

A COMPARISON OF BALANCE SHEET STRUCTURES IN MAJOR EU COUNTRIES

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The UK is commonly viewed as having a 'market oriented' financial system, in contrast to other European countries which are seen as 'bank dominated'. In the light of this supposition, we investigate sectoral balance sheet data for evidence of differences in financial structure between the UK and other major EU countries. It is found that the UK has much in common with Continental countries, in particular France, and they are themselves markedly heterogeneous. There is also some evidence of convergence towards a more market-oriented financial system, even in the most bank-dominated economy, Germany.

Introduction

A financial system has two goals, to channel resources to the most productive use (allocation) and ensure adequate returns for financiers (governance). Traditionally, one of the key differences between the UK and other EU countries has been considered to relate to the structure of financial systems. The UK is seen as 'market-oriented' with active securities markets, while the Continental Countries are thought to be 'bank-dominated'.

Besides affecting allocation and governance, such differences can have a wider significance if they link to monetary transmission and other behavioural differences at a macro level. Indeed, it has often been pointed out that there appear to be differences in the monetary transmission mechanism across EU countries (see for example Maclennan *et al.*, 1998), while one key factor underlying monetary transmission is financial structure – the overall pattern of financing relations within an economy.

In this context, and viewed in the light of the theory of finance, this article seeks to assess the degree to which contrasting patterns in financial structure are apparent in national balance sheet data for France, Germany and Italy *vis-à-vis* the UK. We trace the evolution of key sectoral balance sheet patterns beginning at the inception of the ERM (1980) through its hardening (1990) to the eve of EMU (1998) and the latest observation (2000).

The data suggest a reality that is more complex than the simple paradigms would suggest. The UK has much in

common with Continental countries, in particular with France,¹ while they are themselves markedly heterogeneous. There is also evidence of convergence. Of course, it should be noted at the outset that a number of key aspects of financing are not shown by data from national balance sheets. In particular, no detail is provided on the maturity, terms, liquidity and negotiability of different instruments, nor on formal and informal aspects of corporate governance arrangements. In this article we also focus on stocks and not flows. These are important areas for further investigation.

Paradigms of financial structure

In order to set a benchmark, we set out the key stylised differences in the behaviour of financial institutions and markets between market-oriented and bank dominated financial systems.² The core of the traditional distinction between the two systems is in terms of the finance and control of corporations, distinguishing between direct control via debt and market control via equity (see Davis, 1995a). This is manifested in differing balance sheet structure, not only for companies but also for households and financial institutions.

Relationship based financial systems (direct control via debt) along the lines of the German (and Japanese) model typically involve companies having exclusive financing relationships with a small number of creditors and equity holders. External finance itself is largely in the form of bank loans and not securities. But firms also depend to a considerable extent on internal finance, which they obtain not only via retentions but also by

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balance-sheet pension reserves. Accordingly, households gain liquidity from banks and diversification indirectly via the assets held in banks' portfolios. Institutional investment is minor, partly reflecting generous social security. Banks are significant shareholders in their own right and in Germany are represented on supervisory boards both as equity holders and as creditors. There is also widespread cross-shareholding among companies.³ Long-term relationships in this system reduce information asymmetry and agency costs. Private information becomes more important than public.⁴

In these countries, banks dominate corporate governance. Influence is exerted most decisively via their control rights as creditors. They may influence the firm by varying the maturity of debt as well as by taking control when firms default or violate debt contracts. They may also provide rescue finance to firms in financial difficulty, recouping the expense by charging higher spreads – and paying lower deposit rates – when the firm recovers. Besides direct equity holdings and creditor links, banks in these countries have also been able to exert governance through the voting rights conferred on them by custody of bearer shares of individual investors who have surrendered their proxies. Besides their small size, the governance influence of institutional investors is often limited by voting restrictions, countervailing influence of bank and corporate shareholders, and lack of detailed financial information. More generally, equity holders are often discriminated against in such systems, to the advantage of the creditors, for example in terms of dividends. Such discrimination may make minority investors unwilling to invest, leaving equity markets themselves underdeveloped.⁵ A symptom is that many firms are not quoted. It is widely suggested (Davis, 1999) that the system is vulnerable to development of securities markets and institutional investors, as well as to enhanced banking competition.

Care is needed in using this paradigm, as extensive academic work suggests that, even in its heyday in Germany, it did not function precisely as described above (Edwards and Fischer, 1994). Nevertheless, it remains useful as a benchmark. Summarising the characteristics expected of relationship banking systems (Schmidt *et al.*, 2002), they include:

- banks dominate the financial sector, while institutional investors play a minor role;
- capital markets are underdeveloped;
- household accumulation is mainly in the form of claims on banks and insurance companies;

- external financing of firms depends on long-term bank loans, underpinned by close relationships;
- pension reserves are an important source of internal financing of companies;
- cross shareholding among companies is high;
- most companies are not quoted; those that are, are held by few large shareholders;
- shareholders are joined by other stakeholders (e.g. workers) in corporate governance; stakeholders are encouraged to make firm specific investments;
- external control by the capital market is low.

Arms length systems (direct control via equity) are typified by the UK (and US). In terms of finance, liquid and thick financial markets provide the range of financial instruments that economic agents need; and liquid financial markets reduce investment risk and open up scope for diversification by investors. Monitoring is provided by specialists such as rating agencies and venture capital firms as well as commercial and investment banks. Short-term spot transactions rather than long-term relationships predominate, with external financing of corporations taking place by short-term bank lending and bond issuance, as well as equity issuance. Institutional investors, notably pension funds, are important sources of external finance as well as banks (Davis, 1995a). Debt financiers are protected only by explicit contracts and legal enforcement; creditors may intervene only when liquidation is threatened. Public information is predominant.

In respect of governance, hostile takeover activity, which is a distinguishing mark of Anglo-Saxon systems, seeks to resolve the conflict of interest between management and shareholders. The firms that deviate most extensively from shareholders' objectives – and consequently tend to have lower market values as shareholders dispose of their holdings – have a greater likelihood of being acquired. The threat of takeover, as much as its manifestation, acts as a constraint on managerial behaviour. Institutional shareholders, both directly and via non-executive directors, can have an important role to play in this context, both in complementing takeover pressure as a monitoring constraint on management behaviour and in evaluating takeover proposals when they arise.

