

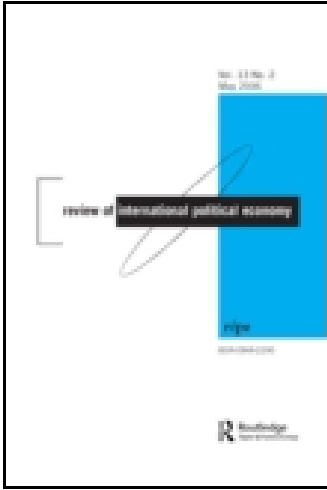
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Non-market cooperation and the variety of finance capitalism in advanced democracies

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Non-market cooperation and the variety of finance capitalism in advanced democracies

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ABSTRACT

In this article I explore empirically the determinants of the persistent cross-national variation in finance capitalism in advanced democracies. I find that the degree of strategic coordination through extra-market institutions – which protect the economic system from class and sectoral pressures and promote collaboration among state agencies, financiers, managers, and labor organizations – contributes to a country's domestic banking and financial intermediary-based development but is less conducive to the development of its securities markets. The financial liberalization reforms of the 1990s meant the emergence of an asymmetric corporatist system, whereby banks and other financial institutions played a crucial role in defining the new rules of financial governance. Conducting a panel data analysis encompassing 18 advanced democracies over the period of 1960–2005, I find evidence of the impact of strategic coordination on financial development, while controlling for alternative explanations and ensuring that my estimates capture the influence of the exogenous component of coordination. The paper shows that convergence to the Anglo-Saxon model of finance has not occurred.

KEYWORDS

Financial convergence; strategic coordination; bank-based system; market-based system; law and finance; corporate governance.

A large body of evidence suggests that national economies have maintained their varieties of finance capitalism despite the unstoppable forces of financial globalization (Allen and Gale, 2000; Demircuc-Kunt and Levine, 2004; Hall and Soskice, 2001). This paper studies *why* the contemporary financial arrangements in rich industrialized countries differ, and why these differences persist over time. I stress the impact of non-market political institutions, promoting economic cooperation, on financial development. Financial development is broadly defined here to include the

availability of arm's length market finance as well as the development of the banking sector. I do not however, evaluate whether markets or banks are more effective at providing financial services. Both banks and capital markets contribute to economic development, implying that banks provide different services to the economy than markets (Demirguc-Kunt *et al.*, 2011: 8).

The classic explanation of national diversity of financial systems, developed by Gerschenkron (1962), emphasizes access to capital, linking the timing of industrialization to the organization of the financial system while focusing on the relative degrees of market, bank, and state intermediation in providing long-term capital: whereas the British industrialization was market-financed, French and German industrialization were financed by banks.¹ Two types of financial systems were identified based on these criteria: *bank-based* and *market-based*. With France as the prototypic case, Zysman (1983) applied Gerschenkron's insight to the story of industrial policy in the postwar period and suggested an additional model of finance: a credit-based system in which financial relations are dominated by government administered prices.

Alternative explanations identify various structural impediments to creating viable equity markets. A particularly influential strand of this literature stresses the importance of differences among national legal systems, transplanted centuries ago through conquest and colonization (La Porta *et al.*, 1997, 1998).² This approach is based on the classification of legal systems into four 'families': the English common law system, and the French, German, and Scandinavian civil law traditions. Scholars working in this tradition have shown that the stronger protection of creditors and minority shareholders present in English common law systems result in more developed capital markets and easier access to external finance than seen in civil law systems (especially French civil law countries). Yet, the 'law and finance' school does not explain financial change: the history of financial development is one of 'great reversals', to use the phrase of Rajan and Zingales (2003a), and there seems to be significant variance in financial development across countries with the same legal origin over time.³

According to the prominent interest group theory of financial development developed by Rajan and Zingales (2003a), incumbent interest groups – financiers and industrialists – will try to use their political power to oppose financial development because it introduces competition and erodes their positional rents and relationships. Since legal institutions result from political choices, understanding financial development requires examination of the workings of political institutions and the preferences of political actors. The literature on the political economy of financial development has identified various political channels – including partisan politics, electoral laws, median voter preferences, the power of political incumbency, political accountability, degree of state centralization, and

political instability – to explain corporate governance and modern financial markets (Hellwig, 2000; Verdier, 2004; Pagano and Volpin, 2005; Rajan and Zingales, 2003a; Perotti and von Thadden, 2006; Roe, 2006; Haber *et al.*, 2008; Schwartz and Seabrooke, 2008).⁴ For instance, Pagano and Volpin (2005) show that proportional representation systems, in which workers and controlling shareholders (owners) of closely held firms form a corporatist-type deal, are conducive to poorer protection of the rights of minority shareholders and higher worker security than are majoritarian systems. Differences in banking sectors and financial markets are central to varieties of capitalism literature (VOC) (Hall and Soskice, 2001;⁵ Pinto *et al.*, 2010; Cioffi, 2010; Schmidt, 2002; Amable, 2003; Gourevitch and Shinn, 2005; Callaghan, 2009; Culpepper, 2005; Deeg, 1999; Vitols, 2004; Grossman, 2011; O’Sullivan, 2003, 2007; Hardie *et al.*, 2011; Nolke and Vliegthart, 2009). Gourevitch and Shinn (2005) examine the coalition that forms among workers, managers, and owners in differing combinations in support of alternative corporate governance models, partly depending on the extent to which electoral institutions encourage consensus or majoritarian outcomes. The most comprehensive attempt to classify national financial systems is provided by Amable (2003), who tries to move beyond the dichotomous Gershenkronian perspective, and identifies five different types of institutional configurations of national financial systems: market-based, social-democratic, Asian, continental European, and South European.

Building upon the literature on neo-corporatism (Katzenstein, 1985; Scharpf, 1991; Hicks, 1999; Cameron, 1984), I provide an approach to financial development that focuses on the emergence of political coalitions that bring financiers, industrialists, and workers together with government policymakers interested in creating and preserving cooperative institutions. These institutions provide a greater social insurance and labor protection, but also a greater role of bank finance and government intervention in financial governance. Therefore, I suggest a model, in which preferences of socio-political groups are mediated by the institutions of non-market coordination that settle the conflict of interests between these groups. I find preliminary evidence that a corporatist economy, aiming at the incorporation of financiers, managers, and labor, also shifts corporate control to banks and towards bank-based systems. In contrast to earlier models of corporatist compromise and financial development, contemporary cross-class coalitions and coordination institutions aim at incorporation and taming of banks and other financial institutions. Although I underline the centrality of socio-political interests, my arguments are linked to the institutional theory of stability and change in global finance.

Among the most visible of such coordinating institutions have been centralized structures of business confederations, and coordinated wage bargaining, as well as cohesive government and interest group relations.

These coordination structures determine the degree of neo-corporatism in a country. According to Katzenstein (1985: 30–3), ‘democratic corporatism’ can be distinguished by three characteristics: ideology of social partnership expressed at the national level; a relatively centralized and concentrated system of interest groups (through ‘peak associations’); and voluntary and informal coordination of conflicting objectives through continuous bargaining between interest groups, state bureaucracies, and political parties to address undesirable outcomes of economic change.⁶

Substantial questions remain, however. First, in contrast to prior studies relating some features of neo-corporatism to legal rules of corporate governance practices (creditor protection, protection of minority shareholders) that have proven to be correlated with the development of financial markets, this paper examines the *direct* link between the degree of non-market coordination in an economy, and the size and activeness of banking sector and private securities markets. Second, the main problem plaguing research in this area is how to measure the degree of coordination and bargaining among state agencies, business, and labor organizations. Previous studies rely on a rich set of comparative case studies, or use time-invariant quantitative indicators of coordination, which only assess a small range of institutions that are important for coordinating economic activity. For instance, Hall and Gingerich (2009) constructed time-invariant indices of corporate governance to assess whether the corporate governance and labor regulation dimensions of market and strategic coordination posited by VOC theory exist, and where they are present. These authors estimate the impact of complementarities in labor relations and corporate governance on economic growth but do not examine the determinants of cross-national variation in financial development, however.⁷ In contrast, I use time-varying indices of cooperation developed by Hicks and Kenworthy (1998)⁸ and Swank (2006) that measure the political dimension of cooperative institutions associated with strong labor movements, strong social democratic and labor parties, and a neocorporatist orientation of economic policies.⁹ Third, previous investigations of political-economic factors influencing financial development were often limited to cross-country snapshots at different points in time and neglected the time dimension, primarily due to limited data availability. This study takes advantage of the time series variation available in more recent samples to explain the evolution of financial development within countries.¹⁰ Finally, in contrast to some earlier studies (Demirguc-Kunt and Levine, 1999), I conceptualize bank-based systems as financial systems in which not only deposit money banks but also non-bank financial institutions play a leading role in financial intermediation and allocating capital. I thus recognize the fact that non-bank financial intermediaries, such as investment banks, pension funds, hedge funds, equity and venture capital funds have become important actors in financial markets.

