

Economics and Culture in the Writing of Financial History\*

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## Abstract

Recent research in financial history has taken three approaches to the subject, focusing on financial institutions, financial systems, and financial networks. Functionalist logic from neoclassical economics is both the strength and the weakness of the first, institution-centered approach. This logic provides a coherent framework with which to analyze the development of financial arrangements but one based narrowly in information economics and agency theory. I argue in this paper that the other two approaches focusing on financial systems and financial networks are richer and more suggestive. They provide microeconomic foundations for arguments emphasizing the path-dependent character of financial development, thereby highlighting the contribution of financial history to financial economics. By emphasizing the extent to which financial relations are socially embedded and depend on interpersonal networks, they provide a means of bridging the gap between economic and cultural history.

Recent research in financial history has benefitted enormously from concurrent advances in economics, specifically in information economics and agency theory. Alexander Gerschenkron and Rondo Cameron, to name two of our formidable forbearers, had an intuitive sense of what distinguished financial markets from other markets, namely imperfect information and imperfect contract enforcement.<sup>1</sup> Recent work in economics, by more rigorously modeling these market imperfections and drawing out their implications, has helped to clarify the role of financial institutions in the process of economic growth. It has lent rigor to the intuition of earlier financial historians.

The theme of this theoretical work is that financial institutions provide monitoring and control services useful for overcoming problems of incomplete information and incomplete enforceability. If borrowers have more information than lenders about the characteristics of projects in which they invest (adverse selection) or are in a position to manipulate the outcome (moral hazard), then the price mechanism may not suffice to transfer credit from savers to investors. Akerlof's (1969) seminal work on adverse selection demonstrated how the interest rate charged on loans might not equilibrate a market in which the characteristics of participants (in the present context, of those who demand loans) depends on the price charged and where those characteristics are difficult to observe. Were loss-making lenders to raise the interest rate they charged, low-risk borrowers would drop out of the market, leaving only customers seeking to finance high-risk projects and therefore willing to bear the increased interest-rate premium. The level of risk (and associated loan losses) having risen with the interest rate, the lender is no better off than before, threatening the market with breakdown. This problem implies the need for an agent (a bank, as in Diamond, 1984, or a rating agency, as in Millon and Thakor, 1985) capable of overcoming the information asymmetry, ascertaining the borrower's true characteristics, and

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<sup>1</sup> See Gerschenkron (1962) and Cameron (1967).

pricing credit accordingly.

The question then becomes why banks, rating agencies or other financial institutions have a comparative advantage in carrying out these tasks. Diamond's (1984) work on banks as delegated monitors assumes that assembling and processing the information relevant for loan decisions is costly but that this task can be carried out more efficiently through specialization. If individual investors delegate the task of screening borrowers and monitoring their actions to specialized entities called banks, the latter can undertake these functions at relatively low cost. It follows from Diamond's model that an economy in which banks act as delegated monitors will feature a more efficient allocation of resources, a higher level of investment, and a faster rate of growth than one whose the banking system is underdeveloped. Fazzari, Hubbard and Petersen (1988) and Hoshi, Kashyap and Schafstein (1991) show how banks that establish long-term connections with their customers may have a comparative advantage in using monitoring to solve the adverse selection problem, again implying that financially-sophisticated economies should grow faster than their more financially-underdeveloped counterparts.

Formal models have also appeared in which financial institutions are assumed or shown to have a special facility to control the actions of borrowers. In Diamond (1991), banks are assumed to be more efficient at applying sanctions than bond markets; consequently, borrowers without reputational capital at risk will be shunned by the bond market but may still be able to borrow from banks, since the latter are better positioned to control their actions. Better control is associated with more lending, longer investment horizons, and a more efficient allocation of resources (Mayer, 1988; Aghion and Bolton, 1992).

This work in economics has lent obvious support to the functionalist interpretation of financial development. Financial institutions exist, the functionalist argument runs, to fill the need created by problems of asymmetric information, adverse selection, and moral hazard. The precise