Summarising the characteristics expected of arm's length financial systems (Schmidt *et al.*, 2002), they include:

- institutional investors dominate the financial sector,

Box A. Instrument and sector definitions, and the key differences between balance sheets

Historically, there were important differences between national balance sheets, knowledge of which is important in interpretation of trends before 1998. Fortunately, with ESA 95, the differences have become much less important than was the case before 1995 (see for example the discussion of Davis, 1986). Accordingly, pan-European comparisons are likely to be particularly accurate for recent years. Sectoral definitions are provided in Table A.1, while the unchanging instrument definitions are given in Table A.2.

Table A.1. Sectoral definitions

	<i>Definition prior to 1998</i>	<i>Definition for 1998 and 2000 (all countries)</i>
Household sector	UK(1980): France and Italy: personal sector including non-corporate business UK (1990): household sector excluding non-corporate business Germany: household sector plus housing sector (all housing activity including mortgages and construction)	Household sector including non-profit organisations and sole traders
Corporate sector (private and public)	UK (1980), France and Italy: excluding non-corporate business UK (1990), Germany: including non-corporate business	Corporate sector including non-corporate business
Financial sector	Includes public and private financial institutions and central bank	Includes public and private financial institutions and central bank
Banking sector	Includes all depository institutions and central bank	'Monetary financial institutions'

Table A.2. Instrument definitions

Deposits	Bank deposits (in domestic and foreign currency), notes and coin
MMIs	Money market instruments
Equity	Shares, including participations and other untraded shares
Bonds	Government, corporate and bank bonds as well as securitisations
Loans	Loans excluding trade credit. Housing loans for France, Germany and Italy are 'long-term loans to households' and consumer loans are 'short-term loans to households'
Mutual funds	Mutual funds
Life insurance and pension funds	Insurance and pension funds. For Germany, France and Italy includes general insurance assets

Some assets which are quite sizeable have been excluded from the principal tables to ensure comparability (due to differing statistical treatment, as they are not incorporated generally elsewhere and/or do not fit into standard instrument categories). For all countries, the category includes trade credit and instruments specifically named as 'other or miscellaneous assets'. For France it includes also the accruals adjustment, for the UK accruals of taxes, rates and interest, German data exclude non-financial and financial corporations' pension commitments, which are held on the balance sheet rather than being funded externally. Finally, we exclude financial derivatives, data on which are available only in the last few years.

In terms of statistical issues, an important issue is the treatment of trade credit. In countries such as Germany only international trade credit is identified, while in Italy trade credit is not identified before 1998. For this reason, as noted, we exclude trade credit from consideration as an asset or liability of the household or corporate sector. A further issue relates to valuations. For most countries, we have market values for all assets in recent years but this is not the case for bonds or unquoted shares in the earlier years. Note also that there is typically a residual in the flow of funds arising from unrecorded claims. This is usually not of major importance, with the statisticians attempting to minimise the discrepancy.

- while banks play a minor role;
- capital markets are highly developed;
 - household accumulation is mainly in the form of capital market investment, directly or indirectly via institutional investors;
 - external financing of firms depends on capital markets, directly (new issues of debt or equity) or indirectly (securitised loans), and institutional investors are major suppliers of it;
 - bank credit is short-term and at arm's length;
 - most companies are quoted; and are widely held; cross shareholdings are rare;
 - corporate control is directed to shareholder value via market mechanisms (takeovers);
 - external control by the capital market is high;
 - relations with other stakeholders are based on explicit short-term contracts, which does not encourage firm-specific investment.

Empirical work on financial systems has in some cases tended to validate these stylised facts. For example, Schmidt *et al.* (2002) found that the features in the two bulleted lists indeed characterised Germany on the one hand and the United Kingdom on the other. They suggested both systems exhibit considerable path dependence, with history having a strong influence on current patterns. France on the other hand was felt to be in a state of transition, with some features of one system and some of the other. For example, the capital market has become more important as a source of funds and destination for household saving, while cross shareholdings between firms remain sizeable and pension funds have yet to develop. The controlling function of the state in corporate governance, directly or via the 'elites' has faded and has yet to be replaced (see also Box B). We may add that Italy is another hybrid, with government control predominating till the 1980s and a generally less developed financial system than elsewhere in Europe.

Scholtens (1997) criticises the clear distinctions often put forward in the literature. He finds indeed that the relative sizes of banks and pension funds, equity in company liabilities and household assets and characteristics of corporate governance fit in with the traditional distinction. But in terms of bank dominance in corporate finance, short-term lending, bank and market competitiveness, the scope of market finance, derivatives and firm indebtedness, less evidence was seen of the expected differences. Rather, individual countries show idiosyncratic patterns thought to be related to 'financial regulation, culture and tradition'.

Balance sheet structure and convergence in the EU-4

With the outline above as background, we go on now to discuss balance sheet structure in France, Germany, Italy and the UK. The main focus is on portfolio shares and the size of assets or liabilities relative to GDP. We also calculated rough indicators of convergence by standard deviations⁶ and coefficients of variation of portfolio shares for the EU-4 (UK, France, Germany and Italy) and the EMU-3 (France, Germany and Italy), with the main focus being on the standard deviation. The difference between EU-4 and EMU-3 figures gives an indication of the idiosyncrasy of the UK. Statistical issues in sector and asset definition and measurement are covered in Box A.

Table 1 shows the household sector's portfolio of financial assets as a percentage of total financial assets (excluding 'other assets', see Box A). Deposits, equities and life insurance and pension funds are shown to be the major assets held in all cases. In 2000, deposit shares were higher in Germany at 36 per cent, while elsewhere they were around 25 per cent. The offsetting factor was the level of institutional assets and securities. Again, levels differed, with a distinction between the UK, where institutional asset holdings are 50 per cent or more of household assets, and the other countries where the corresponding figure is around 30 per cent. Meanwhile equity holdings were highest in France (40 per cent of assets), with Italy standing at 25 per cent and the UK and Germany below 20 per cent. As discussed in Box B, this links to a high level of unquoted shares in France. These figures are not consistent with a simple divide between the UK and Continental Europe.

