999). In Great Britain, Nicholas (1999, 2000) used the multi-volume *Dictionary of Business Biography* (Jeremy 1984-6), which provides biographical data on a large number of businessmen active in England and Wales after 1860, to test the drivers of entrepreneurial success and failure. Using lifetime rates of wealth accumulation as a proxy for entrepreneurial success, he found that religion (along with region and industry) could not explain performance differences, but other social indicators (such as inheriting a family firm or attending a “public” school) negatively affected accumulation. Likewise, Foreman-Peck (2006) has outlined a series of

quantitative methods for teasing apart the relative importance of various cultural influences on propensity to become an entrepreneur and on an entrepreneur's social mobility.

Although recent quantitative studies might be criticized for certain methodological limitations, including the incompleteness of their data and the indicators they use to measure entrepreneurship (such as new firm creation or wealth accumulation), they represent an advance in research on the validity of cultural explanations that have traditionally lacked careful empiricism and tended toward broad generalizations about national values. Consequently, they provide one avenue for business historians to deepen their insights on the contribution of entrepreneurship to explaining patterns of wealth and poverty.

4. The Political Economy of Entrepreneurship

The importance of political-legal institutions in explaining patterns of economic growth has re-emerged as a topic of interest among business historians. Where research by economists has done much to substantiate the assertion that inherited institutions matter for long-term economic growth, historical research has sought to identify the mechanisms and processes that help explain at a more nuanced level how and why institutions have mattered, particularly to entrepreneurial processes.

The economic historian Douglass North played a pivotal role in the emergence of the "new institutionalism." North's work emphasized the role of property rights, patent laws, and power-sharing political arrangements in the West to account for the development of a political framework that stimulated and supported the development of entrepreneurial activity (North 1990; North and Davis 1971; North and Weingast 1989). North and others

helped once again place inherited institutions at the center of economic reasoning by arguing that institutions create the incentive structure for private enterprise.

The new institutionalism in economics posits that societies that provide incentives and opportunities for investment will be richer than those that fail to do so. By reducing transactions costs and facilitating potential gains from exchange, institutions can fuel productivity and growth. A particularly influential approach comes from the law and finance literature associated with LaPorta, et al (1997). Broadly this camp argues that the legal tradition a country inherited or adopted in the distant past has a long-term effect on financial development and in turn on long-term growth. Countries that had a common law legal system had on average better investor protections than most civil law countries, and that French civil law countries were worse than German or Scandinavian civil law traditions. They suggest this had a major effect on financial development, which it in turn can be assumed to have impacted entrepreneurial activity. There has been much criticism from historians of this hypothesis.

Baumol (1988, 1990) has provided a causal explanation for how institutions affect entrepreneurship and, through that, long-term growth. He argues that inherited institutions matter because they create incentives that allocate entrepreneurship between productive activities such as innovation and unproductive activities such as rent seeking or organized crime. This allocation is in turn influenced by the relative pay offs offered by a society to such activities.

Recent historical research has explored the precise mechanisms by which institutions affected productivity and long-term growth. Maurer (2002), for instance, explores how the existence of an undemocratic political system and selective enforcement

of property rights shaped the financial system and constrained entrepreneurial opportunities in late nineteenth century Mexico. Limited in its ability to raise taxes to finance infrastructure projects as well as fend off political opponents, the Mexican government relied on banks to provide it credit, while the banks relied on the government to enforce property rights. A select few bankers were given extensive privileges producing a highly concentrated banking system. Each bank grew fat in its own protected niche. To overcome the problems associated with information asymmetry, banks lent to their own shareholders and other insiders. In the case of the textile industry, banks did not lend to the best firms, but the best-connected firms. Poorly defined property rights prevented those excluded from the insider networks from pledging collateral and finding another financial route for their entrepreneurial endeavors.

Historical studies have also looked more closely at the influence of patent rights and the law of business organizations to examine their influence of entrepreneurial activity. Khan (2005) found that antebellum US courts consistently supported inventors' patent rights based on the premise that the patent system fostered economic growth. She found that the structure of the American patenting system in early industrialization fostered widespread patenting by ordinary people. Access to patent protection (or lack of it) seems to have been important in determining not only technological development, but also the adoption and diffusion of technology. Aspiring late nineteenth century Dutch and Scandinavian entrepreneurs were able to build businesses in more technologically advanced industries precisely because of the lack of patent protection afforded to foreign companies in those countries (Ruigrok and Tulder 1995).

Likewise, legal historians have long emphasized the importance of the development of the rights of private corporations for entrepreneurship that involved economies of scale and scope. Hovencamp (1991) suggests that the American law of corporations evolved functionally to meet these economic needs over the nineteenth and early twentieth centuries. Lamoreaux and Rosenthal (2005), however, caution against such broadly functionalist definitions and particularly against sweeping claims of LaPorta et al that civil law countries offered inferior economic rules to common law ones. In comparing nineteenth-century French and American law, they found little difference between the two countries in the legal system's responsiveness to business' organizational needs. In fact, US law offered entrepreneurs fewer options on how to organize their businesses and more limited adaptability.

Historians doing research at the nexus of law and business caution that the new institutionalism too often paints a picture of political development that is overly rigid, functionalist, and highly stylized. In particular, they point out that the historical evidence on economic rule making suggests that the assumption of a division between inherited economic rules and entrepreneurial activity is artificial, especially when applied outside the sphere of the recent Anglo-American political economy (Novak 1996; Freyer forthcoming). In developing countries, political rule making is often part of the entrepreneurial process, not exogenous to it (Kilby 1971). Even in the Anglo-American world, the sharp divide between public rules and private enterprise implied in the new institutionalism is problematic as a framework for modeling political economic development (Novak 2001). In fact, Freyer (forthcoming) and others have argued that such an "instrumental" view of economic lawmaking fundamentally mis-interprets what is

actually a “constitutive” process, in which entrepreneurial actors are often re-negotiating or pushing the boundaries of legal rules in the process of innovation and where political actors fundamentally shape the private economy through innovations in the categories and rules they create. Certainly, many historical studies of the state as an entrepreneurial actor and regulator, especially in the United States, indicate that the state’s role as rule maker is only one of a broad set of ways in which governments have been influential in shaping entrepreneurship (Hurst 1967; Scheiber 1973; Hughes 1991).