To assess my hypothesis empirically, I conducted a panel data analysis encompassing 18 advanced democracies over the period 1960–2005. My empirical results suggest that a higher degree of non-market coordination in an economy contributes to the development of banking markets but is less conducive to the development of capital markets.

BANK-BASED VERSUS MARKET-BASED FINANCING

I begin my analysis by briefly discussing the differences between market-based (arm's length) and bank-based (relationship-based) systems distinguished by the comparative financial economics literature (La Porta *et al.*, 1998).¹¹ When we compare financial systems across countries, we do not find consistent availability of market finance. In fact, we rarely observe consistency over time even within a single country. In market-based systems of finance, financial markets directly channel capital from savers to investors (direct finance). Securities and derivatives are the main source of long-term finance for firms (La Porta *et al.*, 1998). Capital markets are large, active, and characterized by high levels of transparency and dispersed shareholding, with well-protected equity holder rights. Banks tend to manage portfolios of stocks, spreading their risks across many companies rather than investing in the development of specific corporations. Firms' access to external finance depends on market valuation. Hostile takeovers that depend on share price are common, rendering firm managers sensitive to current firm profitability (Zysman, 1983). Relations between financial institutions and firms rest on an arm's-length market basis and limited short-term lending arrangements. For Zysman (1983: 70), the capital-market-based system 'places banks, firms, and governments in distinct spheres from which they venture forth to meet as anonymous bargaining partners'.

In bank-based systems, banks and other financial intermediaries provide loans to firms for financing their investments (indirect finance). Firms are closely connected by dense corporate networks of cross-shareholding that facilitate exchange of private information and determine the reputation of managers. Banks and other non-financial entities hold large ownership stakes in firms, allowing them to closely monitor and influence the firms' strategic decisions. This 'voice-based' partnership (Hirschman, 1970) encourages investors to actively intervene in the firm, rather than exiting quickly when the firm is in financial distress. These systems tend to be dominated by 'relational banking', where reputation and close long-term, exclusive relationships between firms and their investors, rather than share price, are the key to bank credit extension and capital accumulation (Zysman, 1983; Hall and Gingerich, 2009). National and regional governments also play an important role in intermediating and allocating capital through the banks in corporatist states, which have historically engaged in economic planning and industrial policy aimed at the need to adapt to

international market forces and to help domestic firms stay competitive. Selective credit allocation has served as a particularly effective instrument of state-led industrial strategies (Zysman, 1983: 76). As a result, bank-based financial systems, characterized by consensus and collective achievement, tend to have more concentrated ownership, more bank finance, and less active securities markets than arm's length systems.

EXPLAINING FINANCIAL DEVELOPMENT: A THEORETICAL FRAMEWORK

The logic of my argument is based on distributional consequences of the development of securities markets for different societal groups and economic actors. According to the interest group model suggested by Rajan and Zingales (2003a), those who have enjoyed monopoly rents created by artificial barriers to entry would be hurt by development of capital markets, which lowers the entry barriers to the financial and industrial sectors and thus increases competition from new players who can compete away profits. When financial markets are underdeveloped, incumbent interest groups have access to capital, through internal cash flows or relationship-based finance, and thus reap all the benefits of new business opportunities. Therefore, established industrialists and financiers have incentives to use their political power to limit capital markets development. Interest group models are helpful in understanding the distributional implications of capital markets development, but their predictions are unclear when one of these powerful groups favors development while the other opposes it, duly acknowledged by Rajan and Zingales (2003a). The political economy approach to financial development adopted in this paper is different from the conventional lobbying argument, in which opposing economic actors lobby the government for their preferred economic outcomes.

I put forward a political model of societal divisions that allies cross-class and cross-sector coalitions, which defend the institutions of bank-centered systems of finance as part of a corporatist arrangement. The continued viability of the institutional diversity of finance capitalism in the industrialized world hinges on the ability of institutions of non-market cooperation to mitigate class and sectoral conflict among financiers, industrialists, and workers. These institutions sustain voice-based, long-term relationships between firms and their financial investors, as well as cooperation between labor and management within companies (Hicks and Kenworthy, 1998). I further argue that in the new financial environment that resulted from financial liberalization reforms of the 1990s, we have witnessed the emergence of an *asymmetric* corporatist system, whereby banks and bankers' associations played a crucial role in defining the new rules of financial governance.

All economic players – organized labor, incumbent industrialists, and bankers – trying to preserve their political connections, positional rents, greater social insurance and welfare, have political incentives to sustain the bank or state control of finance at the cost of less competitive capital markets. They would want to restrict the competition from dispersed financial investors, foreign banks, and capital market governance. Bank control of finance can serve as a collusive device that protects firm managers from external pressures in financial or product markets (Hellwig, 2000). The active involvement of banks in the monitoring and strategic planning of firms decreases the uncertainty of firm managers and allows for the attainment of long-term strategies by supplying ‘patient capital’ (Amable, 2003: 253). Therefore, as Pagano and Volpin (2001) show, firm managers would want to restrict investor rights to reap greater benefits of control, thus impeding securities market development. Managers need the political support of workers. Seeking to avoid hostile takeovers, managers can offer workers long-term contracts, making the firm unattractive to a potential buyer. Capital market finance is harmful to both groups: it increases risk exposure for labor revenues and forces firm managers to pay close attention to the price of their stock in order to maintain access to finance and avoid hostile takeovers (Perotti and von Thadden, 2006). The financial regulatory framework can impede private equity or venture capital, thus making firms dependent on bank financing (Perotti and von Thadden, 2006: 148). The presence of well-functioning capital markets can be harmful to incumbent bankers: financial capital can move effortlessly across sectors and borders, and firms are not limited to financing supplied by domestic banks. Financial globalization may also lead depositors to withdraw their assets from banks during ‘bull markets’, which can decrease the lending capacity of banks (Von Mettenheim, 2011).

When the interests of societal groups are aligned with national interests, good economic policies can be implemented. But when these interests are misaligned, economic outcomes can be disastrous for a country’s development (Rajan and Zingales, 2003a: 43). Corporatist institutions provide information about the behavior of coalition partners and markets that can facilitate trust and reassurance and provide a basis for bargaining and policy agreement. These institutional settlements are the expressions of political interests of socio-political groups, and subsequently constrain these coalitional actors to act in accordance with these agreements.¹² Among the most important non-market cooperative institutions have been the tripartite arrangements composed of centralized business and union associations negotiating the terms of legal or economic change with political elites. In some countries (as in France), these tripartite bargains are coordinated by representatives of political parties and the state; in others (as in Sweden), labor market organization creates the basis for national

bargaining; and in still others (as in Germany), banks, acting as government allies, facilitate bargaining (Zysman, 1983: 92–3).