As regards trends, we observe a striking decline in each country in holdings of deposits, notes and coins as a component of household sector financial wealth. Traditionally, households would concentrate resources on basic methods of storing wealth in liquid form and would not hold more complex financial instruments. Moreover, as the overall level of financial wealth has increased, the level of liquidity required as a percentage of total wealth has decreased. Accordingly, we have seen an adoption of alternative financial instruments such as life and pension funds and mutual funds as a store of value (Davis and Steil, 2001) as well as equities and bonds. This process has been particularly marked in France and Italy where holdings of deposits, notes and coins has more than halved as a proportion of wealth in the 20 years prior to 2000. Another reason for the trend may be falling demand for narrow money as a

Table I. Household sector financial assets (per cent of total)

		UK	Germany	France	Italy	Standard deviation of portfolio shares		Coefficient of variation of portfolio shares	
						EU-4	EMU-3	EU-4	EMU-3
Deposits, notes, coin	1980	42.8	64.2	66.7	65.9	11.4	1.3	0.19	0.02
	1990	32.3	52.1	40.3	4.5	8.4	7.9	0.21	0.18
	1998	22.1	40.8	31.0	28.8	7.7	6.4	0.25	0.19
	2000	22.8	36.2	26.4	24.9	5.9	6.2	0.22	0.21
Money market inst.	1980	0.1	0.2	0.0	9.5	4.7	5.4	1.91	1.68
	1990	0.1	0.4	2.1	12.7	6.0	6.7	1.57	1.33
	1998	0.1	0.1	0.5	2.3	1.1	1.2	1.46	1.28
	2000	0.1	0.0	0.4	1.0	0.4	0.5	1.10	1.01
Bonds	1980	5.4	12.7	10.2	8.2	3.1	2.3	0.34	0.22
	1990	1.8	15.2	4.0	18.9	8.4	7.8	0.84	0.61
	1998	1.4	11.6	2.6	21.0	9.1	9.2	0.99	0.78
	2000	1.2	10.8	1.9	17.9	7.9	8.0	1.00	0.78
Equity	1980	13.7	4.8	13.3	10.3	4.1	4.3	0.39	0.46
	1990	17.6	6.0	26.8	20.6	8.7	10.7	0.49	0.60
	1998	16.6	15.3	33.0	19.5	8.1	9.2	0.39	0.41
	2000	17.9	16.7	38.4	26.0	10.0	10.9	0.40	0.40
Mutual funds	1980	1.1	0.0	2.5	0.0	1.2	1.4	1.31	1.73
	1990	0.7	4.5	14.0	2.2	6.0	6.3	1.12	0.91
	1998	3.9	9.4	9.4	17.1	5.4	4.4	0.54	0.37
	2000	6.0	12.1	9.0	17.6	4.9	4.3	0.44	0.34
Life and pensions	1980	36.8	18.1	7.3	6.1	14.2	6.6	0.83	0.63
	1990	47.5	21.8	12.8	8.5	17.5	6.8	0.77	0.47
	1998	55.8	22.8	23.6	11.4	19.1	6.8	0.67	0.35
	2000	51.9	24.2	23.9	12.7	16.7	6.6	0.59	0.32
Total assets (% of GDP)	1980	117.3	93.7	94.8	84.8	13.9	5.5	0.14	0.06
	1990	200.5	121.7	137.3	166.2	34.7	22.6	0.22	0.16
	1998	302.4	160.7	198.1	204.1	60.5	23.5	0.28	0.13
	2000	300.4	167.7	229.6	225.1	54.4	34.5	0.24	0.17

medium of exchange owing to innovations such as credit card penetration as a means of payment, ATMs reducing average real narrow money balances and workers' wages paid directly into their bank accounts.

The trend in equity holdings has been upwards, albeit only marginally in the UK, reflecting *inter alia* privatisations and rising share prices. There has also been a marked and consistent rise in life insurance and pension holdings as well as mutual funds (including money market funds). This is due *inter alia* to changing demographic trends and a reduction in government provision of social security pensions (notably in the UK), as well as a rising trend in wealth more generally. In terms of the other forms of wealth holdings, Italy and Germany have a large component of bonds. France has also seen some role for bond holdings in the past, but these have fallen sharply from 10 per cent in 1980 to 2 per cent in 2000. Econometric evidence suggests that capital uncertain assets such as equities, bonds and institutional

investment are becoming more important in determining consumption relative to liquid assets across all the EU countries (Byrne and Davis 2001).

Comparing the ratio of total assets to GDP, household sector financial asset holdings were more than twice as large as GDP for the countries shown except Germany, where it was 170 per cent. Ratios in 2000 were somewhat higher in the UK than elsewhere. There has been a distinct upward trend, tempered somewhat between 1998 and 2000 by worldwide declines in the stock market.

As regards convergence for the household sector, according to the standard deviation, shares of deposits, notes and coin show evidence of convergence across the EU, and there is also convergence for money market instrument holdings. For bonds and equities, the series are volatile, with little evidence of consistent convergence in any of the country groups. Both for the EMU-3 and EU-4, the standard deviation of equity shares is comparable

Table 2. Household sector financial assets allowing for underlying instruments in institutional investors' portfolios, 2000 (per cent of total)

	UK	Germany	France	Italy
Deposits	25.0	45.2	27.7	25.4
MMIs	0.8	0.1	3.6	1.1
Bonds	15.7	19.1	14.6	24.3
Equities	52.9	27.1	47.8	30.5

Notes: UK, French and German portfolio shares of mutual funds fixed at nearest known level. Data do not add to 100 owing to other assets held by institutional investors (loans, mutual funds, real estate) and due to lack of data on assets of Italian mutual funds.

at 10–11 per cent in 2000, up from 4 per cent in 1980. Mutual funds were not important assets of the household sector before 1990 in most countries, hence it is interesting that since then there is some convergence in shares in the EU-4 and EMU-3. For life and pension funds the much greater divergence in the EU-4 relative to the EMU-3 reflects the lesser development of pension funds in the latter group, as highlighted above. Accordingly, the EU-4 deviation has increased up to 1998, with only a slight convergence in 2000. Finally, the assets/GDP ratios have shown increasing divergence at the EU-4 and EMU-3 levels. Current standard deviations of 30–50 per cent show the major discrepancies in these aggregates, which is greater with the UK included.