The growing economics literature on the role of colonialism in explaining the slow growth of Latin America, Africa and Asia has direct relevance to the relationship between political institution development and entrepreneurship, although it is not typically framed within that debate. Engerman and Sokoloff (2005) stress the negative impact of colonization in altering the composition of the populations. Soil and climate gave Latin America and the Caribbean a comparative advantage in growing crops that used slaves or natives. The resulting extreme inequality in distribution of wealth, they suggest, gave them institutions which contributed to persistence of substantial inequality. Acemoglu, Johnson and Robinson (2002) distinguish between institutions of “private property” and “extractive institutions.” The former provide secure property rights and are embedded in a broad cross-section of society. Extractive institutions concentrate power in the hands of a small elite and create a high risk of expropriation. In prosperous and densely settled areas, Europeans introduced or maintained extractive institutions to force people to work in mines and plantations. In sparsely settled areas, Europeans settled and created institutions of private property. The spread of industrial technology in the nineteenth century, it is suggested, required a broad mass of society to participate, so they won out.

With some exceptions (Banerjee, Abhijit and Iyer 2005), the economics literature on colonialism and institutions tends to be ahistorical. Business historians are well-placed to explore the issues in a more nuanced fashion. Colonialism changed greatly over time. The British colonial regime in late nineteenth century India, for example, differed radically from that of its exploitative predecessor a hundred years previously. While traditional Indian handicraft industries were forced to compete with Lancashire textiles because of British free trade policies in the nineteenth century, by the interwar decades British India was protectionist, including against British imports. Moreover the impact of colonialism was multi-faceted. It provided a channel for entrepreneurs in colonies to acquire international knowledge and access international markets, although within a context of institutional racism (Tripathi 2004). This may have been important in affecting entrepreneurial cognition. In crude terms, entrepreneurs who were not white men from the rich Western European and North American countries may have felt less qualified to pursue opportunities, even if they were not.

In general, the thrust of recent research suggests that although colonialism provided opportunities for Western entrepreneurs, colonial governments in Africa and elsewhere were rarely agents of expatriate enterprise or metropolitan industries (Hopkins 1987). Their general impact was to improve the business environment for all entrepreneurs, both because of improved institutions and investment in infrastructure. Goswami (1985) found that the rise of Marwari businessmen in Eastern India began well before Independence and that the political history of late colonialism was only loosely connected to business history on the Subcontinent. Entrepreneurship also flourished among so-called “middlemen” ethnic minorities which forged special links with colonial authorities, such as the Parsees

in nineteenth century India or the Chinese in Southeast Asia (Dobbin 1996; Jones 2005a). However the importance of such minorities remains contested. As Oonk (2006) has shown in the case of ethnic Asian entrepreneurs in late nineteenth century Zanzibar, membership of such a minority was no guarantor of entrepreneurial success. Moreover while in regions such as the Middle East, historians have focused their attention on non-Muslim and foreign merchants (Tignor 1980), but recent research has identified the importance of “mainstream” Muslim entrepreneurs in late nineteenth century Iran, Ottoman Empire and elsewhere (Gilbrar 2003).

Business history research has made a particular contribution in showing how entrepreneurial performance takes place within a wider political economy environment. With perhaps the single exception of Britain in the eighteenth century, governments have contributed to entrepreneurship and firm growth not only by providing (or not providing) institutional rules of the game, but through a wide range of policy measures. The role of the state in catching up economic backwardness has been well-recognized since Gerschenkron (1962a), even if the ways in which governments facilitated entrepreneurial perception and exploitation of opportunities has not been the primary emphasis of this research. Recent work has extended the study of “state entrepreneurship” to the development of firms and industries in Singapore (Brown 2006), Taiwan, Israel, and Ireland (Breznitz 2006). Certainly it is difficult to account for the rapid economic growth of the United States in the nineteenth century without mentioning government policy. US governments purchased or else annexed much of the territory of the present day country, and then largely gave it away to budding entrepreneurs. State governments were active promoters of infrastructure investment. During the late nineteenth century tariff protection

widened the market opportunities for US entrepreneurs and firms by shutting out cheaper imports from Europe (Scheiber 1973, 1997).

The impact of the wider political economy on entrepreneurship is evident in many settings. Explanations for why ethnic Chinese business has been disproportionately important in Southeast Asia typically stress cultural influences including the role of family, dialect groups and the Confucian value system. With respect to the latter, it is often argued that social trust, the social obligations that bind family and lineage, is strengthened by the Confucian belief, and that has provided the bedrock of commercial networking (Hefner 1998). Yet business historians have shown that the growth of Chinese entrepreneurship in Southeast Asia has to be placed within a longer political economic context. From the fourteenth century, the region's rulers favored foreign over local merchants because the latter might pose a political threat. Through the seventeenth century local trading communities –whether Malay or Filipino – continued to flourish, but the Chinese role was strengthened by the arrival of Western merchants, for the Chinese positioned themselves as intermediaries. By the late nineteenth century, the Chinese had secured the position of revenue farmers across the region, both in colonial and non colonial areas. This made them indispensable for local governments, while providing a source of funds for their business interests (Brown 2000).

On the whole, political-economic approaches that focus on national institutions, policies, and political boundaries may provide the environmental settings for entrepreneurial activity, but often reveal little about either the extent of state involvement in entrepreneurship or the ways in which new economic opportunities have historically been created and exploited. The historical record suggests that state-entrepreneur

interactions have been extensive and taken on a diverse array of forms, rarely limiting itself to arms-length economic rule making. Likewise, entrepreneurial opportunity structures have rarely, if ever, materialized as truly *national* constructs but rather have appeared and been exploited at the level of individuals, firms, industries, and regions.

As a result, a significant conclusion of historical research in recent years is that entrepreneurship is often better studied at a regional level rather than that of the nation state. In nineteenth century Mexico (Cerutti 1996) and Colombia (Davila 2003) there were significant regional differences in entrepreneurship. In colonial India, expatriate Scotsmen developed the modern industries of Calcutta during the second half of the nineteenth century, but the industries on the west coast were developed by Indians of various ethnicities (Tripathi 2004). Although institutions matter for entrepreneurship, they have often not been national ones.

5. Corporate Entrepreneurship

As discussed earlier, Chandler's compelling framework for understanding the rise of big business displaced the earlier interest in Schumpeterian entrepreneurship as the center stage of the business history research agenda. From another perspective, there was a refocus of the discipline's research agenda on the entrepreneurial function within the firm, reframing the research to address a different historical context: the rise of big business.