nature of the information environment and the scope for opportunistic behavior will be different in different historical settings, and so will the efficient institutional response. In an agricultural setting, where the problem is the care and timeliness with which farmers prepare their land, plant their crop and tend their livestock, peer monitoring can be carried out by neighboring farmers, and rural credit cooperatives will be observed (Guinnane, 1994). In the circumstances of early industrialization, where the problem facing the aspiring manufacturer is what to produce, how to organize the factory, and how to market the product, critical assets of the enterprise are intangible, providing scope for opportunistic behavior on the part of potential borrowers. Credit is provided by family-based financial institutions with inside information and the ability to use family connections and the threat of excommunication to force repayment (Lamoreaux, 1994), or by suppliers who use their other economic relations with the firm to acquire information about its creditworthiness and the threat of suspending the provision of inputs as a sanction against default (Petersen and Ragan, 1996). Where the problem is investing in foreign railway bonds, credit intermediation is provided by specialized investment banks employing foreign agents, and contract enforcement is carried out by the cooperative efforts of a bondholders committee and a stock exchange (in the British context, the Council of Foreign Bondholders and London Stock Exchange; Eichengreen, 1996). Where the problem is financing trade over long distances, the function is carried out by trading companies which combine trade and lending as a way of diversifying away risk and in which the dependence of subsidiaries on parent company serves as a bonding device (Jones, 1997). Where it is transferring large chunks of capital to joint-stock firms that have not yet established a reputation for profitability, the function is carried out by industrial banks that gain access to information by putting bank directors on corporate boards (Calomiris, 1995; Da Rin, 1996). And finally, where the market in information is relatively well developed and firms have well-established reputations,

capital is mobilized from large numbers of small savers through the equity market (Michie, 1997).

This functionalist interpretation of the history of financial institutions, strengthened by the support it derives from recent advances in economic theory, continues to inform much recent research.<sup>2</sup> Unfortunately, it does not entirely survive historical scrutiny. Recent work on German universal banking, for example, challenges whether the Great Banks in the late 19th century in fact carried out the functions ascribed to them on any significant scale (Fohlin, 1997). Rural credit cooperatives, while present in Germany and Northern Italy, were largely absent in Ireland and Southern Italy, despite that the same economic need prevailed (Galassi, 1997; Guinnane, 1994). Financial arrangements which give rise to significant inefficiencies -- in the United States, a fragmented banking system prone to instability (Grossman, 1994), in the United Kingdom a commercial banking system with only loose connections to potential industrial clients (Collins, 1997) -- display a disturbingly weak tendency to be driven out of business by better-structured competitors. While functionalist interpretations of the historical role of financial institutions are not obviously misleading, at the least they are incomplete.

An alternative is to focus not on individual financial institutions but on the financial system. A system is a set of interconnected parts. My Webster's Collegiate Dictionary defines it as "a regularly interacting or interdependent group of items forming a unifying whole." This suggests a different perspective on the evolution of financial structure, one that many financial historians are likely to find congenial. It suggests that the financial sector at any point in time is made up of a variety of institutions and arrangements, some formal, some informal, that interact in providing

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<sup>2</sup> The single clearest statement of this approach and its applications to financial history may be Hellwig (1991).

financial services to the economy. Some service sectors that others cannot. Importantly, those different arrangements and institutions interact. The existence of a stock market on which large firms can borrow, for example, limits the clientele likely to be available to banks. This change in customer base then influences the efficiency advantages of large versus small or mixed versus industrial banks and the structure of the financial system itself. This idea of a financial "system" of coexisting, interacting parts cries out for further study. The idea is provocative, but systematic, rigorous historical and theoretical research has yet to be done.

Recent work in financial history has repeatedly invoked the concept of "path dependence." Davis and Gallman (1997), for example, invoke the tendency for a country's financial history to strongly shape its subsequent financial development -- for that development to take on a path-dependent character. Some would dismiss this fashionable phrase "path dependence" as nothing but a trendy synonym for history. In fact, path dependence, properly utilized, implies more than just "history matters." It means that history matters permanently -- in the present context, that passing events in financial markets affect not just the subsequent course of financial history but that they change the course of their development permanently. Not just the "transitional dynamics" of the system are affected; so is its equilibrium -- its long-term resting point.

What is unsatisfactory in this literature is a certain lack of precision about the *mechanism* lending these historical dynamics their path dependent character. Only under quite precise conditions does path dependence obtain. It requires a lock-in mechanism, a positive-feedback effect (Arthur, 1988). Financial historians, when climbing on the bandwagon of path dependence, have engaged in too little serious discussion of this point. One possible lock-in mechanism is politics -- that financial interests use government regulation to maintain their competitive advantage. Quirks of history create those interests, and once created they use political means to maintain their

position indefinitely. This view is encouraged by the conventional research strategy, as in Davis and Gallman (1997), who adopt the nation state as the unit of analysis. What is distinctive about the nation, after all, is that it is the level at which important aspects of the regulatory framework are set (differences among U.S. states or between England and Scotland notwithstanding). National histories encourage a focus on national policies and therefore on politics as the mechanism giving rise to path dependency.