As a variant on the tables for households, we present in table 2 estimates for household sector financial asset distributions in 2000 which 'see through' institutional investors and allocate their portfolios to households *pro rata*. Caution is needed in interpreting the tables, since the existence of guarantees, especially for defined ben-

efit pension funds, mean that the risk accepted by the household sector from equity may be less than these data imply. Defined benefit schemes are of particular importance in the UK. Furthermore, mutual fund data are estimated in some cases. The equity and bond share is naturally much higher than direct holdings shown in table 1 would suggest. Bond holdings are around 25 per cent in Italy, and around 15 per cent elsewhere. Equity holdings are around 50 per cent in the UK and France, 30 per cent in Italy and 25 per cent in Germany. The counterpart is deposits, where German households have over 45 per cent, while elsewhere the share is 25 per cent. Allowing for both deposits and MMIs, instruments held directly and via money market funds, overall liquidity remains closely aligned in countries other than Germany. Overall liquidity, including money market instruments, is closer aligned in the countries other than Germany. Note that this breakdown identifies Germany as bank dominated, with Italy intermediate and a remarkable resemblance between France and the UK.

Data for household sector liabilities are presented in table 3. For all countries, liabilities are mainly in the form of housing loans; the UK has the largest proportion of consumer credit. When we express liabilities as a percentage of GDP, we see that household liabilities have been increasing and this can be explained by the greater availability of credit to households following financial liberalisation. Liabilities have doubled in the UK and Italy (although the percentage is quite low in the latter), with substantial increases in Germany. France has witnessed a small increase in liabilities as a percentage of GDP between 1980 and 2000. Nevertheless, France and Italy remain outliers with low levels of debt/GDP (below 40 per cent) while in the UK and Germany

Table 3. Household sector liabilities (per cent of total)

		UK	Germany	France	Italy	Standard deviation of portfolio shares		Coefficient of variation of portfolio shares	
						EU-4	EMU-3	EU-4	EMU-3
Consumer credit	1980	18.3	18.2	10.8	34.3	9.9	12.0	0.49	0.57
	1990	15.2	20.5	13.5	41.9	13.1	14.8	0.58	0.59
	1998	17.8	8.0	6.9	22.9	7.7	8.9	0.56	0.71
	2000	19.4	7.5	7.0	20.4	7.3	7.6	0.54	0.65
Housing loans	1980	81.7	81.8	89.2	65.7	9.9	12.0	0.12	0.15
	1990	84.8	79.5	86.5	58.1	13.1	14.8	0.17	0.20
	1998	82.2	91.1	93.1	77.1	7.5	8.7	0.09	0.10
	2000	80.6	91.6	93.0	79.6	7.1	7.4	0.08	0.08
Total liabilities (% of GDP)	1980	27.9	50.9	29.2	6.5	18.1	22.2	0.63	0.77
	1990	62.3	55.1	37.2	17.6	20.0	18.8	0.46	0.51
	1998	67.3	71.1	35.8	19.7	24.9	26.3	0.51	0.62
	2000	73.1	73.8	37.2	22.2	26.0	26.5	0.50	0.60

Table 4. Company sector liabilities (per cent of total)

		UK	Germany	France	Italy	Standard deviation of portfolio shares		Coefficient of variation of portfolio shares	
						EU-4	EMU-3	EU-4	EMU-3
Money market inst.	1980	0.3	0.4	0.0	0.3	0.2	0.2	0.69	0.89
	1990	0.6	0.1	1.3	0.1	0.6	0.7	1.12	1.47
	1998	0.9	0.1	1.1	0.3	0.5	0.5	0.74	0.98
	2000	0.9	0.4	1.4	0.1	0.6	0.7	0.78	1.00
Loans	1980	26.5	68.5	44.6	43.8	17.3	14.0	0.38	0.27
	1990	35.7	67.4	25.8	44.0	17.7	20.8	0.41	0.46
	1998	22.3	41.5	20.9	41.0	11.4	11.8	0.36	0.34
	2000	22.5	42.8	16.1	36.4	12.3	13.9	0.42	0.44
Bonds	1980	2.3	2.8	5.2	3.5	1.3	1.2	0.37	0.32
	1990	5.4	3.0	4.1	3.5	1.0	0.6	0.25	0.16
	1998	5.6	1.8	4.1	1.8	1.9	1.3	0.57	0.52
	2000	6.5	1.3	3.4	0.7	2.6	1.4	0.87	0.77
Equity	1980	48.4	28.3	50.2	52.4	11.2	13.4	0.25	0.31
	1990	58.4	29.6	68.8	52.4	16.6	19.7	0.32	0.39
	1998	71.1	56.6	73.9	56.9	9.2	9.9	0.14	0.16
	2000	70.2	55.4	79.0	62.7	10.1	12.1	0.15	0.18
Total liabilities (% of GDP)	1980	71.2	63.7	94.1	102.2	18.3	20.3	0.22	0.23
	1990	165.1	88.7	187.1	106.9	46.7	52.4	0.34	0.41
	1998	235.1	126.5	269.5	116.8	76.8	85.5	0.41	0.50
	2000	292.7	147.3	371.4	148.6	111.0	129.0	0.46	0.58
Memo: Debt/GDP	1980	20.7	45.7	46.9	48.6	13.3	1.5	0.33	0.03
	1990	68.8	62.5	58.4	50.9	7.5	5.9	0.12	0.10
	1998	68.0	55.0	70.3	50.4	9.7	10.4	0.16	0.18
	2000	87.4	65.7	78.0	55.4	14.0	11.3	0.20	0.17
Memo: liquidity/GDP	1980	9.9	22.1	12.5	22.8	6.6	5.8	0.39	0.30
	1990	23.8	27.2	17.5	12.5	6.5	7.5	0.32	0.39
	1998	26.7	18.8	16.3	11.7	6.3	3.6	0.34	0.23
	2000	31.9	22.4	21.1	14.6	7.2	4.2	0.32	0.22

it is 60–80 per cent. Mortgage debt is comparable in the UK and Germany; but note however that mortgage credit is mainly fixed rate in Germany and floating rate in the UK. In terms of convergence of household liabilities, according to the standard deviations, there is convergence in the relative use of consumer credit and mortgage credit by households in the EU-4 and EMU-3. On the other hand, the overall debt/GDP ratio has shown a growing divergence over time, which is partly linked to lower levels in Italy and France than in the UK and Germany.