An interest in organizational (as opposed to individual) entrepreneurship predated Chandler. It was an integral part of the research that Schumpeter had spurred in the 1940s and 1950s. Though overshadowed by the dominant socio-cultural approach to entrepreneurship, the notion of organizational entrepreneurship was explored in the 1950s

in the work of, among others scholars, Arthur Cole and Edith Penrose, who framed ideas about the evolutionary development of firms using an explicitly Schumpeterian approach. Cole, for instance, developed an eclectic model of entrepreneurially driven evolution in business systems that included roles for organizational factors, industry-based linkages, and national cultural norms (Cole 1959).

Chandler focused research on one element of Cole's eclectic framework for entrepreneurial evolution—the innovative firm (Cuff 2002). The modern industrial enterprise, Chandler observed, was “entrepreneurial and innovative in the Schumpeterian sense” (Chandler 1990). Moreover, while emphasizing the importance of large firms, Chandler and other business historians in his tradition never argued that size and managerial control alone were sufficient for making a firm entrepreneurial and innovative. Chandler's studies repeatedly deal with failure as well as success, and provided ample empirical evidence to support the extensive management literature that large established corporations face major challenges in innovation arising from technological and resource lock-ins, and routine and cultural rigidities (Brown and Eisenhart 1995; Teece 1998).

The business history literature on corporate entrepreneurship evolved in parallel and with minimal interaction with a burgeoning managerial literature on the subject (Zahra, Jennings and Kuratko 1999). The lack of interaction was unfortunate, as the historical literature provided valuable longitudinal insights on the significance of routines and culture in encouraging or retarding entrepreneurship and innovation within large firms. Graham and Schulder (2001) provided an historical study of innovation at US-based Corning which demonstrated that managerial hierarchies and economies of scale were less important in promoting technological innovation within firms than certain firm-specific

cultural characteristics. Corning was a medium-sized, family-owned company which was able to progressively “re-invented” itself from a specialty glass manufacturer in the nineteenth century, to being a leading producer of television tubes after the Second World War to becoming one of the world’s largest fiber optics manufacturers.

The creation of internal venture units has provided one means to escape the inertia of existing organizations. In the decades after the Second World War, many large corporations began to respond to the perceived maturity of their traditional markets and their own declining levels of innovation by seeking new organizational means to facilitate new business creation within their own boundaries. It was too daunting to contemplate a transformation of the entire organization, and instead attention turned to trying to make or create more entrepreneurial components within it. During the 1960s Hounshell and Kenly Smith (1988) show in an authoritative study of innovation at the US chemical company Du Pont, this firm utilized both its existing divisions and a Development Department to create new ventures. During the same period internal venture divisions were created within many large US corporations. The key problems faced by such internal venture units often arose from their relationship with the larger organization (Fast 1978). Venture managers were often “orphaned” and not effective in the parent firm’s internal politics (Jones and Kraft 2004; Jones 2005b).

Historical research has exercised an important influence on theories of firm-level entrepreneurship and industry evolution. While static neoclassical theories of the firm still predominate, evolutionary theories based on path-dependent firm innovations and capability development have been developed in part based on the now-extensive historical record on Chandlerian firms (Nelson and Winter 1982; Aldrich 1999). Such evolutionary

approaches to industry change through firm innovation have now become commonly used among management scholars doing longitudinal studies (McKelvey 2000; Murmann 2003). More recently, and extensively, Lazonick (2003) has sought to synthesize the historical scholarship in this area into a theory of the innovative firm that incorporates variation over time. More extensively than the research on the contributions of individual entrepreneurship to the wealth of nations, the focus on firm-level entrepreneurship has made significant contributions to our understanding of innovation within large enterprises and how historical environments affect the entrepreneurial processes of firms.

6. Financing Entrepreneurship

In the social scientific literature, entrepreneurial finance is practically synonymous with the study of venture capital firms. Venture capital, the reasoning goes, occupies a unique place in the financial system by specializing in relatively risky long-term financing of entrepreneurs with little in the way of assets to collateralize. Most entrepreneurial firms with high growth potential need external financing, but few intermediaries and individuals are in a position to extend such financing given the significant problems inherent in monitoring investments in new firms with no track record and tremendous uncertainties. VCs place themselves in a unique position to make such investments in two ways. First, they specialize in effectively understanding and monitoring such new firms and their managers in ways that reduce the chances of opportunistic behavior by entrepreneurs. And second, they transfer a critical bundle of knowledge, skills, and contacts to entrepreneurial firms that reduce the uncertainties it faces and increases the likelihood of success (Gompers and Lerner 2000, 2005).

Because the venture capital industry is relatively new, few social scientists consider “entrepreneurial finance” an historical topic. Yet the problem that entrepreneurial finance addresses – the challenges of raising long-term risk capital to finance uncertain new businesses – is in fact central to understanding entrepreneurship in a wide range of historical settings. As historical research has highlighted, the problems of entrepreneurial finance have been addressed in a wide range of organizational and institutional ways in different historical contexts, each with implications for the nature of entrepreneurial activity in the period.

In the 1960s Gerschenkron developed and popularized the idea that Germany’s big universal banks played a critical innovative role in helping that country “catch up” to early industrializers. Gerschenkron’s thesis was that German banks did not simply allocate capital to German industry but also helped it innovate by transferring knowledge from Western economies and concentrating managerial skills in key firms. They also monitored their investments closely, often sitting on the boards of the corporations in which they invested. German industrial firms grew big in part with the aid of banks that were willing to engage in long-term investments in such firms but also in aiding the development of economies of scope and managerial hierarchies needed for the success of these “champions” (Gerschenkron 1962a).

While aspects of Gerschenkron’s thesis have been contested, his argument that banks did not simply invest in German firms, but were critical to the entrepreneurial processes and industry development have, in interesting ways, been picked up by historians working on other national settings. Studies of banks in the early industrial period have revealed close relationships with entrepreneurs. Brunt (2005), in a study of the

financing of the adoption of the risky new technology represented by Watt steam engines by late eighteenth century Cornish copper mines, demonstrates that some English country banks resembled proto-venture capital firms.

A common theme of much recent research is that bank lending often favored “insiders,” and that – contrary to modern beliefs – this was a sound business strategy when it was hard to find reliable information on prospective borrowers. Lamoreaux (1994) argues that this was the case in nineteenth century New England. Similar conclusions have been drawn about the promotional and developmental role of banks in recent research on the financial system in industrializing Britain (Collins 1991). Far from maintaining divisions between commercial banking, investment banking, and entrepreneurship, early banks in Great Britain and the United States seem to have provided range of services, including long-term risk capital, knowledge, and inter-firm linkages that were critical to innovation and the entrepreneurial process. In the United States and Great Britain, the separation of commercial and investment finance often associated with those financial systems did not develop until the early twentieth centuries.