I contend that cooperative institutions have also helped corporatist countries to cope with financial globalization by compensating societal groups through domestic bank-centered finance and cross-shareholding that limits hostile takeovers and facilitates network monitoring. In coordinated systems of finance, financial regulation has traditionally protected firm managers and bankers against product market and financial competition by regulating foreign influence. Labor has enjoyed social security and worker protection laws that maintained employment and wages, in addition to involvement in the direction of companies.¹³ The willingness of firm managers to grant job security to workers is influenced by the existence of union confederations and tripartite arrangements.

The state, a coalition partner, plays an important role as a promoter of economic activity through ownership of industries, provision of industrial credit and legitimacy to a system, and facilitation of political consensus (Hancke *et al.*, 2007: 21–5). Governments have continued to effectively influence private banks to lend to certain sectors and firms, to improve the allocation of funds, and to provide benefits to losers from globalization. Government politicians compensated banks by defending their interests¹⁴ and shielding them from the pressures of capital markets through regulatory barriers to foreign bank capital, for instance, by merger and acquisition control (Koehler, 2007). In return, banks have forgone some of their profits to retain their power and protection against foreign competition.

I agree with Cioffi (2010) who argues that the new institutional arrangements resulting from shifting cross-class coalitions reflect the interests of the powerful financial sector in promoting securities markets forging a coalition with managers but assuring side-payments to workers and the preservation of their role in corporate governance.¹⁵ But I reframe the discussion to focus on potential internal divisions within the financial sector. There is a bipolar world in the financial sector of many European countries: a few strongly internationalized big banks co-exist with a large number of small local and regional banks that stay out of reach of international markets (Deeg, 2010). Small banks have strengthened their links with domestic actors and remained supportive of shareholder capitalism and bank-based system.¹⁶ Large international banks can also make common cause with small banks at the expense of foreign bank investors. Similarly, large and small firms have different preferences and abilities regarding their reliance on bank funding and securities: large public enterprises rely more on self-finance and market finance (Culpepper, 2005), while small and medium enterprises (SMEs) are still dependent on bank loans (Deeg, 2010).¹⁷ These SMEs have developed closer long-term relations to

domestic banks in recent periods (Deeg, 2011: 571), further strengthening their incentive to cooperate.

Gourevitch and Shinn (2005) note that a 'corporatist compromise' also requires political institutions that favor the formation of party coalitions. In particular, they underline that in contrast with majoritarian systems (in which winning a majority of districts guarantees victory), proportional representation systems are consensual, with many 'veto points' to include the opinions of a wide range of actors in decisions and thus lead to smaller policy swings. The political economy framework I am proposing departs from Gourevitch and Shinn in two respects: First, Gourevitch and Shinn explore the cross-national variation in corporate governance, which they define as the authority structure of a firm. In contrast, I attempt to explain how non-market coordination affects banking sector development, measured by credit allocation, which is one of the most important functions of banks and other financial intermediaries; as well as stock markets development measured by the size and the activity of the stock market, and the degree of liquidity that stock markets provide to the economy. Stakeholder corporate governance usually corresponds to a bank-based system and shareholder to market-based but these two dimensions have shown signs of divergence in the recent period (Deeg, 2010: 5). Second, I extend the discussion to focus on banks, as actors that have been pivotal in sustaining a social compromise over institutions of non-market coordination that afforded them protection from outside competition, while allowing their successful adaption to the new rules of liberalized financial markets.¹⁸

In sum, bank-based finance can thus still offer competitive advantages and protection from external competition to all coalitional partners that may outweigh their costs. The corporatist social networks sustained the institutional foundations of comparative advantage of bank-based financial systems, providing greater financial stability and counter-cyclical lending to smooth economic shocks. This underlies the durability of institutional legacies of bank-based finance. Let me now frame the two-dimensional hypothesis that will be tested empirically: *A high degree of non-market cooperation should be positively correlated with a country's domestic banking and financial intermediary-based development, but negatively correlated with a country's capital market development.* Let me first discuss the evolution of financial systems of advanced democracies.

THE EVOLUTION OF FINANCIAL SYSTEMS

Within the rich industrial countries, the divide between corporatist bank-based, and non-corporatist market-based countries roughly coincides with that between common law and civil law traditions, inherited from the colonial times (Pagano and Volpin, 2001).¹⁹ But Rajan and Zingales (2003a)

show that the historical development of capital markets did not follow a monotonic path. They document that in 1913, civil law countries such as France, Belgium, and Austria had more developed capital markets than did the United States and other common law countries. After the war, many European countries and Japan changed their political and legal institutions: stronger trade unions, protectionist lobbies, 'rent-seeking' business groups, and banks all pushed for a system that suppressed equity markets and favored insider control and state intervention in finance.²⁰ As a result, financial sectors in these countries became bank oriented. Simultaneously, the United States developed more active capital markets.

Since the late 1980s, advanced industrial countries have faced new challenges arising from the globalization of finance. European economies faced additional pressures from the Single Market Programme with its supranational regulation and adoption of a single currency. These developments have led to reconfiguration of coalitions and how they shape the institutional structures of finance. The old coordination institutions have been transformed and evolved (Katzenstein, 2003). As argued above, in contrast to the traditional tripartite corporatism, in the new cooperative arrangements financial institutions have become more central than labor, but cross-class coalitions were able to defend non-market coordination. Streeck and Kenworthy's (2005) review of research on corporatism suggests that limited (if any) convergence has been found in interest group organization and participation in recent decades.²¹ Campbell and Pedersen (2007, 321–3) illustrate how, in Denmark and other small European states, corporatist institutions have become more decentralized and inclusive, involving new actors (for example, representatives from various professional associations and geographic regions) and improving the capacity to develop 'collectively shared understandings of international competition' based on a better process of information exchange and strategic coordination among various actors.²²

Similar patterns of change can be found in financial systems development. Financial reforms and privatizations from the late 1980s that led to the rapid growth of equity markets across advanced industrial democracies, particularly in corporatist European countries, have been often perceived as a convergence towards market based systems. Rajan and Zingales (2003b: 8) argue that in continental Europe 'since 1980, the stock market capitalization to GDP ratio went up more than thirteen times, while the proportion of investments financed through equity issues went up sixteen times'. But this does not necessarily mean that enterprises and households changed their relative demand for financing provided by banks and securities markets (Demirguc-Kunt *et al.*, 2011: 2).

This paper acknowledges that the financial systems of advanced industrial countries have changed since Zysman's (1983) seminal analysis, as most countries witnessed substantial reforms in corporate governance

and the expansion of securities markets. But it finds that there is a significant institutional inertia with regard to financial structure. At the aggregate level, countries with corporatist institutions preserved distinctive national models of bank-based finance.

Before discussing the findings of statistical models, I present below some comparative data on the level of financial development, measured by the variables used in this paper. Inspection of the Table 1 reveals that in recent decades, most countries experienced the most rapid development of capital markets as well as banking sectors, but historical differences in relative market size persist. As expected, differences in the degree of coordination seem to be correlated with the size and structure of capital markets. In 2007, stock market capitalization was highest in Switzerland, Australia, Canada and the United States and lowest in New Zealand, Austria, Germany, and Italy.²³ Corporatist countries including Sweden, the Netherlands, and Denmark have large, active banking systems. Japan,²⁴ the Netherlands, Sweden, and the United States exhibit the presence of large non-bank financial institutions issuing more credit to the private sector than do the deposit money banks (Demirgüç-Kunt and Levine, 1999). As the Table 1 shows, in spite of financial liberalization, banks remain predominantly domestically owned and controlled except for Finland and Ireland, where bank assets owned by foreign investors represent 65 per cent and 61 per cent, respectively. Banking sectors in many corporatist countries remain highly concentrated.