Liabilities of the corporate sector are shown in table 4. In all four countries, these are mainly in the form of equity. France and the UK have the largest proportion of equities (over 70 per cent in 1998 and 2000), while the ratio in Italy and Germany was around 60 per cent. Bear in mind, however, that the level attained largely reflects valuations rather than issuance – in other words it does not imply that equity issuance dominates the flow of external

corporate finance. Loans are also important, with 43 per cent of liabilities in this form for Germany – the archetypal relationship banking country – and 36 per cent for Italy. France and the UK use loans the least for company finance, with the shares of liabilities being around 20 per cent in 2000. In the EU-4 countries (including the UK) corporate bonds are relatively unimportant as a means of financing, indicating the historic lack of diversified funding mechanisms in terms of debt finance (Davis, 2001, discusses the benefits of an active bond market).⁷

As regards trends, all countries have seen a decline in bank lending as a share of corporate liabilities in the 1990s, partly reflecting the financial crises faced by companies in the early 1990s due to over indebtedness (Davis, 1995b), as well as increases in equity valuations. This trend also holds in bank dominated Germany where loans fell from 67 per cent of total liabilities in 1990 to 43 per cent in 2000. As a proportion of GDP, corporate liabilities are substantial and well in excess of GDP. In 2000, the French

Table 5. Financial sector financial assets (per cent of total)

		UK	Germany	France	Italy	Standard deviation of portfolio shares		Coefficient of variation of portfolio shares	
						EU-4	EMU-3	EU-4	EMU-3
Deposits	1980	17.9	4.0	30.4	20.9	10.9	13.4	0.60	0.73
	1990	30.1	6.2	28.1	19.4	10.8	11.0	0.52	0.61
	1998	27.3	12.7	26.0	12.3	8.2	7.8	0.42	0.46
	2000	27.6	12.6	25.1	12.6	8.0	7.2	0.41	0.43
Money market inst.	1980	2.4	0.4	1.8	7.4	3.1	3.7	1.03	1.17
	1990	4.6	0.4	7.3	3.4	2.8	3.4	0.72	0.92
	1998	3.6	0.3	8.7	2.4	3.6	4.4	0.96	1.15
	2000	3.3	0.6	8.7	0.9	3.7	4.6	1.12	1.36
Loans	1980	56.1	78.4	53.0	43.2	14.9	18.2	0.26	0.31
	1990	36.3	69.3	43.0	50.2	14.2	13.6	0.29	0.25
	1998	26.5	49.0	26.5	40.2	11.0	11.3	0.31	0.29
	2000	27.2	44.9	23.7	41.3	10.4	11.4	0.30	0.31
Bonds	1980	12.1	11.3	4.9	20.9	6.6	8.1	0.54	0.65
	1990	9.3	15.8	12.0	19.5	4.5	3.8	0.32	0.24
	1998	16.0	22.4	16.5	28.7	6.0	6.1	0.29	0.27
	2000	7.0	20.0	14.6	24.4	7.5	4.9	0.45	0.25
Equity	1980	10.0	2.4	3.7	1.7	3.8	1.0	0.85	0.39
	1990	18.1	4.7	5.5	5.9	6.4	0.6	0.75	0.12
	1998	24.2	12.2	15.5	14.8	5.2	1.8	0.31	0.13
	2000	24.1	15.6	20.8	18.5	3.6	2.6	0.18	0.14
Mutual funds	1980	1.4	0.0	0.0	0.0	0.7	0.0	1.97	1.73
	1990	1.7	1.6	2.1	0.0	0.9	1.1	0.69	0.90
	1998	2.4	3.3	4.7	0.6	1.7	2.1	0.62	0.72
	2000	2.3	5.9	6.6	1.5	2.6	2.8	0.63	0.60
Central bank reserves (gold and SDRs)	1980	n.a.	3.4	6.3	5.8	2.9	1.5	0.74	0.29
	1990	n.a.	2.0	2.0	1.6	0.9	0.2	0.68	0.13
	1998	n.a.	0.1	0.6	0.9	0.4	0.4	1.01	0.70
	2000	n.a.	0.5	0.5	0.8	0.3	0.2	0.76	0.34
Total assets (% if GDP)	1980	213.2	162.0	202.7	152.3	29.9	26.7	0.16	0.16
	1990	395.5	221.4	268.1	147.1	104.3	61.0	0.40	0.29
	1998	569.9	304.7	350.9	219.9	149.2	66.5	0.41	0.23
	2000	625.6	347.7	409.7	239.9	162.5	85.9	0.40	0.26

and UK corporate sectors had the largest liabilities, at 300 per cent or more of GDP. Germany and Italy had much lower liabilities relative to GDP. For all countries, the level of liabilities in 2000 was greater than in 1980 and 1990. Of course debt and equity liabilities differ sharply in terms of their implications for default risk. The debt/GDP ratio (including money market instruments, loans and bonds) may be more informative than total liabilities in this regard (Davis, 1995b). The table shows that in 2000, this aggregate stood highest in the UK and France, at around 80 per cent. Germany and Italy had lower levels of around 60 per cent. On the asset side, an offset to gross debt is corporate liquidity, which is usually defined as deposits and other short-term assets plus bonds. In 2000, it varied from 32 per cent of GDP for the UK to 21–22 per cent for Germany and France and 15 per cent for Italy. Accordingly, net debt was around

55 per cent in the UK and France, and lower at around 40 per cent in Germany and Italy.