Even as commercial banks became increasingly divorced from new venture financing in the early twentieth century Anglo-American world, banks continued to play a significant role in entrepreneurial finance in other parts of the world. Japanese banks within larger Japanese business groups, for instance, played a critical role in coordinating capital and talent toward new venture development. Moreover, the role of banks was not limited to financing entrepreneurial innovation within large, established firms or groups. Through much of continental Europe, including France, Germany and Italy, banks played a crucial role in financing the development of small and medium sized enterprises that have

proven to be a particularly dynamic and competitive segment of these economies (Carnevali 2005).

Banks and other formal financial institutions, however, represented only one way of raising entrepreneurial finance in the past. A very large portion of early stage innovation and entrepreneurship was long been financed through the personal networks of the entrepreneur – that is, through angel investors. Social networks – particularly kinship and ethnic networks – seem to have played an important throughout much of the historical record, particularly in extending trade financing. Hamilton (1998) describes the importance of extensive family networks about Chinese entrepreneurs in pooling capital for new ventures. In the United States, immigrant Jews in the early twentieth century formed informal and formal credit organizations to finance small business and trade when access to bank credit was not a possibility. Likewise, Lamoreaux, Levinstein, and Sokoloff (2004) have shown that certain innovative firms and former entrepreneurs served as hubs in entrepreneurial financing networks in turn-of-the-century Cleveland. Such informal credit networks were also important in the pursuit of international entrepreneurial opportunities. Diaspora networks were often an important source of credit in the nineteenth century global economy, as were the personal contacts one developed over the course an international business career. Liu (1954), for instance, described how one nineteenth-century American entrepreneur in China was able to pull together financing for a new steamship company largely through the Chinese and ex-pat associates he had met while working for his employer.

In the United States and Great Britain, where banks did increasingly back away from entrepreneurial finance in the twentieth century, government policymakers

increasingly stepped in to finance entrepreneurship through grants and subsidized loans. In the United States, much of the high-technology sector benefited from government research expenditures and the small business administration played a crucial role in extending low-cost lending to small and medium sized businesses. Similar developments took place in Great Britain as bank lending to small business dwindled and as the banking sector became more concentrated. In particular, concerns over the lack of finance for small business in the interwar years led to the formation in 1945 of the Industrial and Commercial Finance Corporation (ICFC) and the Finance Corporation for Industry (FCI). As Coopey has shown, though both firms “were capitalized and owned by private sector banks and financial institutions, [they] were seen to have a sense of public duty.” ICFC laid the foundations for the emergence of the modern British VC industry (Coopey 2005; Coopey and Clarke 1995).

Venture capital firms first emerged in the US within this milieu in no small part because the formal institutional intermediaries in the country had largely given up on entrepreneurial finance. In the decades after World War II, a handful of VC firms concentrated in the northeastern US and later in California developed in order to focus on new venture finance in a limited set of industries and regions. Until very recently, the rise of venture capital can only be described as having had a potentially important but narrow impact on entrepreneurship. To the extent that an historical record exists of VC’s ability to spur entrepreneurship and innovation, this record is largely limited to the US (Gompers 1994).

Nevertheless, the recent scholarship on venture capital by social scientists has a potential to reinvigorate the ways in which historians examine and consider the historical

development and contribution of entrepreneurial finance. Scholarship on the ways in which VC firms create contractual terms with entrepreneurs, for instance, suggests a model for similar studies of contracting and the relationships between the sources of entrepreneurial finance and its users across time. Similar potential lies in the opportunity to understand the extent to which financial intermediaries had played a role in shaping entrepreneurial firm strategy and the structure of emergent industries. The history of entrepreneurial finance hence remains an area in which research is likely to reveal important insights in the future.

7. Conclusions

After its initial vitality during the postwar decades, the study of entrepreneurship in business history ran into formidable methodological roadblocks. A number of lengthy debates, such as that of the role of entrepreneurship in the relative decline of late nineteenth-century Britain, became virtual symbols of the methodological challenges encountered in studying the topic. Decades of biographical studies of leading entrepreneurs failed to produce the “valid generalizations” which Schumpeter (1947) called for so long ago. The powerful stream of research including Schumpeter and Cole lost traction as attention focused on the corporation. This did not displace research on entrepreneurship, but it left it fragmented and usually marginal to mainstream research agendas.

Nevertheless business history has made important, and frequently overlooked, contributions to the study of entrepreneurship. By embedding entrepreneurship within the broader process of historical change in industries and economies, historical research provides insights for other social scientists into how contemporary entrepreneurial activity may be better contextualized in time and place. As Shane and Venkatarman (2000) have pointed out, it is precisely the lack of attention to the context for the existence of

entrepreneurial opportunities that can be regarded as a primary weakness of social scientific research today. Business historical research provides compelling evidence for how context – the economic, social, organizational, or institutional setting in and upon which entrepreneurs act – is ultimately as important to assessing and evaluating entrepreneurship as the characteristics and behavior of entrepreneurs themselves.

Business history has made important contributions to the study of entrepreneurship through its diverse coverage of countries, regions and industries, even if the literature has been heavily oriented towards large corporations. Where management research on entrepreneurship over the last two decades has been narrowly clustered in its empiricism, often drawing broad generalizations based on high-technology start-up firms in a few locations, historical research had sought to understand entrepreneurship in a much wider range of settings and, more importantly, to identify its role in shaping economic development.

Business historians, in turn, can learn much from the other social sciences about the study of entrepreneurial behavior and cognition. While historians have put considerable effort into understanding who became entrepreneurs and how context mattered, they have only occasionally focused on how entrepreneurs pursued opportunities (Stevenson and Jarillo 1990). Social scientific research provides significant insights into how to investigate such questions as how entrepreneurs perceive opportunities, how they assemble resources now on the promise of delivering uncertain future goods and services, and how they create governance and contracting relationships. These questions and approaches can be effectively adapted for historical research in ways that can offer historians a more fine-grained understanding of how entrepreneurs in a particular setting operated. Such careful

behavioral studies can also help historians better understand the causal mechanisms by which particular institutions or events affected modes of entrepreneurial behavior over time.