Recent advances in the VOC school of analysis have identified several trends in corporate governance and financial systems involving some or all of the following processes:²⁵ bank disintermediation and a shift toward increasing self-finance and market finance by large and publicly listed firms (Deeg, 2011); securitization and a shift towards investment and trading (Hardie *et al.*, 2011); a decline in the prevalence of cross-shareholdings and weakening of relationship banking (Beyer and Hopner, 2003); the growing importance of non-bank financial institutions (for example, pension funds) in corporate governance and equity markets (Clark, 1998); changing household savings and investment patterns away from holding assets in bank deposits; the rise of fee income in the banking sector (Erturk and Solari, 2007; Engelen *et al.*, 2011).²⁶ Nonetheless, the literature remains inconclusive with regards to the extent and nature of these changes and whether these reforms led to convergence among financial systems.

In spite of formal regulatory changes, the existing practices of corporate cross-shareholding, designed to protect firms from international competition and hostile foreign acquisitions, appear to be largely preserved (Culpepper, 2005). According to Culpepper (2005) who examines corporate governance reforms in France, Germany, and Italy since 1990, only France has experienced major changes: cross-shareholdings among large French banks and nonfinancial firms have been replaced by British and

Table 1 Financial structure across advanced democracies

Country	Classification of financial structure ¹	Hicks-Kenworthy index of neocorporatism ²	Swank index of national coordination ³	Domestic private credit to private sector % of GDP in 2007 ⁴	Stock market capitalization % of GDP in 2007 ⁴	Bank concentration index (2005) ⁵	Foreign bank assets of total banking assets (2007) ⁶
Australia	Market-based	0.22	0.14	1.14	1.47	0.77	5
Austria	Bank-based	0.96	0.48	0.85	0.56	0.72	19
Belgium	Bank-based	0.73	0.36	0.85	0.88	0.89	13
Canada	Market-based	0.10	-0.94	1.30	1.47	0.87	4
Denmark	Market-based	0.77	0.90	1.92	0.83	0.77	8
Finland	Bank-based	0.86	0.82	0.77	1.30	0.98	65
France	Bank-based	0.42	-0.74	0.99	1.02	0.66	6
Germany	Bank-based	0.81	0.09	0.84	0.57	0.74	11
Ireland	Bank-based	0.12	0.24	1.84	0.61	0.74	61
Italy	Bank-based	0.42	0.22	0.97	0.50	0.54	7
Japan	Bank-based	0.76	-0.37	0.97	1.06	0.44	0
Netherlands	Market-based	0.66	-0.05	1.79	1.16	0.92	10
New Zealand	Bank-based	0.20	-0.27	1.40	0.36	0.94	80
Norway	Bank-based	0.97	1.12	0.81 (06)	0.84	0.95	17
Sweden	Market-based	0.98	1.38	1.16	1.34	0.92	0
Switzerland	Market-based	0.55	-0.36	1.69	3.02	0.74	4
United Kingdom	Market-based	0.15	-0.50	1.74	1.41	0.58	14
United States	Market-based	0.08	-1.26	0.60	1.44	0.39	23

Notes: (1) *Source*: Deming-Kunt and Levine (1999), Table 6; (2) scores are cross-period averages over the period 1960–89, Kenworthy (2001); (3) scores are the results of the factor analysis for the years 1979–97, Swank (2006); (4) Beck *et al.* (2001); (5) bank concentration index is defined as a share of deposits in largest five banks. The index for Austria and Ireland is for 2001. *Source*: Barth *et al.* (2001), extended to 2009; (6) *source*: Claessens and Van Horen (2012).

American institutional investors. The French government has also actively sought the development of the securities market (O'Sullivan, 2007).²⁷ On the other hand, Clift (2007: 551, 561) argues that although the '*noyaux dur*', the crux of French financial capitalism, partially unraveled as a result of privatizations, the distribution of share ownership remains very concentrated (for example, 15 families control nearly 35 per cent of the capitalization of the French securities market), hostile takeovers are rare, and corporate governance strategies continue to protect managerial elites and marginalize minority shareholders.

Germany, a paradigmatic bank-based system, has preserved the institutional architecture of 'stakeholder' governance, including co-determination and work councils (Cioffi, 2010: 8; Deeg, 2011: 561; Vitols, 2004).²⁸ Callaghan (2009) argues that despite a recent decline, German corporate cross-shareholdings remain quite high. In particular, she argues that controlling influence of banks is much greater than what their equity holdings suggest. For example, in 1992, the top 24 banks in Germany controlled an average of 85 per cent of voting rights, out of which only 13 per cent by virtue of their own shareholdings.²⁹ In 1996, the supervisory boards of 29 of the 100 largest firms were chaired by representatives of Deutsche Bank alone (Beyer and Hopner, 2003).

At the same time, both French and German banks have expanded their foreign and trading operations, engaged increasingly in investment banking (for example, derivatives trading), and internationalized their activities while searching for profit making opportunities (Hardie and Howarth, 2009). These developments led Hardie *et al.* (2011: 16) to suggest the emergence of a third, *hybrid* model of finance capitalism: 'market-based banking'.³⁰ For them, although the system remains credit driven, the character of intermediation has changed: commercial banks depend less on deposits from household savers to finance their lending and more on borrowing from financial markets and other financial institutions.³¹ Hardie and Maxfield (2011: 2–8) consider the UK financial system – dominated by large commercial banks relying on debt and security sales as sources of funding of loans to firms, which have increased dramatically in recent decades – as the prime example of such a hybrid system.

Notwithstanding these recent reforms along Anglo-Saxon lines, banks still dominate in traditionally bank-centered systems. While some countries (Japan, Italy) preserved the traditional banking ideal dominated by commercial banks, in others (Germany, France, Belgium), alternative banking institutions, including government banks, saving banks, credit cooperatives, and mutual credit associations came to occupy the center of coalitions involving unions, firms, pension and mutual funds, and political parties (Von Mettenheim, 2011). The historic 'Hausbank' relationship has not been undermined for German SMEs that continue to finance their investments through domestic public sector banks and their

use of new forms of equity finance (for example, venture capital) remains fairly limited (Deeg, 1999, 2011). There seems to be a corresponding world in German banking sector: an internationalized sector shifting towards investment banking (Deutsche Bank, Dresdner Bank, Allianz) exists alongside a resilient and powerful traditional three-pillar system of local and regional banks that has strong linkages to the regional economies and firms (Grossman and Leblond, 2011: 429). Domestic banks remain the most important source of external finance for SMEs in most continental European countries, as well (Deeg, 2011). Local banks can provide adequate capital on competitive terms, and therefore reduce the attractiveness of external equity finance; as well as facilitate their existing customers' access to securities markets (Deeg, 2011; Allen *et al.*, 2005).

While pension funds have become very important financial institutions in Anglo-American economies, pension fund sectors are still relatively weak in France, Germany, and Italy (Clark, 1998). In their efforts to preserve national comparative institutional advantages, governments seek to limit the influence of foreign institutional investors. For example, as a reaction to the penetration of the French system by foreign mutual and pension funds, unequal voting rights (for example, voting ceilings limiting the voting rights of certain investors) and ownership ceilings have become prevalent as new instruments to limit the influence of foreign capital (Clift, 2007: 562). Moreover, foreign investors, even those with substantial block-holdings in French firms, play rather a passive role *vis-à-vis* management (Deeg, 2010).

Foreign banks have increased their market share of lending to firms in most advanced democracies but foreign penetration in the banking sector remains very low, providing evidence of monopolistic competition in French, German, Italian and other European banking markets.³² Furthermore, firms do not turn to foreign banks for financing; the latter tend to operate in niche markets in France and elsewhere (Hardie and Howarth, 2009: 1037). While the number of merger and acquisitions in the banking sector has increased in many European countries, most transactions were domestic (Allen *et al.*, 2005: 5). Several European politicians have intervened in cross-border mergers and acquisitions in order to prevent foreign banks from taking over or merging with domestic banks. For instance, in 1999, Portuguese Minister of Finance vetoed the acquisition of the Portuguese financial group Champlinaud by the Spanish bank Banco Santander Central Hispano; and in 2005, the governor of the Bank of Italy blocked the acquisition of Banca Antoveneta and Banca Nazionale del Lavoro by the Dutch ABN Amro and the Spanish Banco Bilbao Vizcaya Argentaria (Koehler, 2007). These are only three prominent examples of government protectionism in banking markets that brought actions of the European Commission for infringement of the free movement of capital principle.

