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*The Transformation of the
European Financial System*

*Where Do We Go?
Where Should We Go?*

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Editorial

Over recent years the transformation of financial systems has been the subject of many economic, legal and political science studies. In the past, most of the theoretical and empirical literature concentrated on a separate analysis of efficiency aspects, policies and institutions. Meanwhile, an alternative view has gained importance, namely to consider economic systems as a set of complementary institutions (Hall and Soskice 2001). In this view, financial structures are but one subset of institutions governing economic activity. They are significant to the extent that considerable changes in financial structure are often alleged to set off adjustments in other institutional areas such as labor and product market institutions, affecting the degree of corporatism, industrial relations and the distribution of income, wealth and risk in the society.

This volume puts together papers discussing the positive and normative aspects of the convergence of financial systems.¹ The financial systems of many European countries have experienced some changes during the past two decades. The most obvious trends are the diffusion of financial market-based corporate governance criteria, a decrease in state ownership as well as a growing role of institutional investors. However, those changes have contrary to expectations not yet spurred a major convergence towards a financial market-based system.

In his introductory overview of the literature, *Peter Mooslechner* reviews the main findings of the recent research on the impact of financial structure on economic efficiency and discusses two broad issues: first, whether convergence towards the U.S. model will take place, and, second, whether this is desirable. The answer to both questions, he concludes, is highly uncertain depending on one's view regarding the interaction of markets and institutions. *Bruno Amable* provides an overview of financial systems' diversity. He investigates not only indicators of financial structure, but also the pattern of control (internal versus external control) and its implications for corporate governance. Looking at cross-country differences in some indicators of financial structure, he finds that the trend towards increased disintermediation - observed since the mid 1990s - can almost entirely be accounted for by the rise in share prices. Furthermore, *Amable* studies the links between financial systems and characteristics of

¹ Workshop of the Oesterreichische Nationalbank on "The Transformation of the European Financial System. Where Do We Go – Where Should We Go?", held on June 20th 2003.

political systems. He shows that partisan politics are correlated with financial systems, and he presents evidence that the political system (majoritarian versus consensus-based) is also related to the financial system. *Markus Knell* notes that the paper of Amable is part of a strand of literature that considers many determinants (law, politics, ...) of financial systems' diversity. But in principle, he adds, one could also argue that neither law nor politics may be regarded as the fundamental cause, but that culture shapes both the legal and the political structures of an economy.

Ekkehard Ernst studies the interaction of the labor and the financial markets. Cross-country differences in policies and institutions on labor and financial markets are more and more acknowledged as key drivers behind countries' performance divergence. His paper offers an empirical investigation of industry growth among OECD economies. He considers industry growth as a function of complementarities that may exist between financial and labor market institutions. Various measures of financial and labor market characteristics in 19 OECD countries are used to construct interaction terms to measure the impact of these characteristics - and their combinations - on industrial activity. A systematic relation between certain institutional combinations and the type of industry that prospers in a particular country can be found: Industries showing more needs in flexible relations with stock- and stakeholders are significantly more active in countries with a combination of dispersed ownership and flexible labor relations. On the other hand, industries in need of stable relations between various financial investors, management and the workforce can prosper better in countries displaying a combination of stable labor relations and concentrated ownership. *Jürgen Janger* comments that Ernst's finding is important, because approaches focusing on institutional complementarities have up to now provided little econometric evidence in favour of their claims, while approaches focusing on the impact of only one set of institutions on growth have provided a lot of yet inconclusive evidence. Further research is needed to link Ernst's findings on industry growth to aggregate economic growth.

Two contributions remain that are rather cautious towards the notion of institutional complementarity. One paper studies the concept from a theoretical perspective and the other one examines it by looking at a case study. *Wolfgang Streeck* argues that the concept of institutional complementarity makes demanding assumptions on the rationality of the actors and that it suggests too static a view of institutions. His point is that the extent to which one institution complements another is fundamentally uncertain. The institutions thought to be made complementary by design are themselves only vaguely defined. The environmental demands on the performance of social and economic systems are not static and in fact change in often unpredictable ways. But complementarity is not just an uncertain but also a moving target, because long-time lags make their elements less tightly coupled than functionalist theories suggest. And institutions

also depend for their performance on an unpredictably changing environment that is the ultimate arbiter as to whether or not and to what extent their institutions are complementary. Mostly actors do not have enough information to pursue institutional complementarity, and therefore tend to pursue other objectives that are less demanding on their cognitive capacities.

Helene Schuberth and *Martin Schürz* share Streeck's sceptical view about the notion of complementarity. They investigate whether financial governance modes within the U.S. financial system are coherent by studying governance mechanisms for groups of society with different resources, namely chief executive officers (CEOs) and the poor. The governance mechanisms for CEOs aim to align the interests of shareholders and managers. Rent seeking by managers is combated by efforts to strengthen social responsibility. Governance relies on fostering individualistic rent seeking behavior and on restricting such behavior by a specific social value system, which may be seen as a conflicting set of governance modes. The governance mechanisms for the poor aim at increasing the knowledge of the financial illiterate. This neither ensures sound financial behavior nor the integrity of financial institutions. Knowledge as a substitute for consumer regulation shifts the responsibility to the individual and creates the paradox of informed but powerless consumers.

These proceedings are the first among others to follow, publishing contributions to our regular workshops that bring together academics and policy makers addressing key policy challenges. The workshop on "The Transformation of the European Financial System" is the fourth of a series of workshops dealing with issues of financial markets and the macroeconomy.² We hope these proceedings will contribute to a better understanding of the mechanisms linking financial structures to other institutional features of economies. With this broader interdisciplinary perspective going beyond the narrow research focus of the economics profession we also hope to have provided some new insights regarding convergence of financial systems in Europe.

Helene Schuberth

Martin Schürz

Hall, P.A. and D.W. Soskice (eds.) (2001), 'Varieties of Capitalism. The Institutional Foundations of Comparative Advantage', Oxford: Oxford University Press.

² 'Aspects of the Transmission of Monetary Policy', November 9, 2001 (published in OeNB Focus on Austria 3-4/2001); 'Pension Finance Reform: From Public to Financial Economics', December 6, 2002 (published in OeNB Focus on Austria 2/2003) and 'Finance for Growth', January, 27, 2003 (published in OeNB Focus on Austria 1/2003).

The Transformation of the European Financial System – A Brief Introduction to Issues and Literature

Peter Mooslechner

1. Introduction

At the end of the 1980s, given the long-term success of Japan and Europe in catching up with the United States in terms of GDP per capita, the question which model of capitalism has a comparative competitive advantage was clearly answered in favour of the former. Europe and Japan were praised for their specific modes of institutional arrangements combining the merits of long-term relationships between banks and lenders in investment financing with cooperative industrial relations that encouraged the accumulation of skills necessary for manufacturing competitiveness. In the U.S. the lack of cooperative industrial relations together with arms length financing was held responsible for discouraging long-term investment and finally inhibiting skills upgrading, resulting in a decline in U.S. industrial competitiveness.

About a decade later only, this assessment has been completely reversed. At the turn of the millennium the same institutional features that were held responsible for loss in competitiveness in the U.S. in the past were seen as the world best practice: Today it seems commonly acknowledged, that elements like flexible labor markets, shareholder value and strong incentive mechanisms led the foundation for the strongly growing ‘knowledge based’ new economy of the 90s. The Japanese economy on the other hand experienced a decade of stagnating growth with signs of ‘crony’ capitalism and institutions in Europe were all of a sudden considered inadequate in a period where technological innovation plays a decisive role.

But how can the mechanisms linking institutions, economic policy and growth change so dramatically and in such a short period of time leading to such a spectacular alteration in expert’s assessment? The usual response is perhaps that globalisation with its increased pressure for homogenization set off by the removal of barriers to trade and capital accomplished by the end of the 1980s brought about the necessity of transformations of institutions towards the U.S. style. But if convergence is in fact an inevitable requirement why do we not

observe clear signs of convergence, but instead a wide variety of different institutional responses in individual European countries (Amable 2003), where some adopt U.S. style institutions in some areas and others don't. Is it because 'incumbents' are inhibiting needed change (Rajan and Zingales 2003), as emphasised by some proponents in the literature? Or is it that institutions will adapt in a way to preserve institutional comparative advantage (Hall and Soskice 2001) which – given the varieties of capitalism prevailing (Amable 2003) – will not necessarily imply convergence towards the U.S. model but idiosyncratic country-level path-dependence. This implies that different institutional arrangements are conducive to similar macroeconomic performance. This view however rests on the idealized assumption that institutional arrangements are designed and are changed to increase economic efficiency, a view that for instance does not account for the frequently observed phenomenon of institutional change stemming from unintended consequences of actor's decisions (Streeck 2000).

The structure of the European bank-based system has been and is subject to several reform initiatives at the European and national level. While the focus of economist's research is to comparatively study the main determinants and impacts of different financial structures on economic efficiency, proponents of Varieties of Capitalism (VOC), a strand of comparative political economy literature, argue that policy initiatives to transform the European bank-based financial system towards the blueprint of more sophisticated U.S. financial markets might sequentially prompt institutional change in other complementary areas as well, ranging from industrial relations to vocational training (Hall and Soskice 2001). Whether this is an unintended consequence, anticipated or even intended is very much open to debate. However, in this view prevailing systems of financial and corporate governance do not exist in isolation but appear to be related to other key institutional features of the economies, including the degree of corporatism, social security and distribution of income, wealth and risk in the society. Hence, to avoid unintended consequences and to understand the driving forces of the transformation of the European financial system requires looking beyond the narrow research focus of economics. This may help to get more comprehensive insights regarding two broad issues:

- *First*, will the European financial system converge towards the U.S. style model?
- *Second*, as convergence, if it takes place, is not an inevitable outcome of market pressure but also an explicit or implicit expression of political choices (Boyer 2000), whether such convergence is desirable.

Regarding the later issue, the controversy about whether Europe should move towards a more market-based system is dominated by economist's views about the relative advantages of the financial structures promoting allocative efficiency, macroeconomic growth and, more recently, stabilisation. Here,

possible interaction effects among institutions are ignored. Hence, the VOC literature argues that the transformation of the financial system in Europe should not only be assessed against its implications on economic efficiency. This short introduction tries to summarize and to assess the recent findings of the literature in this respect.

Whether convergence will take place, the second issue that will be evaluated, is controversial. While proponents of the convergence hypothesis conjecture that regulatory reforms as for instance the introduction of fully funded pension schemes and initiatives at the European level such as the Financial Services Action Plan of the European Commission will unleash its full impact with some time lag in the next future others point to path dependency (Schmidt et al. 2002) or, in the case of Germany, to a hybridization process where the old path is transformed to a new one in an evolutionary way (Deeg 2001).

The paper starts by reviewing the recent literature on the impact of financial structure on economic efficiency and concludes that restricting the analysis on indicators of economic efficiency might probably be a too narrow approach given that other factors might also be an important source of welfare (Section 2). Section 3 discusses the hypothesis of institutional complementarities and the fundamental role of the financial system within this approach. As both questions raise the issue whether convergence will take place, and if it is desirable at all, are closely related to the nexus of financial structure and distribution of income and wealth four transmission channels of how the financial system might impact wealth and income distribution are discussed (Section 4). Section 5 gives an indication of the changes in financial and corporate regulation and financial structure that were observable throughout the last two decades in Europe. The paper closes by illustrating some likely prospects of the transformation of the European financial system.

2. Financial Structure and Economic Efficiency

Over the last decade, the economics profession's view of the relationship between financial development and economic growth has shifted fundamentally from one of neglect to the view that finance, by changing either the productivity of capital, the savings rate or the efficiency of financial systems (Pagano 1993), exerts a significant influence on economic growth - a view previously shared by economic historians comparatively investigating growth experiences of

countries.¹ A different strand of literature studying historical episodes of financial crises however reveal that under specific circumstances financial deepness might be associated with financial fragility and vulnerability to crises. Whereas the impact of finance on economic growth has been studied extensively both theoretically and empirically, there is little empirical evidence that relates financial deepness to the degree of cyclical volatility²

Even more surprising is our modest knowledge with respect to the mechanisms relating differences in financial structure that range from bank-based to more market-based systems to measures of economic efficiency, given the fact that the paradigm of financial liberalisation promoting market based systems was widely accepted before there was empirical evidence to relate it to economic efficiency (Wachtel 2001). There is a high degree of diversity in opinion in the existing literature which is by and large theoretical. These opinions range from the view that the specific type of the financial system is not important for explaining differential growth rates across countries, as supported by Levine's (2000) and Demirgüç-Kunt and Levine's (2001) empirical findings, to the view that either bank-based or market based financial systems are better suited to promote long-run growth. In general, these empirical findings have to be treated with caution as important institutional coherences might be ignored. If institutional features such as product and labor market regulation, industrial relations, welfare state arrangements, education and financial structure help to build up positive interactions, any growth regression should account for institutional complementarities.

Proponents of the market based view mainly concentrate on three arguments: First, financial markets may avoid the problems generated by powerful banks in exercising corporate control, as financial intermediaries may, in using inside information, extract rents from the firms and collude with managers against outsiders which in turn inhibits competition and long run growth. Corporate control by financial markets is mainly exercised by facilitating hostile takeovers, and by structuring compensation such as stock options.

Second, banks are supposed to be biased towards financing low-risk projects that are generally low return investments, as in the bank-based systems only a few managers decide whether funding of a project is worthwhile and funding of new technologies is less likely since future returns are highly uncertain. Allen and Gale (2000) argue that financial markets have considerable advantages in financing new projects, such as biotechnology, where little information is available and diversity of opinion prevails. In this situation financial markets

¹ For an overview see Rousseau and Sylla 2001.

² For exceptions see Beck et al. (2001), Hahn (2003), Kaufmann and Valderrama (2004).

involve many potential investors in making investment decisions and at least some innovative projects are likely to be financed.

Third, financial markets are better suited in providing cross-sectional risk sharing by providing a vast range of financial products. At any point in time individuals can diversify their portfolio of assets. While financial markets have a comparative advantage in facilitating cross sectional risk sharing, the capability of diversifying aggregate risk across time, such as macroeconomic shocks is considered as one of the main advantages of bank based systems (Allen and Gale 1997 and Levine 2000). Such inter-temporal risk sharing requires that large reserves are accumulated in lower return safe assets which can only be made available by banks, since financial markets are continually adjusting their portfolio to receive the highest yield. By disposing over a large amount of safe assets banks may dampen aggregate shocks through a system of endogenous buffers. However, the bank's capability of providing intertemporal risk sharing is increasingly restricted by competition from financial markets (Allen and Gale 2000).

Another set of arguments in favour of bank based systems relates to corporate control: First, advocates of a bank-based system argue that fragmented ownership and liquidity of financial markets where investors can readily sell shares might inhibit efficient corporate control. Furthermore financial markets tend to underinvest in acquiring information on investment projects to be funded. This is attributed to a free-rider problem, which consists in this case of the fact that financial markets constantly reveal information in the public which provides investors with less incentive to acquire information by themselves. Thus, identification of innovative investment projects might be inhibited (Boot et al. 1993). This free-rider problem is less severe in bank-based systems as far as loans are not traded. Finally, the delegation of the costly process to screen investment projects to intermediaries saves transaction costs as duplication of information acquisition is avoided.

The empirical support for either of the two hypotheses, the market-based and the bank-based view based on cross-country studies using macroeconomic data is inconclusive and studies can be found promoting either the market-based view for countries with developed financial sectors (Tadesse 2002) or the bank-based view (Arestis et al. 2001). A more recent strand of empirical literature relating measures of financial development to economic growth in industries (Rajan and Zingales 1998) find that financial development disproportionately affects growth in industries that are more dependent on external finance. Carlin and Mayer (1999) establish a positive correlation between market-based finance and legal protection with the growth of equity-financed and skill-intensive industries, and particularly with investment in research and development. These findings indirectly support the view that financial markets and banks are complementary and foster growth in industries with different technological features. In this line

of reasoning Allen and Gale (2000) develop the argument that banks have a comparative advantage in funding firms belonging to traditional sectors, while financial markets are better suited to finance new technologies in high-risk sectors.

In general, research on the impact of financial structure on measures of economic efficiency is at an early stage. However, as a general result it seems that similar growth rates across countries are compatible with different financial structures and it is the degree of financial deepness that seems to matter for growth. Most of the literature discusses the impact of financial structures on economic growth, while little is known on how different financial structures affect the propagation mechanism of real and monetary disturbances. Hence, the open issue remains which financial system might be better capable of smoothing business cycles. Even more surprising is the modest knowledge about how income and wealth distribution are interrelated with financial structure, given the fact that not only economic efficiency but also equity is a major source of welfare and - at least from descriptive statistics - it is clearly visible that countries with arms' length financing having higher income and wealth inequality.

3. Financial Structure as Part of a Countries Institutional Framework

Different models of market economies are constituted by a broad set of complementary and mutually reinforcing institutions such as industrial relations, innovation and training system as well as financial structure (Hall and Soskice 2001). Changes in the financial system which occupies a central position within the mutually reinforcing institutional complex of the economies should thus have significant consequences for the non-financial sector as well.

The great variety of financial systems across different countries of the industrialised world ranges from, at the one extreme, market-based financial systems where financial markets play a decisive role and banks are much less significant in savings allocation, and, at the other extreme, bank-based financial systems where banks are dominating and financial markets are playing a minor role, the financial systems in place representing combinations of these two polar cases. The binary classification between market- and bank-based financial systems implies that those countries that cannot be clustered along this

dichotomy are categorized as intermediate cases.³ Hence, other authors have considered additional dimensions along which economies can be differentiated and distinguish three (Schmidt 2002) or five models (Amable 2003).

According to Hall and Soskice (2001) more bank-based financial systems are an integral part of coordinated market economies (CMEs).⁴ In their analysis the role of financial systems in these economies is restricted to the function of exercising corporate control which is provided by banks. Since banks are capable to diversify aggregate risk over time (Allen and Gale 2000) the main focus of their monitoring function is on the long-term profitability prospects of the firm and less on short-term profit. Hence, the corporate governance system partly shields financing conditions from variability in firm's profits. This concurrently allows the firms to offer long-term employment contracts, to retain a skilled workforce through economic downturns and to invest in projects generating returns mainly in the long run. Monitoring the performance of firms requires private or inside information which reinforces dense business networks linking managers of banks and firms (through for instance cross-shareholding) and business associations. Availability of a labor force with high industry and firm-specific skills is more conducive to a specific production regime that favours incremental innovation as compared to radical innovation.

In CMEs business association are supportive to coordinated industrial relations. By equalizing wages at equivalent skill levels across an industry the poaching of skilled workers by other firms becomes less likely. Hence, the production strategies that depend on high skill levels and corporate commitment which is secured by long-term employment rely on corporate governance mechanisms that assure financing independent of short-term profitability considerations.

In contrast, governance mechanisms in Liberal Market Economies (LMEs)⁵ encourage firms to be attentive to current earnings and to their share price. Monitoring is exercised through fragmented shareholders and information is provided publicly, hence, there is a lack of business networks providing investors with inside information. Industrial relations are organised through the market and firms do not engage in securing long-term employment. Flexible labor markets are congruent with an education and training system that relies on

³ Among the OECD countries, six take a more ambiguous position (France, Italy, Spain, Portugal, Greece and Turkey).

⁴ Among the OECD countries, ten are classified as CMEs (Germany, Japan, Switzerland, the Netherlands, Belgium, Sweden, Norway, Denmark, Finland, and Austria).

⁵ United States, Britain, Australia, Canada, New Zealand and Ireland are classified as LMEs.

general skills. Given short tenure and threat of poaching of employees by competitors, firms less invest in industry specific skills. Hence, weak employment protection and poor welfare state arrangements discourage investment in industry specific skills which would rapidly devalue in case of structural change and favour industry Specialization which more relies on general skills.

If complementarities are important a change in one institutional pattern will set in motion changes in other institutional subsystems, the speed and intensity of adjustment depending on the tightness of the coupling among these institutions. Deregulation of financial markets might put pressure on firms to increase short-term profitability which in turn eradicates corporatist arrangements between social partners concerning long-term employment, wage setting and investment in firm-specific skills. In this view a change in one subsystem results in instability and loss in comparative institutional advantage which puts pressure to adapt and reorganise the other institutional subsystems to rearrange a set of subsystems that is again coherent. However, how does this hypothesis tie in with the observation that the major reforms of corporate governance introducing Anglo-Saxon governance modes were implemented by centre left governments? (Amable 2003). Were the left parties simply unaware of the consequences such policy might entail for their clientele? Or is it an indication that complementarities are much loser than hypothesized or even nonexistent? The latter view is supported by Höpner (2003) who provides some appealing explanations of this ‘paradox’ at the background of the German experience. He also conjectures that in Germany there is indication of a new form of hybrid convergence evolving where Anglo-Saxon corporate governance modes coexist with strongly unionized industrial relations and codetermination.

4. Financial Structure and Distribution of Wealth and Income

Table 1 reports the Gini coefficients for two groupings of countries showing that bank-based economies in general have a more equal income distribution than market-based systems. The Gini coefficients of the countries that are classified as more bank-based vary from 0,247 to 0,266, while those that are categorized as market based had a much higher Gini coefficient, ranging from 0.311 in Australia to 0.368 in the United States.

Table 1: Income Inequality in Selected Countries

<i>Country</i>	<i>Year</i>	<i>Gini Coefficient</i>
Coordinated Market Economies		
Finland	2000	0,247
Germany	2000	0,252
Sweden	2000	0,252
Denmark	1997	0,257
Austria	1997	0,266
Liberal Market Economies		
Australia	1994	0,311
Ireland	1996	0,325
U.K.	1999	0,345
U.S.	2000	0,368

Source: Luxembourg Income Study Key Figures (www.lisproject.org/keyfigures/).

One might think of at least four different channels of how the financial structure might impact distribution of income and wealth. First, a direct and most dominant channel is the way how corporate governance modes have an impact on resource allocation among stakeholders and shareholders. Increased shareholder value restricts the capability to transfer resources from profitable sectors to less profitable ones. In an established market for corporate control the increased account of short-term profitability in an attempt to increase the return on equity will distribute income from stakeholders to shareholders (De Jong 1997). Using financial data on fifty-nine large German companies, Beyer and Hassel (2002) for instance show that the newly adopting Anglo-Saxon standards on corporate governance had a significant impact on the distribution of net value added. While supporters of an active market for corporate control claim that takeovers will direct corporate assets to more efficient uses, Shleifer and Summers (1988) argued that shareholders' gains less result from increased efficiency but from the ability of managers to breach the 'implicit contracts' of stakeholders. As employment perspectives of employees with industry-specific skills are not adequately protected by law, they are vulnerable to a 'breach of trust' that aims at distributing wealth to shareholders at the expense of long-term performance of the firm. The 'breach of trust' hypothesis is also supported by Deakin et al. (2002).

A second closely related channel through which financial structure impacts income and wealth distribution can be derived from the idea of institutional complementarities according to which convergence towards a market based financial system should change industrial relations and the way how conflicts of

interests between social partners are orchestrated. Centralized and coordinated wage bargaining as practiced by Scandinavian economies and Austria allows for more equal distribution of income which should change with more competitive industrial relations. Third, secondary distribution of income is also affected as the shareholder value has an impact on how risk sharing is organised in society. Fourth and closely related to the last two points is the role of hegemony of ideas in creating shareholder value and exerting a negative impact on income distribution. The latter is the most indirect but nevertheless not less important transmission channel. It is commonly acknowledged that differences between the U.S. American and European models of the firm reflect strong different cultural value preferences (Salacuse 2002). Europe's emphasis on social solidarity is in contrast to U.S. American cultural value which accord the individual wealthholder a dominant role. With regard to the corporation, the law considers individual shareholders as the firms' owners who are legally entitled to all its fruits. In this respect, concerns have been expressed that the replacement of the European system of corporate governance by the U.S. American will eradicate the European value system in general and make the principle of social solidarity less acceptable in society.

Those transmission channels establish possible links between financial structure and income distribution where causality runs from the first to the latter. Conversely, the level of income inequality might also have an impact on whether a financial system is more market or bank based (Vitols 2004) as different income groups demand different types of financial assets. This is well documented by a survey regularly conducted by the Federal Reserve Board (2003) which indicates that about 90 percent of the top 10% households in terms of income level have direct or indirect stock holdings, the latter including mutual funds, retirement accounts, and other managed assets, while the respective figure for the bottom 20 percent is 12.4%. One might argue that bank-based systems are better supported by risk-averse household sectors with lower income inequality. The fact that for instance German households' willingness to invest in risky assets is still limited may be attributed to the relatively low income inequality. According to Vitols (2004), a more unequal income distribution together with a further reform of the pension system to encourage more private retirement savings are major prerequisites for a major shift towards a market based system.

5. Some Recent Changes in the Financial Structure of the Euro Area

Over the last two decades major European countries carried out substantial

regulatory changes promoting more market based financing, for example in the field of pension systems and corporate governance. As reported by Shinn (2001) almost all European countries included in his sample surveyed (Belgium, France, Germany, Italy, the Netherlands and Spain) have adopted features of the Anglo-American governance model in the 1990s except for the takeover legislation. In addition a major impetus to strengthen the role of equity finance originated in the privatization programs aimed at reducing the Maastricht debt ratios and to cut back the role of the state. However, the scope and timing of regulatory reforms was placed differently across countries.

The most far reaching regulatory change took place in France. It started to deregulate the banking system in the 1980s by abolishing interest rate ceilings, introduced futures markets and liberalised the Stock Exchange. The sizable privatization of French industry and banks, reforms of the governance systems and the introduction of a fully funded pension system were associated with a deepening of financial markets.

Germany has introduced the most important reform measures directly and indirectly promoting financial markets since the 1990s. Those include the initiative Finanzplatz Deutschland, measures for promoting the new economy, in particular public subsidies for venture capital, a pension reform in 2002 that shifts the balance away from the state pension towards the firm and individual pillars, and several initiatives to reform the corporate governance practices improving the quality of investor protection. By introducing stock option schemes for top managers previously unknown in Germany and adapting accounting rules towards U.S. standards large German firms increasingly oriented themselves towards the shareholder value. The German control and transparency law (KonTraG) of 1998 introduced another set of Anglo-Saxon corporate governance modes, such as the protection of minority shareholders and international accounting standards. In an effort to dissolve the common practice of cross-shareholdings, a major impediment to the development of market-based finance as it makes outsiders' investment more difficult to assess, a tax reform in 2000 abolished capital-gains taxes on the liquidation of those shareholdings, herewith loosening the ties between the firms and the banks. This increased the vulnerability of German firms to resist hostile take-overs, as denoted by the hostile takeover attempt of Thyssen by Krupp. Awareness of weakness of German firms to withstand hostile takeovers favoured a broad coalition against the European anti-takeover directive initiated by the European Commission that should facilitate takeovers and in general should make firms more sensitive to shareholders – at the expense of stakeholders – interests. The German takeover law adopted in 2002 contains almost all of the elements of the EU directive but tries to balance improved investor protection and continuing significance of stakeholder's interests (Hackethal et al. 2003).

Given the substantial changes in the regulatory system the question arises

how significant these changes have been for the financial structures. Interestingly, the few studies investigating whether throughout the last two decades, changes in financial structure indicate convergence towards arm's length financing, do not find any substantial convergence towards the U.S. model, an exception being Rajan and Zingales (2003). For the period 1980-1998 Schmidt et al. (2002) - by studying National Accounts Data for Germany, Great Britain and France, Japan and the United States - find no general trend toward disintermediation for the European countries with the exception of France where there has been a persistent move away from banks towards financial markets which reflects the consciously intended policy by the French state to create a reorganised financial sector based on the Anglo-Saxon model. Hackethal and Schmidt (2004) provide interesting historical information for the period of 1970 to 2000 on corporate financing of Germany in comparison with Japan and the United States. In Germany and Japan, banks were by far the most important source of corporate finance. In both countries bank financing in percent of the volume of long-term external corporate finance maintained its share at constant levels between 70% and 80%, while the contribution of U.S. banks declined from 22% to 14%. Equity and corporate bond financing only slightly increased to 18% in Germany and 17% in Japan while the upward trend was much more pronounced in the United States moving up from 36% to 53% between 1970 and 2000. While in Germany, small and medium-sized firms still rely on bank financing large firms however have become less dependent on this source of finance, while especially large banks seem to reduce their corporate lending activities (Hackethal et al. 2003) which might stimulate those banks to reduce active involvement in corporate governance in the future. In France, the share of bank loan financing has decreased for all firm size classes. Similar qualitative results have been obtained by Hartmann et al. (2003) for the period 1995 to 2001 in the euro area.⁶ The major change they identify is an unprecedented boom in corporate bond financing, partly unleashed by the introduction of the euro and to some extent by the liberalization of telecommunications business and merger and acquisition activities.

Furthermore, privatization policy implemented by several euro area governments was the main explanatory factor behind increased market capitalization of euro-area stock exchanges. When correcting for price increases annual growth rate of market capitalization between 1998 and 2001 was even higher than in the U.S. and in Japan but this trend partly reversed in 2001 and 2002. However Hartmann et al. (2003) conclude that both the bond market boom

⁶ This study partly relies on a report by the ECB (2002) on financial structures compiling data provided by national central banks.

and some growth in equity finance have not led to a noteworthy shift to arm's length financing. Surprisingly, they find that since the mid of the 1990s financial structures have been diverging across euro area countries except for bond market financing.

To sum up the financial structure indicators looked at in isolation do not signal fundamental change in financial structure. Whether this holds true from a systemic perspective, whether those European countries that traditionally were considered stakeholder-oriented insider control systems combining different institutional characteristics in a complementary way, can still be categorized as such is rather unclear? In Germany, for instance, the stakeholder system of corporate governance seems to be intact. The role of codetermination, the representation of trade unions in the supervisory boards, which constitutes an important element of the stakeholder-oriented insider control system, has even been strengthened in 2001. On the other hand there is evidence of reduced involvement of large banks in corporate governance (Hackethal et al. 2003).

6. Any Convergence of Financial Systems in the Future?

In reviewing recent developments in corporate governance in the European Union a number of authors take contrasting views concerning the issue of future convergence of financial structures. From a neo-institutionalist perspective (Williamson 1985) convergence is seen as an inevitable result of rational micro-behavior when adopting most efficient best practice standards. As single market measures continue to take effect this will lead to gradual convergence of financial structures towards U.S. modes. Conversely, the 'institutional complementarity thesis' theoretically underpins the possibility of plurality of models, each corresponding to local and national circumstances (Hall and Soskice 2001). Within this broader perspective, financial structures are not analysed in isolation but as one subsystem among several complementary institutions, while the various sets of institutions form the basis of comparative institutional advantage. Change in the direction of U.S. standards might also be inhibited by political factors, such as local vested interests repressing arm's length financing, as stressed by Rajan and Zingales (2003). A different view establishing obstacles to further rapid convergence is put forward by La Porta et al. (1998) who stress the important role of the legal tradition in explaining current persisting diversities in financial structures. While common law countries, in protecting private property rights, developed well-functioning financial markets, countries with a civil law tradition that promoted a stronger role of the state to interfere with the financial system are – according to this view - inherently less dynamic in adapting to new conditions. While the literature is usually inclined to discuss dichotomies, some authors pointed towards the

likelihood of hybrid convergence taking place (Hackethal et al. 2003). Hence, as concluded by Reberioux (2002): “The outcome of the confrontation between two competing trends, the affirmation of the European model of corporate governance and the spreading of shareholder value, is highly uncertain.”