Finally historians can also advance their research on entrepreneurship by re-engaging central concepts and theories of entrepreneurship, and by drawing together the many different streams of research that now touch on the subject (Cassis and Minoglou 2005). Unlike in other disciplines (and unlike in the entrepreneurship research of the postwar era), entrepreneurship research in business history today is not a coherent field: no institutional mechanism exists to hold it together, few historians would consider themselves primarily entrepreneurship scholars, and little effort is made to tie together the various streams of work or to consider broader theoretical contentions about the nature of entrepreneurship in history.

This working paper has identified major opportunities to reassert entrepreneurship as a central research issue, and to build on the strong roots which are already in place. There is important work to be done on the historical role of culture and values on entrepreneurial behavior, using more careful methodologies than in the past, and seeking to specify more exactly how important culture is relative to other variables. There are major opportunities to complement existing research on the role of institutions in economic growth by exploring the relationship between institutions and entrepreneurs. Business historians are in a unique position to complement other social science contributions to enhance our understanding of what Baumol (1988) has described as the “inherently subtle and elusive character” of entrepreneurship.

The authors would like to thank Walter Friedman, Tom Nicholas, and Jonathan Zeitlin for their incisive comments on earlier drafts of this working paper.

References

Acemoglu, Daron, Johnson, Simon, and Robinson, James (2001). "The Colonial Origins of Comparative Development: An Empirical Investigation." *American Economic Review*, 91: 1369-1401.

Acs, Zoltan J., and Audretsch, David B. (eds.) (2003). *Handbook of Entrepreneurship Research*. Boston: Kluwer.

Aldrich, Howard (1999). *Organizations Evolving*. New York: Sage.

----- (2005). "Entrepreneurship," in Neil Smelser and Richard Swedberg (eds.), *Handbook of Economic Sociology*. Princeton: Princeton University Press.

----- and Waldinger, R. (1990) "Ethnicity and Entrepreneurship." *Annual Review of Sociology*, 16: 111-135.

Ashton, T.S. (1939). *An Eighteenth Century Industrialist: Peter Stubs of Warrington 1756-1806*. Manchester: A.M. Kelley.

Banerjee, Abhijit, and Lakshmi Iyer. (2005). "History, Institutions and Economic Performance: the Legacy of Colonial Land Tenure Systems in India." *American Economic Review*, 95/4: 1190-1213.

Baumol, William J. (1988). *Entrepreneurship, Management, and the Structure of Payoffs*. Cambridge, MA: MIT Press.

----- (1990). "Entrepreneurship: Productive, Unproductive, and Destructive." *Journal of Political Economy*, 98/5: 893-921.

- Bergoff, H. (1995). "Regional variations in Provincial Business Biography: The case of Birmingham, Bristol and Manchester, 1870-1914." *Business History*, 37: 64-85.
- and Möller, R. (1994). "Tired Pioneers and Dynamic Newcomers? A Comparative Essay on English and German Entrepreneurial History, 1870-1914." *Economic History Review*, 47: 262-287.
- Berlin, Leslie (2005). *The Man behind the Microchip. Robert Noyce and the Invention of Silicon Valley*. Oxford: Oxford University Press.
- Breznitz, Dan. (2006) *Innovation and the State: Political Choice and Strategies for Growth in Israel, Taiwan and Ireland*. New Haven: Yale.
- Brown, Raj (2000). *Chinese Big Business and the Wealth of Nations*. London: Palgrave.
- (2006). "State Entrepreneurship in Singapore: prospects for regional economic power?" in Cassis, Youssef, and Minoglou, Ioanna Pepelasis (eds.), *Country Studies in Entrepreneurship: A Historical Perspective*. New York: Palgrave.
- Brown, Shona L. and Eisenhardt, Kathleen M. (1995). "Product Development: Past Research, Present Findings, and Future Directions." *Academy of Management*, 20/2, April: 343-78.
- Brunt, Liam (2005). "Rediscovering Risk: Country Banks as Venture Capital Firms in the First Industrial Revolution." *Journal of Economic History*, 66/1: 74- 102.
- Carnevali, Francesca. *Europe's Advantage: Banks and Small firms in Britain, France, Germany and Italy since 1918*. Oxford: Oxford University Press.
- Cassis, Youssef, and Minoglou, Ioanna Pepelasis (eds.) (2005). *Entrepreneurship in Theory and History*. New York: Palgrave.

Casson, Mark (1995). *Entrepreneurship and Business Culture. Studies in the Economics of Trust*, vol. 1. Aldershot, UK: Edward Elgar.

----- (1991). *The Economics of Business Culture*. Oxford: Clarendon Press.

Cerutti, Mario (1996). "Estudios regionales e historia empresarial en Mexico (1840-1920. Una revisión de lo producido desde 1975," in C. Dávila L. de Guevara (ed.), *Empresa e historia en América Latina*. Bogotá: Tercer Mundo Editores/Colciencias.

Chandler, Alfred D. Jr. (1962). *Strategy and Structure*. Cambridge, MA: Harvard University Press.

----- (1990). *Scale and Scope*. Cambridge, MA: Harvard University Press.

Cochran, Thomas (1950). "Entrepreneurial Behavior and Motivation." *Explorations in Entrepreneurial History*, 2 (5): 304-307.

----- (1960). "Cultural Factors in Economic Growth." *Journal of Economic History*, 20: 515-530.

Cole, Arthur H. (1959). *Business Enterprise in Its Social Setting*. Cambridge, MA: Harvard University Press.

----- (1968). "Introductory Remarks." *The American Economic Review* 58/2: 60-63.

Coleman, D.C, and Macleod (1986). "Attitudes to New Techniques: British Businessmen 1800-1950." *Economic History Review*, 39/4: 588-611.

Colli, Andrea (2003). *The History of Family Business 1850-2000*. Cambridge: Cambridge University Press.

Collins, B., and Robbins, K. (eds.) (1990). *British Culture and Economic Decline*. London: Palgrave Macmillan.

