Accounting Standards and German Supplementary Pensions: The Emerging Framework Underpinning Global Finance

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Abstract. In this paper we focus on the current status of German employer-sponsored supplementary pensions in the context of moves towards the harmonization of international accounting standards. We emphasize the changing standards used to measure pension liability, and the consequences of these changes for (firstly) corporate management discretion and (secondly) German under-funded systems of defined benefit pensions. In combination, we show that claimed historical differences between the Anglo-American market for corporate control and the German system of entrenched management within interlocking boards of supervision are now less compelling than assumed. Adoption of international and US financial accounting standards by leading German corporations presages a new era in European capital markets with important implications for the design and management of German supplementary pensions. The reader is introduced to financial accounting standards institutions, the evolution of US accounting standards since the introduction of FASB 87 and recent patterns in US corporate pension assets and liabilities. Emphasis is placed upon the concerted campaign of national and international accounting professionals to harmonise corporate accounting practices and the measurement of pension liabilities to accepted international standards. Using data collected from 1998 annual reports for German firms in the DAX 30 index, we report on the adoption of international accounting standards and the scope and significance of reported corporate net pension liabilities. Noting the theoretical literature relevant to adoption, we identify four reasons that may account for the immediate adoption of international accounting standards. As well, tests for correlation between net pension liabilities and indicators of corporate financial performance are developed. In conclusion, implications are drawn for theorising local institutions and global finance.

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Introduction

The united Germany is at the economic core of continental Europe, and is one of a handful of advanced western economies with firms that have global reach and impact. By virtue of its market size, its prosperity, and its trading relationships with Europe and the world, Germany has become a major economic player if not a dominant political player in world affairs. For many commentators, the German "social market" model is one to emulate, being a successful economic system with strong social democratic traditions (compared to the UK; see Hutton 1995). Described as the ideal-type of a corporatist welfare state by Goodin et al. (1999), it is widely believed that Germany developed around reinforcing self-sustaining systems of social welfare and collective economic decision-making that have resulted in political stability and remarkable rates of long-term economic growth.[1]

Like France and Italy, however, Germany will be greatly affected by the "demographic bomb": the relative ageing of population combined with the under-funding of social security and related retirement benefits (see Disney 2000). It is clear that current contribution rates are inadequate in the face of the immediate effects of early retirements and continuing levels of unemployment, and promised high rates of income replacement over the long-term. While there is considerable pride in Bismarck's model of social solidarity and insurance (Borsch-Supan 2000), there is widespread debate about the form and nature of private pension provision.[2] Even so, debate is often limited about employer-sponsored pensions, an important element in many German workers' total compensation. Some of Germany's largest firms have provided these types of benefits for more than a century. Many of these same firms have had extensive experience with Anglo-American funded pension schemes including defined contribution and cash-balance systems. Whereas much of the public debate about private pensions has been about protecting the status social insurance, for Germany's largest firms there is considerable interest in the redesign of existing supplementary pension systems including shifting away from *direktzusagen* (book reserve) systems that were so important for internal investment resources.

This interest has been prompted, in part, by recent developments in global capital markets and international financial accounting rules. Here it is argued that these developments may have significant implications for German corporate-sponsored pensions, profoundly affecting the viability of *direktzusagen* and *pensionskassen* (mutual insurance) defined benefit systems. Whereas very little was known even five years ago about the pension liabilities of German firms, the introduction of international accounting standards to German corporate reporting has allowed market agents to better appreciate the scope and scale of these liabilities compared to Anglo-American corporate rivals. For many of Germany's largest firms, these private pension institutions are now "in play" as part of a more general re-alignment of powers between management, labour and shareholders. How and why financial transparency and comparability has become so significant, and the implications of such accountability for management power (in the first instance) and private pension systems (in the second instance) are important topics of this paper.