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An Overview of Financial Systems' Diversity

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Introduction

The analysis of the transformation of financial systems in developed countries has been the subject of many recent studies. Although a large diversity of financial systems was commonly observed, the central question became that of a hypothetical convergence towards the same model under various influences more or less linked to globalization. Going against commonly-held views, Schmidt, Hackethal and Tyrell (2002) show that the expected convergence of financial systems in Europe did not take place in the period prior to the introduction of the Euro. The question of diversity or convergence is not limited to the financial sector and the issue may be thought in a wider context of variety of capitalism (Hall and Soskice, 2001). The evolution of the financial sector would be a particular aspect of the transformation of economic systems that would lead all societies towards the model of a Liberal Market Economy (LME). The financial sector may have an important role to play in the transformation of these societies if one considers economic systems as a set of complementary institutions (Aoki, 2001). In this perspective, changes in the structure of financing and corporate governance of firms in Coordinated Market Economies (CME) could set off a series of transformations in other institutional areas and drastically modify the complementarities between institutions, leading former CME on the path towards the adoption of institutions characterizing LME. Such a 'sparking' role is sometimes attributed to the transformations affecting financial institutions in general and corporate governance in particular.

The issue of diversity, either among varieties of capitalism or financial systems, is often thought in dichotomous terms. One finds several dichotomies in the literature, which partly overlap with each other. Hicks (1974) distinguished two types of firms with differentiated financing needs: firms in the autonomy sector and firms in the overdraft sector. In the former, firms hold reserve financial assets; in the latter, they do not hold enough liquid assets and borrow, mainly from banks. A generalization of this dichotomy opposes financial markets-based to bank-based systems. This differentiation is not limited to the main source of firms' funding but also involves the relationship between the firm and its

financiers (Allen and Gale, 2000). Market-based systems are associated with arm's length finance, whereas bank-based systems may favor more or less long-term relationships, which may be instrumental in promoting cooperative behavior between the firm and its financiers and discourage morally hazardous behavior. Close relationships between banks and firms may help solving information-related problems, such as with the Japanese main bank system or with the German *Hausbank*. By contrast, financial markets are better at imposing a 'hard budget constraint' on firms and maintaining a commitment to refuse further funding to firms in case of default.¹ This may act as ex-ante incentives for the firm and prevent managers from investing in too risky projects; this bias may however not be socially optimal if it puts too high a 'short-termist' pressure on firms. Financial systems also share risks, and the most common view is probably that financial markets do a better job than banks in this respect, because they favor liquidity and reversibility of commitments for savers. However, Allen and Gale (2000) point out that financial markets also create risks through changes in assets value. Furthermore, some risks cannot be diversified at a given point in time, but averaged over time so that their impact on intertemporal welfare is reduced. Allen and Gale (2000) show that bank-based and financial markets-based systems have very different abilities at intertemporal risk smoothing. The former are much better as long as they are not under competitive pressure from the latter. Intertemporal risk-smoothing is much better provided by long-lived institutions accumulating reserves over time. But these intermediaries are fragile because individuals are likely to choose markets in good times, when the accumulation of reserves may not benefit them. Financial markets are on the other hand better at insuring against cross-sectional risks.

Countries also differ with respect to the type of corporate governance: whether managers have a strong incentive to act in the shareholders' interest (fiduciary duty), the channels through which shareholders monitor and influence managers, the type of election for the board of directors (whether it is one share one vote or not...), the number of external directors, etc. The market for corporate control, as a means of disciplining management and replacing it if the firm does not pursue a policy in the shareholders' interest, is more or less active according to countries. It may operate through various means, such as friendly mergers or hostile takeovers. The latter are more or less facilitated by the existing legal framework, which may authorise the implementation of various measures by the management in order to resist the takeover. Cross-shareholding for instance makes success of a takeover much more hazardous. Roe (1993)

¹ Dewatripont and Maskin (1995).

showed how the US model of corporate governance emerged from a specific legal and law-making tradition prone to limiting the activities of banks under populist pressures, privileging managerial over workers rights, and taxing the dividends obtained from cross-holding of shares. This does not mean that US corporations are necessarily easy preys in takeover attempts. There are other ways to resist takeovers, such as minority shareholders protection and explicit anti-takeover rules. In most American states, corporate law allows the board of directors to fight off hostile takeovers. This is what Mayer (2001) calls a 'market control bias', by opposition to a 'private control bias' stemming from weak minority protection and leverage control devices such as in Germany: dual-class shares, pyramids² and non-voting shares allow dominant investors to retain control as outside ownership comes in. The legal framework in the US also privileged competition over coordination by specifying tight constraints on collaborative arrangements between firms in the same industry. In Germany and Japan on the other hand, different banking, labor, and competition regulations supported models of corporate governance that facilitated regular interactions between owners and managers and extensive collaborative ties between financial institutions and firms or between firms themselves.³ Therefore, the principles of corporate governance are different on each side of the Atlantic and rest on different political economy equilibriums.⁴ In the US, agency costs relative to the separation between management and ownership⁵ are controlled by specific institutions and organizations: independent and active boards, incentive compensation of managers, an active market for corporate control, securities markets signaling from financial analysts, competitive capital and product markets etc. On the other hand, in most European countries, more rigid labor markets make it more difficult to lay-off workers, diminishing incentives for mergers and takeovers, boards are less active and effective, etc.

La Porta et al. (1997), (1998), (2000a, 2000b) have stressed the importance of legal determinants in the structure of financial systems and their differences across countries. Legal systems differ with respect to the extent of protection given to shareholders and creditors. This will have an impact on firms' financing, ownership structure and governance. They make a distinction between countries where common law predominates (the UK and the US for instance) from countries where civil law prevails (France, Germany and Scandinavian

² Pyramids are structures in which a holding company controlled by an entrepreneur issues shares in a subsidiary that it itself controls.

³ Roe (2001).

⁴ Roe (2000).

⁵ Berle and Means (1932).

countries). Civil law systems give weaker legal rights than common law systems, where shareholders and creditors' rights are stronger. However, the quality of enforcement of legal rules is highest in Scandinavian and German civil-law systems. An important point is that substitutes of legal protection have been developed in systems where there is more risk of appropriation by managers. There, investors require powerful mechanisms for exercising control through holding large ownership stakes in companies and exerting voting power that is disproportionate to the amount invested in firms. Concentrated ownership is a means to prevent the abuse of minority shareholders' rights when legal protection is weak, and acts as a monitoring device. Blockholders and private owners have means and motivation to monitor managers, dispersed shareholders in a 'Berle and Means' corporation have not. There is a free rider problem associated with dispersed ownership. No single shareholder has an incentive to incur costs for actively monitoring the firm. On the other hand, shareholders with a significant wealth commitment have such an incentive, so that the firm's value may increase with the concentration of ownership. Banks may play such a role, but there is a specific risk attached to this configuration. Acquiring information about the firm, banks may use it in order to extract rents. For Hellwig (1998), there is also a risk of collusion between banks and management, at the expense of outside owners. Blockholding may persist on the continent because managerial agency costs are potentially higher there and stockholders have no other alternatives to monitor managers. In countries where investors' rights are well protected, firms' ownership tends to be widely held whereas the reverse is true when investors' protection is low: shareholders control large blocks of shares, or companies are controlled by a single family or the state. On the other hand, a high level of creditors and shareholders rights favors the development of capital markets, which in turns fosters the dissemination of ownership. In addition, firms in common law countries pay more dividends than firms in civil law countries.

The present article does not aim at assessing all the changes taking place in financial systems and corporate governance in modern developed economies. It gives a broad overview of the diversity of systems and some indications of the current trends. The first section will treat the issue of diversity of systems from the point of view of funding sources. The next section will concentrate on the diversity of systems of governance, using the data gathered by La Porta et al. The third section will follow the inspiration of Roe (2003) and consider the links between financial systems, politics and political systems. The fourth section will conclude by presenting the recent evolution of financial systems in France and Germany.

1. Financing Structures of Non-Financial Firms

The differences between archetypal financial systems are sometimes mentioned in terms of the sources of financing of non financial firms. In the ideal market-based model, firms are supposed to benefit from an easy access to market finance and are expected to obtain most of their external financing from this supposedly cheaper source rather than from intermediated finance. On the other hand, underdevelopment of financial markets in bank-based systems prevent firms from having direct access to finance, hence, they must resort to bank credit as the main source of funds. The convergence hypothesis would then imply an increase in the share of direct finance in firms' funding pattern and a correlated decrease of intermediated funding.

Rajan and Zingales (1995) used (listed) firms' data and their results only partly confirmed common wisdom about the differences between market-based and bank-based systems. They showed that Germany, a typical bank-based financial system, was characterised by a low ratio debt/capital (0.20 in 1982; 0.16 in 1991) i.e. lower than the UK (resp. 0.19 and 0.24) or the US (0.29 and 0.37), which are market-based systems. Criticism addressed to Rajan and Zingales (1995)'s results concern the limitation to large listed firms in their sample. Other studies, including both large listed and small non listed companies in their sample deliver less clear results about the special position of Germany; the results of Rajan and Zingales may be due to a selection bias in their sample. Sauvé and Scheuer (1999) have shown that German SMEs are characterised by a strong share of bank credits in their funding, whereas larger firms tend to depend more upon their own internal sources of funds.

The source of funds may also be looked at using macroeconomic data from National accounts. The figures of Table 1 confirm a well-known result (Mayer, 1988), i.e. that the main source of non financial firms' funding is retained earnings, irrespective of the market-based or bank-based nature of the financial system. The sources of *net* financing of the non financial sector are computed from national accounts data, averaged over a period of over two decades. Several aspects may be mentioned. First, shares represent a small source of funds in all countries, and contribute negatively to firms' funding in countries that belong to the market-based club, i.e. the US and the UK. This negative contribution is usually due to firms buying back their own shares. Paradoxically, shares contribute the most in Italy, which is far from being considered as a market-based financial system. Second, retained earnings are the main funding source in all countries, and particularly in market-based countries. Third, bank credit is not a more significant source of funds in a bank-based country such as Germany, than in a market-based country, such as the United States, which confirms the results obtained with microeconomic data.

Table 1: Net Financing Structure (%) of Non-Financial Firms

	United States ⁴	Japan ⁴	Germany ⁴	UK ⁴	Italy ⁴	France ¹	Netherlands ²	Sweden ³
Retained earnings	96,1	69,9	78,9	93,3	59,5	72,8	106,9	77
Shares	-7,6	3,5	0,1	-4,6	11,5	5,4	-6,2	-3
Bank credits	11,1	26,7	11,9	14,6	30,1	25,7	17,5	50,4
Bonds	15,4	4	-1	4,2	-3,4	3,2	0,7	-12,8
Other sources	-15	-4,1	10,1	-7,5	2,3	-7,1	-18,9	-11,6

Sources: United States, Japan, Germany, United Kingdom: Corbett and Jenkinson (1997), Italy: Cobham, Cosci and Mattesini (1999), France, Netherlands, Sweden: computations from OCDE National Accounts.

¹ 1970-1996

² 1985-1996

³ 1980-1996

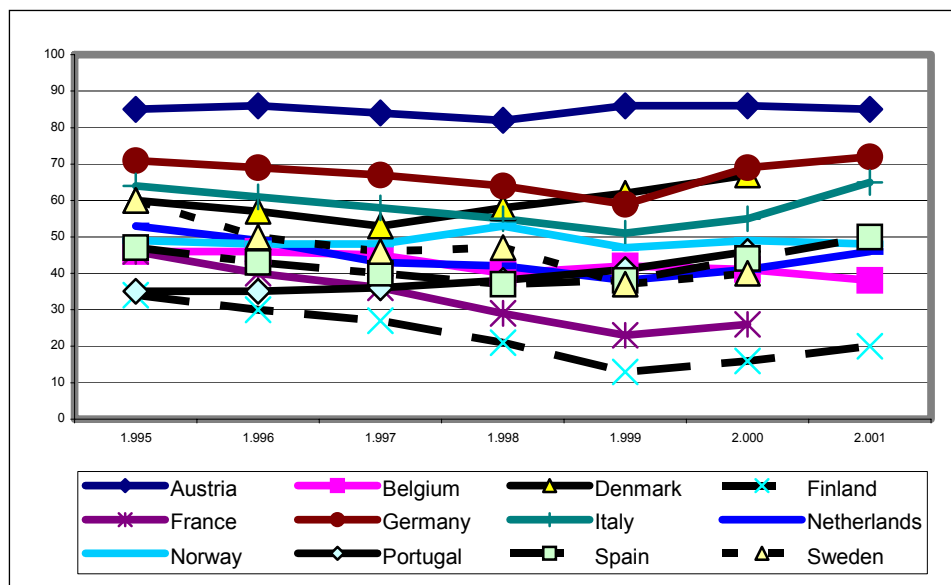
⁴ 1970-1994

But this approach for assessing the respective weights of financing sources has been criticised by Hackethal and Schmidt (2004). Most comparative studies of financing pattern are based on net flows of funds. This method implies that new external funds such as bank loans are first used to repay any outstanding of the same financing source and that only the remainder makes a contribution to financing investment. This introduces a bias in favor of internal funds, which do not need to be repaid. They may thus come out as the most important financing source. Therefore, Hackethal and Schmidt argue that net flows are helpful in estimating the change in the importance of the various financing sources, but not the importance itself. Using gross flows instead of net flows, they show that long-term bank loans were the most important source of external financing in Germany and Japan between 1970 and 2000 (over 75% on average), whereas they represented only 18% of external funds in the USA for the same period. Their data does not support the hypothesis of a convergence of the German and Japanese financial systems towards the market-based system either. It thus seems that the difference between bank-based and market-based financial systems in financing patterns is still important.

We can have a look at this issue using a different data set. The data gathered by Capelle-Blancard and Couppey-Soubeyran (2003) concerns the most recent evolution of the financing structure of non financial firms: 1995-2001. They use the Eurostat National Accounts database and devise an intermediation ratio defined as the amount of credits divided by the sum of all *external* sources of funds of the agent (firm or public administration), i.e. credits and bonds. This ratio is thus computed from the point of view of the debtor and represents the

contribution of financial intermediaries to funding. Chart 1 shows this intermediation ratio for non financial firms.

Chart 1: Intermediation Ratios for Non Financial Firms (%); Firms' Side



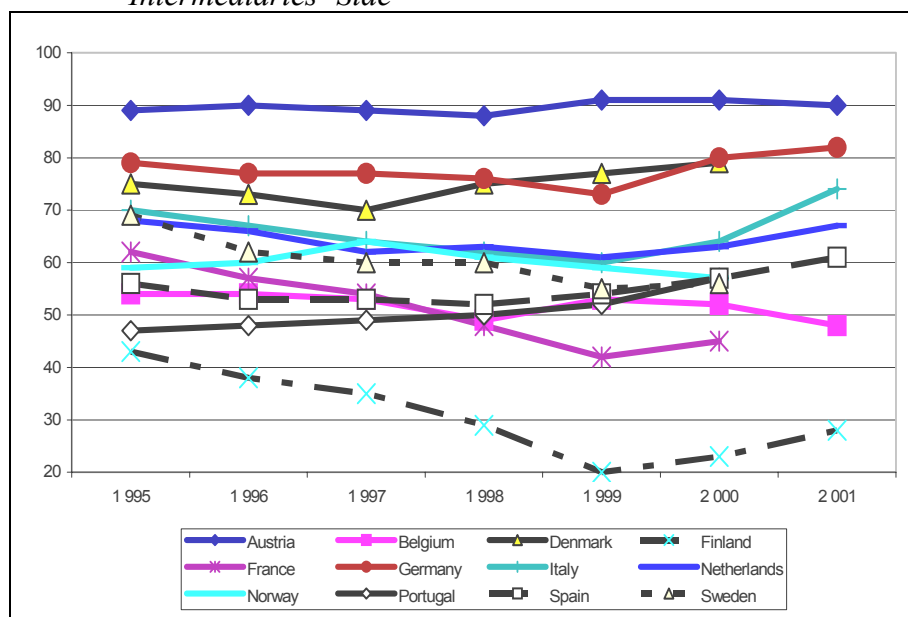
Source: Capelle-Blancard and Coupey-Soubeyran (2003).

The evolutions pictured in Chart 1 do not suggest a general pattern of convergence towards the market-based model, provided one appreciates this convergence with the help of disintermediation. The role of financial intermediaries as the dominant source of funds was maintained in Austria, Denmark, Italy and Germany. On the other hand, some countries have seemingly experienced a pronounced disintermediation: Finland, France and Sweden. On average, Europe exhibits a moderate pattern of disintermediation, with Portugal being an exception since the share of financial intermediaries in firms' funding has actually increased over the period. Therefore, the feeling that there is a generalised and pronounced disintermediation underway is somewhat exaggerated. Capelle-Blancard and Coupey-Soubeyran (2003) show that disintermediation has much more affected public administrations than non financial firms. The intermediation ratio for public administrations dropped significantly in Belgium, Spain, France, the Netherlands, Austria and Sweden between 1995 and 2001. Indeed, in most European countries, financial markets liberalization was initiated by the State during the 1980s and furthered during the 1990s with a simple objective in mind: to allow public debt to find a wider

market and thus decrease the cost of public borrowing. Indeed, public bonds represent a significant share of all bonds traded on financial markets.

Disintermediation can also be assessed if one takes into account that financial intermediaries play also a role in the development of securities' markets. There is a complementarity between the role of intermediaries such as banks and the diversification of funding sources by firms. Intermediaries collect savings resources and channel them towards financial markets. Banks have also participated to the development of financial markets by buying securities and bonds. One may then devise another intermediation ratio that measures the activity of all financial intermediaries, which is no longer limited to supplying credit but also includes the purchase of securities. What was considered as direct finance in the computation of the ratio of Chart 1 is now reintegrated as intermediated finance. A second indicator of intermediation is defined as the ratio between the total of credits granted and securities detained by financial intermediaries on the one hand and the sum total of financial sources of funds of the agents on the other side. It adds to the intermediation ratio of Chart 1 the share of securities detained by financial intermediaries. This intermediation ratio is thus considered from the financial intermediaries' point of view. Chart 2 presents the figures for European countries.

Chart 2: Intermediation Ratios for Non-Financial firms (%); Financial Intermediaries' Side



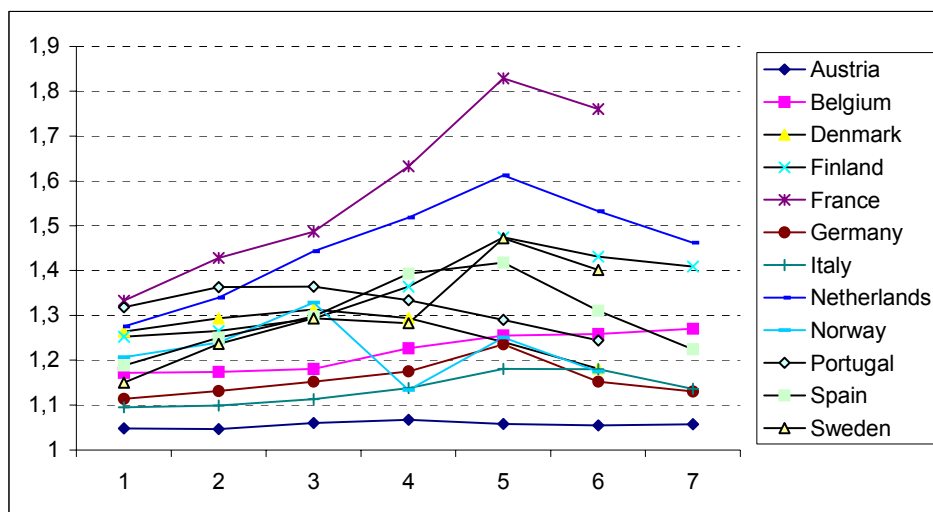
Source: Capelle-Blancard and Coupey-Soubeyran (2003).

As expected, the intermediation ratios are now larger when one takes into

account securities held by intermediaries. The reintegration of financial intermediation does not alter too much the picture obtained with the figures of Chart 1. There is a limited decrease in the intermediation ratios on average; some countries maintain or augment their intermediation ratios: Austria, Denmark, Germany, Portugal, Spain and a few countries experience a decrease: Finland and France in particular.

The difference between the two intermediation ratios may be interpreted as the 'market finance' or non traditional activity of financial intermediaries, i.e. purchase of bonds instead of credit supply. Chart 3 gives the ratio between the two intermediation ratios considered in Chart 1 and 2, i.e. the ratio between the financial intermediaries' side and firms' side intermediation ratios. Chart 1 shows that the situation of European countries is indeed very diverse. Financial intermediaries have kept their more traditional role of credit suppliers to non financial firms in Austria, Germany, Italy and Norway, but seem to have significantly reoriented their activity in France, the Netherlands, Finland and Sweden.

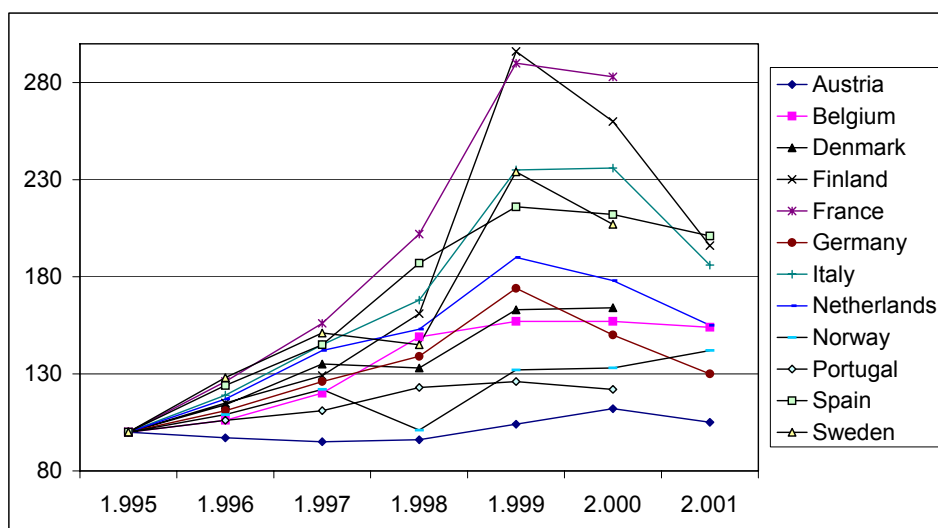
Chart 3: Relative Size of Market Finance Activity of Financial Intermediaries



There is a problem linked to the use of intermediation ratios above. They account for the rise in the value of securities, particularly shares. Therefore, two effects are mixed: the increase in the number of shares issued to the public and the rise in the value of shares. Only the first effect actually reflects the growing contribution of disintermediated finance to firms' funding. The increase in

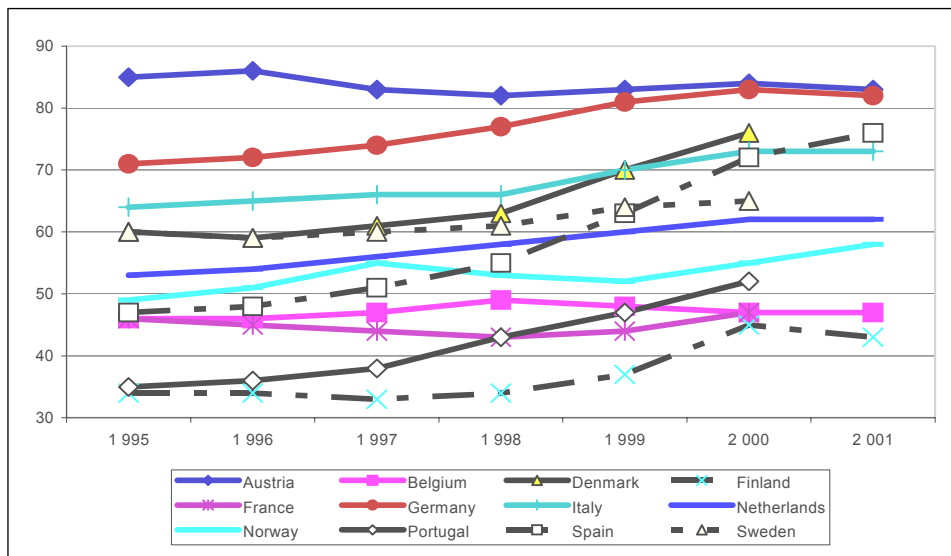
shares' prices, particularly pronounced for the period under consideration, artificially increases the contribution of securities to funding. Capelle-Blancard and Couppey-Soubeyran (2003) propose a deflator for shares' prices, which takes into account both listed and non listed shares. The evolution of the deflator for European countries is shown in Chart 4. An important feature is that there is a non negligible degree of heterogeneity among countries; France, Finland, Spain and Sweden are characterised by high shares prices, in opposition to Austria, Portugal, Germany or Norway. Such differences are bound to distort the evaluation of disintermediation, by an overvaluation the contribution of shares.

Chart 4: Deflator for Shares' Prices; 1995=100



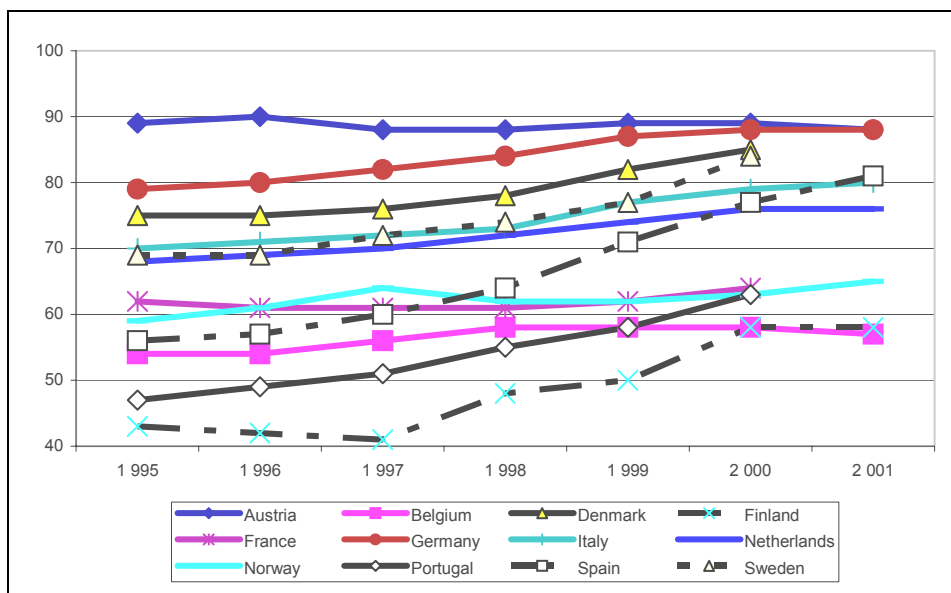
The deflated intermediation ratios are presented in Charts 5 (firms' side) and 6 (intermediaries' side). The result is that disintermediation vanishes: on average, the ratio has increased between 1995 and 2001, whether one considers the firms' or the financial intermediaries' point of view. The case of countries which had seemingly experienced the more pronounced disintermediation is exemplary. France maintains its intermediation ratio, and Finland actually sees it rising. Therefore, the disintermediation trend observed above is almost entirely due to the rise in shares prices.

Chart 5: Deflated Intermediation Ratios for Non-Financial firms (%); Firms' Side



Source: Capelle-Blancard and Couppey-Soubeyran (2003).

Chart 6: *Deflated Intermediation Ratios for Non-Financial Firms (%); Financial Intermediaries' Side*



Source: Capelle-Blancard and Coupey-Soubeyran (2003).

Nevertheless, this does not mean that nothing has changed over the period in the structure of intermediation. One can compute the shares of different intermediaries: banks, other intermediaries, and insurance companies and pension funds. The share of insurance companies and pension funds in the source of funds of non financial agents has increased in all countries except in Denmark, Portugal and Germany, even when one takes into account the shares prices deflator. They represent between 2% (Austria) and 14% (Netherlands) of non financial agents' funding sources. On the other hand, banks have seen their share of funding decrease in all countries except Denmark, Portugal and Sweden. They represent between 27% (Finland) and 66% (Germany) of non financial agents' sources of funds. However, the differences in contributions to funding have not varied much over the period.

2. Control

The traditional dichotomy of financial systems may have more sense when one

considers the pattern of control and the implications for corporate governance. An external control characterises market-based system whereas an internal control applies in bank-based systems. In the former, stock markets are developed enough for the firms to be able to have access to direct finance. Ownership diffusion discourages share owners to incur active monitoring costs because of the public good aspect of monitoring. Since no direct monitoring is exerted, external control applies, through the threat of share sales or other indirect mechanisms such as takeovers. In bank-based systems on the other hand, ownership concentration and blockholding allows for a closer, internal type of monitoring. The risk is then for minority shareholders, who are too small to monitor, to suffer from a possible collusion between blockholders and managers.

We can try to assess the diversity of countries with respect to control by using various indicators. La Porta et al. (1997), (1998), (2000a, 2000b) have proposed a set of indicators concerning control and corporate governance for a large set of countries. Their data apply to the mid-1990s and concern the size of the stock market, which conditions the possibility for the emergence of an external control, the structure of ownership of listed firms and the diffusion of ownership. Some other variables characterising the structure of financial systems are also considered as supplementary variable, i.e. not contributing to defining the factorial axes.

We apply a principal components analysis to the control indicators for 18 developed countries. The projection of countries in the first factorial plane is given in Chart 7. The first factor accounts for 45% of the variance alone. The variables defining this factor or significantly associated to it are the following.

- On the negative side: stock market capitalization to GNP (and external capitalization to GNP); widely held character of the ownership of large listed firms; the ratio of financial investors' assets to GDP; the percentage of shares in the portfolio of institutional investors; the merger and acquisition activity; the quality of accounting standards; the size of venture capital investment;
- On the positive side: various measures of ownership concentration such as the fraction of the firm's voting rights owned by its controlling shareholder or the fraction of the firm's ultimate cash-flow rights owned by its controlling shareholder; the scope of public enterprises' sector, the size of public ownership of firms; the control of large firms by families; the percentage of bonds in the portfolio of institutional investors.

This factor is clearly the one opposing internal (positive side) to external (negative side) control. The association of variables such as diffusion of ownership and size of the stock market on the same side is a confirmation of the mechanisms invoked for the functioning of an external control. Also, the size of

the State's intervention is negatively associated to financial markets' development and appears positively correlated on the positive side of the axis.