Corporate sector liabilities portfolios show a general convergence in the loans ratio since 1990, according to the standard deviation data for both country groups, as well as for equities. This is an important result, since these are the key items in the balance sheet in the EU-4. For both loans and equities, as well as money market instruments, the standard deviation in 2000 for the EU-4 was lower than for the EMU-3. Looking at convergence in the ratios to GDP, the overall liabilities/GDP ratios show growing divergence for both the groups shown. The greatest is in the EMU-3, reflecting the differing stocks of equity outstanding. Much lower and more stable are the standard deviations of debt/GDP ratios, which are arguably more relevant for monetary

transmission and the overall behaviour of the corporate sector. Here both the EU-4 and EMU-3 standard deviations are comparable in 2000 at 10–15 per cent, albeit with closer convergence apparent in 1990. Finally the corporate liquidity/GDP ratio on the assets side shows the strongest convergence in the EMU-3, although this was also apparent for the EU-4 up to 1998.

Assets for the G-7 financial sectors, aggregating all financial institutions including the central bank, are generally concentrated in loans and securities (table 5). Loans are around 45 per cent of assets in Germany and Italy, while in the UK and France they are below 30 per cent. Bonds plus equities are over 40 per cent in Italy. Deposits (including interbank deposits and those by other financial institutions with banks) are over 20 per cent in the UK and France. Over time, we see a move towards more holding of bond and equity and a move away

from loans, although loans were still the largest single category in 2000 in Germany and Italy. Total assets of the financial sector as a percentage of GDP are a good reflection of the size of each country's financial sector and the corresponding scope of financial intermediation. The United Kingdom has the largest; financial assets are six times as large as domestic output. Even if the estimated size of the international banking sector is deducted,⁸ assets would still be 4.5 times GDP. France also has a substantial financial sector, while the smallest sector is in Italy. Financial assets of the financial sector are increasing rapidly for all our countries as a percentage of GDP. As noted in Davis and Steil (2001), it is an interesting counterpart to the growth of securities markets that total financial intermediation – including institutional investors – is tending to rise. We are witnessing a shift from bank to institutional intermediation, and also a relative decline of direct security holdings by the non-financial sectors.

Table 6. Banking sector financial assets (per cent of total)

		UK	Germany	France	Italy	Standard deviation of portfolio shares		Coefficient of variation of portfolio shares	
						EU-4	EMU-3	EU-4	EMU-3
Deposits	1980	25.0	0.5	31.2	23.0	13.4	15.9	0.67	0.87
	1990	38.0	0.3	35.1	27.0	17.2	18.2	0.68	0.88
	1999	33.7	8.4	36.1	17.0	13.3	14.2	0.56	0.69
	2000	34.9	9.0	35.0	16.2	13.2	13.4	0.56	0.67
Money market inst.	1980	2.5	0.4	1.9	8.4	3.5	4.2	1.06	1.19
	1990	5.8	0.5	3.5	4.3	2.2	2.0	0.63	0.71
	1998	4.8	0.4	10.5	2.2	4.4	5.4	0.99	1.24
	2000	4.2	0.8	9.3	0.7	4.0	4.9	1.07	1.37
Loans	1980	69.1	83.4	55.9	36.3	20.0	23.7	0.33	0.40
	1990	49.9	80.7	54.1	46.5	15.6	18.0	0.27	0.30
	1998	44.6	61.7	33.8	57.2	12.6	15.0	0.26	0.29
	2000	45.8	59.5	32.3	58.9	12.9	15.6	0.26	0.31
Bonds	1980	2.0	10.1	2.5	24.0	10.2	10.9	1.06	0.89
	1990	4.8	13.3	5.1	18.3	6.6	6.7	0.64	0.55
	1998	11.7	20.7	7.7	17.6	5.8	6.8	0.40	0.44
	2000	7.0	19.5	7.6	14.6	6.0	6.0	0.49	0.43
Equity	1980	0.0	1.6	1.9	1.5	0.9	0.2	0.68	0.13
	1990	1.4	2.4	1.6	1.6	0.5	0.5	0.26	0.26
	1998	2.3	6.4	9.2	5.4	2.9	2.0	0.49	0.28
	2000	2.9	7.9	13.3	7.9	4.2	3.1	0.53	0.32
Mutual funds	1980	1.3	0.0	0.0	0.0	0.6	0.0	1.99	1.73
	1990	0.0	0.3	0.6	0.0	0.3	0.3	1.21	1.02
	1998	0.0	2.2	1.3	0.1	1.0	1.0	1.12	0.86
	2000	0.1	2.7	1.9	0.3	1.3	1.3	1.04	0.77
Central bank reserves (gold and SDRs)	1980	n.a.	3.9	6.6	6.9	3.2	1.6	0.73	0.28
	1990	n.a.	2.5	n.a.	2.3	1.4	1.4	1.16	0.87
	1998	n.a.	0.2	0.8	1.4	0.6	0.6	1.06	0.76
	2000	n.a.	0.6	0.7	1.3	0.5	0.4	0.80	0.41
Total assets (% of GDP)	1980	134.6	142.5	193.0	128.3	29.5	34.0	0.20	0.22
	1990	263.2	178.2	209.4	98.9	68.7	57.0	0.37	0.35
	1998	315.2	232.0	249.3	140.2	72.2	58.6	0.31	0.28
	2000	346.0	251.8	276.3	151.4	80.6	66.2	0.31	0.29

Table 7. Institutional investor assets (per cent of GDP)

		UK	Germany	France	Italy	Standard deviation of portfolio shares		Coefficient of variation of portfolio shares	
						EU-4	EMU-3	EU-4	EMU-3
Life and pension funds	1980	36.7	19.5	7.6	2.5	15.2	8.7	0.9	0.9
	1990	89.6	33.9	18.4	6.9	36.6	13.6	1.0	0.7
	1998	166.2	48.1	58.7	17.5	64.8	21.4	0.9	0.5
	2000	168.2	55.9	69.3	22.6	62.6	24.0	0.8	0.5
Mutual funds	1980	5.7	n.a.	2.7	n.a.	n.a.	n.a.	n.a.	n.a.
	1990	11.6	9.2	30.4	3.6	11.6	14.1	0.8	1.0
	1998	25.5	28.1	45.0	34.9	8.7	8.5	0.3	0.2
	2000	32.4	40.4	60.6	41.4	12.0	11.4	0.3	0.2

Convergence statistics for the financial sector show that, for several important instruments, there is convergence in financial sector assets, namely deposits, loans and (in the EMU-3) bondholding. Standard deviations for equity are lower in the EMU-3. However, there is also some tendency to divergence, for example of mutual fund holding, although the deviations are comparable in the EMU-3 and EU-4.