The current global financial crisis has produced large losses at banks and led to massive interventions of governments to mitigate its consequences, which may further reinforce the institutional foundations of bank-based finance. Governments have bailed out and nationalized insolvent banks, provided credit guarantees, coordinated and enforced mergers, and pushed for stronger European and international financial regulatory frameworks. For example, the French and German governments have become majority shareholders in several banks, with the aim of rescuing these banks and ensuring the continuation of domestic lending. They have also used the crisis to promote national banking champions: for example, BNP Paribas took over the Belgian and Luxembourg branches of Fortis Bank with the assistance of the French government (Hardie and Howarth, 2009: 1031–3).

EMPIRICAL ANALYSIS

Measuring financial development

In my empirical models, I use the indicators of financial development, traditionally employed in the finance-growth literature, to measure the importance of both capital and banking markets. I use stock market capitalization as a percentage of GDP for the period 1976–2005 as the indicator of the size of capital markets and private credit provided by the banking sector as a percentage of GDP during 1960–2005 as the primary measure of overall development in private banking markets. This measure of banking sector development excludes credits issued by the central bank and development banks, as well as credit to the public sector and cross claims of one group of financial intermediaries on another (Beck *et al.*, 2000: 267–8). For robustness checks, I also consider the ratio of private credit from deposit money banks and other financial institutions to the private sector to GDP for the period 1960–2005 as an additional measure of financial intermediation. Furthermore, I use total value of stocks traded during 1975–2005 as an alternative dependent variable that measures the activeness of capital markets. All measures of financial development are extracted from the dataset of Beck *et al.* (2001).

Independent variables

For the purposes of this paper, I use a time-varying index of coordination in the economy developed by Hicks and Kenworthy (1998) and Kenworthy (2001).³³ This index captures the two dimensions of non-market cooperation. The macro-level dimension includes measures of encompassing centralized structures of business confederations; coordinated wage bargaining; cohesive government and interest group interrelations; and

tripartite neocorporatism. The second dimension delineates firm-level cooperation, which includes the measures of investor-firm cooperation; cooperative purchaser-supplier relations; alliances among competing firms; labor-management cooperation; and cooperation among workers through participatory and multidivisional project teams. Due to the limited availability of sufficiently long time-series of cooperation indices (1960–1994), I also estimate model specifications that include Swank's measures of national and sectoral economic coordination for 18 countries over the period 1960–2005.³⁴ There is a significant, but not perfect, overlap between Hicks-Kenworthy and Swank's measures of coordination. Swank constructed temporally and spatially varying indices of national coordination, combining measures of employer organization with a directly comparable measure of labor organization and collective bargaining centralization. He also constructs an index of sectoral coordination, which is composed of measures of sector coordination to provide collective business goods and the strength of long-term finance and producer relations.³⁵ Finally, I estimate the effect of coordinated wage bargaining from Visser (2011), a frequently used proxy for corporatism, on financial development over the period 1960–2008.

I estimate the long-term effect of the degree of strategic coordination on financial development in an economy, with a range of appropriate controls standard in the finance and growth literature. Corporatist countries tend to be associated with proportional voting systems, non-corporatist ones with majoritarian systems. I construct an indicator of the degree of proportionality of the voting system based on the World Bank Database of Political Institutions. Following Pagano and Volpin (2005), I combine in a single indicator three dummy variables that describe the electoral system: (1) PR, proportional representation, which equals 1 if at least some candidates are elected via a proportional rule, and 0 otherwise; (2) PLURALITY, which equals 1 if at least some legislators are elected via a majoritarian rule, and 0 otherwise; and (3) HOUSESYS, which equals 1 if most seats are allocated via a majoritarian rule, and 0 if via a proportional rule. My indicator of proportionality is thus defined as: $PR - PLURALITY - HOUSESYS + 2$. This variable equals 3 if all the seats are assigned via a proportional rule; 2 if the majority of seats are assigned via this rule; 1 if a minority of seats, and 0 if no seats are assigned proportionally. I also add a variable designed to capture the influence of social democratic cabinet participation, which is measured using Comparative Political Data Set 1960–2008.³⁶ This measure employs a five-point scale where 1 = right dominance, 2 = right-center, 3 = balanced, 4 = left-center, and 5 = left dominance. Based on the theoretical arguments explored previously, I expect financial systems in countries with proportional representation to be positively associated with banking development but negatively associated with securities market development.

The explanations surveyed in this paper make opposing predictions concerning the relationship between government political orientation and securities market development. Roe (2006) predicts that cabinets dominated by social democratic parties, whose primary constituencies are workers, are associated with less developed institutions of corporate governance that securities markets need. In contrast, building on Cioffi and Hoepner (2006) and Cioffi (2010), Pinto *et al.* (2010) flip the conventional argument and predict that pro-labor cabinets promote stock market capitalization through policy instruments aimed at protecting investors since greater investment flows lead to higher labor demand and higher wages, thus stimulating employment.

Furthermore, I test the Rajan and Zingales (2003a) openness hypothesis, which suggests that the ability of incumbents to impede financial development should be weaker when an economy is open to both trade and capital flows. This proposition suggests that the simultaneous opening of both trade and capital accounts is the key to financial development.³⁷ For the capital openness variable, I use the Chinn-Ito index (2006), which is the first principle component of the IMF binary variables reported in the *Annual Report on Exchange Arrangements and Exchange Restrictions* that codify the existence of multiple exchange rates, restrictions on current accounts, capital account restrictions, and the requirement for the surrender of export proceeds. Trade openness, measured by the ratio of total trade to GDP (exports plus imports to GDP), is from the World Development Indicators database. I thus expect both trade and capital account openness to have a positive impact on banking as well as capital market development. Macroeconomic control variables include log per capita income in PPP terms and the inflation rate. Log per capita income is a proxy for the quality of institutions that have positive impact on financial development. The inflation rate may distort economic policy-making. Particularly, high rates of inflation may discourage depositors from placing their money in banks and cause them to save in real assets instead (Chinn and Ito, 2006).

Finally, I control for the well-known legal-origin approach by encompassing the legal origin of countries in regressions: a variable that takes a value of 1 if a country has French, German, or Scandinavian legal origins and 0 otherwise.

Methodology

I estimate the impact of strategic coordination on financial development for 18 industrialized countries from 1960 to 2005. When data are from a long panel like this (that is, a dataset in which the number of observations over time is large relative to the number of panels), the error structure is likely to be nonspherical, that is, plagued by autocorrelation, heteroskedasticity, or both. To correct for both panel heteroskedasticity and

Table 2 Corporatism and financial development

	Banking sector development			Capital market development		
	Private credit by banks and nonbank financial institutions			Stock market capitalization		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Neocorporatism	0.294*** (0.038)	0.349*** (0.063)	0.140*** (0.042)	-0.357*** (0.101)	-0.185** (0.070)	-0.123* (0.055)
GDP per capita	0.000*** (0.000)	0.000 (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
Proportional representation	-0.083*** (0.011)	-0.059** (0.019)	-0.024 (0.014)	-0.028 (0.018)	-0.057*** (0.008)	-0.006 (0.011)
Cabinet partisanship	-0.038*** (0.011)	-0.030*** (0.009)	-0.016 (0.009)	-0.028*** (0.006)	-0.013 (0.010)	-0.012* (0.005)
Trade openness		-0.003*** (0.001)	-0.001** (0.000)		0.001* (0.000)	-0.001* (0.000)
Capital Openness		0.038** (0.014)	0.051** (0.017)		0.076 (0.043)	0.041*** (0.011)
Inflation (log)		-0.140*** (0.029)	-0.069** (0.022)		-0.032 (0.029)	-0.064** (0.022)
Constant	0.172** (0.058)	0.918*** (0.131)	0.338*** (0.080)	0.151*** (0.037)	0.027 (0.140)	0.070 (0.071)
Observations	358	315	315	119	108	124
R-squared	0.414	0.490	0.534	0.507	0.533	0.509

Notes: Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All regressions are estimated using the pooled OLS with panel corrected standard errors.