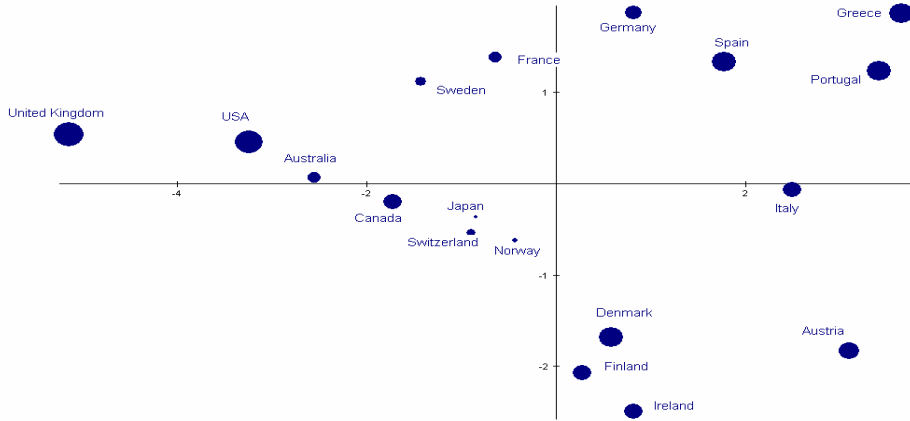
The first factor clearly separates market-based countries such as the UK or the USA from countries such as Greece, Portugal, Italy, Austria or Spain. If describing correctly a simple opposition between internal and external control, this factor only partly reflects the traditional opposition between bank-based versus market-based systems: some of the most archetypal bank-based countries (Japan and Germany) are found somewhere in the middle on the first axis, where most Continental European countries are also located.

The second factor accounts for 15% of the variance. The variables defining this factor or significantly associated to it are the following.

On the positive side: Control of large firms by pension funds, mutual funds and miscellaneous financial corporations, the quality of enforcement and transparency, concentration of the banking sector

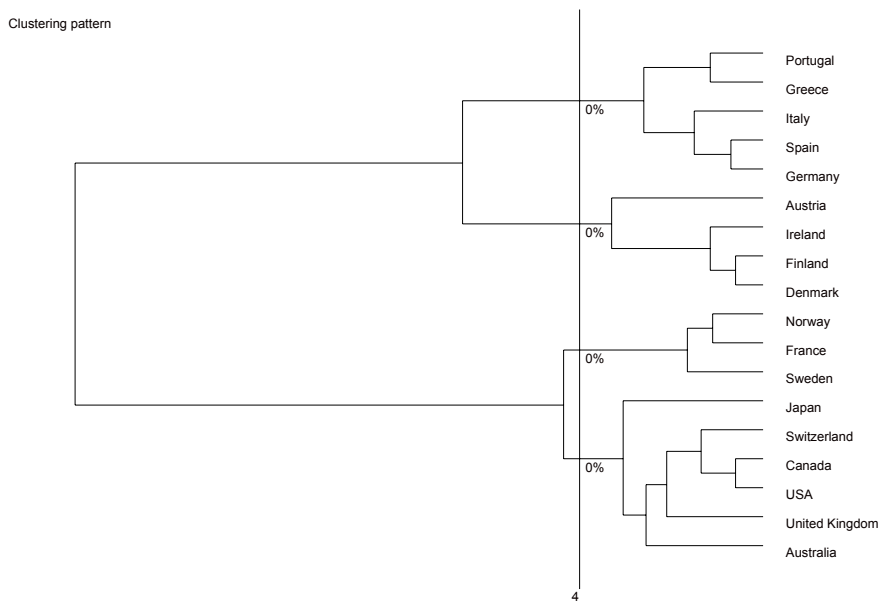
This axis is less easily interpretable in terms of external versus internal control. It separates some North European countries from Greece and Spain. This factor also suggests that the quality of enforcement and transparency is partly independent of the diffusion of ownership and the development of stock markets.

Chart 7: Projection of Countries on the First Factorial Plane



One can use these results to identify clusters of countries. The clustering pattern is given in Chart 8.

Chart 8: Country Clusters



One can distinguish four clusters of countries:

1. USA, Canada, UK, Switzerland, Australia and Japan. This cluster is characterised by a high level of protection of shareholders' rights, a wide diffusion of firms' ownership, developed stock markets and a substantial investment of institutional investors in the stock market. Also, public ownership is lower than average.
2. France, Norway and Sweden. Countries of this cluster are characterised by a larger than average control of firms by financial institutions.
3. Ireland, Denmark, Finland and Austria. This cluster is characterised by a relatively low importance of family control.
4. Germany, Spain, Italy, Portugal and Greece. This cluster is characterised by ownership concentration, a certain lack of conformity to international accounting standards, a low mergers and acquisition activity and a moderate development of stock markets.

Interpreted in terms of the opposition between insider and outsider systems, the clustering pattern described above distinguishes a group of outsider control countries (cluster 1) from two groups of insider control countries (clusters 3 and 4), while cluster 2 seems to occupy an intermediate position. Only the presence of Japan is a surprising element in the list of countries belonging to cluster 1, but the position of this country in the first factorial plane (Chart 3) and the clustering tree (Chart 4) somewhat distinguishes it from the core group of outsider control countries (USA, Canada, the UK and Australia). Clusters 3 and 4 represent two groups of insider control countries, the former being intermediate between cluster 1 and cluster 4. Countries of the fourth cluster are nearer to the traditional representation of outsider control (underdeveloped financial markets, important role of banks...) than countries of cluster 3 and even more cluster 2. The average intermediation ratio (calculated from section 1) is higher in the former group than in the latter. Also, stock markets have been growing quite importantly in some countries of cluster 2: in 2000, the ratio between the number of listed firms and the population was 32.3 in the UK (cluster 1), 13.4 in France (cluster 2) 9.1 in Germany and 5.0 in Italy (cluster 4).

3. Politics

To establish that there is some diversity in systems of financial intermediation and corporate control does not explain what is behind this institutional diversity. La Porta et al. have ventured that differences in legal systems explain the type

and extent of investor protection, hence the incentives to invest in shares and more generally the type of financial system of a country. The explanations for differentiated patterns of development of stock markets and the type of corporate governance would then find their roots in history, i.e. in legal traditions which have been established centuries ago. La Porta et al. distinguish four types of legal tradition: Anglo-Saxon (common law), French, German and Scandinavian (civil law). The Anglo-Saxon legal tradition is held to protect investors the best, whereas the French tradition is supposed to provide the weakest protection. Is a partition of countries according to legal tradition compatible with our results concerning corporate control? Crossing our clustering pattern with legal traditions gives the results presented in Table 2.

Table 2: Percentage of Countries in Each Cluster According to Legal Traditions

%	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Anglo-Saxon	66.7	0.0	25.0	0.0
French	0.0	33.3	0.0	80.0
German	33.3	0.0	25.0	20.0
Scandinavian	0.0	66.7	50	0.0

The correspondence between legal traditions and types of systems is broadly consistent with La Porta et al.'s position: countries of cluster 1 come mainly from an Anglo-Saxon legal tradition, i.e. the one that provides the most extensive investor protection, whereas countries from cluster 4 belong mostly to the French legal tradition. However, the correlation is not perfect as can be seen from the legal origins of countries of the other two clusters.

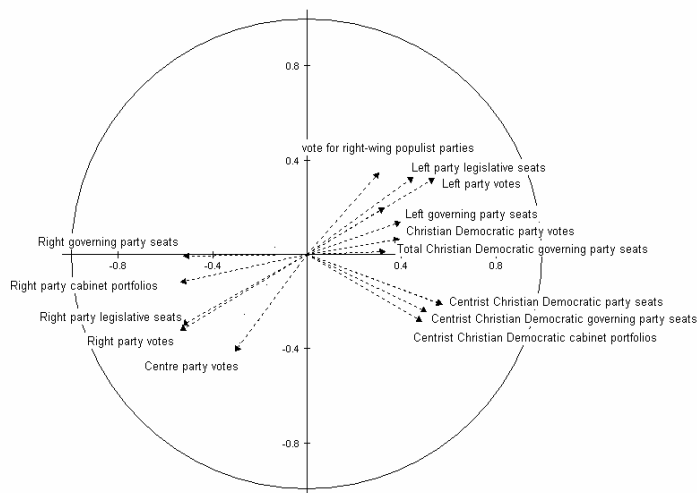
Pagano and Volpin (2001) and Roe (2003) have proposed other determinants of systems of corporate governance. Roe argues that political forces account for the differences in choices of financial systems and systems of corporate governance. Roe's argument can again be specified in a binary opposition. Social democracy would be associated with weak shareholder rights and hence a low diffusion of ownership. The mechanisms involved are that social democracy gives rights to stakeholders as well as shareholders: employment security, income distribution, welfare... Blockholders can partly counter these claims whereas a dispersed ownership could not. A consequence is that partizan politics in terms of left versus right should be strongly associated with differentiated financial systems. Gourevitch (2003) proposes supplementary political arguments related to the differentiation of corporate governance systems, widening the channels of political mechanisms at work and opening new possibilities of interest group expressions beyond the left/right divide. Interest groups could coalesce on a cross-class rather than class divide. Besides,

institutional mechanisms of interest aggregation are likely to matter too; political institutions themselves will affect the pattern of coalition formation.

We can attempt at checking the relevance of these points by looking at the correspondence between the classification of countries obtained in the previous section, which is partly understandable in terms of diffused versus concentrated ownership as well as insider versus outsider control, and variables expressing partizan politics as well as political systems of the various countries.

For partizan politics, Swank (2002)'s pooled time-series data base on political parties and election results will be used. The data covers the period between 1950 and 1999 for all the countries of the sample used in the preceding section and provides information on cabinet portfolio compositions, percentage of legislative seats and percentage of votes of the major political orientations: left-libertarian, left, right, centre, Christian-democratic, and right-wing populist parties. Only averages over the 1989-1999 period will be considered here. In order to check the correlations between partisan politics and financial systems, we project the various indicators on the factorial space we came to in the characterization of the financial systems. Therefore, the first factor more or less reflects an opposition between concentrated and diffuse ownership, and the second factor accounts for concentration of the banking sector, the quality of transparency, and distortion of the one share one vote rule.

Chart 9 shows the projection of political variables. Roe's predictions are partly confirmed. The first axis can also be interpreted as a right/left axis. On the side of diffuse ownership (Anglo-Saxon countries and Japan), one finds variables such as the percentage of votes for right-wing parties, whereas votes for the left are on the side of concentrated ownership. But this latter type of ownership is not only associated with left political forces. Centrist and Christian Democratic parties votes can also support the type of corporatist arrangements that Roe (2003) associated with Social Democracy. Votes for left-libertarian or right-wing populist parties are not so well associated with one or the other type of corporate governance system.

Chart 9: Projection of Political Variables on the First Factorial Plane

In order to account for the diversity in political systems, we use two types of databases. Lijphart (1999) distinguishes between majoritarian and consensus based systems. The idealised majoritarian system is the ‘Westminster’ model of democracy defined by Lijphart (1999) as having ten characteristics. (1) The executive is concentrated in single-party cabinets. (2) Cabinets dominate the Parliament. (3) There is a two-party system. (4) The electoral system is majoritarian and disproportional, majorities are ‘manufactured majorities’ created by the electoral system out of mere plurality of the votes. It is possible for one party to win without a majority in votes. (5) The interest group system is pluralist, i.e. a multiplicity of interest groups exerts pressure on the government in an uncoordinated and competitive manner. Unions or management are not integrated in the policymaking process and both sides settle their differences in a confrontational manner. (6) There is a unitary and centralised government, as opposed to federalism. (7) Legislative power is concentrated in a unicameral parliament. (8) Constitutions are flexible. (9) There is no judicial review, i.e. no written constitutional document with the status of ‘higher law’ against which Courts can test the constitutionality of legislation. (10) The Central Bank is controlled by the executive. The majoritarian system is best exemplified by the United Kingdom.

The consensus model by contrast is based on bargaining between organised interest groups. Those affected by a decision have a chance to participate in the making of that decision. The almost pure model of consensus democracy is given by Switzerland: (1) The executive power is shared in broad coalition cabinets. (2) There is a balance of power between the executive and the

legislative. (3) There is a multiparty system, reflecting a multiplicity of cleavages in the society. (4) Electoral systems are organised around a proportional representation. (5) Interest representation is based on corporatism, either social corporatism where labor unions dominate, or liberal corporatism in which business associations are the strongest force. (6) Government is federalist and decentralised. (7) The Parliament is constituted of two chambers, enabling a special representation of minorities such as the smaller states in a federal system in the second chamber. (8) Constitutions are rigid. (9) There is judicial review. (10) The Central Bank is independent.

Both models will differ with respect to the number of 'veto points' and the weight of 'veto players'.⁶ Veto points are any point within the political system where a policy measure, legislation or any institutional change may be blocked and the status quo preserved; veto players are individual or collective actors who may block such measures. Where a veto may be opposed and who may do it depends on existing political institutions. The consensus-based model is likely to have more veto players than the majoritarian model. As a consequence, the latter system will more easily enable radical institutional change once political change has brought a new government into power. The former system is likely to be much more resistant to radical institutional change and permit a better representation of organized, corporatist interests

Lijphart (1999) has proposed a certain number of indicators characterizing political systems, distinguishing between. Some of them are particularly relevant for stressing the differences between the political systems underlying the different models of capitalism:⁷

- The number of issue dimensions addressed by political party programs. A large number of political parties allow for the expression of a highly differentiated political demand, which may reflect the strong positions gained by particular socio-political groups. The dimensions of political conflict should increase with the number of parties. A two-party system must have a political platform of the 'catch-all' type, which aims at the median voter and where parties cannot afford to confront specific interest groups on well defined issues.
- The degree of disproportionality of the electoral system. The typical electoral system of majoritarian democracy is the single-member district plurality or majority system; consensus democracy uses proportional representation. Single-member districts favor the emergence of a winner-take-all system.

⁶ Tsebelis (1995, 2002), Scharpf (2000).

⁷ See also Gourevitch and Hawes (2002) and Amable (2003) for the relation between political variables and types of capitalism.

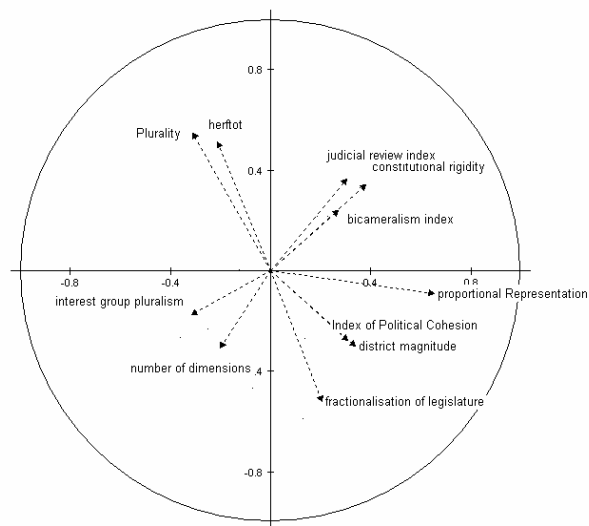
The index of disproportionality gives an indication of the aggregate vote share/seat share deviation.

- Interest group pluralism. The typical interest group system of majoritarian democracy is a competitive and uncoordinated pluralism of independent groups in contrast with the coordinated and compromise-oriented system of corporatism. This indicator can be interpreted as an anticorporatism index. One should then expect to see market-based economies associated with high values of the three indicators, whereas Continental European and Social-Democratic economies should exhibit low values of these indicators.
- Constitutional rigidity. Presence or absence of explicit restraints on the legislative power of parliamentary majorities. Is the parliament the supreme law-maker or is there a constitution serving as a higher law. Distinction between flexible constitutions (changed by a majority) and rigid constitutions (supermajority). Based on the case of the UK, one would expect market-based economies to have non rigid constitutions, but this is not so clear if one considers the case of the US.

Other indicators may also be taken into account. The database of political institutions of the World Bank Beck, Clarke, Groff, Keefer and Walsh (1999) allows considering the following:

- An indicator of political parties concentration, the Herfindahl index, i.e. the sum of the squared seat shares of all parties in the government and the opposition in the lower chamber. If market-based economies rest on a two-party-median-voter system, they should have a higher political concentration than other types.
- Fractionalization of legislature. It is the probability that two deputies picked at random from the legislature will be of different parties. Here again, this indicator should split the market-base economies from the other types, particularly the social-democratic model.

Chart 10: Projection of Political System Variables on the First Factorial Plane



The projection of variables shown in Chart 10 indicate that political systems variables are indeed associated with some dimensions of differentiation of corporate governance systems, but not so much with the first axis, i.e. the factor of ownership diffusion, but with the second axis. The variables reflecting a majoritarian system are associated with the negative side of the second factor, whereas the consensus-based model is on the positive side of the same factor. Only proportional representation (a variable reflecting the consensus-based system) points towards the side of concentrated ownership. These findings can be seen as a confirmation of a point made by Roe (2003) against La Porta et al. Some countries may have a good quality of corporate governance (the quality of enforcement transparency is on the positive side of the second factor) and yet have some degree of ownership concentration. But this latter aspect is not enough if one does not take also into account variables of interest representation characterizing the consensus-based model. Therefore, good corporate governance could be obtained in a system with concentrated ownership *and* a consensus-based model of interest representation that would ensure that all interests, including those of minority shareholders, are sufficiently well represented.

4. Evolution of Systems

The financial systems of most European countries have experienced significant changes during the past few years. The common trends are an increase in stock market capitalization and the number of listed companies, a decrease of state ownership, an increasing role of foreign ownership, and particularly extra – European (mostly American) institutional investors and a diffusion of financial markets-based criteria of corporate governance. These changes are complementary with changes affecting other areas and institutions: employment and product market regulation, welfare systems... and the context is that of a possible convergence towards a market-based model of capitalism or an LME.⁸ Part of these complementarities are understood at the EU level: the Green paper of 1997 on Supplementary Pensions in the Single Market mentioned a virtuous circle of increasing funding of supplementary pensions into European capital markets which would in turn set in motion an increased securitization leading to a deepening of financial markets. The dynamics would thus link an increasing share of private social insurance scheme to a rise in the role of financial markets. This factor has played a major role in the transformation of the Swedish system of corporate governance for instance, (Henrekson and Jakobsson, 2003).

We can concentrate on the cases of France and Germany to illustrate the changes taking place at the beginning of the years 2000 in Continental European systems. Both, France and Germany experienced changes in the regulative framework of the banking industry and the soar of financial markets. The main reforms affecting French banks were undertaken in the 1980s, with the 1984 Banking Act putting an end to the regime of different interest rates, the creation of a futures market in 1986 and the liberalization of the stock exchange in 1988. After 1986, most public banks were privatized in several waves. By contrast, public banks still represent over a third of the market share in Germany and local *Landesbanks* are backed by public guarantee. The stock exchange was reorganised during the 1990s and transformed into a publicly traded company (Deutsche Börse AG). Some additional transformations were necessary to harmonise German law with international norms as well as EU Directives. A series of financial market promotion acts were passed, introducing a secondary capital market, increasing transparency, protecting small investors and allowing more types of investment funds, and making gains from risk capital tax-free after one year instead of six. An independent authority for securities trading supervision was established. A new stock market for fast growing firms, *the*

⁸ Amable (2003).

Neue Markt was created at the Frankfurt stock exchange.

One of the main drivers of change in the French financial sector was the privatization of a substantial amount of French industry all through the 1980s and 1990s which mechanically 'deepened' existing financial markets. Moreover, in order to obtain better conditions for its public debt, the State initiated a process of financial liberalization that led to a surge of direct instead of intermediated finance. In both countries, the development of financial markets contributed to loosening the ties between firms and banks. The former tried to diversify their investor base while the latter aimed at redirecting their activities away from direct participation and toward financial services such as securities trading and business consultancy, or tightening their links with the insurance sector. The evolution of bank asset structures clearly shows the rise of these activities at the expense of the more traditional loan activity in France. This evolution also takes the form of the creation of subsidiaries dedicated to investment banking and/or insurance.

Firms internationalized their investor base and had to comply with international accounting rules in order to be listed on foreign stock exchanges such as the NYSE. A consequence of investor diversification was a growing importance of market finance under the guise of institutional investors, particularly foreign Anglo-Saxon institutional investors who had special requirements in terms of corporate governance. In both countries, new laws were passed in 1998 to authorize firms' shares buyback up to a limit of 10%. This enabled firms to put into practice stock option plans in order to supply high-powered incentives to the top management as well as boost share prices making them more attractive on the stock market. In general, managerial behavior had to reorient towards a policy of shareholder value: improving the informational quality of annual reports, which involves among other things a change in the accounting rules to international or American standards. Höpner (2001) reports that the orientation of large German companies toward a policy of shareholder value since the mid-1990s is indeed linked to the rise of institutional investors as shareholders. Nevertheless, the German Company Law explicitly denies the role of shareholders' agent to the management. The fiduciary duties are due to the firm itself, not to any particular group.⁹

The transformation of Continental European countries may be assessed with an indicator of conformity to corporate governance practices proposed by Shinn (2001). Seven points are taken into account:

- Accounting systems; coded 1 if a majority of the listed firms use GAAP or

⁹ See Pistor et al. (2001) for a comparison of company laws. Also, the supervisory board must act independently from any specific stakeholder in the Netherlands.

IAS in their reporting or when the country's domestic accounting system differs only slightly from IAS.

- Audit; coded 1 if third-party audit is a listing requirement.
- the presence of non executive directors on board (average percentage): coded 1 if majority
- the existence of fiduciary duty;; coded 1 if directors' liability to minority shareholders has been enforced in courts on the basis of derivative or class-action suits.
- voting rights rules; coded 1 when 'one share one vote' is observed in practice, in terms of statutory rights and procedures.
- anti takeover provisions; coded 0 if listed firms employ significant anti-takeover provisions
- management incentives; coded 1 if the sum of performance bonus and stock options exceeds 10% of total pay.

Table 3 shows that most European countries have significantly raised their degree of conformity to corporate governance practices, in the second half of the 1990s in Italy, Germany and Spain, earlier in the Netherlands and through the whole decade in France, which is actually scoring 'best' on this issue, missing only the conformity to the 'one share one vote rule' and still allowing for takeover defences.

Table 3: Country Scores on the Conformity to the Principle Corporate Governance

	1989	1994	1999
Belgium	2	2	2
France	3	4	5
Germany	1	1	3
Italy	0	0	3
Netherlands	1	3	3
Spain	0	1	3

Source: Shinn (2001).

This deeper transformation of France with respect to the principles of market-based finance is confirmed by Goyer (2002), who compares the process of refocusing on core competencies by large French and German firms. Such refocusing is a standard requirement of Anglo-Saxon institutional investors, who criticise the conglomerate form of corporations on several grounds: the cross-subsidization from profitable division to unprofitable units is a denial of market incentive mechanisms and makes outsiders' investment more difficult to assess;

a company with a diversified portfolio of activities should focus on a limited number of core competencies for fear of becoming a 'Jack of all trades'; (financial) markets are held to be far better at risk diversification than internal company procedures. Goyer (2002) shows that French and German companies have changed their corporate strategies of diversification in differentiated ways. French companies have reduced their degree of diversification to a greater extent than their German counterparts. Restructuring was more radical in France than in Germany. Therefore, France, more than Germany, has made significant steps towards market-based principles of corporate governance.

The turn towards more market-based finance principles also concerns the market for corporate control, which can only be active if ownership is diffuse enough. Continental firms exhibit a higher degree of cross shareholding than their Anglo-Saxon counterparts. This pattern was initially preserved in France even after the second privatization wave in the mid-1990s. The so-called 'hard cores', i.e. a specific pattern of cross ownership linking large industrial firms, banks and insurance companies, aimed at preserving ownership stability and the capacity to implement long term industrial strategies. Of course, the presence of hard cores was particularly unattractive to foreign institutional investors, and was thus an impediment to the development of market-based finance in France. The hard-core structure soon entered a process of dismantling after the merger between insurance companies AXA and UAP in 1996.¹⁰ The disappearance of the 'hard cores' subsequently encouraged foreign investors to enter the French share market. In Germany, the Tax Reform Law of July 2000 (*Steuerreform*) abolished capital gains taxes on the liquidation of cross-shareholdings. This was a deliberate policy to dissolve the cross-shareholding pattern characteristic of the long term relationships between corporations and banks. Neither party seemed that interested in keeping the close relationship going; as mentioned above, firms were eager to obtain cheap capital from financial markets and universal banks wanted to reorient towards the investment banking business. The tax measure was also thought as an instrument to boost the German securities markets and force German companies to restructure and adapt to a changing economic environment. The consequences on the ability of German corporations to resist hostile takeovers without a solid pattern of cross-shareholding were however under-estimated, as will be seen below.

The dynamism of the market for corporate control is probably best appreciated through the hostile takeover activity. Table 4 shows that it has noticeably gathered pace in Continental European countries during the 1990s. Hostile takeovers used to be very rare in Germany before that decade, but they

¹⁰ Morin (1998).

are no longer impossible as shown by the impressive increase in both target and acquirer takeovers. An important event in this respect was Krupp's attempt at a hostile takeover of its competitor Thyssen in 1997. As a symbol of the demise of the close relationship bank-based system in Germany, the hostile takeover attempt was prepared by subsidiaries of the *Hausbank* of both Krupp and Thyssen.¹¹ For the first time, German Banks not only let a hostile takeover take place but actually sided with the attacker. As with the case of company restructuring, France seems more involved in the practices characteristic of market-based finance than Germany, and the end of the decade was marked by large scale hostile takeovers in banking (BNP, Paribas and Société Générale) and oil industry (Elf and Total-Fina).

Table 4: Announced Hostile Corporate Takeovers

Country	Transaction Value (% of World Total)			
	Target		Acquirer	
	1980-1989	1990-1998	1980-1989	1990-1998
France	1.9	5.4	2.9	3.6
Belgium	0	0	0	0.1
Austria	0	0.1	0	0.1
Germany	0.2	1.8	0.2	1.8
Portugal	0	0.2	0	0.2
Spain	0	0.1	0	0.1
Switzerland	0	0.1	2.1	0.7
United Kingdom	18.4	18.2	18.6	17.5
Norway	0	0.6	0	0.4
Netherlands	0.1	0	1.6	0.1
Denmark	0	0	0	0
Sweden	0.1	0.6	0.2	0.7
Finland	0	0.1	0	0
Italy	0	0.7	0.3	2.5
Ireland	0	0.1	0	0.1

Source: Guillen (2000).

If one goes back to Roe's point about the links between politics and systems of corporate governance, it may come as a surprise that the most fundamental changes having taken place in the financial systems of France and Germany

¹¹ Lütz (2000).

were initiated under social-democratic governments. The most important privatization programs and financial liberalization measures were implemented by the socialist party in France, and the German Control and Transparency Law (*KontraG*) of 1998, which was part of a financial markets-promotion strategy aiming at reinforcing the protection of small owners and more generally adapt Germany to Anglo-Saxon corporate governance, was passed under a red-green government. This law prohibited banks holding more than 5% of a corporation's shares to vote with their equity *and* the proxies deposited with them, and was thus an incentive to reduce their stakes in German firms. In the desire to protect minority shareholders, the law prohibited unequal voting rights; it abolished voting ceilings and forbade the voting of cross-shareholding stakes over 25% in the supervisory board. In conjunction with the tax reform which created incentives to unwind cross-shareholdings, i.e. to radically alter the system of corporate governance in Germany, and, if one believes in institutional complementarity, to lead to a major change of the German model of capitalism.

The influence of the 'third way' ideology over left-wing parties in Continental Europe (Amable, 2003), the desire to liberalize financial systems in order to provide cheap financing for the State, and the lack of perception of the coherency of the models of capitalism are all influences that partly explain the evolution of the systems of corporate governance in Europe. A precise assessment of the relative influence of these and possibly other factors on the course of events is left for further research.

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Comment on: Bruno Amable, “An Overview of Financial Systems’ Diversity”

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1. Introduction

The paper by Bruno Amable sets itself the task to give an „overview of financial systems’ diversity“. Rather than offering a mere survey of the existing literature, it goes beyond such a more “enumerating orientation” and adds interesting facets to the established wisdom in this area. Since it is notoriously difficult to discuss an overview paper in a satisfying manner (and rather uninspiring to point to the inevitably missing pieces and underemphasized aspects) I will concentrate my short remarks on the genuine contributions of the paper. Before turning to these issues in section 3 I want to briefly summarize the main results of the article in the following section.

2. Summary of the Main Results

Bruno Amable focuses primarily on two dimensions along which financial systems differ: sources of finance (bank-based vs. market based systems) and corporate governance (internal vs. external control). In the first part of the paper Bruno Amable presents some empirical evidence about cross-country differences and the development over time. Generally one could not observe a trend towards disintermediation over the 1990s (and even less so if the measures are corrected for increases in share prices).¹

¹ As an aside – given the place of this publication – it is interesting to note that the data

In order to analyze the second dimension of financial system diversity—corporate governance – Bruno Amable undertakes a principle component analysis (PCA) based on various indicators that were collected and developed by La Porta et al. (1998). The first factor that comes out of this analysis clearly represents the dichotomy between internal and external control (or concentrated vs. diffuse ownership). The second factor is (less clearly and somewhat more multifariously) related to transparency, enforcement etc.

The PCA identifies – implicitly – three clusters of countries, where the first one represents insider-control (or market based) systems (Anglo-Saxon countries and Japan), while the third cluster comprises outsider control economies (Southern European countries, Germany and Austria). The second cluster (Scandinavian countries, France, Switzerland and Ireland) lies somewhere in-between although it is closer to the outsider control group.

In the second part of the paper Amable tries to assess what lies behind the diversity. First it is shown that the clustering broadly corresponds to legal traditions (in the spirit of La Porta et al.). He goes, however, beyond this comparison and also analyses whether politics and characteristics of the political system might be associated with the financial systems that emerge in different countries. In a first step it is shown that partisan politics are in fact correlated with financial system diversity (diffuse ownership is associated with right-wing political forces). In a second step the author presents evidence that also the political system (majoritarian vs. consensus based) is related to the financial system (although more to the second factor of the PCA than to the first).

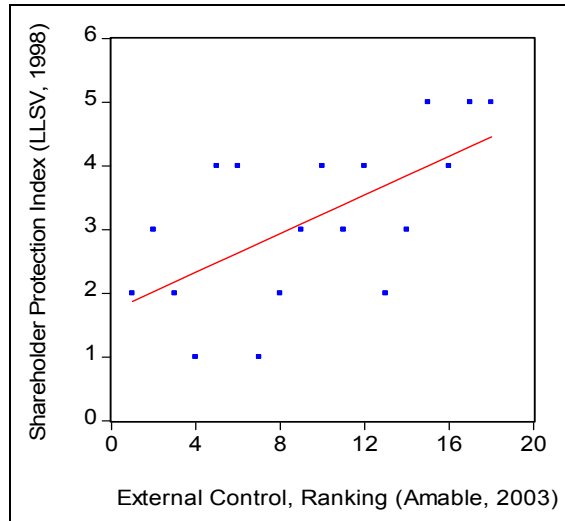
3. Comments and Discussion

The starting point for my brief comments on the paper is the observation that over the recent years a large and growing body of literature was produced that deals with issues of financial system diversity. In this

indicate that among all countries analyzed Austria is the one with the highest degree of intermediation.

literature many factors and dimensions are mentioned and analyzed that could be responsible for or at least contribute to this diversity: sources of finance (bank-based vs. market-based), corporate governance (internal vs. external control, shareholder rights, ownership structure), regulation and supervision, openness to international financial flows etc. In a way there is a *diversity of diversities* and it would be interesting to have a more extensive discussion of whether and why the two dimensions singled out in the paper are the most important ones. Even more interesting would be to offer some comparisons of the evidence and conclusions presented in the paper and the established (and sometimes conflicting) results of the widespread literature. This could be helpful in assessing whether the different methods, focuses and data sources lead to similar results, thus contributing to the emergence of “stylized models” of financial systems. I have undertaken a tentative analysis along these lines by contrasting the results of Bruno Amable with the famous shareholder protection index (SPI) by La Porta et al. (1998).