- Collins, Michael (1991). *Banks and Industrial Finance in Britain 1800-1939*. London: Macmillan.
- Cooper, Arnold (2003). "Entrepreneurship: The Past, the Present, the Future," in Zoltan J. Acs and David Audretsch (eds.), *Handbook of Entrepreneurship Research*. Boston: Kluwer.
- Coopey, Richard (2005). "Venture Capital and Enterprise," in Youssef Cassis and I.P. Minoglou (eds.), *Entrepreneurship in Theory and History*. London: Palgrave.
- and Clarke, Donald (1995). *3i: Fifty Years Investing in Industry*. Oxford: Oxford University Press.
- Cuff, Robert D. (2002). "Notes for a Panel on Entrepreneurship in Business History." *Business History Review*, 76: 123-132.
- Davenport-Hines, Richard P.T. (1984). *Dudley Docker. The Life and Times of a Trade Warrior*. Cambridge: Cambridge University Press.
- Dávila L. de Guevara, Carlos (ed.) (2003). *Empresas y empresarios en la historia de Colombia. Siglos XIX y XX*. Bogotá: Norma/Uniandes.
- Davis, Lance, and North, Douglass (1971). *Institutional Change and American Economic Growth*. New York: Cambridge University Press.
- Dobbin, Christine (1996). *Asian Entrepreneurial Minorities: Conjoint Communities in the Marking of the World-Economy 1570-1940*. Richmond: Curzon.
- Engerman, Stanley L., and Sokoloff, Kenneth (2005). "Colonialism, Inequality and Long-Run Paths of Development." *NBER Working Paper Series W11057*.
- Fast, Norman D. (1978). *The Rise and Fall of Corporate New Venture Divisions*. Ann Arbor: UMI Research Press.

Fear, Jeffrey (2005). *Organizing Control. August Thyssen and the Construction of German Corporate Management*. Cambridge, MA: Harvard University Press.

Feldenkirchen, Wilfried (1994). *Werner von Siemens*. Columbus: Ohio State University Press.

Foreman-Peck, James. (2006). "Measuring Historical Entrepreneurship," in Youssef Cassis and Ioanna Minoglou (eds.), *Entrepreneurship in Theory and History*. New York: Palgrave MacMillan.

----- and Boccaletti, E (2002). "French and British Businessmen in the Nineteenth Century," in P. Chassaing and M. Dockrill (eds), *Anglo-French Relations 1898-1998*. Basingstoke: Palgrave Macmillan.

Freyer, Tony A. (forthcoming). "Legal Innovation & Market Capitalism, 1790-1920," in Christopher Tomlins and Michael Grossberg (eds.), *The Cambridge History of Law in America*. New York: Cambridge University Press.

Galambos, Louis (1970). "The Emerging Organizational Synthesis in Modern American History." *Business History Review*, 44/3: 279-290.

Gartner, William, and Carter, Nancy (2005). "Entrepreneurial Behavior and Firm Organizing Processes," in Zoltan Acs and David Audretsch (eds.), *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*. Boston: Kluwer Academic Publishers.

Gerschenkron, Alexander (1962a). *Economic Backwardness in Historical Perspective*. Cambridge, MA: Belknap Press.

----- (1962b). "Social Attitudes, Entrepreneurship, and Economic Development: A Comment." *Explorations in Entrepreneurial History*, 6: 245-72.

- (1966). "The Modernization of Entrepreneurship," in Myron Weiner (ed.), *Modernization: The Dynamics of Growth*. New York: Basic Books.
- Gilbrar, Gad G. (2003). "The Muslim Big Merchant-Entrepreneurs of the Middle East, 1860-1914." *Die Welt des Islams*, 43/1:1-36.
- Godley, Andrew (2001). *Jewish Immigrant Entrepreneurship in New York and London*. Basingstoke: Palgrave.
- Goldin, Claudia (1990). *Understanding the Gender Gap* (New York: Oxford University Press.
- Gompers, Paul (1994). "The Rise and Fall of Venture Capital," *Business and Economic History*, 3: 1-26.
- and Lerner, Josh (1996). "The Use of Covenants: An Empirical Analysis of Venture Partnership Agreements." *Journal of Law and Economics*, 39: 463-449.
- (2000). *The Venture Capital Cycle*. Cambridge: MIT Press.
- (2005). "Equity Financing," in Zoltan Acs and David Audretsch (eds.), *Handbook of Entrepreneurship Research: An Interdisciplinary Survey and Introduction*. Boston: Kluwer Academic Publishers.
- Goswami, Omkar (1985). "Then Came the Marwaris: Some Aspects of the Changes in the Pattern of Industrial Control in Eastern India." *The Indian Economic and Social History Review*, 22: 225-249.
- Graham, Margaret B.W., and Shuldiner, Alec T. (2001). *Corning and the Craft of Innovation*. Oxford: Oxford University Press.
- Hagen, Everett (1962). *On the Theory of Social Change*. Homewood, IL: Dorsey Press.

Hamilton, Gary. (1998) "Culture and Organization in Taiwan's Market Economy," in Hefner, Robert (ed.), *Market and Cultures: Society and Morality in the New Asian Capitalisms*. Boulder: Westview.

Hannah, Leslie (1984). "Entrepreneurs and the Social Sciences." *Economica*, 51:219-34.

Hirschmeier, Johannes (1964). *The Origins of Entrepreneurship in Meiji Japan*. Cambridge: Harvard University Press.

Hodgson, Geoffrey (2001). *How Economics Forgot History: The Problem of Historical Specificity in Social Science*. London: Routledge.

Hopkins, Anthony G. (1987). "Big Business in African Studies." *Journal of African History*, 28: 119-140.

Hounshell, David A., and Smith, John Kenly (1988). *Science and Corporate Strategy. Du Pont R & D, 1902-1980*. Cambridge: Cambridge University Press.

Hovenkamp, Herbert (1991). *Enterprise and American Law 1836-1937*. Cambridge: Harvard.

Howe, A.C. (1984). *Cotton Masters 1830-1860*. Oxford: Oxford University Press.

Hughes, Jonathan R. T. (1983). "Arthur Cole and Entrepreneurial History." *Business and Economic History*, 12: 133-44.

Hughes, Jonathan T. (1991). *The Government Habit Redux: Economic Controls from Colonial Times to the Present*. Princeton, NJ: Princeton University Press.

Hurst, James Willard (1967). *Law and the Conditions of Freedom in Nineteenth-Century America*. Madison: University of Wisconsin Press.

Jenks, Leland H. (1944). "Railroads as an Economic Force in American Development." *The Journal of Economic History*, 4: 18-20.

----- (1949). "Role Structure of Entrepreneurial Personality," in *Change and the Entrepreneur: Postulates and the Patterns for Entrepreneurial History*. Harvard University Research Center in Entrepreneurial History. Cambridge: Harvard University Press.