Table 3 Corporatism, legal origins, and financial development

	Banking sector development Private credit by banks and nonbank financial institutions Model 7	Capital market development Stock market capitalization Model 8
Neocorporatism	0.512*** (0.103)	-0.370** (0.125)
GDP per capita	0.000*** (0.000)	0.000* (0.000)
Proportional representation	-0.046*** (0.010)	0.042** (0.016)
Cabinet partisanship	-0.021* (0.009)	-0.005 (0.006)
Initial level of private credit	0.453*** (0.058)	0.707*** (0.057)
French legal origin	-0.131*** (0.030)	-0.061*** (0.014)
German legal origin	-0.194** (0.066)	0.013 (0.032)
Scandinavian legal origin	-0.448*** (0.058)	0.008 (0.028)
Constant	-0.001 (0.056)	0.183*** (0.047)
Observations	357	119
R-squared	0.646	0.816

Notes: Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All regressions are estimated using the Pooled OLS with Panel corrected standard errors.

spatial (contemporaneous) autocorrelation, I employed pooled ordinary least squares regression with (long) panel-corrected standard errors.³⁸

An important concern in empirically studying the impact of coordination institutions on financial development is the potential for endogeneity bias as a result of measurement error, reverse causality, and omitted variables. I take several steps to ensure that my estimates capture the influence of the exogenous component of coordination. To reduce concerns about reverse causality or simultaneity, I lag all regressors in our estimations one period. Furthermore, I estimate dynamic system Generalized Method of Moments (GMM) models in the manner of Arellano and Bond (1991), which difference the models to eliminate country specific effects of any time-invariant country specific variable. The differencing removes any correlation that may be due to unchanging common influences, including all time-invariant political economy factors. This also deals with endogeneity that may be due to the correlation of these country-specific effects and the right-hand-side regressors. In my estimations, I restrict the moment conditions to a maximum of three lags on the dependent variable. A special feature of dynamic panel data GMM estimation is that the number

Table 4 Corporatism and financial development: GMM dynamic estimations

	Banking sector development	Capital market development
	Private credit by banks Model 9	Stock market capitalization Model 10
Neocorporatism	0.327* (0.134)	-6.022** (2.021)
GDP per capita	0.000*** (2.650)	2.670 (4.180)
Proportional representation	-0.115 (0.070)	-0.000 (0.043)
Cabinet partisanship	0.002* (0.001)	-0.001 (0.001)
Lag 1 of dependent variable	0.494*** (0.070)	0.671*** (0.038)
Constant	-0.010 (0.152)	2.800** (0.927)
Observations	320	68
Sargan test (p-value)	12.337 (1.000)	12.122 (0.207)
First order serial correlation test (p-value)	3.736 (0.00)	-2.246 (0.02)
Second order serial correlation test (p-value)	-1.010 (0.31)	1.1709 (0.24)

Notes: Standard errors in parentheses; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All regressions are estimated using the Dynamic GMM estimator (Arellano and Bond, 1991).

of conditions increases with T . Too many conditions can introduce bias although increases efficiency. I treat the coordination variable as endogenous and use maximum two lag values of the difference as an instrument for this regressor.

EMPIRICAL RESULTS

The main results are presented in Table 2. The parameters estimates are broadly stable across the six models. Models 1–3 present the results with measures of banking sector development (private credit by banks, and private credit by banks and nonbank financial institutions to GDP) and Models 4–6 with capital market measures (stock market capitalization and stock market total value) as the dependent variables, respectively. Separate regressions are reported for a political model of financial development and the model that includes macroeconomic controls, including variables for the openness hypothesis and inflation. Consistent with my theoretical framework, across all estimations, neocorporatism positively contributes to the development of the banking sector (when the regressions are controlled for political and macroeconomic variables), but it is negatively associated with capital market development. The coefficient on

Table 5 Swank's national coordination index and financial development

	Banking sector development		Capital market development	
	Private credit by banks Model 13	Private credit by banks and nonbank financial institutions Model 14	Stock market capitalization Model 15	Stock market total value Model 16
National coordination	-0.021 (0.038)	-0.134*** (0.035)	-0.298*** (0.071)	-0.513*** (0.116)
GDP per capita	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
Proportional representation	-0.018 (0.022)	0.023 (0.015)	-0.001 (0.034)	0.144* (0.063)
Cabinet partisanship	-0.011 (0.009)	-0.008 (0.008)	0.042** (0.014)	0.065*** (0.014)
Trade openness	-0.000 (0.001)	-0.001 (0.000)	0.003*** (0.001)	0.001 (0.001)
Capital openness	0.044** (0.014)	0.034* (0.015)	0.107** (0.039)	0.099*** (0.026)
Inflation (log)	-0.123*** (0.026)	-0.052*** (0.016)	-0.148** (0.048)	-0.104** (0.037)
Constant	0.573*** (0.130)	0.156* (0.064)	-0.625*** (0.185)	-1.273*** (0.206)
Observations	443	445	244	260
R-squared	0.394	0.551	0.401	0.451

Notes: Standard errors in parentheses; *p < 0.05, **p < 0.01, ***p < 0.001. All regressions are estimated using the pooled OLS with panel corrected standard errors.

corporatism is of considerable magnitude and statistically significant. I also find that economic development as measured by GDP per capita is a strong predictor of financial development. The proportionality of the voting system is negatively associated with both banking and capital market development. Similarly, left-leaning government cabinets have a negative impact on financial development. Macroeconomic variables also seem to be important predictors of financial development in both the banking and the equity sectors. While capital openness positively influences financial development, the effect of trade openness is ambiguous. As expected, high inflation is detrimental to the development of financial markets. The first robustness check, which consists of an examination of the sensitivity of my baseline results in the dependent variable by including two commonly used proxies for financial development – private credit by banks and non-bank financial institutions, and stock market total value (both measured as a percentage of GDP) – leads to similar results to my baseline models.

In Table 3, I include controls for the role of legal origin. The literature contains no arguments that countries' legal institutions determine their political institutions. Beck *et al.* (2001) find that legal origin is the predominant determinant of financial development, while political variables have

Table 6 Swank's sectoral coordination index and financial development

	Banking sector development		Capital market development	
	Private credit by banks Model 17	Private credit by banks and nonbank financial institutions Model 18	Stock market capitalization Model 19	Stock market total value Model 20
Sector coordination	0.200*** (0.021)	0.081*** (0.016)	-0.175*** (0.048)	-0.196*** (0.054)
GDP per capita	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
Proportional representation	-0.133*** (0.016)	-0.088*** (0.013)	-0.096*** (0.024)	-0.057* (0.029)
Cabinet partisanship	-0.014* (0.007)	-0.022** (0.007)	0.016 (0.014)	0.022 (0.015)
Trade openness	0.002*** (0.001)	0.001* (0.000)	0.002** (0.001)	0.000 (0.001)
Capital openness	0.046*** (0.013)	0.039* (0.017)	0.073 (0.040)	0.074* (0.035)
Inflation (log)	-0.100*** (0.021)	-0.049** (0.016)	-0.173*** (0.051)	-0.133** (0.042)
Constant	0.743*** (0.080)	0.351*** (0.049)	-0.175 (0.145)	-0.640*** (0.120)
Observations	459	461	260	276
R-squared	0.493	0.567	0.396	0.403

Notes: Standard errors in parentheses; *p < 0.05, **p < 0.01, ***p < 0.001. All regressions are estimated using the Pooled OLS with Panel corrected standard errors.

little influence. Political variables may be insignificant in the presence of legal origin variables because the latter 'embed political circumstances that more directly capture political incentives toward the financial sector than the political variables themselves' (Keefer, 2008: 147). But when political variables are included in regressions together with legal variables, and controlling for the initial level of financial development, the coefficient on neocorporatism retains its sign and significance. French, German, and Scandinavian legal origin countries negatively affect the development of banks and financial intermediaries. This implies that English legal origin countries, being the default case, are conducive to banking development. British legal origin performs better, also, in the case of capital market development, while the coefficients of the German and Scandinavian legal origin dummies are no longer statistically different from zero. These findings confirm the theoretical arguments claiming more developed securities markets in countries with common law legal systems. The initial size of the financial sector has a significant positive effect on its subsequent growth.