Chart1 is a scatter plot of the rank that countries hold with respect to the first factor of the PCA (the external vs. internal control dimension) versus the SPI. As is evident from the picture (and shown by the regression line) there is a clear positive relation between the two measures thus confirming the results of the PCA. Furthermore, one can calculate the average SPI for the three clusters of countries. Again the results are broadly in line with each other since the SPI is highest for cluster 1 (4.6), followed by cluster 2 (3.0) and cluster 3 (2.16). Of course these results are not particularly surprising (especially since similar data sources are used) but it is nevertheless comforting that different methods and approaches lead to compatible results.

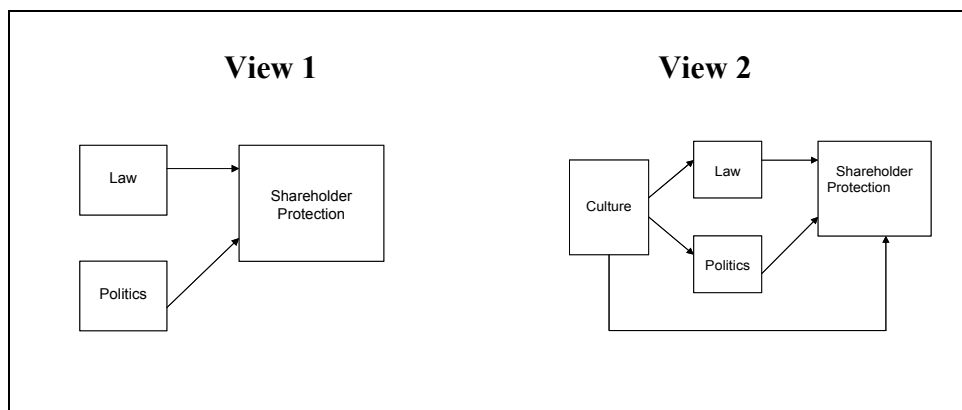
Chart 1: External Control vs. Shareholder Protection

The topic of the second part of the paper touches on various deep and difficult questions: What lies behind the diversity of financial systems (or even behind the diversity of diversities)? Why do we observe one constellation of institutions in country A and another one in country B? What are possible explanations for the diverse patterns? Bruno Amable broadens the traditional focus on issues of legal origin and turns the attention to aspects of the political system. This is a highly interesting extension of the existing approaches and delivers new results about the connection between partisan politics, political structure and the financial system. Nevertheless the findings of the paper should probably be regarded as only a first pass on this topic and it would be rewarding to have more research along these lines. I want to list some of the open question in this area as I see them.

- The paper is rather mute on the question of whether politics is the basic, moving force behind the main economic and social developments that lead to the emergence of differentiated financial systems or whether legal origin (perhaps together with the political system) shapes the institutional structure of a country. Put differently it is not clear in the article whether the assumption is made that there is a *causa prima institution*, a first institution or factor to which all other

institutional features can be reduced and on which a hierarchy of institutions can be built. In principle one could also argue that neither law nor politics is this *causa prima* institution but that rather a third factor – something like “culture” (comprising social preferences, “national characteristics”, historic specificities etc.) – shapes both the legal and the political structures of a country and its position on shareholder protection. These two alternative views are illustrated in a highly stylized form in Chart 2.

Chart 2: Two Alternative Views on the “Hierarchy of Institutions”



- Related to these aspects is the ever-present issue of simultaneity, endogeneity and reverse causality. It could, e.g., well be that it is not only politics that influence shareholder protection but that – the other way round – the existing legislation on shareholder protection has an effect (e.g., via lobbyist activities) on the political processes and outcomes. In the field of institutional analysis, where cumulative causation and complementarities abound, it is particularly important to take such possibilities into consideration.
- PCA does not seem to be well suited to deal with these aspects, since the groups of potentially explanatory variables are considered one at a time. I also have some difficulties in interpreting the results of these projections as “causal”, rather than as a representation of correlations. Altogether, I would find it interesting to supplement the results of the PCA with an empirical investigation that uses a multivariate framework. This could be helpful to deal with issue of simultaneous

influence of the legal and the political process (and of other possible factors) and to approach the topic of complementarities (although this is probably the subject of a separate paper or even an entire research project).

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Financial Systems, Industrial Relations and Industry Specialization

An Econometric Analysis of Institutional Complementarities

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1. Introduction

Cross-country differences in policies and institutions on labor and financial markets are increasingly recognized as important drivers behind countries' performance divergence. In this regard, recent empirical studies have revealed the vast differences that exist among apparently similar countries with respect to their financial systems and the way their industrial relations are organized. Despite comparable growth rates and GDP levels, even among the highly developed countries of Western Europe and North America, finance for industry is provided through different channels (Demirgüç-Kunt and Levine, 2001) while labor relations may be subject to numerous legal, institutional and customary constraints (Freeman, 2000).

Economists have therefore started to look into the functioning of particular markets and their interaction with growth rates, following earlier research on endogenous growth. Financial intermediaries may help to overcome agency costs when the quality of a research project is not fully known to the market (King and Levine, 1993). By incurring monitoring cost, the specialized financial operator can detect the true type of the project and thus make it marketable. The better the financial system is developed, the lower will be the monitoring cost to discover the true value and hence the higher will be the growth rate of the economy. Financial intermediaries may also help to reduce inefficient signalling occurring under the pressure of takeovers (Stein, 1988). Overall, studies in this field – while not conclusive as regards the particular source of finance – seem to converge to the fact that the degree of development of financial markets matters for good economic outcomes (Demirgüç-Kunt and Levine, 2001).

Similarly, on the labor market institutional arrangements affect the labor transaction in two important ways. First, they impact on the incentives of firms and workers to undertake specific investment that increases innovative activities and human capital. On-the-job-training, job related capital investments, high effort and cooperation all can be seen as specific investment potentially

important to guarantee successful innovation and hence superior firm performance on the market with important aggregate effects on productivity and output growth. Second, labor market institutions may distort the relative price structure on the market for heterogeneous work and different jobs. Reducing inter-industry wage differentials will reduce rent sharing and labor turnover, while reducing inter-plant wage differentials will affect returns to schooling. This will impact on the allocation of talents and educational investment of market participants. Again, to the extent that the composition of the work force affects the innovation process, firms will have differential capacity to generate technical progress and hence output and productivity growth.

However, overall, work on the interaction between industrial relations and economic performance seems to lead to rather weak conclusions only (Fitoussi and Passet, 2000). The most important effects can be detected regarding the effect of labor market institutions on income distribution and wage inequality (Freeman, 2000), while their impact on employment levels seems to depend on the overall system of institutions and policies prevalent in a country. Regarding the importance of labor market institutions for innovation, important systemic influences can nevertheless be detected (Bassanini and Ernst, 2002).

In order to analyse the variety of these labor and financial relations, most of the theoretical and empirical literature to date has concentrated, however, on a separate analysis of policies, institutions and regulation on either the financial or the labor market taken individually, not taking into account possible spillovers and interactions that may exist between the two markets. Part of the reason for the absence of more decisive results may hence lie with the fact that two points have not yet been integrated fully: firstly, possible interaction effects between policies and institutions on both markets may prove to be important determinants of macroeconomic outcomes while not showing up when tested individually. Secondly, aggregate indicators on macroeconomic performance may be too rough, hence sufficiently taking into account possible multiple transmission links within one country by which institutions and regulations may affect particular industries but not aggregate economic outcomes.

In particular, the first point has received increased attention by recent microeconomic research regarding the analysis of the firm (e.g. Milgrom and Robert, 1995). In particular, the value of the relationship between the firm and its employees is likely to be affected simultaneously by institutional arrangements on the financial and the labor market. Closely nit financial relations, for instance, provide incentives for investors to monitor and evaluate in more detail the specific assets, which the firm disposes of. This in turn will increase the marginal effect that cooperative work relations have on worker's incentives to undertake specific investments – such as work effort – in their current relation.

In addition, industries are characterised by different forms of informational difficulties and coordination failure due, for instance, to differences in the

characteristics of the dominant technology in each industry (Breschi, Malerba and Orsenigo, 2000). In this case, a common institutional and policy environment will have different effects on different industries, hence shaping sectoral specialization patterns. For instance, technologies characterized by technological advancement with long gestation periods necessitate the cooperation of the workforce as well as patient financial investors. On the other hand, ready-to-manage technologies with considerable cash flow at an early stage and a broad scope of applications may not prove profitable in the presence of unionised industrial relations and relational finance.

The following paper aims at contributing to this literature by offering an empirical investigation of industrial specialization among OECD economies as a function of their institutional environment and the complementarity that may exist between the prevalent industrial relations and the characteristics of financial systems in these countries. *A priori* multiple transmission mechanisms may exist between different types of financial systems or industrial relations and industry performance, hence a wide range of indicators is offered to distinguish various types of industries based on their equity and bank finance requirements and their skilled labor demand, and to test for individual as well as for complementary interactions.

The paper is organized as follows. The next section gives an overview of the empirical literature that aims at establishing individual relationships between institutional arrangements on labor and financial markets and certain macroeconomic performance indicators. Section 3 first introduces the concept of institutional complementarity, derives its theoretical implications, presents some illustrative evidence and then develops the empirical hypotheses to be tested and then discusses the methodology applied to test these interactions. Section 4 presents the data bases used to this end while section 5 presents the regression results as well as some sensitivity analysis. A final section concludes.

2. Financial and Labor Market Interactions

a) Theory and illustrative evidence

While the economic literature has discussed extensively the various aspects of microeconomic market failures, an important macroeconomic aspect of market imperfection – market interaction – has started only recently to attract more and more research. Market interaction arises when contractual imperfections on one market affect outcomes on others. Given that economic activity implies the exchange of goods and services on different markets if not at the same time then at least in a specific order, the individual decision making process will create

interrelations between the contractual shortcomings on one market and the decision to engage in economic relations on others. Implicitly, this has been recognized since long but never fully exploited for macroeconomic analysis.

This phenomenon has first been exploited in a partial equilibrium setting by recent advancements in microeconomics. In particular, the literature on supermodular production and profit functions (e.g. Milgrom and Roberts, 1995) has started to examine the way by which a firm's factor input and production choices may be interrelated¹. However, this work has focused mainly on the firm level, not addressing differences between contractual and institutional (individual versus collective contracting) arrangements. Incentive problems may not be fully solved on the firm level whenever the institutional environment constrains the contractual space from which individual actors may be able to select. Additionally, some incentive problems may not be solved on the microeconomic level due to non-cooperative behavior of individual actors, and only outside institutional (collective) arrangements allow to overcome these shortcomings.

The macroeconomic version of these market interactions therefore has to take into account not only individual contractual arrangements but also institutional constraints that limit or direct individual contractualising. Integrating both – market interactions and institutional constraints – into a common framework has led to what is usually called the theory of “Institutional Complementarities”, recognizing the spillovers that may arise from institutional arrangements on other markets.

Institutional complementarities imply that the extent to which particular institutional arrangements allow to overcome problems of asymmetric information, imperfect contracting or decision coordination may depend on the existence of particular arrangements on other markets. Most institutional arrangements only act locally – i.e. connected to a particular market or to a particular local area – while the agents' decisions are simultaneously influenced by conditions on a variety of markets. More specifically, institutional complementarities arise when two or more institutions reinforce each other in their respective contribution to make an individual agent select a specific action (usually one that is considered to be welfare enhancing). Consequently, a systemic effect prevails as the adoption of one institutional arrangement on one particular market increases or decreases the marginal benefits of adopting another institutional arrangement on another market.

¹ For instance, incentive problems involving informational problems on several markets (e.g. innovative research, and the input of skilled labor and tight relations with financial investors) may make firms selecting a certain contract package that is joint-optimally (but not necessarily individually) to overcome these problems.

In this paper, we apply this concept by analysing the impact of institutional arrangements on the incentives to build up firm-specific capital as one important way to enhance a firm's productivity and growth. Based on theoretical work by the author (Amable and Ernst, 2003), a genuine link can be constructed between these incentives and the institutional environment via the latter's impact on market characteristics. In particular, both firms and workers may have to invest in firm specific capital such as specific skills, technological effort and innovation outlays that are only valuable inside the firm-worker relation. Financial investors, on the other hand, may make an ex-ante screening and ex-post monitoring effort in order to select and control for good managerial effort. This may be important to generate investment returns as some investment projects may imply close monitoring by outside investors in order to guarantee success. All three types of commitment are specific to the relationship and enter in a complementary way in determining the returns to investment of the particular production relation.

For instance, highly complex technologies with long gestation periods necessitate the cooperation of the work force as well as patient financial investors in order to build up the necessary intangible capital (for instance specific human capital to fully exploit and evaluate the technology being used). Reducing labor turnover as well as providing a security net against easy takeover in case of (temporarily) low market value may make it necessary for stakeholders to get involved in the control and decision process of the management of a firm's tangible and intangible assets. Institutions that favor investment in specific assets are therefore particularly supportive of this type of technologies.

On the other hand, other types of technologies such as ready-to-manage technologies with considerable cash flow at an early stage may not prove profitable in the presence of monopolistic labor and financial markets. Instead, these investment projects need liquid financial and labor markets in order to attract the necessary financial and human capital and be able to reallocate resources rapidly. Investment projects where economic actors hold widely heterogeneous expectations as regards their profitability need this high liquidity in order to attract the necessary capital factors. Again, institutions that favor highly liquid markets with strong opportunities to quickly reallocate resources to different projects are supportive of this type of technologies.

Different institutional environments may therefore support different technologies. In addition, there exists a trade-off between market liquidity and incentives for specific investments such that different local equilibria may not co-exist due to market interaction. Indeed, incentives to invest in specific assets are usually negatively correlated with the outside option of both the investor and the bargaining partner. Consequently, high market liquidity may negatively influence the specific investment provided by firms, workers or financial investors, as the specific match-value decreases. Given the interaction that exists

between markets, the reduced incentives for one investment type will spill over to the other market, decreasing overall investment into the firm's assets, ultimately lowering its productivity. It seems therefore, that there may exist a trade-off between efficiency gains that can be achieved in very liquid markets through reallocation and specific investment that would allow for a higher firm productivity. Consequently, while more flexible, liquid markets allow for a quick reallocation of resources through increased matching, more rigid markets may provide the necessary incentives for specific investments that are related to the success of existing firms. Multiple equilibria may therefore be expected (Amable and Ernst, 2003).

This trade-off between market liquidity and incentives for specific investment maps into industrial specialization via the particular characteristics of different technologies. Indeed, differences regarding technologies and their necessary specific investment are likely to be more important across firms in different industries than across firms within the same industry as documented, for instance, by the relative stability of business R&D in relation to value added across sectors. This may have to do with underlying characteristics of the technology predominantly used within a given industry (see, for instance, Breschi, Malerba and Orsenigo, 2000). Consequently, the institutional environment may not only exert an influence on the macroeconomic performance but may impact differently on industries, depending on whether it favors relation-specific investments or market liquidity. Hence, given the technological differences across industries, variation in the macro-level system of institutions will generate differences in the industrial portfolio a country is developing, in other words: the country's comparative technological advantages depend on its institutional environment. (Kitschelt, 1991; Soskice, 1997; Bassanini and Ernst, 2002).

Different dimensions can be used to assess characteristics of technologies, in addition to innovative outlays as measured by business R&D. For instance, different technologies may require dedicated human capital as a complementary factor in the production process. In addition, technologies may differ in the extent to which they are affected by informational, contractual and coordination problems. Finally, technologies may differ in the extent to which their commercial success may be assessable from the outset; hence, their degree of uncertainty may differ. The following table represents two important dimensions of technological characteristics and their consequences for the optimal market structure and therefore for the mix of supporting institutions:

Table 1: Technological Characteristics and Market Outcomes

Degree of uncertainty	Asset specificity	<i>Low</i>	<i>High</i>
	<i>Low</i>		Rapid reallocation across firms in liquid markets, external risk sharing
<i>High</i>		Rapid reallocation across firms, risk-sharing through firm networking and diversification across markets	Incentives for specific investments, low risk-sharing opportunities

Taken together, the paper's main hypothesis is that the institutional environment shapes the comparative advantages a country exhibits not only through the individual effects institutions may have but more importantly through the systemic effect that arises due to market interaction and complementary relations. In order to test these ideas, we concentrate in the following on particular characteristics of OECD countries' financial systems and industrial relations and analyze to what extent direct and complementary effects on the industrial specialization of different countries can be detected. Two dimensions are important: first, a measure or at least a proxy of specific industry characteristics had to be developed, indicating the specific informational and contractual problems one is likely to face in a particular industry. Second, structural variables had to be selected indicating the particular institutional mix on labor and financial markets one can find in specific countries.

Regarding the industry dimension, we used proxy variables to characterize the particular relational needs a certain industry possesses. In particular, three indicators have been selected: the skill level of industries, the extent to which they depend on bank finance and the extent to which they depend on equity finance:

- With respect to the level of skilled labor demand, the interpretation can be done in a straightforward manner, reflecting particular needs of these industries for specific investment by stakeholders and therefore for coordinated and institutionalised labor and financial relations, best obtained by highly regulated labor markets (as measured by unionization, wage bargaining and an indicator for adjusting working time and wages to shocks)

and long-term financial relations guaranteed (at least in theory) by the importance of banks and the concentration of ownership.

- As regards the type of external finance, two indicators are available relating to the degree of bank finance on the one hand and to the degree of equity finance on the other. Given the interactions mentioned above, one would expect bank-financed industries to prosper when particular combinations of protective institutional arrangements are present such that implicit capital can be built up. On the contrary, in equity-financed industries, liquidity, low implications by stock – and stakeholders and flexibility in the relations on financial and labor markets may be of particular importance.

Using the industry indicator, industries can be distinguished as to whether they are high skill, highly bank financed or highly equity financed. A first test whether institutional configurations have any importance for these three different groups of industries therefore simply consists of grouping countries according to their particular financial and labor market characteristics (see Table 7, p. 87). Growth rates can then be averaged over industries and countries in one particular group. When institutional complementarities are at work, one would expect to see that labor and financial market institutions that provide similar types of incentives for industrial activities (following our theoretical discussion) would allow to perform particular types of industries better in the countries where they prevail than in others. And indeed, our figures in Table 7 seem to point towards such a mechanism.

With these theoretical considerations at hand, and given the illustrative evidence that seems to point towards institutional configurations having significant impact on the performance of particular industries, we are able to set up four different hypotheses as to the impact of institutional arrangements on industrial specialization:

- **Hypothesis 1:** (*Interaction between institutional variables and industry specialization*) The industrial specialization is systematically related to the interaction between industry characteristics, the capital structure of firms and labor market relations in different countries.
- **Hypothesis 2:** (*Direct effect of financial relations*) Industries with high demand of stakeholder implication in the management of firms (as measured by high levels of skilled labor demand and high dependence on bank finance) are relatively more performing in countries with easy access to credit and a large banking sector; the opposite is true for countries with well developed stock markets.
- **Hypothesis 3:** (*Direct effect of industrial relations*) Industries with high demand of stakeholder implication in the management of firms are relatively more performing in countries with strong employment protection, weak labor

rotation and a relative stability of wage earners' salaries as well as a good representation by trade unions.

- **Hypothesis 4:** (*Complementary effect*) Industries with high demand of stakeholder implication in the management of firms are relatively more performing in countries combining long-term financial relations and strong stockholder implication in close firm monitoring with employment protection, weak labor rotation and a relative stability of wage earners' salaries as well as a good representation by trade unions.

b) Methodology

In order to test these issues we proceed in a straightforward way by using multivariate regressions with interactive terms. As we proceed with our analysis on the industry level, this seems to be a very suitable approach for our purpose. The highly incomplete nature of time series data on labor relation issues makes averaging over some time span necessary. It is therefore natural to construct a panel (i.e. cross section) around industry and country characteristics averaged over a period of approximately twenty years. The task here will therefore be to explain the variance of the long-run performance differential among industries and countries using variables institutional differences.

The methodology used here follows the one proposed by Carlin and Mayer (1999) and is similar to that used by Rajan and Zingales (1998). Different to latter we used demeaned variables while different to Carlin and Mayer we are using a combination of country characteristics to test institutional complementarity. To carry out the estimations, let us first define the following matrices:

- $Y = k \times i$ matrix of i industrial growth rates and investment shares in k countries
- $X = s \times k$ matrix of s individual and/or complementary country structural features in k countries
- $Z = c \times i$ matrix of c industry characteristics in i industries.

Let us denote \mathbf{B} the $s \times c$ matrix containing the coefficients that indicate the relations between country characteristics and industry characteristics on the one hand and industrial activity on the other. The estimation equation then writes as:

$$\mathbf{Y} = \mathbf{X}^T \mathbf{BZ} + \boldsymbol{\varepsilon}$$

where $\boldsymbol{\varepsilon}$ is the error term of the regression.

In this regression, industrial activity is measured by the average growth rate of value added between 1970 and 1995 in 27 industries ($i=27$) in 19 OECD-countries ($k=19$). Industries have been mainly selected in manufacturing on the 3- and 4-digit ISIC (Rev. 2) level.

Concerning the industry characteristics, we will retain three indicators reflecting underlying particular needs of investors when choosing an activity in a

specific industry: skilled labor input, intermediated finance, and equity finance. The first of these three variables is meant to indicate the degree of coordination necessary in a given industry among stakeholders; the two remaining ones may reflect particular needs for certain types of external finance (with different control and monitoring characteristics) or – as has been suggested by Rajan and Zingales (1998) – reflect an indicator for the need of external finance in general. In order to make sure that the indicators we have chosen reflect an underlying reality of the industry, problems of the supply of these factors had to be taken into account. In this respect, countries with the highest supply-price elasticity are likely to be the ones where the market outcome represents the best the underlying industry needs. Therefore, we have chosen to take Germany as the base for the skill indicator, Japan for the bank finance indicator and the United States for the equity finance indicator, following an earlier suggestion by Rajan and Zingales (1998).

The country characteristics have been taken into account through two different channels. Firstly, we have integrated several factors reflecting conditions on labor and financial markets that have been identified as crucial for economic growth in the literature. Moreover, in order to test our hypothesis on institutional complementarities, we have constructed interacting variables reflecting cross effects of institutional arrangements.

Concerning the financial market, we retain two basic types of variables: Firstly, we are measuring the relative size of the equity market (stock market capitalization, VC market capitalization) and the market for intermediated finance (credit). Second, we provide indicators representing the quality and the involvement of external investors in the firm management, such as accounting standards, equity hold by banks and ownership concentration.

In order to represent the institutional arrangements on the labor market two types of indicators have been chosen: on the one hand, indicators reflecting the individual labor relation and the arrangements framing actors contributing to it, such as the labor turnover, institutional flexibility, employment protection legislation (EPL) and the degree of unionization. A second type concerns the outcome of the bargaining process, largely dependent on collective coverage, level of bargaining (firm, industry or national level) and coordination among bargaining units.

In order to control for country and industry fixed effects, relative industry performance measures have been chosen. Industrial activity has hence been demeaned compared to industry and country averages. The independent variables have been demeaned the same way: the industrial characteristics with respect to the industrial average, while the country characteristics have been demeaned with respect to the country averages.

Continuing the definition we have y_{ik} as the dependent variable in industry i in country k , $y_{i\cdot}$ as its average across countries, $y_{\cdot k}$ as its average across industries and $y_{\cdot\cdot}$ as its average across countries and industries. Furthermore, define x_k as

the country variables, z_i as the industry variables, x_k as the averages of the country variables across all countries, z_- as the averages of the industry variables across all industries and a and b as parameters.

The general equation of testing individual and complementary country features on industrial specialization would be:

$$y_{ik} = a_i + a_k + b_k x_k + b_i z_i + b_{ik} x_k z_i + b_{IC} v_k z_i + \varepsilon_{ik}$$

where x_k and $v_k \equiv x_k' x_k''$ stand for different structural country features represented by matrix \mathbf{X} . Here a_i represents industry fixed effects, while a_k stands for country fixed effects. The structural country characteristics can be tested individually (leaving out b_{IC}), complementarily (leaving out b_{ik}) or in combination. Using the demeaned dependent variables – demeaned relative to both country and industry averages – and demeaned industry and country variables – demeaned relative to their industry- and world-wide averages respectively – this equation can be rewritten as:

$$\begin{aligned} y_{ik} - y_{i-} - y_{-k} + y_{--} &= b_{ik}(x_k - x_-)(z_i - z_-) + b_{IC}(v_k - v_-)(z_i - z_-) \\ &\quad + \varepsilon_{ik} - \varepsilon_{i-} - \varepsilon_{-k} + \varepsilon_{--} \\ &= b_{ik}(x_k - x_-)(z_i - z_-) + b_{IC}(x_k' x_k'' - x_-' x_-'')(z_i - z_-) + \tilde{\varepsilon}_{ik} \end{aligned}$$

By demeaning the dependent variable with respect to both industry and country averages we have the convenient effect of controlling effectively for fixed effects helping to focus on the relationship between growth and the interaction of industry and country structure characteristics.

Omitted variables can never be fully accounted for; nevertheless, most of the other factors can be controlled for by this demeaning approach, while others (such as capital intensity and the dynamics of industry's domestic demand), being co-determined in equilibrium are not included in the reduced form, since, in a cross-section, it is impossible to find valid instruments for these variables. Furthermore, we lack good cross-country comparable data on capital intensity both at the aggregate and industry level.

As has been indicated above structural characteristics enter the regression in two ways: firstly, indicators reflecting different aspects of financial and labor market relations are integrated to identify their direct effect on the endogenous variable; secondly, multiplicative terms are constructed to detect complementary effects.

Concerning the financial market, two types of variables are considered. Quantitative indicators measure the size of the stock market exchange and the importance of credit relations in the different economies. In order to measure qualitative aspects, accounting standards, equity holdings by banks and ownership concentration has also been integrated.

With respect to the labor market, two measures of employment flexibility are considered here: the turnover ratio and an institutional flexibility indicator

reflecting the possibility to quickly adjust wages and working hours to new economic shocks. On the other hand, the degree to which wage earners are protected by institutional actors is measured by the unionization rate and the coverage ratio.

Given these different variables, Table 2 synthesizes the sign of the regression coefficients, as we would expect them according to our four different hypotheses:

Table 2: Coefficients Table

		Industrial characteristics		
		Skill level	Equity finance	Bank finance
Structural characteristics	Stock markets		$b_{12} > 0$ (H2)	
	Banks	$b_{21} > 0$ (H2)		$b_{23} > 0$ (H2)
	Ownership concentration	$b_{31} > 0$ (H2)		$b_{33} > 0$ (H2)
	Flexibility	$b_{41} < 0$ (H3)	$b_{42} > 0$ (H3)	$b_{43} < 0$ (H3)
	Unionization	$b_{51} > 0$ (H3)	$b_{52} < 0$ (H3)	$b_{53} > 0$ (H3)
	Accounting * unions			
	Banks * unions	$b_{71} > 0$ (H4a)	$b_{72} > 0$ (H4b)	$b_{73} > 0$ (H4a) or $b_{73} < 0$ (H4b)
	Ownership * unions	$b_{81} > 0$ (H4a)	$B_{82} > 0$ (H4b)	$b_{83} > 0$ (H4a) or $b_{83} < 0$ (H4b)

Source: Own Calculations.

3. Regression results

a) Presentation and discussion

In order to test the different hypotheses ten different regressions² have been tested, combining the different institutional variables, to assess their impact on the growth rate of value added for the selected 27 industries. Table 3 resumes the variables used and the way they are constructed. A differentiation has been made between regressions assessing direct effects (Table 9) and complementary effects (Table 10). First, only the financial variables have been used (regression 1), then only those variables relating to the labor market (regression 2); in a third regression their explanatory power has been combined (regression 3) while regression 4 reports results where highly insignificant regressors have been dropped; this will constitute the preferred regression for direct effects.

Using second-order equations without assessing the exact functional form³, the second series of regressions tries to establish complementary effects, taking as base each of the three industry characteristics. Regression 4 reports the effects of a combination of ownership concentration and unionization on skilled dependent industries. Regression 5 tries to establish a relationship between ownership concentration and employment protection on bank-financed industries. Finally, regression 6 relates dispersion of ownership, low unionization and equity dependent industries. The individual effects have been put together in regression 8 to test their independence, while regression 9 presents the same equation by using a different estimation technique, called least absolute deviation (LAD). Finally, regression 10 presents one possible additional control for industrial growth by considering the effect of R&D intensity. All OLS regressors have been corrected for heteroscedasticity and only regressions corrected for Welsh-outliers have been reported⁴.

² Table 9 and Table in the appendix only show the results of regressions controlled for outliers using the Welsh distance (Welsch, 1982). Similar to the DFITS approach it attempts to summarize the information in the leverage versus residual-squared plot into a single statistic.

³ Only an equation of the form:

$$y = \alpha + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_1 x_2 + \varepsilon$$

has been tested where any squared terms of x_1 and x_2 – necessary to test for the functional form – have been dropped.

⁴ Other controls have been used such as capital intensity and openness but have not been reported here. Moreover, we have tested hypothesis 4 against the alternatives 2 and 3 by

Table 3: Variable Construction

1. Industrial variables	
Relative weight of sectors in 1970	INITIAL SHARES
Skilled labor input by sector	SKILLS
Bank financed industry	BANK FINANCE
Equity financed industry	EQUITY FINANCE
2. Financial market variables	
Accounting standards	ACCOUNTING
Credit as % of GDP	CREDIT
Ownership concentration	CONCENTRATION
Equity owned by banks	EQUITY
Ownership dispersion	DISPERSION
3. Labor market variables	
Institutional flexibility	FLEXIBILITY
Labor turnover	TURNOVER
Unionization	UNIONIZATION
Collective coverage	COVERAGE
Employment protection	EPL
4. Dependent variable	
The regressors that have been used are constructed by multiplication of an industry variable (1.; except INITIAL SHARES) with one of the variables in 2. or 3.; the complementary regressors have been constructed by multiplication of a variable of all three segments.	

All regressions confirm the initial hypothesis of regression towards the mean: in all ten cases, there is a strong convergence with high significance. An increase of the sector size by one percentage point diminishes the growth rate on average by 0.15%. Hence, one observes a growth rate convergence between sectors with low initial parts towards those with high initial parts. The industrial specialization that has taken place between 1970 and 1990 therefore cannot be explained only by reference on the initial size of the sector; other factors have to

putting the complementary terms in the preferred equation to check for robustness of the complementary terms. All regressions - including the ones not corrected for outliers - can be requested from the author.

be taken into account, which leaves room to the institutional variables suggested here.

Analyzing the effect of these institutional variables gives indeed some interesting results. As can be seen from the first regression, seven out of nine financial variables can be shown to be significant on the 5- or 10% level. This compares well with similar studies carried out by Carlin and Mayer (1999) and Rajan and Zingales (1998) who also found a strong relationship between (similar) financial variables and industrial growth rates.

Evidence on relations between labor market arrangements and industrial growth rates, however, seems to be much weaker with only five out of nine variables being significant. Moreover, some results seem to be somewhat surprising in that they have the opposite of the (theoretically) expected sign (unionization comes out to have a positive impact on equity dependent industries). Neither indicators for labor turnover nor variables implying institutional flexibility play any significant role here. Again, this seems to confirm the studies cited earlier that did not find any strong relationship between labor market institutional arrangements and aggregate or disaggregate economic performance.