Moving on to the banking sector (table 6), loans are the main asset, accounting for over 50 per cent except in the UK and France. A key difference between countries is the scope of interbank activity. It can be seen that the UK, Italy and France have sizeable shares of deposits among bank assets, amounting to over 30 per cent in the UK and France and almost 20 per cent for Italy. For France in particular, loans are a correspondingly lower proportion of assets. France also has a high proportion of money market instruments as a bank asset – around 10 per cent – while in the UK it is around 5 per cent and it is negligible in Germany and Italy, amounting to 15–20 per cent. Bonds are a marked feature of banks' assets in Germany, amounting to almost 20 per cent, while elsewhere the share is quite small. As regards banks' equity holdings, German banks do not stand out in the way that might be expected, with holdings of French and Italian banks exceeding them in terms of portfolio share for most years.

The above comments are focused on ongoing structural differences between balance sheets. It may be added that in Germany, the UK and France there is a marked downward trend in the share of loans, the 'classic' bank asset, with an offsetting rise in deposits, money market instruments (for France), bonds and shares. In Italy, the banking sector asset portfolio is remarkably stable, despite the scope of financial change over the 20-year period covered.

Looking at the data relative to GDP, a striking feature is

the size of bank assets in the UK, amounting to over 3.5 times GDP and reflecting the scope of international banking activity in London. Bank assets are also sizeable in Germany and France, at over 2.5 times GDP – exceeding domestic assets in the UK of twice GDP. Note that, even allowing for the City, the size of banking sectors is much more comparable than the financial sectors commented on above. This reflects the more diverse range of financial activities in the UK, where institutional investors are much larger than elsewhere. In all the countries shown, the banking sector has nevertheless grown over time relative to GDP. In terms of convergence for banking sector assets, the standard deviations are often lower than for the much more heterogeneous financial sector. Again, loans and (since 1990) deposits are converging, as are bonds, while standard deviations for money market instruments and equities are flat or rising.

Table 7 confirms that there are marked differences in the size of institutional assets. Whereas the UK life and pension fund sector dwarfs the others (reflecting pension funding), this is not the case for UK mutual funds, which are actually smaller than in Continental countries. Note that, except in Italy, a sizeable percentage of mutual fund claims are held by sectors other than households.

Confronting theoretical paradigms with the data

We go on to confront some of the expectations from the literature on financial structure (summarised in the first section) with the balance sheet data (discussed in the second section). Such an assessment must inevitably be rather summary and broad brush, not least given that the paradigms themselves are often lacking in clarity and precision. France, Italy and Germany are viewed *a priori* as

Box B. The structure of equity holdings

We have seen that the UK and France both have high stocks of equity outstanding. This box analyses the sectoral holding of these equities, not least in the light of its potential importance to corporate governance. Table B.1, for all equities, shows that Italy has the highest proportion held by households (35 per cent), while elsewhere it is comparable at around 20 per cent. Corporate crossholdings are absent in the UK, but very important (1/3 of stocks) elsewhere. Foreign holdings are highest in the UK (37 per cent), but sizeable also in France (20 per cent). As regards holdings in the financial sector, these are highest in Germany and the UK (30–40 per cent) while in France and Italy they are around 20 per cent. In the UK, life insurers and pension funds dominate holdings in the financial sector, while elsewhere banks and mutual funds (often run by banks) are the key players.

Table B.1. Corporate equity holders by sector end-2000 (per cent of total)

	UK	Germany	France	Italy
Households	20	17	21	35
Companies	4	31	35	28
Public sector	0	3	3	6
Foreign	37	16	20	14
Financial	39	33	21	17
Banks	2	12	12	8
Life/pension	27	8	4	4
Mutual funds	9	13	5	6

Note: 'Financial auxiliaries' used for mutual funds in Germany.

Table B.2. Domestic quoted and unquoted shares 2000

	Value (local currency)			Per cent of total		Per cent of GDP		
	Total	Quoted	Unquoted	Quoted	Unquoted	Total	Quoted	Unquoted
UK	2474	1756	718	71	29	265	188	77
Germany	4685	3537	1148	75	25	118	89	29
France	4301220	1427342	2873878	33	67	308	102	206
Italy	3141376	1530190	1611186	49	51	139	68	71

Table B.3. Holders of quoted and unquoted shares (per cent of total)

		Households	Companies	Public sector	Foreign	Financial	Banks	LAPF	MFs
		UK	Quoted	15	2	0	36	47	1
	Unquoted	32	9	0	40	19	7	1	12
Germany	Quoted	18	33	1	15	32	12	8	12
	Unquoted	22	30	14	15	20	10	3	6
France	Quoted	7	21	6	37	28	7	7	12
	Unquoted	34	28	0	22	16	9	2	0

The proportion of unquoted shares¹ in France and Italy is far above that elsewhere (table B.2), with nearly 70 per cent of the equity outstanding for French companies being unquoted and 50 per cent in Italy; elsewhere it is below 30 per cent with the UK resembling Germany. Nevertheless, the stock of equity for French quoted companies is still over 100 per cent of GDP, above that of Germany and Italy, albeit well below that of the UK. Table B.3 shows data for holders of quoted and unquoted shares. It is apparent that holdings of French quoted shares are dominated by foreign investors – at 37 per cent – while foreign holdings of unquoted shares are only 22 per cent.² Domestic households and companies hold the bulk of unquoted shares in France, while financial institutions hold 28 per cent of quoted but only 16 per cent of unquoted. These figures are most closely comparable to the UK, notably in respect of holdings by households (around 10 per cent of quoted and 30 per cent of unquoted in each case). One difference is that foreigners hold 40 per cent of unquoted UK shares as well as 36 per cent of quoted. UK companies are less important holders of both types of share than in France, and financial institutions more so, reflecting the size of the institutional sector. On the other hand it is apparent that the life and pension sector in the UK is reticent in holding unquoted shares, accounting for only 1 per cent against 38 per cent of quoted shares (see Davis and Steil, 2001, for a discussion of reasons for this). Meanwhile in Germany 14 per cent of unquoted shares are held by the public sector, the bulk being held by companies.