GMM estimations, reported in Table 4, indicate a weaker yet mostly significant link between the index of neocorporatism and financial development. More importantly, in dynamic GMM estimations, all of the

diagnostics are satisfactory: the Sargan test does not reject the over-identification restrictions, the absence of first order serial correlation is rejected, and the absence of second order serial correlation is not rejected. Moreover, the lagged dependent variable in both cases is positive and significant.

Due to the limited availability of sufficiently long time series of capital market and corporatism indicators, I also use the Swank's indices of national and sectoral coordination as an alternative proxy for corporatism. The results are reported in Tables 5 and 6. In line with my theoretical expectations, national and sectoral coordination variables retain a strongly negative effect on capital market development in all regressions. While enterprise cooperation contributes to the banking sector development, macro-corporatist institutions exhibit a negative effect (Models 13 and 14). These results may reflect an increased importance of financial intermediaries in some market-based economies. Finally, the results are consistent with the baseline when wage coordination is used a measure of corporatism (see Table A1 of the Appendix).

CONCLUSION

This paper contributes important insights to understanding the continued viability of bank-led financial structures and persistent varieties of finance capitalism in the era of globalized finance. My empirical findings suggest that the degree of strategic coordination through extra-market institutions, which protect the economic system from class and sectoral pressures and promote collaboration between state agencies, business, and labor organizations, is an important factor in the shaping of banking, credit, and securities markets development. I also argued that earlier forms of socio-political coalitions have been supplanted by an asymmetric form of corporatist arrangements, in which power was redistributed from labor to financial institutions. This finding appears to be strong and robust to the inclusion of variables proposed by alternative explanations. I also take steps to address the potential for endogeneity bias. Controlling for economic wealth and institutional development, two groups of countries can be distinguished: corporatist countries with coordinated bank-based financial systems, and non-corporatist countries with large capital markets. Legal origins indicators also contribute to the development of financial markets but do not exhibit as strong an effect as the principal variables.

An ideology of social partnership and consensus building through corporatist institutions, which lies at the heart of Katzenstein's argument (1984), has proved to be an important adjustment mechanism to the instability of international financial markets. I have stressed throughout this paper that coordinated economies were able to design compensation strategies to attenuate social dislocations resulting from financial globalization through bank-centered finance. Corporatist coalitions and institutions

have shown persistence over time, allowing the preservation of traditional patterns of banking and collaborative views of corporate finance in spite of financial crises, stock market collapses, and the liberalization and deregulation reforms introduced by many countries during the 1990s in attempts to deepen capital markets. Corporatist governments instituted extensive financial reforms in order to realize the competitive advantages of the bank-based system, instead of converging towards a single capital-market based model.

At the same time, the 2007–2009 global credit crisis, caused primarily by the excesses of deregulation and securitization of subprime US residential mortgages, underlined the weaknesses of market-based financial systems. The crisis thus further undermined the strategies of banks to shift towards equity markets. The interventions of governments have reinforced the central position of the banks, and traditional patterns of non-market coordination and relationship banking have regained their prominence. This paper shows that convergence to the American model of finance has not occurred. The paper's findings also shed light on the persistence of high level of government influence and domestic ownership of financial institutions in bank-based systems.

These findings suggest two questions for future research on varieties of capitalism. First, at the aggregate level, this work offers empirical support for the persistence of distinctive national models of bank-based finance in countries with corporatist institutions but I recognize that national financial systems may not neatly fit into a single model. No country has a financial system that could be considered as purely bank-based or market-based. All countries rely on both modes of financing. The difference stems from the relative importance of these forms of financing for the economy (Rajan and Zingales, 2003b: 27). Consider, for example, the contemporary French model, which has evolved into one, which appears to successfully combine relatively weak coordination institutions with short-term market finance and a hybrid corporate governance system (Goyer, 2006; O'Sullivan, 2003, 2007). And maybe other countries with similar institutional innovations, such as the Netherlands, combining a stable system for wage coordination with arms-length investor-firm relations and rapid growth of securities markets, may fit this 'hybrid' model of finance capitalism (Kenworthy, 2006; Hardie *et al.*, 2011). More in-depth comparative research is clearly needed to tease out the mechanisms of institutional change towards the securities markets *within* national varieties of financial capitalism over time and how they interact with changes in international regimes.

Second, this study has underlined the role of banks as important players in cross-class coalitions that defend strategic interaction and coordination, rather than purely as financial intermediaries. As holders of mobile assets,

the power of financial institutions resides in the highly credible threat to 'exit' or reduce their commitments to domestic firms (Hirschman, 1970). In the conditions of increased financial integration, the bargaining power of financial institutions has further increased. Concurrently, sectoral wage coordination agreements have become looser even in countries with strong unions and powerful work councils (such as Germany and Sweden) (Hall, 2007). But cross-class coalitions and their institutional settlements reflect not only distributional conflict but also compensation to make the settlement acceptable to those whose interests are not satisfactorily represented (Hancke *et al.*, 2007). In Germany, for example, Länder governments step in to protect small banks for the benefit of small firms' access to finance (Rosenbluth and Schaap, 2003). A systematic empirical study of variations, over time and across countries, in internal divisions within cross-class coalitions (for example, among small and large banks, small and large firms in different sectors, managers and owners of listed and unlisted companies, different types of institutional investors) and the implications of these differences for capacities for strategic coordination, then, is a rich subject for future work.

In addition to VOC literature, this paper extends the literature on financial development and growth, which has given little attention to the character of non-market coordination. Financial deregulation and globalization in recent decades have placed securities markets at the center of capital accumulation and economic growth. A broader implication of this study is that those seeking to understand the effects of institutional reforms should pay careful attention to the relative merits of various systems of financial governance, as there is no theoretical support for the superiority of either the bank-based or the market-based view (Levine, 2002).³⁹ In fact, the banking sector and securities markets act as substitutes for each other during crises, serving to support the recovery from financial collapse (Allen *et al.*, 2011).