Integrating both sets of variables into one regression increases the significance level of some variables while reducing the number of significant variables. This may be due to the reduced number of observations (278 compared to 302 and 339 in the first and second equation). Consequently, the *F*-statistics deteriorates while still leading a 1% significance level for the overall equation. This problem is partly solved by dropping highly insignificant variables as has been done in regression 4.

While these first four regressions already showed an important impact of (some) institutional arrangements on the performance of industries with particular needs – and hence confirming our first hypothesis – the complementary effect still has to be assessed. This is the objective of Table Using all three industry dimensions (skill, bank finance, and equity finance), regressions (5)–(7) present evidence on the combination of particular institutional arrangements on the financial and the labor market with industries exposing these particular characteristics.

In all three cases, highly significant combinations have been found to give the (theoretically) predicted sign on industry performance. Combinations of concentrated ownership together with employment protection or unionization (a private association equivalent to employment protection) is found to be related to industries with particular needs in stakeholder coordination as represented by the input of skilled labor and the demand for bank finance. On the other hand, competitive labor market relations and financial relations characterized by high liquidity and low market power of participants (high degree of ownership dispersion) is systematically linked to industries with high equity demand. Notice, moreover, that the complementary effect offsets some of the earlier

direct effects: in all three combinations, the direct effects have a negative sign, indicating that – relative to the complementary effect – an increase of one measure individually does not lead to increased industrial performance; only the combined effect of both types of institutional arrangements will have the anticipated positive effect.

Regression 8, moreover, shows that these linkages can be considered independently reflecting a variety of institutional models. Here, all three previous regressions have been put together, still resulting in significant estimators; hence, no colinearity between complementary or single effect variables seems to emerge. In order to put further pressure on the robustness of these regressions, we also used least absolute deviation (LAD) estimators on the full sample. Here, no outlier control is necessary (hence more observations are available) as existing outliers will less affect the significance of the estimators. In this case, the significance of all estimators drops while still reaching at least the 10% level⁵.

Moreover, by putting the complementary terms in the preferred regression 4 (not shown in Table 10), hypothesis 4 (the existence of institutional complementarity) could be tested against hypothesis 2 and 3 (only direct effects exist). In this case, the complementary effects remain significant while the direct effects largely disappear if they do not correspond to any of these complementarities (with the notable exception of the direct effect of EPL on equity dependent industries). Hence, going back to our initial hypotheses, the relationship between complementary variables and industrial specialization can clearly be established in light of the results presented in Table 10. Direct and complementary results have been summarized in the following

A RESET test has been used to assess whether omitted variables may be a problem for the empirical analysis. In the case of complementary variables, the test passes in all six cases. Moreover, the joint significance of the complementary variables has been tested; given that not necessarily all complementary relations need to exist simultaneously, this helps to analyse their importance in the case of low significance of single complementary relations. Again, the test does not allow rejecting the joint significance.

⁵ The LAD regression has not been presented here but is available from the author upon request

Table 4: Summary of Regression Results

		Industrial characteristics		
		Skill level	Equity finance	Bank finance
Structural characteristics	Stock markets	++	++	0
	Banking sector	0	0	---
	Ownership concentration	0	---	-
	Worker representation	0	+	0
	Protection of labor relations		+++	+++
	Dispersion * Flexibility		+++	
	Concentration * Unions/EPL	+++		+++

Source: Own calculations.

With respect to our initial hypotheses (2) – (4), the direct effects are confirmed in the first series of regressions. It is therefore not surprising that several authors have found these relations in similar studies; however, the fact that some of the predicted signs of their coefficients (this is especially true for the study by Carlin and Mayer, 1999) do not correspond to straightforward and well established theoretical considerations may be explained by the omission of the complementary effect. It is therefore telling that the direct effect does not persist as soon as complementary relations between labor and financial market arrangements are introduced.

In all regressions, ownership concentration seems to be an important aspect of the complementary relationship compared to other aspects of the financial market such as market capitalization or the amount of credit circulating in an economy. This joins an earlier point made by Mayer (1998) where he claims that one important aspect of financial relations is the actual incentive to carry out monitoring of investment projects; standard wisdom in financial economics has it that these incentives raise with concentration of ownership for the majority stockholder. Moreover, an important endogeneity problem exists with variables such as the credit ratio or stock market capitalization, even when averaged over a certain period. Usually, these variables are highly dependent on the state of the economy and are strongly correlated with the business cycle. Variables such as ownership concentration or accounting standards (which did not seem to enter in any specific complementary relation in our regressions), on the other hand, are much more determined by the underlying legal framework and existing social capital assets that have been accumulated earlier.

Interestingly, all three types of interaction seem to work independently as no complementary effect disappears when put into one single equation. This suggests that there may actually exist multiple channels of institutional complementarities working through different types of industries, as has been discussed in the beginning. Bank financed industries react more importantly to a combination of employment protection and ownership concentration while skill dependent industries are more likely to be associated with a combination of ownership concentration and worker representation (the reverse holds for equity dependent industries). This suggests that in skill dependent industries the reduction of wage differentials and a compressed wage structure may be the relevant aspect while a stronger protection of long-term engagement combined and consequently of specific investments by workers seem to be more relevant for bank financed industries.

b) Some Sensitivity Analysis

The results reported in the above discussion may be driven by particular sectors or depend on endogenous relations between country institutional characteristics and industrial growth. In the following, a number of tests have been carried out in order to detect the sensitivity of the regression results with respect to the exclusion of industries and specific countries.

First, in regression 9 (Table 10), we present the effect of the inclusion of R&D intensity as an additional control for the industry growth equation. As can be seen, the complementary terms remain highly significant while R&D intensity adds to the explanation of the variance with the expected positive sign. Hence, over and above the channel through firms' innovative investment, the complementarities detected have also a direct effect on industry performance.

Table 5: Industry Sensitivity Analysis

		Complementarity type		
		Skill complementarity	Bank finance complementarity	Equity finance complementarity
Significance	on 1% level	311, 312, 313, 321, 322, 323, 324, 331, 332, 341, 342, 354, 355, 356, 361, 362, 369, 371, 372, 381, 383, 3843, 385		All industries
		314, 351, 352	All industries	
	on 5% level			
	on 10% level	382		

Source: Own calculations.

Second, in order to further approximate a standard growth equation, we included a proxy for capital intensity. In the absence of reliable initial values for the stock of capital, we used the average investment intensity over the period 1970-1995 instead. As column (10) shows (Table 10), all complementary terms remain significant at least at the 5% level adding further to the explication of the variance. Investment intensity has the expected positive sign and R&D intensity remains significant with the correct sign.

Finally, in order to determine whether particular sectors are driving the regression, an industry sensitivity test has been carried out for each single industry. In

Table 5 the results of the – outlier controlled – regressions have been summarized when a single industry has been dropped.

The table shows that the preferred equation is robust with respect to most sectors; no particular sector seems to drive the equation. The bank finance and equity finance complementarity in the preferred equation even resists to any change of the industrial selection. This is less so with the skill complementarity. While the equation resists to most of the industries, the significance drops to 5% for sectors 314, 351 and 352 and even to 10% for the non-electrical machinery (sector 383). Nevertheless, the complementary relation still holds and no particular sector can be made responsible for driving the results of the preferred equation.

A further issue raised by the above analysis is whether the independent variables can be treated as exogenous. The fact that they are not measured prior to the dates over which industry growth is measured exacerbates this concern. However, even if they were then the question of whether country structures and industry characteristics could be treated as exogenous would arise.

In order to avoid these problems of endogeneity between industry variables and country performance a regression has been run excluding Germany, Japan and USA, the three countries that provided the data on fundamental characteristics of industries⁶. In order to get a more detailed idea on the relationship between these three countries and the regression results, three more regressions have been provided in addition, excluding only subgroups of countries. The results are presented in Table 6.

It turns out that the first two complementary types resist quite well to the exclusion of all three or subgroups of the above countries. This is less the case

⁶ Unfortunately, instrumenting independent variables by country characteristics that may be fundamentally exogenous - as suggested by the studies cited earlier - proved infeasible given that no appropriate instrument seem to exist for most of the labor market institutional arrangements.

with the third complementarity type – between equity dependent industries and a combination of dispersion and low unionization. Here, a problem seem to exist as the exclusion of either Japan or the United States – and even more importantly the exclusion of both countries – from the regression deteriorates the significance level of the complementarity even though it still keeps the predicted sign. A further analysis seems to be necessary to detect the reason for this econometric behavior and eventually a substitution of the variables used in the regression.

Table 6: Country Sensitivity Tests

Dependent Variable: Average Value Added Growth 1970-1995				
Regressions	(I)	(II)	(III)	(IV)
<i>Excluded countries</i>	<i>Germany, Japan, USA</i>	<i>Japan, USA</i>	<i>Japan</i>	<i>USA</i>
Variables				
Initial shares	-0,1360*** (-3,749)	-0,1092*** (-3,333)	-0,1263*** (-3,704)	-0,1348*** (-3,874)
Concentration*Unioni- sation*Skills	1,515*** (2,595)	1,419** (2,481)	0,9449*** (3,190)	1,3343*** (2,782)
Concentration* Skills	-0,7208** (-2,512)	-0,6733** (-2,400)	-0,4422*** (-3,241)	-0,6315*** (-2,724)
Unionization*Skills	-1,125** (-2,273)	-1,042** (-2,153)	-0,6193** (-2,500)	-0,9600** (-2,385)
Concentration*EPL*	0,0573* (1,742)	0,0597* (1,843)	0,0732*** (2,588)	0,0594* (1,936)
Bank Finance	-0,0351*** (-3,606)	-0,0352*** (-3,594)	-0,0396*** (-4,674)	-0,0328*** (-3,362)
Concentration*Bank Finance	-0,0253 (-0,917)	-0,0274 (-1,032)	-0,0427* (-1,889)	-0,0331 (-1,356)
EPL*Bank Finance	0,4104 (1,293)	0,1107 (0,363)	0,2150 (1,152)	0,3236 (1,620)
Dispersion*(1- Unionization)*Equity	-0,1746 (-1,109)	-0,3976 (-2,263)	-0,0704 (-0,793)	-0,1312 (-1,406)
Dispersion*Equity	-0,3196 (-1,119)	-0,0257 (-0,094)	-0,1358 (-0,793)	-0,2397 (-1,546)
(1-Unionization)* Equity	278	297	312	314
Observations	0,1227	0,1159	0,1416	0,1069
Adjusted R ²	0,77	0,85	1,10	0,99
RESET	F(10,267)=5,70	F(10,286)=6,25	F(10,301)=7,77	F(10,303)=4,55
F	[0,0000]	[0,0000]	[0,0000]	[0,0000]
[p-value]	5,17***	3,78**	6,23***	7,25***
Joint significance of IC variables				

Source: Own calculations.

4. Conclusion

This article tries to establish systematic effects of institutional *combinations* – as compared to single institutional arrangements – on industrial activity and in particular on the selection of countries' industrial portfolio. Using a cross-section database, it has been shown that certain combinations of arrangements on financial and labor markets have the (theoretically) predicted sign on particular industries. Industries showing more needs in flexible relations with stock – and stakeholders are significantly more performing in countries with a combination of dispersed ownership and flexible labor relations. On the other hand, industries with strong cooperative needs between various financial investors, management and the workforce can prosper better in countries displaying a combination of protected employment relations and financial relations with important monitoring incentives. Moreover, the estimations testing for the effect of institutional combinations (or complementarities) perform better than those only aiming at assess any direct effects of types of financial systems or industrial relations.

One potential drawback with the approach suggested here has to do with the fact that the standard industry classification index usually does not relate to the underlying informational and coordination problems that the use of a particular technology may imply (see Kitschelt, 1991, pp. 460–468). Various types of technologies may co-exist in any given industry while institutional combinations have a positive impact only on a subgroup of them in different industries. In this sense, the reported results here may only reflect some statistical artefacts but do not represent a confirmation of the theory.

One may suppose, however, that over a relatively long time-horizon evolutionary competitive pressure may drive out those technologies that do not benefit from the country's institutional environment. If this applies, the observed industrial specialization pattern reflects more closely any inherent industrial characteristics. It is therefore important to use long-term averages as we have proposed it in this contribution.

The results arising from several empirical estimations seem to confirm an association between certain types of institutional *combinations* and countries' industrial specialization. Depending on the inherent characteristics of the industry as measured by the degree of skill dependence, bank finance dependence, or equity finance dependence, an industry may react differently to combinations of ownership control and outsider control on the financial market and worker representation and employment protection on the labor market. These results have been tested against a variety of alternative hypotheses involving only direct institutional effects and been analysed using a sensitivity analysis. Whether by using an outlier control or a least absolute deviations

(LAD) approach, the hypothesis regarding institutional complementarities could be maintained.

Further research along these lines would imply enlarging the possible market interactions as well as the indicators that have been used to analyse these relations. One could imagine integrating indicators concerning the characteristics of the product markets in the countries forming the base of this study. Moreover, using a simulation analysis could help to assess the impact of institutional change during transition periods of modified structural conditions.

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Appendix 1 – Data Bases

a) Value added growth

In order to evaluate the relative industry performance, data on value added growth at constant prices of 27 manufacturing industries (ISIC Rev. 2, mainly 3 digit) of 19 OECD countries between 1970 and 1995 has been taken. All data tables can be found in appendix 2, p. 87.

Table 8 contains the annual average growth rates of these 19 countries over the selected period. Portugal has shown the highest growth rate with Finland being second; Germany, Norway and the United Kingdom followed the least dynamic growth path in this sample. The table also shows a shift-share analysis. The first is a “share effect”, the contribution of deviations of initial shares in different industries from world averages in 1980, capturing the extent to which deviations from world average growth rates are attributable to high initial shares in industries that experienced high or low growth. The second is a “growth effect”, the contribution of deviations from world average growth rates assuming initial shares are equal to world averages, hence capturing country specific deviations from world average growth rates independent of initial industry allocations. The third is an “interactive effect”, the interaction of deviations of initial shares and industry growth rates from world averages.

The table records that the country variation is nearly entirely attributable to the growth effect. This is confirmed by an analysis of variance: -7.5% of country growth variation is attributable to the share effect, 108.6% to the growth effect and -1.1% to the interactive effect; the last of these implies that there is significant regression to the mean – high share industries have below average growth rates.

b) Industry characteristics

We focus on three characteristics of industries: the extent to which they are reliant on market sources of finance, bank finance and a skilled labor force. Establishing the significance of these inputs to the activities of different industries is complicated by the constraints under which firms in these industries may be operating. There may be legal, regulatory, institutional and cultural considerations, which limit their availability or raise their price. The approach which we have taken mirrors that in Rajan and Zingales (1998) who argue that since the US has one of the most highly developed and liberal financial markets in the world, US firms are likely to face the least constraints in raising external finance. External funding levels of US industries will therefore most closely approximate the requirements of firms operating in those industries.

We similarly constructed our three industry variables by using the countries in which conventional wisdom suggests that they are least likely to be constrained and therefore a close reflection of the underlying characteristics. Stylised descriptions treat the US as the archetypal market based financial system, Japan as a bank based system and Germany as a country in which investments in skills and training is promoted. We therefore measured cross-industry variations in external market based sources of finance in the US, bank finance in Japan and investment in skills in Germany.

Using data from Rajan and Zingales (1998), external financing was measured as the fraction of capital expenditure not financed with cash flow from operations by US firms during the 1980's. Equity financing was measured as the ratio of the net amount of equity issues to capital expenditures. Industry data on bank finance in Japan was obtained from the Japanese Ministry of Finance. Bank financing ratios were constructed as the ratio of bank loans to gross external financing (total investment including investment in financial assets minus retentions) and as the ratio of bank loans to physical investment (net of depreciation) averaged over the period 1981 to 1990. Most of the results reported below refer to the latter definition of bank financing. Oulton (1996) reports skill levels of the German work force in 1987. The proportion of the work force with high, upper intermediate, lower intermediate and no vocational qualifications is reported for 30 manufacturing sectors.

Table 4 shows three of the industry variables: equity financing, bank financing and skill levels. Electrical machinery has a high level of equity financing in the U.S. but a modest level of bank financing in Japan. Clothing has one of the highest levels of bank financing in Japan but raised no equity in the U.S.. Skill levels are high in shipbuilding, an industry that raises little equity in the U.S. and ran down outstanding stocks of bank debt during the 1980's. Skill levels are low in textiles, an industry that was heavily dependent on bank finance in Japan but raised little external equity finance in the U.S.. In professional goods, levels of equity finance, bank finance and skills are all above their means. The correlation between equity and bank finance is 0.073, between skills and bank financing is -0.455 and between skills and equity financing is 0.172.

c) Country characteristics

i. The Financial Market

Five structural features that apparently display considerable variation across countries are the degree of concentration of ownership, information disclosure rules, relations between banks and industry, the sizes of stock markets and banking systems. In two papers, La Porta *et al.* report data on ownership concentration in a large number of countries. La Porta *et al.* (1997) report data on the median ownership of the three largest shareholders in the 10 largest non-

financial privately owned domestic firms. La Porta *et al.* (1998, Table 3b) report the mean percentage of the 20 largest firms that were widely held in the sense of having no shareholder with more than 10% voting control. La Porta *et al.* (1998, Table 4) report a third measure of ownership structure: the mean percentage of the 20 largest firms which were not widely held and had control exercised through a pyramid of at least one publicly traded company. Most of the results relate to the second measure of ownership concentration.

Financial disclosure is commonly associated with accounting standards. The Center for International Financial Analysis and Research creates an index of accounting disclosure on a scale from 0 to 90 based on the annual reports of at least three firms in each country. The first comprehensive survey was undertaken in 1990 and the results, which are reported in Rajan and Zingales (1998) and La Porta, Lopez-de-Silanes, Shleifer and Vishny (1997), have been used in this study.

There is no single source of information on bank ownership of corporate equity. Data on the market value of equity held by banks as a proportion of the market value of equity held by the private domestic sector averaged over the period 1980 to 1990 were collected from individual central banks; where this was not available then OECD Financial Statistics were used.

The size of stock markets was measured by the average ratio of market capitalization to GDP over the period 1982 to 1991 as reported by the IFC Emerging Stock Market Factbook. The size of banking systems was measured by the average ratio of bank credit to GDP over the period 1980 to 1990 as reported by IMF International Financial Statistics.

Table 5 records that concentration of ownership is much lower in the UK and U.S. than elsewhere. Australia, Canada and Japan have intermediate levels of concentration and Continental Europe has high levels of concentration. Finland, Germany and Japan have particularly high levels of bank ownership of corporate equity and have also large banking systems. France has a large banking system but little bank ownership of corporate equity. Sweden and New Zealand have no bank ownership of corporate equity and small banking systems. There is little bank ownership in the U.S. but above average amount of bank lending. Accounting disclosure is low in Austria, Greece and Spain. These countries also have small stock markets. The UK has high accounting disclosures and a large stock market but Sweden has high accounting standards but only a modest sized stock market. The correlation between accounting standards and the size of stock markets is 0.472, between bank ownership of corporate equity and the size of banking systems is 0.657, between ownership concentration and bank ownership of equity is 0.126 and between accounting standards and ownership concentration is -0.391.

ii. *The Labor Market*

Concerning the labor market, indicators for institutional flexibility have been taken from Fitoussi and Passet (2000); theirs reflect the ease with which employment, hours worked and wages can be adapted to modified market conditions. Summing up the three base indicators – ranging from 0 to 2 – gives the overall picture of a country concerning its labor market flexibility. The indicators contain the legislation on employment protection, the ease of use of overtime work, the degree of decentralization and coordination of wage bargaining, the overall wage dispersion and the wage dispersion by skill level (Fitoussi and Passet, 2000, p. 36).

The second indicator for the labor market flexibility is actually one of the components of the first one: the labor turnover as measured by the average rate of turnover of the work force in eleven countries between 1979 and 1991 (OECD, 1993, ch. 4). A high rate indicates rapid layoffs and hirings of firms and hence the possibility of rapidly adjusting the employment level to (short-term) fluctuations.

The rate of unionization has been taken from the Luxemburg Income Study (Huber, Ragin and Stephens, 1997) and Visser (1996). Collective coverage has been calculated using the available data in OECD (1997) by averaging over the available years. The rate of unionization represents the degree to which workers are represented within the firm and in the political sphere outside the firm. On the one hand, a high unionization will affect workers' power on the bargaining table; on the other hand, it increases the protection of the labor relation through representation (similar to a *voiced*-mechanism). Collective coverage reflects the degree to which bargaining agreements are extended to non-bargaining units; in this, it is a clear indicator of the bargaining power workers have.

As can be seen from Table 13, p. 94, a great diversity of both types of worker representation exists. At one extreme one can find countries like France with a relatively low unionization rate (about 10% in 1993) but an almost fully encompassing collective coverage (95% in 1993); on the other hand, the U.S.A and Canada have only low degrees of extension of collective agreements, and hence unionization and collective coverage rates are much closer.

A further indicator for the flexibility of the labor relation is EPL, the employment protection legislation (Nicoletti, Scarpetta and Boylaud, 1999). The indicators regroups a series of administrative barriers to adjustment of the work force, such as firing costs, the restriction of overtime or the restriction of use of temporary workers. As can be seen from the correlation matrix of labor market indicators (Table 13, p. 94f.) a highly significant negative correlation exists between labor turnover ratios and EPL.

The last three indicators – coordination, centralization and corporatism – reflect the degree of coordination among bargaining partners (OECD, 1997), which may have important consequences for the degree of wage flexibility to

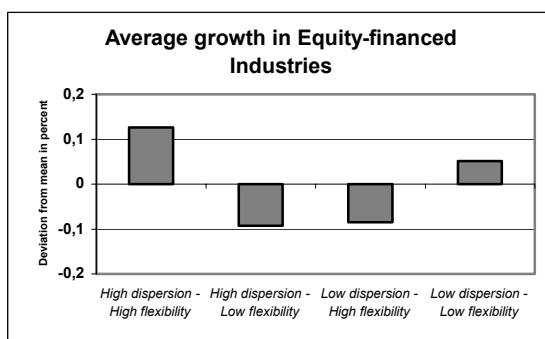
aggregate shocks. The centralization indicator simply reflects the level of the bargaining process (firm level, industry level, national level). Coordination instead focuses on the degree of consensus between the collective bargaining partners. Even in the case of decentralized bargaining, it can be coordinated as it will be in the case of pattern bargaining or covert coordination.

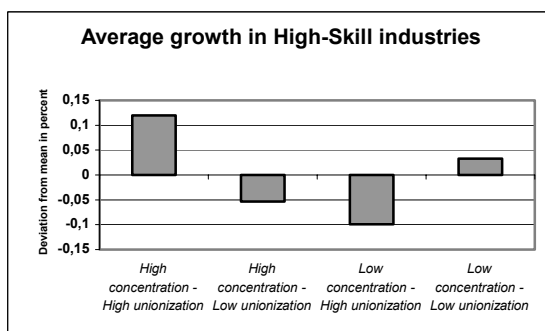
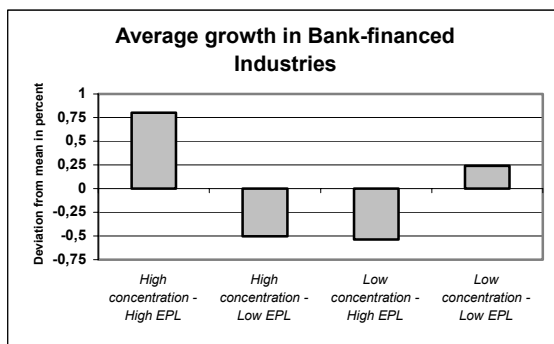
Corporatism includes also the interaction of bargaining partners with the surrounding political sphere. Several dimensions affect this indicator: (i) the existence of strong centralized organizations of employers and worker representatives with an exclusive right of representation; (ii) the privileged access of such centralized organizations to government and (iii) social partnership between labor and capital to regulate conflicts over interests. All three indicators range from 1 to 3.

Appendix 2 – Figures and Tables

Table 7: Institutional Complementarities

The figures present average growth rates by country groups in industries characterised by the prevalence of (i) equity finance, (ii) bank finance and (iii) intensive use of high-skilled labor (for sources see Table 11). Country groups have been defined according to labor and financial market characteristics: Cross-country differences in financial market characteristics have been measured by ownership concentration/dispersion as reported by La Porta *et al.* (1998). Labor market characteristics have been measured by labor market flexibility (Fitoussi and Passet, 2000), employment protection legislation (Nicoletti, Scarpetta and Boylaud, 1999) and by the degree of unionization (Visser, 1996). Cross-country averages of these indicators have been used as thresholds to define “high” and “low” groups.





Country clusters by category:

High-skill industries:

Group 1: Austria, Belgium, Germany, Italy, Japan

Group 2: Netherlands, New Zealand, Portugal, Spain

Group 3: Australia, Denmark, Finland, Norway, Sweden, UK

Group 4: Canada, France, U.S.A

Bank-financed industries:

Group 1: Austria, Germany, Italy, Portugal, Spain

Group 2: Belgium, Denmark, New Zealand

Group 3: France, Japan, Netherlands, Norway, Sweden

Group 4: Australia, Canada, Finland, UK, U.S.A

Equity-financed industries:

Group 1: Canada, UK, U.S.A

Group 2: Australia, Finland, France, Netherlands, Norway, Sweden

Group 3: Denmark, New Zealand, Portugal

Group 4: Austria, Belgium, Germany, Italy, Japan, Spain

Source: Own calculations.

<i>Table 8: Decomposition of the Growth Rate</i>					
The table presents the average weighted growth rates for manufacturing between 1970 and 1995 for 19 OECD countries in column 2. Column 3 indicates the difference with respect to the country average; columns 4, 5, and 6 decompose the weighted growth rate to evaluate the effect of initial shares, the growth effect and the interaction effect by using the following equation:					
$\sum_i \{a_{ik}g_{ik} - a_i g_i\} = \sum_i \{a_{ik} - a_i\} g_i + \sum_i a_i \{g_{ik} - g_i\} + \sum_i \{a_{ik} - a_i\} \{g_{ik} - g_i\}$					
where a_{ik} is the share of industry i in country k in 1970, g_{ik} is the average growth rate of industry i in country k between 1970 and 1995 (the subscript $-$ indicates the country average). Columns 4, 5 and 6 correspond to the first second and third RHS term. Data has been collected from the OECD Structural Analysis Database (STAN) 1998.					
Country	Growth rate	Distance to the mean	Initial shares	Growth effect	Interaction effect
Australia	0.014	-0.005	0.001	-0.005	-0.001
Austria	0.023	-0.005	0.000	0.005	-0.001
Belgium	0.018	-0.001	0.002	-0.001	-0.002
Canada	0.018	0.000	0.002	0.001	-0.004
Denmark	0.014	-0.005	-0.001	-0.002	-0.001
Finland	0.029	0.010	-0.001	0.014	-0.002
France	0.016	-0.002	0.001	-0.002	-0.001
Germany	0.009	-0.010	0.003	-0.013	0.001
Greece	0.014	-0.005	-0.006	0.000	0.001
Italy	0.028	0.009	-0.004	0.014	-0.001
Japan	0.025	0.007	0.001	0.011	-0.004
Netherlands	0.018	0.000	0.002	-0.004	0.001
New Zealand	0.007	-0.011	-0.001	-0.008	-0.003
Norway	0.007	-0.012	-0.002	-0.009	-0.001
Portugal	0.033	0.015	-0.004	0.016	0.002
Spain	0.013	-0.006	0.001	-0.006	-0.001
Sweden	0.011	-0.008	-0.001	-0.007	-0.001
U.K.	0.003	-0.016	0.001	-0.015	-0.001
U.S.A	0.021	0.003	0.002	0.007	-0.006

Source: Own calculations.

Table 9: Regression Results – Direct Effects

A constant has been added but not reported in the table. All regression errors have been corrected for heteroscedasticity. Only regression controlled for Welsh outliers have been reported; the full list of regressions is available on request. *=10% significance level; **=5% significance level; ***=1% significance level.

Variable: Average value added growth 1970-1995

Regressions Variables	(1)	(2)	(3)	(4)
Initial shares	-0.1392*** (-3.487)	-0.1368*** (-3.974)	-0.1516*** (-3.556)	-0.1339*** (-3.566)
Accounting*Skills	0.3169** (2.149)		0.5229* (1.964)	0.3126** (2.479)
Accounting*Bank finance	-0.0246** (-2.106)		-0.0075 (-0.473)	
Accounting*Equity finance	0.1909** (2.600)		0.0095 (0.079)	0.1997** (1.973)
Equity*Skills	0.1009 (0.381)		-0.1477 (-0.517)	
Equity*Bank finance	-0.0238* (-1.742)		-0.0455** (-2.390)	-0.0465*** (-3.785)
Equity*Equity finance	0.2896* (1.852)		0.2610 (1.090)	0.2043 (1.500)
Concentration*Skills	0.0068 (0.130)		-0.0320 (-0.340)	
Concentration*Bank Finance	-0.0068** (-2.209)		-0.0094 (-1.490)	-0.0158*** (-3.251)
Concentration* Equity finance	0.0491** (2.124)		-0.0807* (-1.787)	-0.0800* (-1.938)
Flexibility*Skills		0.0258 (0.486)	-0.1145 (-1.138)	
Flexibility*Bank finance		0.0099 (1.161)	0.0010 (0.113)	
Flexibility*Equity finance		0.0455 (1.166)	0.0701 (1.310)	
EPL*Skills		0.0107** (2.170)	0.0085* (1.681)	0.0102** (2.094)
EPL*Bank finance		0.0192* (1.704)	0.0154 (1.408)	0.0174*** (3.019)
EPL*Equity finance		0.1389** (2.465)	0.2469*** (3.332)	0.2268*** (4.039)
Unions*Skills		0.1965*** (2.650)	-0.0949 (-0.813)	
Unions*Bank finance		-0.0028 (-0.526)	-0.0015 (-0.171)	
Unions*Equity finance		0.0673* (1.903)	0.1167*** (2.805)	0.0919* (1.699)
Observations	302	339	278	299
Adjusted R ²	0.1328	0.1184	0.1635	0.1994
F [p-value]	F(10.291)=5.13 [0.0000]	F(10.328)=5.82 [0.0000]	F(19.258)=3.61 [0.0000]	F(11.287)=8.38 [0.0000]

Table 10: Regression results – Complementary effects

A constant has been added but not reported in the table. All regression errors have been corrected for heteroscedasticity. In (5) – (8) and (10), only regression controlled for Welsh outliers have been reported; the full list of regressions is available on request. Column (9) reports the results of the least absolute deviations (LAD) regression; only a Pseudo-R squared has been reported. The last row reports the value of the F-statistics to test for joint significance of the three variables representing institutional complementarity. The RESET test controls for omitted variables. * = 10% significance level, ** = 5% significance level, *** = 1% significance level.