Jeremy, David (ed.) (1988). *Business and Religion in Britain*. Gower: Aldershot.

----- (ed.) (1984-86). *Dictionary of Business Biography. A Biographical Dictionary of Business Leaders Active in Britain in the Period 1860-1980*, 5 vols. London: Butterworth.

----- (1998). *Religion, Business and Wealth in Modern Britain*. New York: Routledge.

Jones, Geoffrey (2005a). *Multinationals and Global Capitalism*. Oxford: Oxford University Press.

----- (2005b). *Renewing Unilever: Transformation and Tradition*. Oxford: Oxford University Press.

----- and Kraft, Alison (2004). "Corporate Venturing: The Origins of Unilever's Pregnancy Test." *Business History*, 46/1: 100-122.

Kenzer, Robert (1989). "The Black Businessman in the Postwar South: North Carolina, 1865- 1880." *Business History Review*, 63: 61-87.

Khan, Zorina (2005). *The Democratization of Invention: Patents and Copyrights in American Economic Development*. New York: Cambridge University Press.

Kilby, Peter (ed.) (1971). *Entrepreneurship and Economic Development*. New York: Free Press.

Kirby, M. (1993). "Quakerism, entrepreneurship and the family firm in North-east England, 1780-1860," in Jonathan Brown and Mary B. Rose (eds.), *Entrepreneurship, Networks and Modern Business*. Manchester: Manchester University Press.

Kwolek-Folland, Angel (1998). *Incorporating Women: A History of Woman and Business in the United States*, New York: Twayne.

Lamoreaux, Naomi (1994). *Insider Lending. Banks, Personal Connections, and Economic Development in Industrial New England*. New York: Cambridge University Press.

----- and Rosenthal, Jean-Laurent (2005). "Legal Regime and Contractual Flexibility: A Comparison of Business's Organizational Choices in France and the United States during the Era of Industrialization." *American Law and Economics Review*, 7: 28-61.

----- Levenstein, Margaret and Sokoloff, Kenneth (2004). "Financing Invention during the Second Industrial Revolution: Cleveland, Ohio 1870-1920." *NBER Working Paper Series*, No 10923.

Landes, David (1949). "French Entrepreneurship and Industrial Growth in the Nineteenth Century." *Journal of Economic History*, 9: 45-61.

----- (1953). "Social Attitudes, Entrepreneurship, and Economic Development: A Comment." *Explorations in Entrepreneurial History*, 6: 245-72.

----- (1969, 2003). *The Unbound Prometheus: Technological Change and Industrial Development in Western Europe from 1750 to the Present*. New York: Cambridge University Press.

----- (1998). *The Wealth and Poverty of Nations*. New York: W. W. Norton.

LaPorta, Rafael, Lopez-de-Silanes, Florencio, Schleifer, Andrei, and Vishny, Robert (1997). "Legal Determinants of External Finance." *Journal of Finance*, 52: 1131-50.

Lazonick, William (2003). "Understanding Innovative Enterprise: Toward the Integration of Economic Theory and Business History," in Franco Amatori and Geoffrey Jones (eds.), *Business History around the World*. Cambridge: Cambridge University Press.

- Liu, Kwang-Ching Liu (1954). “Financing a Steam-Navigation Company in China, 1861-62.” *Business History Review*, 28: 154-181.
- Livesay, Harold (1995). “Introduction,” in Livesay (ed.), *Entrepreneurship and the Growth of Firms*. Aldershot: E. Elgar.
- Maurer, Noel (2002). *The Power and the Money. The Mexican Financial System, 1876-1932*. Stanford: Stanford University Press.
- McCabe, Ina B., Harlaftis, Gelina, and Minoglou, Ioanna P. (2005). *Diaspora Entrepreneurial Networks: Four Centuries of History*. New York: Berg.
- McClelland, David (1961). *The Achieving Society*. Princeton, NJ: Van Nostrand.
- McCloskey, Donald N., and Sandberg, Lars G. (1971). “From Damnation to Redemption: Judgments on the Late Victorian Entrepreneur.” *Explorations in Economic History*, 9: 89-108.
- McCraw, Thomas K. (2006). “Schumpeter’s Business Cycles as Business History.” *Business History Review*, 80, Summer: 231-261.
- McKelvey, Maureen D. (2000). *Evolutionary Innovations: The Business of Biotechnology*. Oxford: Oxford University Press.
- McKendrick, N. (1959). “Josiah Wedgwood: An Eighteenth-Century Entrepreneur in Salesmanship and Marketing Techniques.” *Economic History Review*, 12: 408-33.
- (1964). “Josiah Wedgwood and Thomas Bentley: An Inventor-Entrepreneur Partnership in the Industrial Revolution.” *Transactions of the Royal Historical Society*, 14:
- Mitchell, Ronald K., Busenitz, Lowell, Lant, Theresa, McDougall, Patricia P., Morse, Eric A., and Smith, J. Brock (2002). “Towards a Theory of Entrepreneurial Cognition:

Rethinking the people Side of Entrepreneurship Research.” *Entrepreneurship Theory and Practice*, Winter: 93-104.

Morawska, Ewa (1996). *Insecure Prosperity: Jews in Small-town Industrial America, 1880-1940*. Princeton: Princeton University Press .

Morris, Morris David (1967). “Values as an Obstacle to Economic Growth in South Asia: An Historical Survey.” *Journal of Economic History*, 27: 588-607.

Munro, J. Forbes (2003). *Maritime Enterprise and Empire. Sir William Mackinnon and his Business Network, 1823-1893*. Woodbridge, UK: Boydell Press.

Murmann, Johann Peter (2003). *Knowledge and Competitive Advantage: The Coevolution of Firms, Technology and National Institutions*. New York: Cambridge.

Nelson, Richard, and Winter, Sidney (1982). *An Evolutionary Theory of Economic Change*. Cambridge: Harvard University Press.

Nicholas, Tom (1999). "Wealth-Making in Nineteenth and Early Twentieth Century Britain: Industry v. Commerce and Finance." *Business History*, Jan., 41, 1: 16-36.

----- (2000). "Wealth Making in the Nineteenth-and Early Twentieth-Century: The Rubinstein Hypothesis Revisited." *Business History*, April, 42, 2:155-68.

----- (2004). "Enterprise and Management." in Paul Johnson and Roderick Floud (ed.), *The Cambridge Economic History of Modern Britain*. Cambridge: Cambridge University Press.