This emphasis runs the risk, it seems to me, of giving too little credit to the market as a force able to overcome political vested interests. An alternative explanation involves developing the implications of the fact that the financial sector is structured as a *system*. Another definition of "system" from my Webster's is "a group of devices or artificial objects or an organization forming a network, especially for distributing something or serving a common purpose." Network is the key word here. A financial system is a network of interacting banks and nonbank intermediaries whose individual efficiency is not independent of the activities of their competitors. One can think of many examples of this: the interbank market, clearinghouse cooperation, trading companies (which are themselves networks of affiliated firms), the association structure of German credit cooperatives, and the underwriting of equity issues by investment banks. These are all instances where economic complementarities arise.

In the presence of such complementarities, it may not be in the interest of individual financial institutions to initiate radical changes in their organization and behavior unless other institutions do so simultaneously. Several equilibria can coexist simultaneously, and these equilibria can be pareto ranked. But it will not be in the interest of any one participant in financial markets to shift from one equilibrium to another unless others do so simultaneously -- unless that shift can be coordinated, in other words. And this kind of coordination is precisely what decentralized markets do least well.

Compared to the functionalist approach, this network-based perspective encourages a different vision of the historical evolution of financial markets. It suggests that efficiency is not enough, that one cannot back out an explanation for financial structure at a point in time by applying functionalist logic. It highlights the essential contribution of financial history to financial economics by implying that financial structure cannot be understood independent of its history.

It also provides a device for reconciling the concerns of economic and cultural historians. The fashion among historians is to reject economically-based arguments, whether these point to efficient outcomes, as in their functionalist incarnation, or inefficient ones, as in versions emphasizing network externalities. Economic relations, in this view, are strongly conditioned by their socio-cultural context, not just by the logic of profit maximization. Socially-embedded personal networks provide the context for financial transactions, and the evolution and operation of the financial system cannot be understood in isolation from that social context.

Note again the appearance of the word "network" in the previous sentence. Its presence implies that personal relations, social context and formal financial institutions can be interpreted as "a regularly interacting or interdependent group of items forming a unifying whole." Particular financial forms function most efficiently in particular social contexts. Rural credit cooperatives work best where there independently exists a relatively high level of social trust (again, see Galassi, 1997). The joint-stock banks created in England between 1826 and 1844 depended for their governance on "a community of management responding to community needs" (Newton, 1997). Great banks with active boards and interlocking directorates on the 19th century Austrian and German models worked best where those boards were dominated by aristocrats, tycoons and financiers all highly-placed in society who brought to the business of banking long-standing social connections that facilitated communication and trust (Eigner, 1997). Family-

owned and operated financial empires were most successful where the families in question were drawn close by a distinctive social and religious ethos that at the same time differentiated them from their customers (Ferguson, 1997). Innovative financial entrepreneurs like Charles Merrill found openings for their abilities in a culture that rewarded independence and originality (Perkins, 1997).

In this view, institutional networks and social networks interact in complementary ways. In the presence of the other, each operates more smoothly than it would otherwise. And these complementarities, which are a source of positive externalities, lock in the lock-in effect. Because financial transactions are embedded socially, they take on a path-dependent character.<sup>3</sup>

Financial historians, especially those who sit in history departments, see their specialty as a bastion of hard-headed economic realism in a hostile world -- in the face of the increasing hegemony of cultural history. Where their colleagues are preoccupied by culture, fashion and literary style, the financial historian immerses himself in bank balance sheets and corporate profit statements, the real constituents of everyday life. In a sense, recent research in financial history suggests that this dichotomy between cultural and financial (and, more broadly, economic) history is artificial. Culture in the sense of shared values, social norms and interpersonal interactions makes up the broader social context in which day-to-day financial transactions are embedded. Cultural affinities solve technical problems that otherwise limit the efficiency of financial markets. Technical complementarities between the socio-cultural and economic spheres hold in place the network externalities that lend financial forms their persistence -- that give them their historical

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<sup>3</sup> To return to the alternative explanation for lock-in, namely politics, this perspective suggests that politics and strictly economic complementarities need not be viewed as rival interpretations. Political connections, like family connections, can work to discourage opportunistic behavior (by, for example, providing "bonds" that will be lost in the event that agents succumb to the temptation to act opportunistically; see Hirschman, 1981).

dimension, in other words. From this perspective, there is no necessary clash between cultural and financial history; the two are complements, not incompatible rivals. The challenge for researchers is to blend them in ways conducive to rigorous theorizing, transparent model building, and refutable hypothesis testing.

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