Variable: Average value added growth 1970–1995						
Regressions	(5)	(6)	(7)	(8)	(9)	(10)
<i>Variables</i>						
Initial shares	-0.2057*** (-5.757)	-0.1344*** (-3.919)	-0.1507*** (-4.445)	-0.1518*** (-4.358)	-0.1647*** (-4.305)	-0.1669*** (-4.557)
R&D intensity					0.1083*** (2.714)	0.1090*** (2.596)
Investment intensity						0.0348*** (2.922)
Concentration*Union- ization*Skills	0.9507*** (3.622)			0.9392*** (3.184)	0.8121*** (2.928)	0.7944*** (2.878)
Concentration* Skills	-0.4032*** (-3.577)			-0.4680*** (-3.625)	-0.3556*** (-2.928)	-0.3489*** (-2.911)
Unionization*Skills	-0.4879** (-2.211)			-0.5612** (-2.242)	-0.5058** (-2.141)	-0.5134** (-2.193)
Concentration*EPL* Bank Finance		0.0722*** (2.790)		0.0926*** (3.304)	0.0558** (2.413)	0.052** (2.271)
Concentration*Bank Finance		-0.0295*** (-3.677)		-0.0322*** (-3.974)	-0.0231*** (-3.371)	-0.0223*** (-3.340)
EPL*Bank Finance		-0.0414** (-2.064)		-0.0645*** (-2.973)	-0.0278 (-1.514)	-0.0248 (-1.369)
Dispersion*(1- Unionization)*Equity			0.5321*** (3.877)	0.4550*** (3.134)	0.486*** (3.854)	0.4746*** (3.852)
Dispersion*Equity			-0.3072*** (-3.881)	-0.2726*** (-3.241)	-0.1918*** (-3.153)	-0.1876*** (-3.198)
(1-Unionization)* Equity			-0.1085*** (-3.486)	-0.1059*** (-2.724)	-0.3833*** (-3.489)	-0.3612*** (-3.423)
Observations	460	363	463	348	279	275
Adjusted R ²	0.0987	0.0671	0.0439	0.1490	0.2121	0.2294
RESET	0.23	0.97	0.77	0.98	0.19	0.36
F [p-value]	F(4.455)=14.66 [0.0000]	F(4.358)=9.48 [0.0000]	F(4.458)=9.01 [0.0000]	F(10.337)=7.66 [0.0000]	F(11.267)=8.36 [0.0000]	F(12.262)=8.85 [0.0000]
Joint significance of IC variables				13.41***	11.39***	12.52***

Source: Own calculations.

Table 11: Industry Characteristics

The table reports the three industry characteristics that have been used in the above regressions. Column 2 represents the rate of investments financed by net equity of U.S. enterprises during the 1980's as published by Rajan and Zingales (1998). The third column indicates the average rate of physical investment financed by bank credits in Japanese firms as reported by Carlin and Mayer (1999) (n.a.=not available). The last column represents the rate of skilled to total workers in German industries in 1987 (Oulton, 1996). Moreover, the table reports the correlation between the three industry characteristics (significance levels in parentheses). Note the positive (but non-significant) correlation between the degree of equity finance and the degree of bank finance, as well as the positive (but again non-significant) correlation between skills and equity finance.

Industry	Equity finance	Bank finance	Skills
Food	0	0.52	0.658
Beverages	0	0.52	0.745
Tobacco	-0.08	0.52	0.619
Textiles	0.01	0.86	0.593
Clothing	0	1.49	0.646
Leather & Products	0	n.a.	0.586
Footwear	0.04	n.a.	0.586
Wood Products	0.04	1.78	0.724
Furnitures & Fixtures	0.01	n.a.	0.724
Paper & Products	0.02	0.68	0.628
Printing & Publishing	0.03	0.80	0.771
Industrial Chemicals	0.07	0.04	0.758
Other Chemicals	0.02	0.04	0.758
Petroleum & Coal Products	0.06	n.a.	0.769
Rubber Products	0.11	n.a.	0.641
Plastic Products, nec	0.26	n.a.	0.641
Pottery, China etc	0.11	0.63	0.623
Glass & Products	0.02	0.63	0.623
Non-Metallic Products, nec	0.01	0.63	0.707
Iron & Steel	0.01	-1.01	0.691
Non-Ferrous Metals	0.02	0.11	0.655
Metal Products	0.02	1.03	0.703
Non-Electrical Machinery	0.11	0.81	0.791
Electrical Machinery	0.36	0.37	0.732
Shipbuilding & Repairing	0.02	-3.41	0.843
Motor Vehicles	0.01	0.39	0.723
Professional Goods	0.62	0.72	0.737

Correlation matrix			
	Equity finance	Bank finance	Skills
Equity finance	1.000		
Bank finance	0.0734 (0.7473)	1.000	
Skills	0.1717 (0.3949)	-0.4551 (0.0387)	1.000

Table 12: Financial Market Characteristics

The table presents the financial market data used for the empirical analysis. Column 2 presents the number of accounting standards on a scale from 0 to 90 reported in Rajan and Zingales (1998) from a survey conducted by the Center for International Financial Analysis and Research normalized to lie in the range 0 to 1 by dividing by 90. Column 3 is the proportion of total equity market capitalization in different countries held by banks. Column 4, shows 1 minus percentage of widely held of the 20 largest publicly traded firms in 1995, reported in La Porta *et al.* (1998). Column 5 reports market capitalization (reported in the IFC Emerging Stock Market Factbook 1992) to GDP ratios averaged over the period 1982 to 1991. The last column represents bank credit (reported in IMF International Financial Statistics) to GDP ratios averaged over the period 1980 to 1990.

Country	Accounting Standards	Equity owned by banks	Ownership concentration	Stock market capitalization	Credit as % of GDP
Australia	0.833	0.042	0.45	0.472	0.357
Austria	0.600	n.a.	0.95	0.078	0.828
Belgium	0.678	0.057	1.00	0.267	0.298
Canada	0.822	0.080	0.50	0.444	0.471
Denmark	0.689	n.a.	0.90	0.231	0.477
Finland	0.856	0.150	0.85	0.152	0.653
France	0.767	0.064	0.70	0.187	0.817
Germany	0.689	0.136	0.65	0.201	0.856
Greece	0.611	n.a.	0.95	0.074	0.314
Italy	0.689	0.057	0.85	0.125	0.520
Japan	0.722	0.232	0.50	0.853	1.018
Netherlands	0.711	0.053	0.70	0.401	0.709
New Zealand	0.778	0.000	0.95	0.386	0.284
Norway	0.822	0.082	0.95	0.142	0.473
Portugal	0.711	n.a.	1.00	0.085	0.562
Spain	0.567	0.095	0.85	0.179	0.684
Sweden	0.922	0.000	1.00	0.395	0.456
UK	0.867	0.017	0.10	0.751	0.422
USA	0.789	0.004	0.20	0.563	0.687

Correlation matrix

	Accounting standards	Equity owned by banks	Ownership concentration	Market capitalization	Credit as % of GDP
Accounting standards	1.000				
Equity owned by banks	-0.3279	1.000			
Ownership concentration	-0.3909	0.1257	1.000		
Market capitalization	0.4720	0.0578	-0.7888	1.000	
Credit as % of GDP	-0.1068	0.6566	-0.2272	0.2338	1.000

Table 13: Labor Market Characteristics

The table reports the data concerning the labor market characteristics in country sample set. Column 2 reports the labor turnover measured as the percentage of workers employed for less than a year, the indicated ratio is an average between 1979 and 1991 (OECD, 1993). The third column reproduces the indicator for institutional flexibility as calculated by Fitoussi and Passet (2000, p. 36). This indicator contains: the flexibility to adjust employment, the flexibility to adjust overtime, and the flexibility to adjust wages; the indicator varies between 0 and 6. Column 4 reports the average number of unionised workers related to the overall active population between 1975 and 1993. This ratio has been calculated using data published by Huber, Ragin, and Stephens (1997) and Visser (1996). The fifth column gives the rate of collective coverage, averaged over the period between 1980 and 1994 as published in OECD (1997). The next column represents the employment protection legislation, indicating administrative measures, such as firing costs, overtime restrictions and restriction for the use of temporary workers (Nicoletti, Scarpetta and Boylaud, 1999). The last three indicators report the degree of coordination among bargaining units, reflected by the level of bargaining (centralization), implicit coordination of decentralised units (centralization) and the interaction with the political sphere (corporatism) as published in OECD (1997).

Country	Labor turnover	Inst. flexibility	Unionization	Collective coverage	EPL	Coordination	Corporatism	Centralization
Australia	23.63	4.5	48.3	84	1.06	1.5	1	1
Austria	n.a.	2	50.7	98	2.39	3	3	2
Belgium	n.a.	1	52.8	90	2.09	2	2	2
Canada	25.90	6	36.5	36.5	0.64	1	1	1
Denmark	n.a.	3.5	74.5	69	1.49	2.2	3	2
Finland	17.38	2.5	70.5	95	2.09	2	2	2
France	14.40	2.5	15.4	90	3.08	2	2	2
Germany	13.17	2	34.5	91.5	2.78	3	3	2
Greece	n.a.	2	n.a.	n.a.	3.53	3	3	2
Italy	n.a.	2	42.2	83.5	4.15	3	3	3
Japan	9.80	3	27.2	24.5	2.65	3	1	1
Netherlands	17.85	2	34.3	78.5	2.36	3	3	2
New Zealand	n.a.	5	41.2	49	1.03	1	1	1
Norway	n.a.	1.5	52.8	74.5	2.89	3	3	3
Portugal	n.a.	3	n.a.	n.a.	3.75	2	2	2
Spain	19.55	2	n.a.	n.a.	3.21	2	2	2
Sweden	n.a.	n.a.	80.7	87.5	2.43	2	2	2
U.K.	19.37	5.5	46.2	58.5	0.51	1	1	1
U.S.A	29.18	6	20.6	22	0.22	1	1	1

Correlation matrix

	Labor turnover	Institutional flexibility	Unionization	Collective coverage	EPL	Coordination	Corporatism	Centralization
Labor turnover	1.000							
Institutional Flexibility	0.7491 (0.0126)	1.000						
Unionization	0.0336 (0.9267)	-0.1251 (0.6324)	1.000					
Collective coverage	-0.2629 (0.4943)	-0.6342 (0.0111)	0.4683 (0.0673)	1.000				
EPL	-0.7834 (0.0073)	-0.8103 (0.000)	-0.1488 (0.556)	0.4306 (0.096)	1.000			
Coordination	-0.8091 (0.005)	-0.8270 (0.000)	0.0605 (0.811)	0.3894 (0.136)	0.7589 (0.000)	1.000		
Corporatism	-0.4502 (0.192)	-0.7652 (0.000)	0.2582 (0.301)	0.6030 (0.013)	0.6480 (0.003)	0.8043 (0.000)	1.000	
Centralization	-0.4555 (0.186)	-0.7966 (0.000)	0.2533 (0.311)	0.5591 (0.024)	0.7539 (0.000)	0.6795 (0.001)	0.8523 (0.000)	1.000

Comment on: Ekkehard Ernst, “Financial Systems, Industrial Relations, and Industry Specialization – An Econometric Analysis of Institutional Complementarities”

Jürgen Janger

1. Introduction

Ekkehard Ernst examines in his paper the relationship between certain economic institutions – the characteristics of different financial systems and the structure of industrial relations – and their joint impact on industry growth and hence on the sectoral (manufacturing) specialization of a country. He finds econometrically that certain institutional combinations foster the growth of a particular type of industry in the countries featuring these institutional combinations. I want to discuss some aspects of the methodology and then the future research agenda for this strand of literature. Before I turn to this, I will briefly summarize the main results of the article in the subsequent section.

2. Summary of the Main Results

Ernst introduces first the concept of institutional complementarities as the result of market interactions and institutional constraints. The adoption of one institutional arrangement on one particular market – e.g., employment protection on the labor market – increases or decreases the marginal benefits of adopting another institutional arrangement on another market – e.g., minority stockholder protection on the financial market. This depends on the technological characteristics of an industry: Certain institutional combinations favor industries whose underlying technologies need flexible relations with the input providers (workforce, finance etc.), others favor industries whose underlying technologies need stable relations. Thus, the main hypothesis of the literature on institutional complementarities states that a country’s comparative technological advantage depends on its institutional environment, more precisely on the complementarities between its economic institutions.

Ernst proceeds with testing this hypothesis. In a first step, he groups 27

industries at the 3 – and 4 digit ISIC level in three categories – high-skill, highly bank financed and highly equity financed. He clusters 19 OECD countries following their institutional arrangements on the labor and the financial market into four groups for each industry category. Then he ranks the four groups following the average industry category growth rate. The first result which emerges is that industries grow faster in general in countries where labor and finance institutions are coherent, i.e. where institutional arrangements on labor and financial markets support stable relations with both finance and labor providers. They grow more slowly where one set of institutions favors stable and the other flexible relations, i.e. where institutions are incoherent. The second result is that industries perform better in countries where institutions are coherent and where the industry-specific relationship demands to finance and labor providers are supported by national institutional frameworks, e.g. Germany features high growth of high-skill industries.

In a second step, Ernst confirms these results by performing an econometric analysis using multivariate regressions with interactive terms. This analysis yields the result that in addition to the generalization of the two results above, the institutional characteristics of financial and labor markets taken together (the interactive terms) matter more for industry growth and hence economic specialization than the individual arrangements. This can be understood as an empirical validation of the theory of institutional complementarities.

3. Comments and Discussion

Ernst's finding is important, because approaches focusing on institutional complementarities have up to now provided little econometric evidence in favor of their claims, while approaches focusing on the impact of one set of institutions on growth have provided a lot of yet inconclusive evidence. The studies by Porter (1990), mainly based on trade data, and by Casper et al. (1999), based on patent data, seem to corroborate the impact of institutions on industry growth and economic specialization. The drawback of Ernst's approach against the complementarity approach is that he does not take account of product market institutions and the training system, two elements considered important for economic specialization; by comparison with the single institution-approaches it explains by design only industry growth, not aggregate growth. We do not know how institutional complementarities affect aggregate growth.

Next, I want to comment briefly on some methodological issues and then point out some tentative conclusions and directions for further research.

The main difficulty with performing an econometric analysis to identify the impact of institutions on industry growth is grouping industries according to their differing relational or institutional needs. One must either find proxies for

the relational needs – such as Ernst does – or group industries based on their underlying technological characteristics. Ernst's proxies follow the suggestions by Rajan and Zingales (1998) – industries are classified as high-skill, equity- or bank based following the level of the actual input factor in the country supposed to provide the best institutional framework for this particular input factor. E.g., an industry is classified as being high-skill – and thus in need of stable relations – when it has a high share of skilled workers in Germany; it is classified as equity based, when it uses more external finance than other industries in the U.S.A.

However, there may be functional equivalents in other countries, e.g. a combination of labor, financial and product market regulation might have the same beneficial impact on an industry as an institutional arrangement fostering external finance. This could be a reason why in the sensitivity analysis the exclusion of Japan and U.S.A from the regression causes some problems. The second way for the industry classification – using underlying technologies – might introduce artificial variance in the econometric analysis. The problem of both methods, as Ernst himself states, is that the official statistical industry classification index does not reflect underlying relational needs or technologies – various types of technology may co-exist in any given industry, the reported results could thus refer to statistical artefacts.

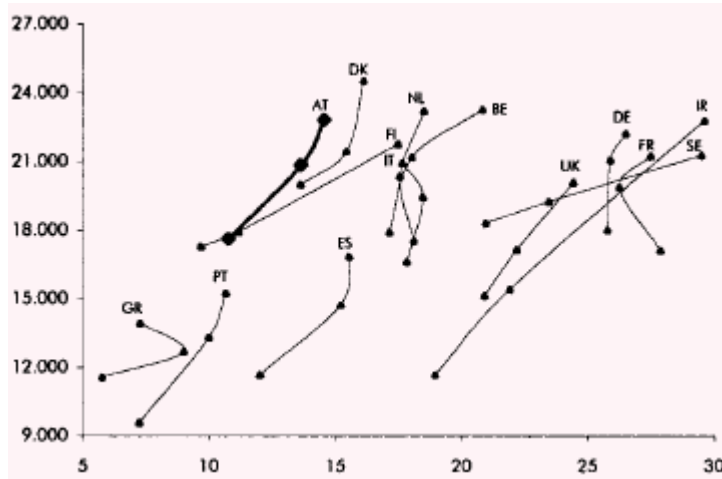
Another issue with analyzing institutional complementarities and their economic impact econometrically may be the direction of causality. Institutions influence industry growth, but especially over a long time span the representatives of industry have the possibility to influence the political process shaping a country's institutional framework. As always in institutional analysis, the analysis may by focusing on formal institutions (laws etc.) divert from the importance of informal institutions such as culture, or elements of culture like business customs, behavior-guiding values (German “communitaristic values vs. Anglo-Saxon “individualistic” values) etc.

Turning to the impact of Ernst's finding on economics and economic policy, the literature on institutional complementarities often seems to be more interested in the political economy aspect of institutional evolution, i.e. in the question of convergence or divergence of political-economic systems. However, the purely economic side of the discussion, the link to aggregate growth, seems to be particularly interesting against the background of economic stagnation in the eurozone and TFPtotal factor productivity)-trends falling in some countries and rising in others. What is the impact of institutional complementarities on aggregate growth, i.e. how could we establish a link between Ernst's findings at the meso-level and the macro-level?

There is a growing literature on industrial specialization and aggregate growth. Peneder (2002) for instance suggests that specialization in technology-intensive sectors is positive for aggregate growth via knowledge spillovers to other industries. Chart 1 plots the share of technology intensive industries in

GDP on the horizontal axis against the level of GDP per head in purchasing power parities in the years 1985, 1992 and 1998 on the vertical axis. This intuitive association between industrial structure and aggregate growth is also found econometrically.

Chart1: Share of Technology Intensive Industries and Level of GDP 1985, 1992, 1998



Source: Peneder, 2001, p. 742.

To link Ernst's findings to this, one has to establish a relationship between the relational needs of industries (stable vs. flexible relations) and their technological intensity. Hall and Soskice (2001) describe the relational needs of industries as the needs of incremental vs. radical innovation (the former benefiting from stable relations with input providers, the latter from flexible ones). Up to now, no such relationship between incremental and radical innovation on the one hand and technological intensity has been established empirically – a promising avenue for further research.

The link to the aggregate level becomes further blurred by only looking at the manufacturing sector. The services sector accounts for over 60% of GDP in most developed countries, yet the relational needs of services sectors are not fully known nor are there comprehensive empirical studies of the impact of institutional arrangements on individual services sectors.

Linking institutional complementarities to aggregate growth would obviously bear considerable policy relevance. So far, the only finding for economic policy is that institutions must be coherent – combinations of, e.g., flexible labor markets and bank-based financial markets do not seem to work well. This is

already per se very interesting for the current European economic reform discussion. National institutional frameworks should aim for coherence, and piecemeal reform of individual institutional arrangements may have unintended consequences by damaging a country's institutional comparative advantage. Should there be a link to aggregate growth, the transitional path to different institutional arrangement will also constitute a major area for research – how should change happen, by gradual steps or shock therapy? Kitschelt's (1991) argument of technological cycles which fit different countries' institutional frameworks at different times implies prudence in the face of any major institutional overhaul.

In the meantime, a more modest further research agenda would in addition to labor and financial markets look at product markets, as Ernst suggests, to strengthen the empirical evidence in favor of the presence of institutional complementarities. The latter's link to aggregate growth should, however, be the major direction for further empirical research.

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Taking Uncertainty Seriously: Complementarity as a Moving Target

Wolfgang Streeck

In the following I will discuss a few conceptual issues related to the notion of complementarity between economic institutions. My brief notes are not meant to debunk the concept. Quite to the contrary, they are a plea for more sophistication in its use. My central claim is that current usage of the concept makes too demanding assumptions on the rationality of the actors designing and enacting economic institutions. Moreover, it suggests too static a view of institutions. In both respects, it seems necessary to rethink and make explicit the micro-foundations of the concept of complementarity, grounding it in both a realistic theory of rational action on the one hand and a dynamic theory of social institutions on the other.

After a short definitional exercise necessary to set the stage, I will first explore a number of real-world implications of the notion of complementarity from both a practical and a theoretical perspective. While these are often treated as empirical impurities that can be neglected for theoretical convenience, one does so only at the peril of abstracting from essential properties of social systems as well as from the experience of actors inside them. My main point (I.) is that the extent to which one institution complements another is fundamentally uncertain. In fact complementarity must be established, or “worked out”, in both a cognitive and a practical sense, over time and experientially by actors with limited foresight and no more than patchy knowledge of the causal textures in which they move. Following this I will argue (II.) that the institutions supposed to be made complementary by institutional design are themselves by their very nature only vaguely defined and, in addition, far from static. Those acting within them are therefore forced to absorb a great deal of uncertainty, which in turn both *constrains and allows* them continuously to redefine the institutions within which they act, in the process of enacting them. Next I wish to make the point (III.) that environmental demands on the performance of social and economic systems are not static either and in fact change in often unpredictable ways, which adds to the uncertainty of actors as to when there is and is not institutional complementarity. I will close (IV.) with brief remarks on what a redefined concept of complementarity might look like.

I begin with definitions of my two core concepts, *complementarity* and

institution. In an effort that is still under way, Robert Boyer and I are trying to produce a glossary of key terms in the debate on institutional complementarity in economic systems and on the “variety of capitalism”. Our definition of complementarity is straightforward:

Complementarity is a relationship between at least two elements. Element E' is complementary to element E if its presence enhances the performance of E... More generally, complementarity of E' for E requires that E' assumes certain properties that match the properties of E, in the sense that the simultaneous presence of such properties in E and E' increases the performance of E... Complementarity may be mutual, i.e., E may be complementary to E' where E' is at the same time complementary to E... Complementarity may also involve more than two elements interacting in a “virtuous circle” of mutual enhancement.

Note, however, that whether or not complementarity obtains is dependent upon a system's *performance*, which in turn hinges, not just on the structure and behavior of the system itself, but also on the demands made upon it by its environment.

Complementarity must be distinguished from both *compatibility* and *coherence*. Two elements are compatible if they *do not interfere* with each other's performance or stability. Complementarity presupposes compatibility, but not all that is compatible is necessarily complementary – although elements that are incompatible undermine each other and are therefore by definition not complementary. Coherence, in turn, means structural similarity, homology, or isomorphism. A set of institutions is coherent if its elements have important properties in common. This may be a result of diffusion, of social norms, of a common social repertoire of “ways of doing things”, or the like. Coherence may make for smoother relations between the units of a system, for example like in nineteenth century Germany where public and private (industrial) bureaucracies were similarly structured and inspired by the same ethos.¹ But coherence as such, while it should normally ensure compatibility, cannot guarantee complementarity. Where the common tradition in a society is one of clientelism, nepotism, corruption, lawlessness and low trust, organizations and institutions may be isomorphic but their interaction will be far from mutually supportive.

Institutions are even trickier to define. For the present purpose I would like to

¹ Another example is Japanese labor and capital markets that, as Ronald Dore has pointed out, are both characterized by low liquidity due to lasting commitment of resources.

emphasize the following properties, again quoting from the Boyer and Streeck glossary:

Institutions consist of normatively founded and collectively enforced rights and obligations... Institutions may be ... regarded as regimes for specific sets of actors and activities, for which they represent both constraints and opportunities. As actors almost always have a degree of choice as to whether or not to make use of a given institution or comply with its rules, institutions can only condition but cannot determine action. Moreover, as the rules that make up an institution must be applied to a wide variety of – changing – circumstances, they are not once and for all unambiguously clear and in fact require permanent interpretation and reinterpretation. This is one of the reasons why institutions continuously undergo change.

Our notion of institutions, that is to say, rejects an “oversocialized” view of human actors and human action, allowing actors a basic capacity to distance themselves from institutionalized normative demands. It also draws attention to the fundamental tension between normative and factual realities, with respect to action itself and to the settings in which it takes place. As a consequence institutions appear as essentially *dynamic*, their dynamism being rooted in their *necessarily imperfect enactment*: due, among other things, to the inevitable inconclusiveness of rules and norms as such; to ongoing efforts of rational actors to try out and establish new interpretations of pertinent norms that better fit their interests; and to the need to apply institutionalized rules to a wide variety of specific circumstances that their makers could not possibly have anticipated.

I.

How can public policy concerned with the design of a national institution, for example a country’s financial system, make the complementarity of that institution with other national institutions its objective? Note that this question takes the view, and thereby presupposes the existence, of an institutional designer powerful enough, purposively and effectively, to shape social arrangements. It also assumes this designer to be interested in improving collective performance, not just in maximizing his own benefits. Both assumptions underlie much of the vast public policy literature and are almost never questioned by it.

In the present context, it suffices to say that the concept of institution that I am proposing does allow in principle for purposive intervention as it

distinguishes between “regime makers” and “regime takers”. Moreover, for the sake of argument, I will treat as unproblematic the assumption that regime makers are public-spirited and interested in “problem-solving”, although in reality this is far from assured. Rather than the possibility or the benevolence of effective institutional design, I want to discuss its capacity to know with reasonable certainty whether and to what extent institutions will complement each other. I believe that this capacity is low and, when it comes to assessing the effects of interactions between institutions, neither theory nor practical experience can provide regime makers with more than crude rules of thumb (“rough heuristics”). The reasons for this, I argue, lie in the cognitive limitations of human actors as well as in essential characteristics of social systems.; In fact, I believe the two are very closely related.²

To simplify, I will limit myself to a list of elementary observations on the problem of institutional complementarity as it confronts political decision-makers and other actors in political economy.

(1) From the perspective of institutional decision-makers acting in the real world, complementarity presents itself as *a matter of degree*. The question is to which being one of the *extent* to which a given institution is or is not complementary to another. This reflects the fact that the changes institution-builders can possibly hope to make are normally only incremental changes. Throwing out a non-complementary institution and replacing it with a complementary one is almost always beyond the powers of even the most powerful institutional designer. Thus, in the real world, the choice is likely to be not between a bank-based and a market-based financial system, where one of which fits a given institutional environment, while the other doesn't. Real institutional design choices will be about a *gradual improvement* in the functional fit between an institution and its context, as when market elements are introduced in a bank-based financial system to increase its responsiveness to international capital flows.

(2) If institutional complementarity is a matter of degree, the implication is that it is not a matter of life and death and that economic systems can survive with different degrees of it. Put otherwise, within the limited range of choices

² Basic for the sort of theory this invokes are, of course, authors like Hayek and Simon. If one takes them as seriously as one must, one finds it hard to construe observed complementarity between institutions as a result of rational-intentional action, be it by public policy-makers or by firms interested in enhancing their own performance. In particular it becomes difficult to offer, as does much of the current “varieties of capitalism” literature, a rational choice-type teleological theory of action as a micro-foundation for an economic-functional theory of society.

available to institution-builders, political-economic systems are rather robust with respect to alternative institutional designs, and systems that opt for or mistakenly end up with less rather than more complementarity do not have to fear immediate collapse. The offshoot is that there is no clear and simple criterion for complementarity. While all-or-nothing complementarity would be easy to determine, degrees of complementarity are not. Real-world institutional design decisions are therefore subject to fundamental cognitive limitations and must be made without the computational algorithms that would be required for maximization of utilities.

(3) In a global economy it may suggest itself to judge the complementarity of national institutions by their economic performance in comparison with that of competing countries. Indeed as long as institutional arrangements “work” in the everyday comparison organized by competitive international markets, questions of institutional design do not normally arise. However, the logic governing institutional adjustment to international competition is not one of maximizing but of “satisficing”, one that relies on relative rather than absolute performance. Thus, institutions that are in fact quite suboptimal may be adopted or defended, simply because all other institutions in the competition are even less optimal, for all sorts of contingent reasons. Lacking an absolute standard of optimal performance, what is desirable, is, and only can be, defined by practical aspirations reflecting, not a system’s optimal possibilities, but its experience in its relations with a limited number of real-world competitors.

(4) What is more, not only do we have to replace optimal with satisfactory performance as the economic criterion for institutional design, but unsatisfactory performance of a national political economy, however measured, cannot easily be attributed to institutional deficiencies, not to mention frictions between specific institutions caused by a lack of complementarity. Since the number of comparable political economies competing in the real world is inevitably smaller than the number of variables that might potentially affect their relative performance, causal textures remain uncertain and ambiguous, not only in practice but also in theory. This opens up ample space for cognitive disagreement, political contestation, ideological fixations, and the robust survival of all sorts of causal myths on the relationship between institutional arrangements and the economy. Further contributing to this is the long time lag between an institutional design decision and its effects on performance becoming first observable, which in extreme cases may take decades (consider, for example, the introduction of more market-driven elements in the training system of a nonliberal market economy). Moreover, the idiosyncratic character of each system – its status as a complex “historical individual” overdetermined by a practically endless number of causal factors – makes the most appropriate comparison for a given institutional design the alternative designs that were not

chosen when it was adopted. But, of course, the results of comparing an existing structure to a set of counterfactuals can only be highly uncertain and contestable.

(5) Time affects complementarity in yet another way. In the real world decisions, including those on institutional design, must be made under the pressure of deadlines that are usually shorter than necessary what would be needed for a full exploration of their possible efficiency effects. As a result other objectives than efficiency may take precedence. In particular imperatives of power seem to be easier to satisfy than imperatives of efficiency as the effects of power-oriented actions are more concentrated and more easily measured than the efficiency effects of alternative institutional designs. Whether or not, I have maintained my power is easier to observe, and its utility is more obvious, than whether I have contributed to a more efficient allocation of resources.

(6) Moreover, if complementarity between institutions is desirable, rather than incurring the costs of adapting one's own institution to presumed complementarity requirements, one may want to wait for those controlling the other institutions to make the first move. Playing a game of chicken is encouraged by uncertainty about the causal texture of the real world. Indeed given the high complexity of historical social systems, their fundamentally unpredictable future and their long response time, actors may rightly find it rational to limit themselves to pursuing sectoral or organizational subgoals, leaving it to the future to work out how "their" institutions may complement others. Gambling and waiting for as yet unknown ways to be found to reconcile a preferred institutional design with an environment with which it may seem incompatible at present, may actually be a quite rational strategy for actors confronting high uncertainty.

(7) Social action, including that of the purposeful, problem-solving sort, always has multiple effects. While some of them may be functional in terms of what an actor wants to achieve, others will be dysfunctional in one way or other. Indeed in social life, as we learn from Robert Merton, every function tends to come with a dysfunction, which makes for endemic tensions and contradictions in social systems. Theories that explain institutional continuity by a search for "increasing returns" assume that systems will grow increasingly identical with themselves as rational actors invest in ever higher complementarity between institutional domains. But this may be an illusion, in part because actors often do not know what would in fact be complementary, but also because complementarity with one institution may be incompatible with complementarity with another. For example, employment protection and peaceful industrial relations may be necessary complements to the product strategies of firms competing on high product quality and dependent on worker cooperation in productivity improvement. If employment problems arise, using the social security system for early retirement of redundant workers would then suggest itself as a functional response. The more widely that response is

adopted, however, the more destructive it may become of other objectives such as the consolidation of public finance that may be equally essential for the system to function.

(8) Indeed it appears that actors in the real world often do not care much about institutional complementarity, or entertain the apparently wildest and in any case most divergent views on what is complementary and what is not. Thus, as Martin Höpner has shown, the postwar German Left has relentlessly opposed the “power of the banks” in corporate governance and demanded capital disentanglement of large firms, although to many observers these very same features of the German financial system appeared to be indispensable complements of the German system of labor relations, in particular of co-determination. Similarly, as Helen Callaghan has pointed out, German business sees no contradiction between its opposition to the European Union takeover directive on the one hand and to workforce participation in the governance of European companies on the other – just as British unions now favor European legislation on workplace participation without at the same time opposing a European-wide “market for control” of large firms. Apparently experienced actors who know that both institutional change and institutional complementarity are matters of degree tend to develop the confidence that if desired changes in institutions should cause problems of suboptimal complementarity, they will find will ways and means to address them in time.