North, Douglass (1990). *Institutions, Institutional Change, and Economic Performance*. Cambridge: Cambridge University Press.

----- and Davis, Lance (1971). *Institutional Change and American Economic Growth*. Cambridge: Cambridge University Press.

----- and Weingast, Barry (1989). "Constitutions and Commitment: The Evolution of Institutions Governing Public Choice in Eighteenth-Century England." *Journal of Economic History*, 49, Dec.: 803-832.

Novak, William (1996). *The People's Welfare: Law and Regulation in Nineteenth Century America*. Chapel Hill: UNC Press.

----- (2001). "The American law of Association: The Legal-Political Construction of Civil Society," *Studies in American Political Development* 15: 163-88.

Olegario, Rowena (1999). "'The Mysterious People:' Jewish Merchants, Transparency, and Community in Mid-Nineteenth Century America," *Business History Review*, 73: 161-189.

Olsson, Ulf (2001). *Furthering a Fortune. Marcus Wallenberg*. Stockholm: Ekerlids Forlag.

Oonk, G. (2006). "South Asians in East Africa (1880-1920) with a particular focus on Zanzibar: Toward a Historical Explanation of Economic Success of a Middleman Minority." *African and Asian Studies*, 5/1: 1-32.

Ranis, Gustav (1955). "The Community-Centered Entrepreneur in Japanese Development." *Explorations in Entrepreneurial History*, 7: 80-98.

Redlich, Fritz (1958). "Business Leadership: Diverse Origins and Variant Forms." *Economic Development and Cultural Change*, 6: 177-190.

Ruigrok, Winfried, and van Tulder, Rob (1995). *The Logic of Internationals Restructuring*. London: Routledge.

Sabel, Charles F. and Zeitlin, Jonathan (1997). *World of Possibilities: Flexibility and Mass Production in Western Industrialization*. Cambridge, Cambridge University Press.

Sass, Steven (1978). "Entrepreneurial Historians and History: An Essay in Organized Intellect." Ph.D. dissertation, Johns Hopkins University.

Sawyer, John (1954). "The Social Basis of the American System of Manufacturing." *Journal of Economic History*, 14: 361-79.

Scheiber, Harry N. (1997). "Private Rights and Public Power: American Law, Capitalism, and the Republican Polity in Nineteenth-Century America." *Yale Law Journal*, 107, December: 823-861.

---- (1973). "Property Law, Expropriation, and Resource Allocation by Government, 1789-1910." *Journal of Economic History*, 33/1: 232-51.

Schumpeter, Joseph (1942). *Capitalism, Socialism, and Democracy*. New York: Harper and Brothers.

----- (1947). "The Creative Response in Economic History." *The Journal of Economic History*, 7: 149-159.

Scranton, Philip (1997). *Endless Novelty: Specialty Production and American Industrialization 1865-1925*. Princeton: Princeton University Press.

Shane, Scott, and Venkataraman, Sankaran (2000). "The Promise of Entrepreneurship as a Field of Research." *Academy of Management Review*, 25: 217-226.

Simmel, Georg (1908, English translation 1950). "The Stranger," in K.H. Wolff (ed.), *The Sociology of Georg Simmel*. New York: The Free Press.

Smith, Michael S. (2006). *The Emergence of Modern Business Enterprise in France, 1800-1930*. Cambridge, MA: Harvard University Press.

Sombart, Werner (1911, English translation 1982). *The Jews and Modern Capitalism*. New Brunswick: Transaction Books.

Stevenson, Howard, and Jarillo, J.Carlos (1990). "A Paradigm of Entrepreneurship: Entrepreneurial Management." *Strategic Management Journal*, 11, Summer: 17-27.

Tawney, R.H. (1926). *Religion and the Rise of Capitalism*. New York: Harcourt, Brace.

Teece, David J. (1998). "Design Issues for Innovative Firms: Bureaucracy, Incentives and Industrial Structure," in Alfred. D. Chandler Jr. et al (eds.), *The Dynamic Firm*. Oxford: Oxford University Press.

Tenenbaum, Shelly (1993). *Credit to Their Community: Jewish Loan Societies in the United States, 1880-1945*. Detroit: Wayne State University Press.

Thompson, F.M.L. (2001). *Gentrification and the Enterprise Culture: Britain 1780 - 1980*. Oxford: Oxford University Press.

Thornton, Patricia (1999). "The Sociology of Entrepreneurship." *Annual Review of Sociology*. 25: 19-46.

Tignor, Robert (1980). "The Economic Activities of Foreigners in Egypt, 1920-1950: From Millet to Haute Bourgeoisie." *Comparative Studies in Society and History*, 22/3: 416-449.

Tripathi, Dwijendra (2004). *The Oxford History of Indian Business/Dwijendra Tripathi*. Reprint. New Delhi: Oxford University Press.

Tripsas, Mary, and Gavetti, Giovanni (2000). "Capabilities, Cognition and Inertia: Evidence from Digital Imaging." *Strategic Management Journal*, 21: 1147-1161.

- Wada, Kazuo, and Yui, Tsunehiko (2002). *Courage and Change. The Life of Kiichiro Toyoda*. Toyota City: Toyota Motor Corporation.
- Walker, Juliet (1986). "Racism, Slavery, Free Enterprise: Black Entrepreneurship in the United States before the Civil War." *Business History Review* 60/3: 343-382.
- Weber, Max (1904, 1930 English edition). *The Protestant Ethic and the Spirit of Capitalism*. New York: Scribner.
- Wiener, Martin (1981). *English Culture and the Decline of the Industrial Spirit: 1850–1980*. New York: Cambridge University Press.
- (ed.) (1966). *Modernization: The Dynamics of Growth*. New York: Basic Books.
- Wilson, C.H. (1955). "The Entrepreneur in the Industrial Revolution." *Explorations in Entrepreneurial History*, 7 (3): 129-45.
- Yamamura, Kozo (1968). "A Re-examination of Entrepreneurship in Meiji Japan." *Economic History Review*, 21: 144-58.
- (1978). "Entrepreneurship, Ownership and Management in Japan," in Peter Mathias and M.M. Postan (eds.), *The Cambridge Economic History of Europe*, Vol VII, Part 2. Cambridge: Cambridge University Press.
- Zahra, Shaker A., Jennings, Daniel F., and Kuratko, Donald F. (1999). "The Antecedents and Consequences of Firm-Level Entrepreneurship: The State of the Field." *Entrepreneurship Theory and Practice*, Winter.