Box B (continued)

There may be important implications for corporate governance. With unquoted shares it is harder to mount hostile takeovers, and effective monitoring by institutions may also be weakened. More generally, these data link in an interesting manner to the work of Schmidt *et al.* (2002). They suggest that in France the corporate governance system is a hybrid between the Anglo Saxon and Continental traditions. Traditionally, hostile takeovers have been difficult owing to state 'golden shares' and corporate cross holdings. 'State influence and the peer control exercised by the elite' (*ibid*, p. 28) did until recently keep an overview on the otherwise substantial powers of company managers. But now the authors suggest that, owing to reform, deregulation and denationalisation, there is a potential for dysfunction owing to the fact that the public sector no longer seeks to direct industry, while banks, which have a major shareholding, do not do so either and domestic institutional investors are weak and mostly themselves controlled by banks. Activism by the dominant foreign shareholders, as has been increasingly apparent, could arguably help ensure consistency in this context, although development of domestic pension funds is clearly also desirable.

NOTES

¹ The value of unquoted shares is typically undertaken on a 'fair value' basis, for example by cumulating retained earnings (Bank of Japan, 2000).

² These figures both exceed the 20 per cent in table B.I owing to the existence of 'other equity' not classified as quoted or unquoted, which is purely-domestically held.

Table 8. An assessment of balance sheets in the light of theory

Sector	Expectation from theory – bank based	Expectation from theory – market based	Positive deviation	Negative deviation
Household assets	High bonds and deposits, low assets/GDP (unfunded pensions)	High equities, life/pensions, mutual funds, high assets/GDP	Italy, Germany high mutual funds; France high equity holdings	UK low direct equity holdings, France low direct bond holdings
Household liabilities	Low debt, mainly mortgages	High debt, with high consumer credit	Germany debt/GDP comparable to UK. Italy high share of consumer credit	
Corporate liabilities	High share of loans, high debt/GDP (relationship banking)	High share of bonds, equities and MMIs, low debt/GDP	France high equity, UK high debt/GDP	France low loans, UK low bonds, Italy low debt/GDP
Financial sector assets	Loans predominate (banks), smaller overall financial sector	Bonds and equities predominate, possibly deposits (institutional investors), larger financial sector	France high equities, MMIs, France large assets/GDP	France low loans, UK low bonds and MMIs
Banking sector assets	More loans and equity (relationship banking), larger banking sector/GDP	More debt securities, smaller banking sector/GDP	Germany high bonds, UK large assets/GDP	UK low mutual funds/GDP
Institutional investor assets	Lower assets/GDP	Larger assets/GDP	Germany and France high mutual funds/GDP	UK low mutual funds/

bank dominated countries and the UK as market based.

Examining some highlights of table 8, it can be seen that the UK has some bank related features such as a large banking sector, small mutual funds and household equity holdings, and low levels of bonds. UK companies have large debt/GDP ratios. On the other hand, aspects such as French equities outstanding, German household

debt and large Continental mutual funds tell in the opposite direction. German banks hold large amounts of bonds but low levels of equities.

Summing up the message of the table, it is evident that the division made is not watertight and France in particular may be in transition to a market based system. Indeed, there are remarkable similarities between France and the UK (for example in household assets and

corporate liabilities). The UK is itself not an archetypal market based system, given the size of the banking sector. Meanwhile, taking an overview of the tables, it is notable that Germany is fairly rarely encountered, conforming as it does quite closely to the theoretical expectations. Italy could be seen as simply a less developed financial system than the others, to help explain some of its specific features. On the other hand, Italy is developing fast and, as noted above, even Germany is converging in important respects, such as the role of loans in corporate balance sheets.

More generally, balance sheet information cannot tell the whole story of the current status of financial systems, since it covers only a subset of the aspects outlined in the first section. There are a large number of indicators which suggest that the financial systems in Continental Europe are becoming more market oriented. These include the beginning of hostile takeovers, such as Vodafone-Mannesmann; the development of capital markets with EMU; the strategies of Continental universal banks to focus on investment banking; tax reforms (in Germany) permitting decumulation of cross-holdings of shares; current and prospective pension reform; and shifts away from book-reserve funding of pensions. EMU and the growing role of foreign shareholders (Box B) are likely to accelerate the nascent shift.

Conclusion

The paradigms of market orientation and bank domination do not apply in their entirety to any of the EU-4 countries. The closest is Germany as a bank dominated economy, although even there shifts towards market orientation are discernible. There are some trends towards convergence, but these are not universal. It has been shown that the UK financial system has much in common with the EMU countries, and there is a notable resemblance to France. Some differences remain; key sources of such differences include London as a financial centre and the system of pension funding in the UK. However, London in itself may not strongly affect macroeconomic behaviour, and current and prospective pension reform in Continental Europe will lead to some convergence in the role of institutional investors. Moreover, differences between the UK and Continental countries are not always greater than heterogeneity within EMU itself.

NOTES

- 1 There are also marked similarities in the scope of mortgage credit between the UK and Germany.
- 2 For a deeper assessment see Allen and Gale (2000) and Schmidt

et al. (2002).

- 3 However, such bi-directional cross-holdings are typically means of cementing alliances or collusion rather than exerting control.
- 4 This may give rise to 'information rents' to providers of external finance – although desire to maintain reputation reduces risks of exploitation of such exclusive relationships.
- 5 Note that there is also evidence that banks may be inadequate as monitors of overall performance, not seeking to discipline managers as long as the firm is far from default (Harris and Raviv, 1990).
- 6 Note that standard deviations are a function of the absolute size of the deviations and not the relative size. Hence, whereas there may be a greater deviation relative to the mean for a series with a small mean than a large mean, the standard deviation may show more divergence to the large mean series. We would contend that this is appropriate, as the main interest in convergence analysis is on the key items accounting for a significant share of portfolios. However, we also include the coefficient of variation (standard deviation/mean) as a memo item.
- 7 The growth of corporate bond issuance in euros since EMU was evidently not sufficient by end-2000 to impact on stocks – but may be expected to do so in the future.
- 8 The foreign currency assets and liabilities of UK monetary financial institutions at end-2000 were each around £1500 bn, i.e. around 150 per cent of GDP.

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