In short, institutional complementarity is hard to predict and provide for *ex ante*. Where it exists, it is mostly generated *ex post*, through corrective intervention and piecemeal mutual adjustment. Rather than planned and designed in one step, complementarity seems the product of continuous, more or less improvised de-bugging of perceived frictions under pragmatic standards of satisfactory – relative – performance. Among other things due to their long response time compared to the time horizon of political careers and individual human lives, social systems are experienced by human actors as quite robust and forgiving, tolerating considerable laxness in dealing with their institutional architecture. Indeed, they seem to allow broad space for decisions that are frivolous and reckless, in the sense that they do not at all care about systemic complementarity and may therefore generate as many problems in the future as they presently solve. Frivolity and recklessness are invited by the fact that institutional complexity and inertia make suboptimal design decisions difficult to identify and attribute. Loose and uncertain causal textures shield actors during their lifetime from accountability for the negative consequences of their decisions. They also allow future actors considerable short term discretion in addressing institutional dysfunctions resulting from past design mistakes. For example, the inert response of institutions to political intervention seems to enable actors to distribute their attention between dilemmatic problems over time, addressing one problem by means that are bound to exacerbate another,

which is dealt with later in ways that undo the solution found for the first.

II.

My second point relates to the character of social institutions as such. In a political economy institutions are sometimes conceived as collective instruments of utility maximization constructed, selected and adapted in complex processes of aggregation of individual preferences. Once established, they become stable social artifacts whose shape and structure can be taken as given – until they are redefined by some sort of purposeful intervention or rapid unintended change, after which they return to their previous stability. For some practical and analytical purposes this simplification may be useful. However, for a realistic understanding of institutional complementarity, and of how institutional arrangements in a political economy work or do not work together, it seems important that institutions, looked at from close up, are always and necessarily less than perfectly defined. As a consequence, they undergo permanent – latent or manifest – revision driven, among other things, by an inherent uncertainty of their precise meaning.

Before I explain why this is so, I should like to point out its significance for our subject. If social institutions are essentially vaguely defined and in flux, they are hard to structure so that they safely and assuredly complement one another. At the same time, assuming institutions to be inherently dynamic and evolving one can imagine numerous small and ongoing adjustments taking place in the interface between related institutions – a process that might gradually reduce friction and increase complementarity. An example of such a process, which has recently attracted great attention, is the *hybridization* of institutional transplants in a new, “foreign” context. Hybridization involves gradual and at first imperceptible changes, not just in the imported institution, but also in its new environment. Thus as a new, more “Anglo-American” capital market regime is implanted in the German political economy, some large German firms are trying to build a constituency for themselves in the new capital market that is willing to honor with lasting a commitment their specific stability and the long-term perspective they are capable of pursuing due, in part, to their labor relations. At the same time, German labor relations, notably the practice of co-determination, are becoming more market-aware and market-conforming. In the process, both the labor and the capital market regimes are “hybridized,” in that they assume traits previously associated with “models of capitalism” other than those of their origin.

Why are social institutions never fixed and, to the contrary, continuously evolving? There are many reasons for this, all of which, however, can be traced

back one way or other to fundamental properties of social action as such. Institutions are socially sanctioned expectations with respect to the behavior of specific categories of actors or, better, the performance of specific social activities. Typically they involve mutually related rights and obligations for social actors that, by distinguishing between appropriate and inappropriate, “right” and “wrong”, “possible” and “impossible” activities, organize their behavior into predictable and reliable routine patterns. Institutions and the regimes they embody are legitimate to the extent that they are guaranteed by third parties. While a third party may be the community as a whole, informally expressing disapproval, in modern societies where institutions tend to be more or less formalized, enforcement is typically delegated to specialized agencies that are institutions themselves, such as regulatory authorities or courts. For analytical purposes, it is possible to distinguish between *regime makers* (or institutional designers), *regime takers* (or actors to which institutionalized rules are to apply), and *third parties* that may be called upon in case of non-compliance. In reality, the distinction between regime makers and regime takers may be fluid, for example in a democratic polity.

Defining institutions in this way has the advantage that it directs attention to important but often overlooked sources of institutional change. They all have to do with the fact that the enactment of a social institution can never be perfect and that there always is a gap between the *ideal pattern* of a norm and the *real pattern* of life under that norm. Among the facets of this complex relationship are:

(1) The meaning of a social norm is never self-evident and always subject to and in need of interpretation. Life in a social, i.e., normatively ordered community consists to a significant extent of ongoing efforts to develop and maintain a shared understanding of what exactly the rule is that one has to apply to a given situation. As ideal patterns are necessarily less complex than real patterns, honest disagreement on over how a norm is to be applied may always arise. Rather than simply a matter of logical deduction, applying a general rule to a specific situation is a creative act that must take into account, not just the rule itself, but also the unique circumstances to which it is to be applied. This holds for highly formalized norms, like written law, no less than for informal ones. Lawyers know the complexities of subsuming the empirical properties of an individual case under a general rule. Recourse to what is called in various legal systems “the will of the legislator” is for good reason just one way among others to discover what a rule really demands in a concrete context. This is because no lawmaker can be assumed to have been aware of the full variety of situations to which his law might in the future have to be applied. In fact, he might find it difficult to remember with hindsight the variety of motives that may have driven his decision. Sociologists have pointed out that typically, clarification of the operative meaning of formal law presupposes a shared culturally based tacit

understanding between the actors involved that may, however, either not really exist or change over time, in which case the norm *in effect* changes with it. Indeed, often what a norm “really means” can be established only by the rulings of a legitimate authority charged with adjudicating between different interpretations. Such rulings, too, can and are likely to change with time and circumstances, which may be entirely functional as it may provide a regime with the sort of on the ground flexibility that it may require for its reproduction.

(2) A related issue is the cognitive limits of rule makers. Even the honest application in good will of a rule to unforeseen conditions may cause unanticipated results that may necessitate its corrective rewriting. (On the other hand, that rules are never exhaustively and unambiguously defined facilitates their creative application in uncertain circumstances, keeping them valid in spite of the necessarily incomplete information of their designers.) In fact regimes capable of survival in a complex environment are likely to have built-in feedback loops that inform rule makers how their rules are working out in practice. Supported by intelligence of this sort, rule makers may then revise the rules, setting in motion another sequence of practical exploration of their real meaning, observation of their real consequences, and further revision in the light of the latter.

(3) Questioning the true meaning of institutionalized rules happens of course not only in good will. While sometimes rule takers are socialized to follow a rule for its own sake, sometimes they are not. To the extent that rules impose uncomfortable and costly obligations, rational actors may look for ways to circumvent them. Finding loopholes in a law is a specialty of lawyers, especially tax lawyers. Their continuous probing of the boundary between the legal and the illegal is part of the interpretative struggle that begins as soon as a rule is laid down: it is one of a variety of mechanisms by which the meaning of a rule is both clarified and modified (“worked out”) in practice. Favorable discoveries made by adventurous interpretative entrepreneurs may spread fast among the subjects of a regime, forcing rule makers to revise the law in order to restore it. Sometimes the only way this can happen is by more special rules being added to cover unforeseen cases. As this may make the regime increasingly complex, it may further extend the opportunities for inventive opportunists to evade or subvert it to their advantage.

(4) Finally, there are narrow limits to the extent to which agencies of social control can prevent and correct intentional and subversive deviation from social rules. A case in point is the phenomenon of black labor, or more generally of the underground economy. Some labor regimes are more likely than others to give rise to anomic behavior in this sense. In fact, illegal economic activities seem to be most frequent in highly regulated economies. Mass deviant behavior in breach of a social or legal regime can often be ended only by changing the regime and making the behavior legal. Sometimes, however, rule makers are

willing to live with considerable anomie since the stability of a norm may, as famously pointed out by Durkheim, require that it be broken. For example, black labor may furnish a modicum of flexibility to an economy that would otherwise be too rigidly regulated to perform well (what Berger and Piore have long ago described as economic dualism). Uncontrollable or, for that matter, unofficially tolerated deviant behavior may also enhance the complementarity between two institutions that were not designed to fit together.

What all this amounts to is that makers of rules and regimes have less than perfect control over the way in which their creations work in reality. What an institution is, is defined by a continuous complex interaction between rule makers and rule takers during which ever new interpretations are discovered, invented, suggested, rejected or, for the time being, adopted. This implies that whether or not there is complementarity in a political-economic regime is not just determined at the regime level alone or once and for all. Instead, it is subject to spontaneous evolution driven by any institution's inevitably imperfect enactment on the ground, in a direction that is often unpredictable to those supposedly in control. Indeed, the more sophisticated the makers of a regime are, the more they recognize that a good part of institutional and political life consists of unanticipated consequences of institutional design decisions, requiring that these are continuously adjusted and revised if they are to be made stick. This is widely different from a view of economic institutions, not infrequently implied by scholarship, as a rigid hardware of social life, relegating actors and action to firmly circumscribed residual spaces left for rational calculation and the spontaneous voluntarism of social action. Instead, a realistic image of social institutions would emphasize their fluidity and their being continuously created and recreated by a great number of actors with divergent interests, varying normative commitments, different power and limited cognition – in a process that no single actor fully controls, whose outcomes are far from standardized across different sites of enactment, and whose results are contingent and unpredictable and can often be fully understood only with hindsight.

III.

Whether or not and to what extent a given economic institution is complementary with another institution in its environment depends on their joint performance. Performance, however, is measured, not in absolute, but only in relative terms. As long as other systems perform less well, or fail successfully to attack a system's market niche, institutional configurations may therefore appear complementary, so that, if faced with more vigorous competition, would be regarded as nothing like that. This is another way of saying that real economic

systems in the real world frequently, and probably normally, command a measure of slack that covers up internal conditions that are less than optimal in functional terms.

Moreover, in a world of small Ns, with more variables than cases, observed performance is notoriously difficult to attribute causally to a single factor, or combination of factors. A good example is Germany in the 1980s when it was widely regarded as a successful industrial society highly competitive with respect to a specific range of products. Was its success due to what to many seemed a strong complementarity between its engineering culture, its typical organization of work, and its vocational training system? Or was it rather the complementarity between the German corporate governance regime and the peculiar German institution of workforce codetermination? Or the combination, also specifically German for a long time, of an independent central bank with coordinated sector-wide wage bargaining? Adjudicating between these different possibilities is not easy and may be impossible, although much could depend on knowing the right answer. For example, good German performance in the heydays of the “German model” might mistakenly be attributed to mutually supportive interaction between codetermination and bank-based financial markets, while in reality it may have been the result of a fortuitous interplay between German-style engineering and the German apprenticeship system compensating for what in reality might have been costly frictions between bank-based finance and codetermination. In this case, incidentally, Social-democratic and trade union opposition to “the power of the banks” would have been much less paradoxical than it seems.

To complicate things even more, success in economic system competition has not just endogenous but also exogenous sources, the latter being at least as important as the former. In Machiavelli’s terms, it is not just the virtue (*virtù*) of a social system that matters for its performance but also its good luck (*fortuna*). Whether or not an institution can be said to complement another institution depends on the environment they together face. The latter, however, is beyond the control of institutional designers – although it is true that within limits social systems may have the ability to shape or, more modestly, to select their environment, for example by picking a market for themselves in which their specific capabilities give them a competitive advantage. Environments are not, however, unendingly malleable or in unlimited supply. Nor are they stable over time. An environment that makes the relationship between two institutions one of complementarity – by rewarding the system for the particular results of the two institutions’ interaction – may change and thereby render the latter useless. Thus, international capital markets may starve a bank-based financial system of funds which in a closed national capital market worked well together with a long-term employment labor market regime. *Vice versa*, environmental change may turn an institutional configuration that in the past impeded performance into

an asset for national economic competitiveness. Complementarity, that is to say, in the relationship between institutions is conditional on external circumstances which, from the perspective of the social system, may be non-negotiable.

Again, this can be illustrated by an example. It has been argued that the specifically German configuration of institutions, and perhaps also the Japanese one, performs well, and in this sense is characterized by a high degree of complementarity, in a world in which technological change proceeds incrementally and markets reward gradual increases in the quality of existing products more than radical innovation. It has also been argued that historically, technology has developed in cycles, with short periods of radical innovation being followed by longer periods of gradual improvement until the cycle started again with the next technological breakthrough. In this vein, the present decline in German (and Japanese) economic performance has been attributed to the micro-electronic revolution ushering in a new wave of technological change and, as a result, placing the more organized and less liberal economies of Germany and Japan at a disadvantage. While their institutions may still be coherent, they are no longer complementary as they no longer enhance each other's performance. Indeed, high coherence without complementarity may stand in the way of adjustment as it may make individual institutions difficult to reform.

Assuming that technological change indeed moves in Kondratieff-like cycles, one might advise German and Japanese policy-makers not to engage in hasty institutional experiments with uncertain event. Instead, they might do better to wait out the relatively short period in which their indigenous institutions cannot be expected to perform well, until more favorable conditions return that again put a premium on their country's specific abilities. The problem is, however, that nobody can be certain how long the period of transition will last and, indeed, whether a Kondratieffian theory of technological change, even if it was true in the past, will also be true in the future. What if the years of radical innovation – meager years from the perspective of less liberal variants of capitalism – last so long that by the time they finally end, the countries that did not match their conditions of success are economically so emaciated that they have lost the capacity to take advantage of the new opportunities? And what if the stable sort of environment in which nonliberal capitalism prospers does not return at all due to the world having changed? That it may do so can certainly not be ruled out, as the social world remains a historical world with an open future.

Uncertainty about the future, then, is at the same time uncertainty about institutional complementarity, to the extent that complementarity is measured by economic performance, and the latter is conditional on a pay-off matrix offered by the outside world. If we assume that world to be changing, in a direction on which we can make at best educated guesses, then complementarity is not just an uncertain but a moving target, one that we may pursue in bad times by either preserving or rebuilding our institutions, and by refining and upgrading them in

good times, without ever knowing for sure, whether what we are doing will really make them more complementary, and with it more productive.

IV.

This implies, complementarity, this implies, can be no more than one consideration among others for the politics of institution-building. Moreover, social systems seem to be able to operate with significant economic inefficiencies in their institutional make-up, among other things because of long response times along internal causal chains making their elements less tightly coupled than functionalist theories suggest. They also depend for their performance on an unpredictably changing environment that is the ultimate arbiter as to whether or not and to what extent their institutions are complementary. Moreover, most actors most of the time do not by far have enough information to pursue institutional complementarity with any degree of certainty, and therefore tend to pursue other objectives that are less demanding on their cognitive capacities. In what sense, then, can we at all speak of complementarity between economic institutions?

Without being able to offer a full answer, I suggest that we reject the idea that complementarity is a result of environmental selection. There is no perfect market for social systems that would eliminate less efficient institutional arrangements and leave alive only those with optimal performance. I believe that complementarity, in the sense of mutual functional enhancement between two or more social institutions, is the result of experiential learning among actors, both at the controlling and, most importantly, the receiving end of institutional regimes. Both regime makers and regime takers are constrained to improvise with the institutional material they have at hand under constantly changing and inherently uncertain conditions, having to make the best out of a stream of events and structural transformations that they cannot stop or redirect. Improvisation with serendipitously discovered synergies between different social rules and practices gives rise to make-shift structural arrangements that remain temporary and unstable as their exact meaning is elaborated only over time while their economic usefulness is bound to fluctuate with changing external circumstances. “Economizing” does take place, but mainly below the level of grand binary classifications of a small number of core institutions, or institutional sectors. Whether these complement each other depends mostly on the Schumpeterian creativity of local actors for whom national regimes are no more than a starting point in their everyday efforts to make things fit and ends meet. Working out the meaning of the social rules to which they are subject in historically new situations, they modify the regimes that are supposed to govern

their behavior, stabilizing and destabilizing them at the same time: injecting them with flexibility, so they can adjust to dynamic conditions, and gradually rebuilding them until one future day the “model” they have in the past formed will be found to have been fundamentally revised, or even succeeded by a new model, without anyone having noticed.

Rewards for the Rich, Rhetoric for the Poor? Financial Governance Mechanisms in the U.S.

Helene Schuberth and Martin Schürz

1. Introduction

Paradoxes of capitalism is a notion grounded in the research program of critical theory (Honneth 2003). An institutional paradox in capitalism is a kind of ambiguity where something improves from a normative point of view but at the same time brings about a deterioration. For instance, institutional developments may strengthen emancipation and efficiency but also increase social control and containment. This strand of social science research stems from the Marxist tradition. However, it has given up the Marxian term of contradiction as the normative connotations of Marxist theory have not been fulfilled and as its orientation on the sphere of production – where contradictions and crises should have emerged – has neglected other relevant spheres of society.

Different models of capitalism have emerged and the divergences reflect differences in institutional structures, economic specialization and political coalitions (Boyer 1997, Kitschelt et al. 1999, Coates 2002). In the comparative political economy literature, the Varieties of Capitalism (VOC) approach recently received increased attention. It focuses on cross-national institutional differences and claims that various institutional features tightly interact (Hall and Soskice 2001). A key question researchers want to answer is what type of capitalism will prevail? Numerous typologies of capitalism have been provided, typically in the form of dichotomies: A *liberal capitalism* is distinguished from *non-liberal capitalism* (Streeck and Yamamura 2001), the *shareholder model* associated with the UK and the U.S. is confronted with the *stakeholder model* of Germany (Shinn 2001), and *managed capitalism* with *market capitalism* (Lütz 2000). VOC also characterizes two variants of capitalism: coordinated market economies (CMEs) and liberal market economies (LMEs). CMEs have the following characteristics: a long-term orientation in investment financing, centralized wage bargaining and cooperative industrial relations as well as cooperation of firms in education and training. Examples are Germany, Austria, and Finland. Rules are less important because reputation resulting from long-

term relationships is the coordinating device. The financing mode is relationship-based. It grants the financier some form of power over the firm being financed. It has higher entry costs and shows a lack of transparency, it is self-governing and relies on the importance of reputation. Banks play a dominant role and there are restrictions on competition. LMEs rely on short-term financing via financial markets and decentralized wage bargaining. Ownership is fragmented and corporate control is exercised via market mechanisms and is oriented towards shareholder value. Relations between economic agents are coordinated primarily by markets. The rules – insider trading restrictions, disclosure – serve to protect the interest of outside shareholders. *Arm's length financing* provides for a wide circle of lenders to the firm. The financier is mainly protected by contracts and courts, as enforcers of contracts are important.

Within the VOC literature, financial structure characteristics play a crucial role. They determine the corporate governance modes. Strong insider control by stakeholders, which is typically associated with bank financing, supports CMEs while strong corporate control by outside shareholders corresponds with LME characteristics. As argued by Hall and Soskice (2001), the issue of convergence towards the LME model crucially hinges on whether the ongoing liberalization of financial markets will eradicate any of the institutional subsystems of CMEs. VOC takes corporate governance literature as a reference and relies on a principal-agent model description of financial system reality. The problems noticed from this perspective are collective action problems: In LMEs, with fragmented ownership, no one has a serious interest in monitoring what the agents do. The fragmented shareholders are dependent on information provided by delegated monitors, so-called reputational intermediaries such as accountants, lawyers, bond rating agencies and banks. These intermediaries monitor business behavior and provide information on which investors can make decisions (Gourevitch 2002b, Aguilera and Jackson 2002).

VOC studies complementarities between formal institutions (subsystems) of economies. Even if these complementarities are essential, it is not clear, however, whether the subsystems themselves can be regarded as coherent entities. Lack of institutional coherence within one subsystem has important consequences for our understanding of dynamics of change. For this reason, as a case study we investigate whether formal and informal governance modes within the U.S. financial system are coherent. Hence, we extend the narrative of institutional complementarity between the subsystems, which involves assuming convergence of interests of different societal groups, by pointing towards incoherencies within one of the subsystem studied in VOC, namely the U.S. financial system: We change the typical unit of analysis in VOC – firms – and investigate the relationship of different income groups in the U.S. – the highest and the lowest percentiles – with the financial system. The literature on comparative capitalism operates on a too highly aggregated level and misses

conceptual inconsistencies. Focusing on the behavior of individuals has the advantage of shifting the perspective to real world phenomena and allows to question overly abstract models. We find substantial differences between governance modes related to the rich and the poor: The rich are incited to maximize individual revenues but, at the same time, subject to moral suasion *against* exercising such behavior, while the poor receive financial education to learn maximizing revenues and a discourse of egoistic values.

This study is presented in four sections. Section 2 discusses different concepts of institutions and critically evaluates rational choice institutionalism, an important prerequisite of the narrative of institutional complementarity. Next, the main features of the governance mechanisms of the U.S. financial system for CEOs and the poor are outlined (Section 3). The fourth section discusses the paradoxes of their main financial governance mechanisms, pecuniary incentives and information. Section 5 argues that a high degree of acceptance of inequality may account for the fact that paradoxes persist.

2. Preconditions of Institutional Complementarities

The two dominant strands of current institutionalist theorizing are "*rational choice institutionalism*" and "*sociological institutionalism*" (Scharpf 2000).

Rational choice institutionalism conceptualizes institutions as solutions to collective action problems. Actors follow their interests when they engage in strategic interaction with others. Incentives are defined by reference to the self-interest of actors whose preferences are mostly fixed. One of the core arguments of strategic interaction theory is that regardless of the actors' specific preferences, they will face cooperation problems in many respects, as there are incentives to behave in a time-inconsistent way. Thus, situations of strategic interaction give rise to benefits from cooperation. In theory and reality there is a great variety of possible game constellations (Franzese, Mooslechner and Schürz 2003). *Rational choice institutionalism* considers institutions as a means by which diverse preferences of individuals are aggregated into choices for the collective. The context in which these interactions are embedded and the role of trust for institutional arrangements are neglected. The usual critical complaint about rational choice approaches is that institutions become simply a response to cost-benefit considerations and that factors such as history and ideology are denied. Particularly, a sensitivity to the social context of institutional interactions and the social bonds that exist among actors is missing. Pure reference to the social gains from coordination cannot explain why a particular setting of coordination is chosen. Different national experiences reveal the explanatory limitations of the rational choice approach, as institutional incentives fail to

explain the existing empirical differences.

Sociological institutionalism focuses on the institutionalized "*norms of appropriateness*" (March and Olson, 1989) and emphasizes the social nature of institutions by stressing their role in defining individual preferences. Institutions are defined in a broad sense, including elements like rules, incentives, routines, socially constructed views and shared beliefs. Institutions will determine not only what actors can do, but also their perceptions and thus what they will want to do. Institutional rules influence subsequent behavior not just in terms of strategies, but by modifying the aims actors wish to pursue and the way actors perceive themselves. Behavior may be shaped by goals, alternatives, and rules of maximization. But it may also be shaped by roles and norms that define standards of appropriateness.

The research strategy that claims complementarities between institutional features in different domains implicitly refers to rational choice institutionalism. The models of capitalism are seen as systems of mutually supportive economic and political institutions where complementarity is a precondition for economic success (Hall and Soskice 2001). Institutional complementarities make it advantageous to develop similar forms of coordination across spheres (Hall and Gingerich 2002). Herewith institutions and their complementarity are explained by their economic functions. Each type of capitalism represents a unique institutional equilibrium. But, as Streeck (1997) has underlined, institutions do in general not fit with each other because they were designed for that reason. To explain the existence of a particular institution by reference to the functions it serves for other institutions or for society as a whole is problematic. While it is quite easy to argue ex-post why a particular institution is functional it is far more difficult to do so ex ante. And even if institutions fit with each other in theory, actors might be unaware of the complementarity of a specific reform measure proposed.

In the comparative political economy literature a rather eclectic combination of theoretical building blocks taken from finance, corporate law and institutional economics can be found. As it is not conceivable just to combine different strands of literature, consider different methodologies and theoretical approaches in order to get a picture of all the determinants influencing financial systems, we will follow an alternative theoretical approach. Paradoxes of capitalism is the conceptual basis of the research program of the critical theory to explain structural transformations in contemporary societies (Honneth 2003). A paradox in capitalism is a kind of ambiguity where something gets better from a normative point of view, as e.g. the scope of individual freedom increases with the deregulation of markets, while the advantages of normative progress are associated with new forms of impoverishment and exclusion. Institutional paradoxes do not fit in rational choice explanations and are close to sociological institutionalism. In the following section we examine two characteristics of

LMEs as identified by VOC proponents – the monitoring function of capital markets and information acquisition. We do that by comparing their implementation in different social contexts. When studying the financial and corporate governance mechanisms in the U.S. we find paradoxical phenomena reaching from efficiency increasing incentives to misguiding behavior, from ethical norms to legitimizing facades, from individual autonomy to social exclusions.

3. Financial Governance Mechanisms for the Rich and the Poor

Financial governance refers to the creation (rule-setting) and exercise (rule-implementation) of authority of actors in the financial system where non-state actors play a decisive role. Formal (e.g. regulations) and informal modes of financial governance (e.g. values, trust) are exercised vis-à-vis a broad range of actors in society, far beyond financial market participants. The steering modes are primarily employed through the setting of positive incentives and negative sanctions. The monitoring function of capital markets and the crucial role of information dissemination are considered the main characteristics of financial systems in LMEs. We examine how the respective governance mechanisms that are associated with those two characteristics are exercised vis à vis the rich and the poor. Before doing so, we give a brief overview of distribution in stock ownership and the impact of CEO compensation on the development of distribution of earnings.

In the U.S., stock ownership has become more widespread at all income levels and increased to 51.9% by about 20% between 1989 and 2001 for all families (see Table 1). However, when considering the percentage of stock owned directly and indirectly by the poor, stock ownership has not become democratized. About 60% of households earn less than USD 50,000 per year and own less than 10% of stocks. About 30% of households earn less than USD 25,000 per year and own less than 2% of stocks.

Overall, empirical data do not show the emergence of an investor society but rather a persisting phenomenon of abstinence and/or exclusion of the poor. The financial attitudes of the poor differ from the ones of the rich. While the utilization of the financial system by the rich is high, the poor have a shorter financial planning horizon, they spend more rather than less of their incomes, they do not save regularly and are less willing and/or less able to take financial risks when saving.

Table 1: Concentration of Stock Ownership in the U.S. by Income Class in 2001

Income level	Share of households	Percent of households owning stock worth more than USD 9,999	Percent of stock owned
USD 250,000 or more	2.8	90.1	42.0
USD 100,000 – 249,999	11.8	78.8	28.5
USD 75,000 – 99,999	9.2	64.7	9.1
USD 50,000 – 74,999	17.4	47.0	10.9
USD 25,000 – 49,999	27.0	26.8	7.5
USD 15,000 – 24,999	15.0	10.5	1.1
Under USD 15,000	16.8	4.5	0.8
All	100	35.5	100

Source: Own calculations based on Federal Reserve Board 2001; includes direct ownership of stock shares and indirect ownership through mutual funds, trust and retirement accounts.

Table 2: Stock Holdings of Different Income Percentiles

Percentile of income	Families having stock holdings, direct and indirect		Median value among families with holdings (thousands of USD)	
	1992	2001	1992	2001
Less than 20	7.3	12.4	9.9	7.0
20 – 39,9	20.2	33.5	4.9	7.5
40 – 59,9	33.6	52.1	6.2	15.0
60 – 79,9	51.1	75.7	10.1	28.5
80 – 89,9	65.7	82.0	17.3	64.6
90 – 100	77.0	89.6	58.8	247.7

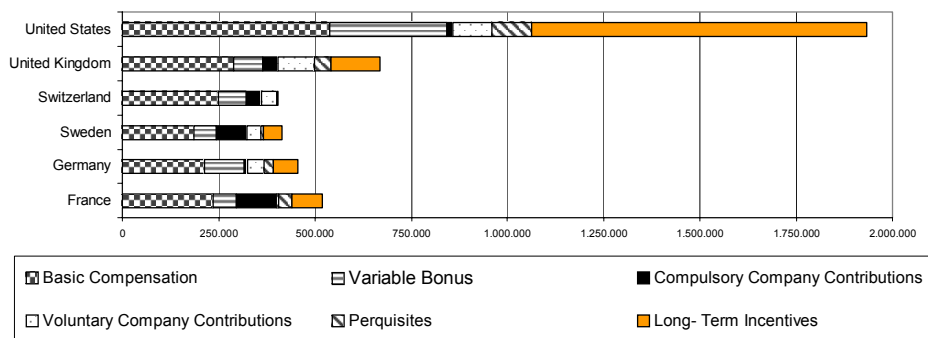
Source: Federal Reserve Board 2001, indirect holdings: mutual funds, retirement accounts and other managed assets.

Another phenomenon indirectly linked to financial governance is the large increase in inequality in wage earnings: The increase in top incomes in the U.S. has been spectacular compared to European countries. In the late 1970s, the richest 1% in the U.S. earned about 8% of the national income. By the end of the 1990s, as much as 14.6% of total U.S. incomes were concentrated in the hands of the top 1% (Piketty and Saez 2003).¹ CEO compensations contributed

¹ The study of Piketty and Saez (2003) looks at income and wage inequality and not at the distribution of wealth. Otherwise inequality should be even larger.

substantially to this development. CEO compensation peaked in 2000 with a percentage increase of 570% from 1990. In 2002 the percentage increase from 1990 declined to nonetheless 280% (see Chart 2). U.S. corporations set the highest levels of CEO compensation in the world (see Chart 1) and the gap in CEO pay has widened over the past decade mainly due to the importance of stock options in executive compensation packages. While in 1980 only 20% of the compensation of U.S. CEOs was tied to stock market performance, CEOs actually receive about 40% of their total pay from stock options (see Chart 1). Particularly for technology companies, stock options were the favorite compensation scheme. With ever rising stock prices it seemed to be a cheap way to provide incentives for executives.

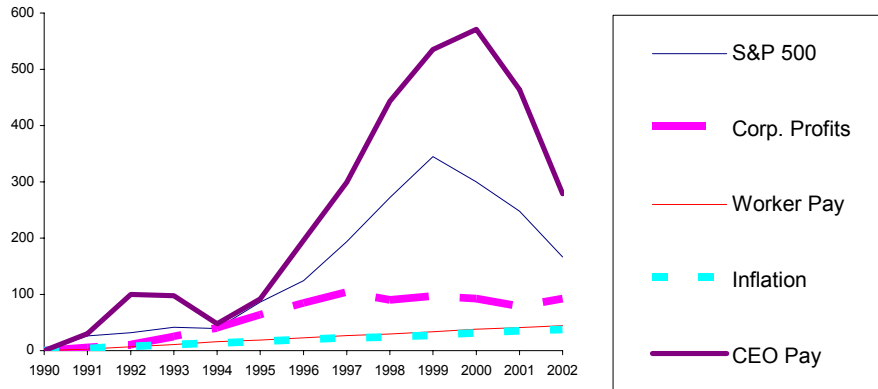
Chart 1: Remuneration of Chief Executive Officers 2001–2002, in USD



Source: Towers Perrin (2001).