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NOTES

- 1 For a summary of the critique of Gerschenkron, see Fohlin (2007).
- 2 Researchers working within this tradition have related financial development to property rights, enforcement of financial contracts, and investor protection.
- 3 Other scholars have criticized historical inaccuracies in the law and finance literature. Dam (2006: 45, 48) contends that the Latin American countries amalgamate elements not just of Spanish, but also of Italian, classical Roman, and German law, while their securities law is heavily influenced by the American model.
- 4 For an excellent review of recent literature on finance, growth and its determinants, see Malmendier (2009).
- 5 VOC perspective, introduced in a volume edited by Hall and Soskice (2001), suggests that capitalist economies cluster into two types of coordination: liberal market economies, where a firm coordinates with other actors through market relations and coordinated market economies where firms rely on strategic coordination.
- 6 For theories and practices of neo-corporatism, see Katzenstein (1985), Streeck and Kenworthy (2005).
- 7 The Hall and Gingerich (2009) coordination index incorporates data from the 1990–1995 period on corporate governance (shareholder power, dispersion of control, size of stock market) and labor relations (level of wage coordination, degree of wage coordination, labor turnover).
- 8 See also Kenworthy (2001).
- 9 See also Hicks and Kenworthy (1998), Kenworthy (2003) and Huber *et al.* (2004).
- 10 The empirical strategy employed in this paper differs from some existing studies of financial development (see Chinn and Ito, 2006), which average data over five- or ten-year horizons to capture the steady state relationship between the variables. Nonetheless, the smoothing out of time series data removes useful variation, which could help to estimate the parameters of interest with greater precision. The use of yearly data also increases the number of observations that allow the inclusion of a larger number of control variables in regressions.
- 11 These classifications overlap but they are theoretically distinct. For instance, while relationship-based finance is more typical for bank-based systems, venture capital financing, typical for market-based systems, is also relationship based but not provided by banks (Rajan and Zingales, 2003b: 13).
- 12 Assuming that political coalitions reflect historical agreements that are institutionalized in neocorporatist structures, my argument is related to Amable (2003). I do not, however, theorize institutional complementarities between financial systems and other institutional spheres of macro-economy.
- 13 For example, the Codetermination Law adopted in Germany in 1976 allows German employees to select half of the supervisory boards of large companies. This arrangement also protects managers by entrusting employees with the power to resist mergers or takeovers (Pagano and Volpin, 2001: 502).
- 14 For instance, in the aftermath of the Single European Act, the German banking round table ZKA was regularly consulted by the Ministry of Finance and the Bundesbank (Grossman, 2011: 643).
- 15 Nonetheless, it is uneasy to determine whether the recent reforms towards securities markets have been driven by market changes, corporate restructuring, or the banks (Allen *et al.*, 2005).
- 16 For example, German regional and the more than 500 municipal savings banks have shown only a reluctant support of the European liberalization initiatives (Grossman, 2011: 646).

- 17 Scholars also pointed to the tensions arising from the dual role of producers as acquirers of labor, thus promoting class interests, and sellers of goods competing with each other with interests varying according to sector, production strategy, market position, and so on (Callaghan, 2011).
- 18 In contrast with Rajan and Zingales (2003a) who show that when countries were open to foreign trade and capital, financial development took place, I put stress on the openness to foreign bank entry as a barrier to securities market development.
- 19 Civil law systems tend to have heavier regulation and favor statist solutions to economic and social problems, while common law systems regulate less and favor decentralized, market-oriented, and transparency-enhancing outcomes (Roe and Siegel, 2009: 782).
- 20 Corporatist systems of financial allocation and greater social insurance were born in the 1930s and 1940s in the midst of the Great Depression, fascism, and World War II, which increased voters' insecurity. For the historical origins of corporatism, see Perotti and Von Thadden (2006), Roe (2006), Katzenstein (1985), Streeck and Kenworthy (2005).
- 21 Nonetheless, Streeck and Kenworthy (2005: 458) recognize that the decline of centralized wage bargaining in Sweden in the early 1980s and the elimination of formal interest group representation at the board of several public agencies in the early 1990s illustrate the decline of labor inclusive corporatism.
- 22 Some scholars have underlined the importance of cultural homogeneity and societal cohesiveness for the viability of power-sharing corporatist arrangements (Campbell and Hall, 2009), while others have pointed to the dangers of the dramatically increasing proportion of non-European immigrants and the concomitant rise of anti-immigrant parties for their continuing relevance in small European states (Schwartz, 2010).
- 23 Finish stock market capitalization is high, mostly due to the very high values of market capitalization of Nokia during 1999–2001 (Allen *et al.*, 2005: 9). The Netherlands and Sweden have also experienced dramatic growth of stock markets. In Sweden, equity markets are still characterized by many cross-shareholdings that protect national champions from hostile takeover, however (Hall, 2007). While the Netherlands is highly coordinated market economy with regards to wage setting, investor-firm relations and relations among firms and their suppliers tend to be short-term and arms-length (Kenworthy, 2006: 77).
- 24 Japanese capital market is still underdeveloped if we exclude government bonds (Allen *et al.*, 2005: 13).
- 25 For excellent surveys of recent comparative research on financial systems see: Deeg (2010), Deeg and O'Sullivan (2009).
- 26 Notwithstanding, according to the OECD banking profitability database, most national banking sectors still earn more than half their income from interest, dully acknowledged by Erturk and Solari (2007: 377). More generally, Engelen and Konings (2010) recognize that the available data are inconclusive because the traditional intermediating functions of investment banks (for example, bond underwriting) also generate fee.
- 27 Among the notable outcomes of the post-1980s regulatory reforms in France were the creation of the futures market and the Second Marche of unlisted securities (Clift, 2007: 553).
- 28 In spite of intense international pressures, the German government did not support the European Union Takeover Directive in 2001, and thus successfully resisted weakening of its Co-determination Law, the centerpiece of the country's corporate governance structure (Cioffi, 2010; Callaghan, 2009).

- 29 Jurgens *et al.* cited in Callaghan (2009: 742).
- 30 Previously, Allen and Gale (2000) identified a hybrid financial system, which they call 'bank intermediated'.
- 31 Hardie *et al.* (2011) distinguish among financial systems based on the relative amounts of bank assets and market-based activities of financial intermediaries.
- 32 In contrast, foreign ownership dominates the banking sectors in the countries of East Central Europe, namely the Czech Republic, Hungary, Poland, and Slovakia, where the market share of foreign branches and subsidiaries amounts to over 70 per cent. Nolke and Vliegthart (2009) identified the type of capitalism in these countries as a *dependent market economy*, with corporate-governance practices reflecting close control on managerial decisions of local managers by Western headquarters.
- 33 Available at <http://www.arizona.edu/~lkenwor/WageCoorScores.pdf>.
- 34 Duane Swank. *The Political Economy of Developed Capitalist Democracy: An Electronic Data Base*. I am grateful to Duane Swank for generously sharing the data.
- 35 For further information see: Swank (2006).
- 36 See Armingeon *et al.* (2010).
- 37 By pointing to the importance of simultaneous trade and capital account openness for financial development, Rajan and Zingales' hypothesis (2003) contrasts with the sequencing literature, according to which trade liberalization should precede liberalization of domestic finance and capital account liberalization should be the last stage in the liberalization process (McKinnon, 1991).
- 38 Beck and Katz (1995).
- 39 Although banks may perform better than 'atomistic' markets at identifying innovative projects and enterprises, effectively monitoring managers and financial industrial expansion, banks may also acquire powerful influence over and extract rents from enterprises. Bank managers may collude with enterprises with which they have long-term, multidimensional ties against other creditors, and be reluctant to bankrupt such enterprises (Levine, 2004: 26–33).

NOTES ON CONTRIBUTOR

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APPENDIX

Table A1 Coordination of wage bargaining and financial development

	Banking sector development		Capital market development	
	Private credit by banks Model 21	Private credit by banks and nonbank financial institutions Model 22	Stock market capitalization Model 23	Stock market total value Model 24
Wage coordination	−0.014 (0.014)	−0.049*** (0.013)	−0.108*** (0.017)	−0.112*** (0.022)
GDP per capita	0.000* (0.000)	0.000*** (0.000)	0.000*** (0.000)	0.000*** (0.000)
Proportional representation	−0.000 (0.013)	0.009 (0.011)	−0.080*** (0.014)	−0.043 (0.024)
Cabinet partisanship	−0.003 (0.007)	−0.006 (0.007)	0.016* (0.008)	0.015 (0.011)
Trade openness	0.000 (0.001)	−0.000 (0.000)	0.004*** (0.001)	0.002* (0.001)
Capital openness	0.074*** (0.016)	0.078*** (0.015)	−0.025 (0.021)	−0.047 (0.030)
Inflation (log)	−0.106*** (0.027)	−0.027 (0.019)	−0.138** (0.042)	−0.112 (0.061)
Constant	0.647*** (0.110)	0.451*** (0.082)	0.458*** (0.133)	0.080 (0.189)
Observations	621	623	414	426
R-squared	0.327	0.481	0.450	0.316

Notes: Standard errors in parentheses; *p < 0.05, **p < 0.01, ***p < 0.001. All regressions are estimated using the Pooled OLS with Panel corrected standard errors.