While the 1980s witnessed a wave of takeover and restructuring activity, at the beginning of the 1990s a consensus view in the literature emerged that the sensitivity of pay to performance for top executives was too low (Jensen and Murphy 1990) to align the interests of managers with those of the shareholders. Hence, in the 1990s the pattern of corporate governance changed. Hostile takeovers declined substantially while executive stock options boomed. On the other hand since the 1980s there has been little progress in incorporating the poor into the banking mainstream. Surveys by the Federal Reserve Board (2003) show that in 2001 12.7% of all families had no checking account. Interestingly, among families without a checking account, 50% had held such an account in the past and 59.3% had incomes in the lowest 20 percent of the distribution.

Chart 2: *Worker Pay versus CEO Pay in the U.S., 1990-2002, Percentage Change since 1990.*



Source: Datastream, *Business Week Executive Pay Survey*, own calculations.

3.1. Monitoring Function of Capital Markets

The monitoring function of capital markets is considered as a main characteristic of financial systems in LMEs by VOC proponents (Hall and Soskice 2001, Hall and Gingerich 2002). In publicly held corporations, management (agent) is separated from fragmented owners (principal). Solutions to the collective action problems that undermine the disciplining mechanisms of shareholders aim at ensuring that the managers do not misuse resources. The main function of the corporate governance mechanisms currently in place is – according to this literature – to solve the collective action problem. According to this view the governance mechanisms serve the purpose of giving optimal incentives for executives to maximize shareholder value by constructing optimal contracts (‘contracting view’). A contract is considered optimal if it minimizes agency costs, that is, the sum of contracting, monitoring and other expenditures made in achieving compliance with shareholder interest. Jensen and Meckling (1976), proponents of the agency theory of governance, describe a firm as “*a nexus of contracting relationships*”. If the contracts with creditors, employees, clients, suppliers are considered as complete, then only the contracts with shareholders are open-ended. That means only shareholders have a claim on residual returns after all other contractual obligations have been met. Furthermore, if there are no agency problems, then maximization of shareholder value is decisive to economic efficiency. Under these assumptions corporate

governance rules should be designed exclusively to protect the interests of the shareholders. As contracts are generally incomplete there is apparently no guarantee that corporate governance rules designed to maximize shareholder values are efficient. In this case, other constituencies would have to be taken into consideration. However, Williamson (1985) argues that despite incomplete contracts the maximization of shareholder value is of tantamount importance because shareholders are relatively less protected than other constituencies. The assumption is that most workers can quit at reasonable costs, creditors have collateral and that only shareholders have open-ended contracts.

To mitigate the collective action problem of shareholders mainly four alternatives are discussed in the literature (Becht et al. 2002, Holmstrom and Kaplan 2003):

- 1) (Hostile) takeovers as a disciplining mechanism to remove inefficient managers,
- 2) Active monitoring by a large block holder (such as an institutional investor or a bank),
- 3) Election of a board of directors representing shareholder interests,
- 4) Executive compensation schemes to align managerial interests with shareholder interests.

Agency theory considers these approaches as substitutes. The first three alternatives lead to the question, *who monitors the monitor?* The fourth option seems to avoid this problem. Stock options shall align the interests of the chief executive officer (CEO) and shareholders directly.² Stock options give the CEO the right to buy stocks at a preset price at a future date. The CEO of a firm (the agent) is confronted with shareholders, creditors, suppliers and employees (multiple principals). The principals are parties with whom the CEO engages in business on behalf of the corporation. Most agency theories legitimizing stock options assume that the determinants of stock prices cannot be manipulated (Core et al. 2003). However, the recent corporate scandals have shown that stock options gave rise to a number of misleading incentives for management. Hence, the compensation scheme seems to be part of the agency problem rather than a solution to it. For instance, attempts were made to gloss over profit and balance-sheet figures in the event they lagged behind investor expectations. Managers manipulated financial statements so as to drive up stock prices, invoking their options and realizing their gains. Thus, stock options provided an opportunity for

² The shareholders are not a homogenous group but a collective principal. Minority shareholders and block holders may not only have divergent interests but also divergent power resources.

CEOs to enrich themselves which was facilitated by dispersion of ownership giving executives significant power. Specific features of executive compensation in the U.S. were designed with managers' welfare in mind supporting the '*rent extraction view*' as an alternative to optimal contracting (Bebchuk et al. 2001). For instance, contracts with managers abstained from filtering out industry or broader market stock price effects. As a consequence even poorly performing managers can make significant profits. The rent extraction view is also supported by the fact that compensation contracts did not place any restrictions on managers ability to sell stock or hedge the stock options. As a common practice, managers usually exercise options well before expiration and hedge their exposure when disposal is not possible. Furthermore the common practice of option repricing, the lowering of the options' strike price when the stock price falls below the original exercise price, is not compatible with providing risk-averse managers with the strongest cost-effective incentives to exert effort and maximize shareholder value. On the contrary, the possibility that the exercise price will be lowered if the stock price falls weakens incentives. Compensation packages often do not follow an internally consistent logic of incentives and sanctions. Large rewards are given when the stock market is booming while there is little financial penalty for failure as managers can never lose money from holding an option, i.e. their lowest payoff is zero percent. That cross-country difference in executive pay is concentrated at the top, while lower level U.S. executives do not receive excessive pay is a further indication of management power that allows rent extraction.

Incentives of stock options are embedded in a social context while trust seems to be an important element of governance mechanism: In 2000 almost 99% of stock option plans at major U.S. corporations received shareholder approval (Becht et al. 2002). Now, moral indignation about the huge compensations of top executives and the enormously increasing wage differences emerging over the last decades dominate (Krugman 2003). Even the proponents of this incentive instrument believe that "*the size of some of the option grants has been far greater than what is necessary to retain and motivate the CEOs*" (Holstrom and Kaplan 2003, p.13). However, how should one determine the adequate size?

In the stylized textbook model of corporate governance in LMEs, governance mechanisms in place are interpreted functionally, i.e. to strengthen the monitoring function of capital markets and to alleviate the collective action problem. As exemplified for the case of managerial compensation, practice in executive compensation seems to have aggravated the collective action problem instead of solving it. The recent wave of corporate failures, which are typically attributed to institutional features, such as lack of disclosure and transparency, weak legal protection of investors' rights, inverse incentives and misconduct of managers, are considered as deviations from the ideal model. An alternative

interpretation would be that those deviations are the ‘steady state’ simply resulting from the operation of market forces leading to misallocation of resources, increasing income and wealth inequalities and *exclusion of the poor*. When behavioral patterns produce large departures from the ideal neoclassical equilibrium the economics profession calls for an improvement in institutional arrangements to offset ‘dysfunctional’ behavior with the aim to finally bring financial and corporate behavior in line with predictions of the neoclassical model. The regulatory response to the recent corporate failures was set along these lines: a combination of strengthened regulation and an appeal to moral integrity should bring about a change in incentive structures of managers and financial market participants in general.

3.2 Information by Reputational Intermediaries

In theory, a governance mechanism that is of utmost importance for the functioning of financial markets is information dissemination by reputational intermediaries. Fragmented ownership generates a collective action problem: no one has an incentive to pay the transactions costs required to acquire the information necessary to monitor the managers. A free rider problem emerges that consists in this case of the fact that other investors can use the information gathered by one or a few resulting in under-supply of information. Hence, fragmented ownership creates the need for external monitors, reputational intermediaries, comprising external auditors, stock analysts, investment banks, bond rating agencies, lawyers and others. Investors base their decisions on information provided by these private agents. The recent corporate failures revealed the limited ability of reputational intermediaries to overcome the collective action problem and to provide for information efficient financial markets. In some cases it turned out that “*instead of providing information to external investors, the intermediaries colluded with managers and each other at the expense of shareholders.*” (Gourevitch 2002a, p. 3). Thus it appears that governance mechanisms in place deviate from the idealized model description of the role of reputational intermediaries in information provision.

An issue that is broadly ignored by the literature describing the role of information in financial governance mechanisms in LMEs is that arm’s length systems seem to require the financially literate individual who understands the broad range of financial services to make informative investment decisions. In recent years, there has been a wave of initiatives promoting the enhancement of financial literacy among the population where reputational intermediaries play

some role (OECD 2004).³ The providers of financial literacy programs are a diverse group including NGOs, churches, commercial banks, the state, the Fed and colleges. They concentrate their educational programs on pension funds, home purchases and consumer credits. In these areas, classes and courses are offered to teach individuals the functioning of standard instruments and calculation methods to assess financial products and make reasonable decisions.

The literacy program providers advocate the advantages of a market-based financial system. However, in their educational efforts they do not rely upon market mechanisms but instead rely on the reputation of NGOs. The Edelman survey of trust (2003) has shown that nowadays NGOs are the most trusted institutions. Thus, many banks work with non-profit and community organizations to convey their message of financial literacy to the poor. From a business point of view the poor are an underutilized niche for financial institutions. By participating in educational programs financial institutions have a better chance to reach these households. Thus financial institutions operate in partnerships with NGOs. Information to the poor (the principal) is given by the financial institution (the agent). There are only few expert outsiders monitoring the performance of the agent.

Is the reason for the abstinence of the poor from mainstream banking a lack of information? The Survey of Consumer Finances 2001 asked all families that did not have a checking account to give a reason (Federal Reserve Board 2003). The most commonly reported answer – given by 28.6% – was that the family did not write enough checks to make account ownership worthwhile. However, 22.6% answered that they did not like dealing with banks. This response showed the largest increase since 1992 (15.3%). This points towards negative experiences made by the poor with financial institutions or, for those who never had a banking relation before, to the social issue of mistrust into the banking system. Credit and other financial services can be obtained not only from the formal financial system but also through informal networks of family friends and ethnic or community organizations. Though less studied there exists a parallel system of financial services providers that primarily serve the lower income working class. This *fringe banking* sector – as it is called by consumer advocates – is a network of check cashing centers and payday lenders. Besides the fact that

³ “A financially literate individual understands his or her relationship to money (e.g. the need for financial security, tolerance for risk) and can read about, discuss and communicate regarding personal financial issues. She possesses knowledge of banking and credit, practices money management, understands the need for protection against unforeseen emergencies, plans for major life events and saves and invests for the future.” (Vitt et al. 2000, p. 29).

fringe banks are banned in 19 states because of their potential for abuse their importance is even increasing. The number of unregulated unlicensed financial service providers is growing in the U.S. but the increase is exponential in low and moderate income and minority communities (Carr and Schuetz 2001).

A number of developments prompt concern amongst supervisory agencies and policymakers: First, the rise in consumer debt levels, the continuing decline in – already low – personal saving rates and the increase in non-business bankruptcies serve as an indication that the financial behavior of people is not sound. The younger population's access to credit has grown considerably, but younger people also have difficulties in managing their debt. Second, the larger market for financial services and increased competition between suppliers has gone hand in hand with instances of massive fraud. The result has been a lack of trust in the financial services industries (Edelman survey of trust 2003). Fed Vice-Chairman Roger W. Ferguson (2002) is quite frank about this dilemma: *“education will not be successful in an environment in which credibility and trust are lacking”*.

4. Paradoxes of the U.S Financial System

Thus, financial governance for the CEOs and the poor is exercised through incentives and information. Does that mean anything more than that for different problems different governance mechanisms do exist? Rajan and Zingales (2003) claim that financial governance is *“not a cultural issue, it is an issue of incentives”*. However, a number of researchers refer to culture and governance (Demirguc-Kunt and Levine 1999). In particular the World Bank has in recent years taken considerable interest in the question of how cultural factors influence the process of development. A few years ago it started a governance project finding empirical evidence of significant effects of public governance on economic development (Kaufmann 2002).⁴ Based on data provided by a broad range of stakeholders around the world they constructed cross-country indicators of measuring dimensions of the quality of governance: Voice and accountability, political stability, government effectiveness, regulatory quality, rule of law and control of corruption. Each of these six governance indicators combines a large

⁴ What is not clear, however, is what the governance variables indeed measure conceptually as the indicators are based on perceptions and concentrate mainly on the perspectives of elites. As the surveys are about perceptions we may consider them as values themselves.

number of underlying measures of perceptions of governance. The variables have been found to be good predictors of economic growth.

Cultural links call for adequate attention being paid to contingency and particularity. Max Weber who underlined the crucial role of Protestant ethics in the development of a capitalist economy knew that the same values can have different pay-offs in different environments and different times: Some values can be very successful in a particular stage of development but less so in other historical experiences. We ask whether some values may be relevant for the rich, others for the poor. To speak of human activity means to talk of ethics. Ethics comes from the Greek word '*ethos*', which can be translated as habit. Albert Hirschman (1996) argued that an argument in favor of capitalism was based on the belief that "*it would activate some benign human proclivities at the expense of some malignant ones*". In general, market economies cannot exist without being based on social values.⁵

Ethics is frequently used within a narrow definition. In this case, the term signifies unselfish, altruistic behavior and opposes the alleged selfishness of the *homo oeconomicus*. Theoretically maximizing behavior reflects an ethos of selfishness. In 1970 Friedman opined in an essay on social responsibility that the "*One and only one social responsibility of business (is) to increase profits so long as it stays within the rules of the game, which is to say, engages in open and free competition without deception or fraud.*" According to Friedman's argument, the social responsibility of companies lies only in achieving maximum profit within the rules of the game and, particularly, in the context of laws. But he does not discuss the reasons why this should be the case. If we assume that laws are only rules backed by threats and that it is solely legislators' task to stipulate appropriate penal provisions for unlawful action, then the law would not have any ethical force. In this case tax evasion or the deliberate falsifying of balance sheets would be morally permissible.⁶ In practice there is a search for a balance between respect of social values and the pursuit of self interest. Ethical rules are not fixed once and for all but are bound to historical circumstances. Social ideas both of justice and public welfare are subject to change. The call of policymakers to change the institutional framework, to

⁵ This was pointed out already by Adam Smith in his *Theory of Moral Sentiments* (Smith 2002). Markets require, at the very least, trust and responsible action and they are formed on the basis of values.

⁶ Whoever argues that the observance of the law is in the self-interest of corporate management, would also need to prove that a breach of the law cannot serve corporate interests. In corporate reality, however, it is easy to find examples of illegal behavior that pays. In a case where the risk of prosecution is low or where sanctions are minimal, illegal activity can be in line with business logic.

introduce codes of conduct, transparency provisions and ethical compliance programs, is an important consequence of the latest developments of financial markets. But to what extent are normative ethical considerations relevant?

On March 7, 2002, U.S. President Bush called for a renewed ethic of corporate responsibility: *“America is ushering in a responsibility era; a culture regaining a sense of personal responsibility, where each of us understands we are responsible for the decisions we make in life. And this new culture must include a renewed sense of corporate responsibility. If you lead a corporation, you have a responsibility to serve your shareholders, to be honest with your employees. You have a responsibility to obey the law and to tell the truth”* (Bush 2002, p.5).

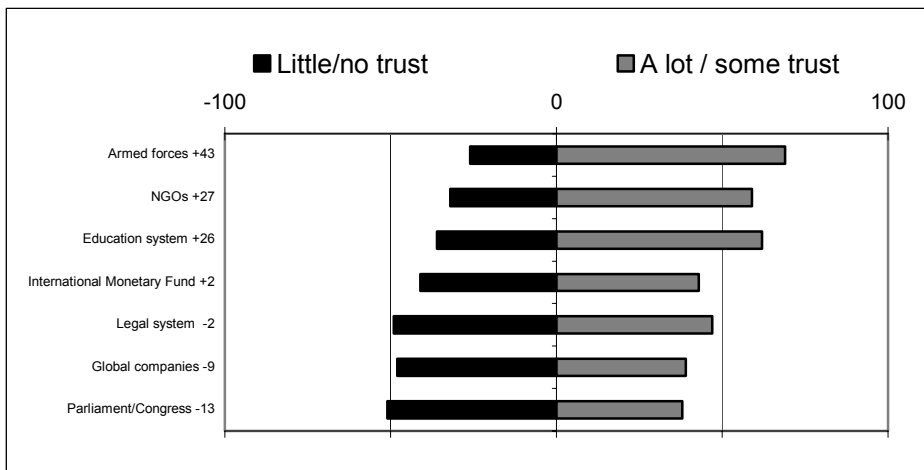
The *greed of managers* has recently become a favorite topic of financial media articles. However, greed can be justified in economically functional terms. This is because, unlike the envy of the *man in the street*, it should indeed foster public welfare in conformity with neoclassical economic models. However, the selfish homo oeconomicus in the financial sphere shall at the same time be a public welfare-oriented homo civicus. Thus, moral suasion is applied against supposedly *greedy CEOs* (World Economic Forum 2002, Greenspan 2002). A success of this governance mechanism would require that CEOs – as they are monitored within short time periods – have to act, in some cases, against their rent maximization interests on the basis of ethical values. And indeed there are a few examples when CEOs declined to accept their bonus at times when layoff announcements were made (Klinger and Hartman 2002). However, what is more important than this vote for signalling integrity is that the incentive concept of financial governance itself is a concealed value judgement. Financial capital shall educate CEOs to be responsible to their shareholders and education takes the form of disciplining or as Holmstrom and Kaplan state *“the capital markets disciplined managers who had ignored shareholders for the benefits of themselves and other stakeholders”* (Holmstrom and Kaplan 2003, p, 7), In this understanding the capital market becomes a moral entity and the people an object of the ethical norm.

According to the fifth annual global CEO survey conducted in conjunction with the World Economic Forum, asking 1161 CEOs from 33 countries, 68% agree that corporate social responsibility is vital to profitability. When asked which stakeholder groups create the greatest incentives for their corporate activities, the CEOs strongly emphasized three key actors: employees and government bodies followed by customers. The investors rank even behind the board of directors. Furthermore, the survey results indicate that ethics becomes a strategic issue of relevance to CEOs and does not only mean philanthropy.

The chairman of the Fed, Alan Greenspan, realizes the limits of incentives and regulatory rules and stresses the importance of values *“Rules cannot substitute for character. In virtually all transactions we rely on the word of those*

with whom we do business” (Alan Greenspan 2002, p.6).⁷ We may assume that ethical values in financial governance gain importance in situations of a need for trust. The *Voice of the People* survey of Gallup 2002 studies the level of trust across 47 countries for 17 different institutions that “*operate in the best interest of society*” (see Chart 3).⁸ The findings reveal a global public opinions climate that is very critical of democratic institutions and companies.

Chart 3: Trust in Institutions to Operate in Society’s Best Interest



Source: Gallup (2002).

Financial literacy programs are non-market instruments to confront a market failure. But theoretically, the market failures could be addressed by two other alternatives: First, a market-oriented governance mechanism would have to rely on incentives for financial institutions to build up reputation vis à vis the poor. The second alternative to the promotion of financial literacy would be to

⁷ However, this is quite close to what Groucho Marx once said: “*There is one way to find out if a man is honest—ask him. If he says yes, he is a crook*”.

⁸ It included face-to-face or telephone interviews with 36,000 citizens across 47 countries on six continents. Results are statistically representative of the views of 1.4 billion citizens. The principal democratic institution (i.e. parliament, congress etc.) in each country is the least trusted of the 17 institutions tested followed by companies. Two-thirds of those surveyed worldwide disagree that their country is “*governed by the will of the people*”.

mandate low cost access to banking. These two alternatives are however not considered: the financial literacy programs aim at improving the financial knowledge of individuals to change financial behavior. Conceptually it remains unclear who shall be protected, the poor from fraud of financial institutions or the banks from failure of the poor? From the official discourse of financial literacy efforts one has to conclude both. *“An educated investor is the first defense against fraud”* (Pitt 2002; 3).⁹ Financial education can be either understood as a component of consumer protection or as a substitute for stronger consumer regulatory protections.

An indication that it shall substitute regulation is its ideological embeddedness. As Treasury Secretary Paul H. O’Neill argued in his testimony before the Senate Committee on Banking, Housing and Urban Affairs, February 2002: *“Financial education can be compared to a road map to the American dream. I believe that we need to teach all Americans the necessary skills to read that map, so that they can reach the dream”*. The U.S. Treasury is quite explicit on the ideological aim of financial literacy programs; it *“permits people to believe that their ambitions do not have to be limited”* (White Paper 2002, p.16).

How effective are the financial literacy efforts for the poor? Recent surveys show that high school seniors in the U.S.A in 2002 know even less about credit cards, retirement funds, insurance and other personal finance basics than they did five years ago. Despite of all the educational efforts the knowledge of high school children has declined (Jump Start 2002).¹⁰ At a hearing of the U.S. Senate Committee on Banking, Housing and Urban Affairs, on the *“The State of Financial Literacy and Education in America”* Denise Voigt Crawford, Securities Commissioner, had to admit: *“On average, the general public is financially illiterate. Despite numerous, well-intentioned efforts over the last few years to increase investor knowledge, recent surveys on financial literacy are finding nearly the same dismal results that were found in surveys five or more years earlier”*. There is evidence that part of the problem lies in the fact that consumers seem not to act on the information provided to them in the expected manner (Jump Start 2002). Many times they do not make use of the information provided or they do not understand it.

Empirical studies to measure the efficacy of financial education come up

⁹ The U.S. securities and exchange commission (SEC) has created a fake scam site, www.mcwhortle.com illustrating what their main messages for investors are: *“if it sounds too good to be true, it is;... if it is that good it will wait;... beauty isn’t everything.”* The main idea of these jokes is: *do not trust*.

¹⁰ The Jump Start survey consisted of a written 45 minute examination administered to 4,024 12th graders in 183 schools across the U.S. (Jump Start 2002).

with ambiguous results. A study by Freddie Mac, one of the largest purchasers of home mortgages in the U.S.A, found that homebuyers who obtained homeownership education have reduced rates of loan delinquency. A study by the National Endowment for Financial Education showed that nearly half of the high school students that participated in financial-planning programs saved more as a result of the program. And another Freddie Mac study shows that learning the general principles of sound financial behavior is more important than detailed information on financial transactions. However, the most important source about personal finances is personal experience (Braunstein and Welch 2002).

Fed Vice-Chairman Roger W. Ferguson (2002) points to the regular tendency for myopic financial behavior even among the most sophisticated individuals. In a study of defined contribution plans by James Choi one-third of self-reported under-savers said they intended to increase their saving rate in the next few months but almost none made a change in their 401(k) saving rate (Ferguson 2002). Ferguson concludes that neoclassical economics with its strong assumptions on rational behavior is of limited explanatory value for real behavior. Most studies on the effects of financial literacy programs show that households do not act as required by orthodox economists' models. Even in the presence of reliable information a self-destructive behavior can be observed. Self-destructive aspects of consumer behavior in finance matters are not cured by information. Mulainathan and Thaler (2000) suggest for instance that the lack of self-discipline of financial consumers necessitates strategies that force savings (automatic enrolment in 401(k) investment plans).

If financial literacy programs do work poorly in improving the capacity for information absorption and rational calculation, what is their usefulness? Individuals *empowered* by financial education can be expected to be more confident in their own ability to engage in financial transactions. The primary purpose of financial literacy programs is to discipline the uninformed poor how to behave in a way that makes public regulation obsolete and enables the solution of problems by market forces. Get everyone to calculate like a rational private investor and the demands for an activist state will diminish. People shall not feel in need of state protection but see themselves as rational, self-reliant individuals taking their fate in their own hands and contributing to their own wealth and well-being by engaging in financial transactions.

But the management of risk has two dimensions: integrity and expertise. While the latter can be dealt with by financial literacy programs for the poor the former remains an open issue. The market is also not protecting rich investors from being defrauded but at least there are regulations in place. The poor are offered financial services that are not covered by consumer protection laws and regulations. And lacking integrity of the so-called agent has more severe consequences for the poor. Poor investors who lost their retirement accounts

following the advice of analysts have presumably no second chance. Monitoring is costly for any principal but for the poor even more so, as they largely remain without support of reputational intermediaries. Shareholders have, in comparison to the poor, relatively low monitoring costs.

5. Acceptance of Inequality: the Common Denominator of Financial System Paradoxes

“Our society, I believe, accepts and approves a large measure of inequality . Americans commonly perceive differences of wealth and income as earned and regard the differential earnings of effort, skill foresight and enterprise as deserved.” (James Tobin 1970).

The financial governance mechanisms in place are largely viewed as a set of coherent, though sometimes economically inefficient, instruments to solve for the principal-agent problem. In market-based systems financial markets and intermediaries channel society’s savings directly to investment projects that have to be monitored by capital owners. In literature on corporate control the structuring of managerial compensation such as stock options and information provision by reputational intermediaries have become important elements of financial governance in exercising corporate control by shareholders. However, investigating the position of the highest versus the lowest income classes vis à vis the financial system reveals that a set of different, incoherent instruments of financial governance are in place.

Table 3: Financial Governance Paradoxes

	Rich (CEO)	Poor (unbanked)
Principal	Shareholders	Low income private households
Agent	CEO	Financial institutions
<i>Agency problem</i>	Rent seeking	Unclear principal-agent roles
Solutions to the agency problem:		
Monitoring	Reputational intermediaries (auditors, rating agencies, research analysts)	<i>Educated principal</i>
Representation	Lobbies	Advocates for the poor: churches, NGOS, Fed, banks
<i>Representation problem</i>	Powerful insider	Powerless outsiders
Ethical discourse	<i>Social responsibility</i>	Individual responsibility
Problematic habits	Greed	Abstinence, ignorance
Official policy tradeoffs	Corporate responsibility versus shareholder value	Informed investor versus fraud avoidance

First, both governance mechanisms, the ones for the rich and the ones for the poor, do not work in the way asserted by their proponents. Neither do stock options ensure an increase in the performance of firms nor do financial literacy

programs show up to now changing behavior, sometimes they do not even increase knowledge. *Second*, to solve for the agency problem the rich and the poor are incited to play according to quite different sets of rules. Thus, the incentives in place for the CEOs differ from the financial governance mechanisms for the poor. *Third*, and most importantly, the different forms of financial governance for the rich and the poor do not only point towards principal-agent problems to be solved, but also towards a representation problem (see Table 3). The lobbying activities of financial institutions and shareholder activism allow an extended utilization of the financial system. The financial sector has a high interest representation. The interests of the poor are to a great deal not organized and thus excluded from the political decision making process. Many of the latter do not use the traditional banking system and remain clients of expensive fringe banking without consumer regulation and protection. And financial literacy efforts take wealth inequality as a brute fact of U.S. capitalism.¹¹

To solve for the representation problem requires either inclusion mechanisms for the excluded or a hegemonic ideology legitimizing exclusion. A hegemonic discourse is the narrative of the unavoidable necessity of individual responsibility to achieve overall welfare enhancing market efficient outcomes. *Rewards for the rich and rhetoric for the poor* are embedded in the framework of the neoliberal hegemonic discourse that legitimizes persisting and growing inequality.¹² Without ideology, financial governance paradoxes would form an enigma of disconnected facts.¹³

¹¹ Furthermore, financial literacy is not for the extreme poor who do not have internet access, who do not own television and who do not attend events of neighborhood communities.

¹² The acceptance of inequality is well documented by the General Social Survey (GSS) conducted since 1972. The American publics' notion of justice depends more on opportunity than on achievement. In the GSS 1993 over 86% rather favoured "*promoting equal opportunity*" over "*promoting equal outcomes*". The GSS 1996 indicates that fewer than one-third of the respondents agreed with the statement, "*It is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes*" (see National Opinion Research Centre, "Codebook Variable: EQINCOME". <http://www.icpsr.umich.edu/GSS/rnd11998/merged/cdbk/eqincome.htm>).

¹³ By simple illustrations the poor get an idea of their likely wealth growth. Over a 10-year period saving USD 3,000 in a shoebox would be worth when adjusted for inflation only USD 2,223. The same sum invested in a 10-year Treasury note would have grown to more than USD 5,000 by 1999. Investment in an SP index fund would have yielded USD 9,180 over that period. And the illustrative point of this simplifying table: if families had

Thus, finally we have to ask about the beliefs that shape financial governance mechanisms. U.S. citizens do not care much about inequality in comparison to Europe. Alesina et al. (2001) report, using data from the World Values Survey, that “71% of Americans, but only 40% of Europeans believe that the poor have a chance to escape from poverty”. While in Europe the poor are generally considered to be unfortunate but not personally responsible, the majority of the Americans believe that the poor can work their way out of poverty. When people are poor U.S. citizens do not consider this as bad luck but rather assume the poor are responsible for their poverty. According to Alesina et al. (2001) U.S. citizens redistribute less than Europeans for three reasons: first, because the majority believes that redistribution favors racial minorities; second since U.S. citizens believe that they live in an open and fair society, and that if somebody is poor it is his or her own fault, and, finally, because the political system is geared toward preventing redistribution. The political system is likely to be endogenous to these basic beliefs. Instead of providing financial governance mechanisms that allow redistribution to ethnic minorities, the majority of the unbanked, – e.g. by providing low cost banking –, the poor are disciplined by financial education.

Conclusions

Economists engage in debates whether a transformation of financial systems towards a U.S. style model will take place. However, sweeping statements about the desirability of a specific financial system without a contextual analysis are misleading. The U.S financial governance mechanisms do, as exemplified for the case of managerial compensation and the role of information acquisition, not appear to be too similar to economists ideas about optimal contracts and incentives. We argue that the VOC literature in relying on a principal-agent description of financial and corporate governance has missed important incoherencies. Extending the analytical framework on values allows to shift the perspective to real world phenomena and to question overly abstract models.

a prophetic inside and invested their savings in Microsoft stocks their wealth would have grown to USD 211,360.

Table: Example: Nominal Value of Saving, USD 3,000

year	shoebox	Treasury note	SP 500 Index Fund	Microsoft Stock
1989	3,000	3,000	3,000	3,000
1999	3,000	5,072	9,180	211,360

Source: Carr and Schuetz 2001, p.11.

We have shown that financial governance works in an incoherent and paradoxical way. We analyzed the ambiguities of governance mechanisms for CEOs and the poor. While, according to the principal-agent view of financial governance, the links to the financial system for the rich and the poor should probably differ only according to their different resources as being wealthy broadens the choices one can make, we show that governance mechanisms differ fundamentally for the lower and higher income classes, both in terms of financial incentives and value construction. The financial behavior of the poor oscillates between ignorance and abstinence. The governance mechanisms for the poor are conceptually coherent as they combine financial education to learn to maximize revenues with a discourse of egoistic values. However, this pattern does not correspond with the policy suggestions from the principal-agent theory because the suggested solution that the agent (financial institution) should educate the principal (poor) would not even theoretically solve an agency problem. The financial behavior of CEOs oscillates between the poles of shareholder maximization and rent seeking. As the rich are incited to maximize individual revenues, moral suasion is exercised in parallel against exercising such behavior. The discourse of corporate responsibility shows the incoherencies of governance mechanisms for CEOs.

Paradoxical phenomena in the U.S. financial system reach from efficiency increasing incentives that at the same time induce misguiding behavior, from ethical norms that degenerate to legitimizing facades, from individual autonomy increasing efforts that lead to growing dependence on integrity. These paradoxes have preserved the stability of the U.S. variant of capitalism.

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http://www2.oenb.at/stat-monatsheft/englisch/start_p.htm

Statistiken – Daten und Analysen

quarterly

This publication contains reports and analyses about Austrian financial institutions as well as about macroeconomic indicators related to financial flows and stocks based primarily on OeNB statistics. The contributions are in German, with English-language executive summaries of the reports. The analyses are also summarized in English. Tables are available in English only on the OeNB's website. This publication is scheduled to replace the monthly statistical bulletin, published in German as *Statistisches Monatsheft*, as from September 2004.

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