To sustain our analysis requires returning to an earlier debate in the US about the connection between market value and corporate pension liabilities (see Bodie and Shoven 1983). While the debate was truncated by introduction of the Financial Accounting Standards Board pension liability rule (FASB 87) and the remarkable performance of US equity markets over the 1990s, recent trends in US corporate pension funding and reporting are noted. In later sections of the paper we deal with the convergence of US, international and European accounting standards, noting the underlying assumptions made by accounting professionals about the efficiency of global financial markets. Notice, however, that our discussion stops short of the announced re-formation of the International Accounting Standards Committee (IASC) in May 2000, and subsequent developments in the European Commission (June 2000). In detail, we consider the (1998) patterns of German corporate pension accounting in DAX 30 index and non-DAX 30 companies. Given that German corporate pension systems are "unfunded" (*direktzusagen*) or "under-funded" (*pensionskassen*) when compared to Anglo-American private pension systems (Clark 2001), the adoption of international accounting standards has revealed significant net pension liabilities amongst leading German corporations.[3] This discussion is a step towards analysing corporate pension investment policy in the context of co-determination (the subject of a related paper).

We should note that this paper and related research sits between the disciplines of political economy and economic geography (Clark 2000). There is a massive and growing academic literature devoted to rival national systems of finance and corporate governance (Hopt et al. 1999). Similarly, there has been an explosion of work on the tensions between globalisation and localisation (Gertler 2000). Both sets of literature combine, in different ways, the analysis of institutions, rules and regulations with reasons for and against the convergence of systems of corporate governance and management (see Christopherson 1993 and compare with Weiner 1999). In this paper, we argue that global financial integration and the international convergence of accounting rules and regulations have overtaken the inherited domestic institutions of German employer-sponsored pensions. For large DAX 30 firms, the adoption of international accounting frameworks will have far-reaching implications for the future of German supplementary pension systems. Whereas much of the literature on national financial systems presupposes the persistence of difference between competing financial regimes, we argue that any presumption in favour of persistent difference must be balanced against the interests of some private agents (corporate and market) in convergence.

Pension Liability and Corporate Finance

Much of the literature comparing Anglo-American and German systems of finance and corporate governance accentuate the differences, not the historical links or the overlapping, perhaps converging, institutions. While there are good reasons to do so, recognising remarkable differences of economic performance in German and Anglo-American financial markets over the 1990s, we should not exaggerate the historical record.[4] In particular, we believe that any understanding of current pension funding dilemmas faced by German corporations should begin with an brief look backwards to the introduction of the US Employee Retirement Income Security Act (ERISA) of 1974 and the subsequent debate about pension liability accounting and funding. In looking at the US historical record, we can draw together informed glimpses of issues and circumstances relevant to the contemporary situation in Germany.

Prior to the passage of ERISA, the US Internal Revenue Service (IRS) was the dominant governmental institution responsible for over-seeing the financial integrity of private employer-sponsored pension plans. Using powers conferred by their role in certifying the federal tax status of these plans, the IRS monitored the funding of corporate pension liabilities. While the IRS encouraged the funding of pension liabilities, according to informed observers the IRS tended to encourage funding according to minimum standards rather than the full-funding of liabilities (Murray 1976, 152). Also involved in “regulating” corporate pension plans was the Accounting Principles Board (APB), a forerunner to the Financial Accounting Standards Board (FASB).[5] This private association of accounting professionals used advisory opinions to set voluntary accounting standards, particularly in the area of reporting corporate profit and loss statements. Neither the IRS nor the APB directly regulated corporate pension funding practices; firms had wide discretion in setting expected interest rates, rates of return on invested assets, the timing of contributions, and the accounting of unexpected gains and losses (Weiss 1976).

The passage of ERISA in 1974 saw the introduction of statutory provisions designed to protect workers' pension rights and mechanisms designed to ensure that all workers were able to vest and participate in offered pension plans. In effect, the federal government introduced concepts allied with civil rights legislation to pension law so as to ensure equitable and fair treatment (see Clark 1993 and Sass 1997). As well, ERISA set conditions for the full funding of defined benefit plans' expected liabilities spread over an extended period of time while requiring earlier recognition by plans (and hence plans) of gains or shortfalls in investment performance. In effect, ERISA sought to redefine the financial discretion available to plan sponsors and set stricter parameters for pension funding. The move towards the full funding of liabilities in accordance with commonly accepted standards was under-scored by the creation of the Pension Benefit Guaranty Corporation (PBGC). It was designated as the federal agency responsible for protecting the value of accrued pension benefits (albeit at a discount), a responsibility shared between the Department of Labor (DoL), the IRS and the federal courts (Clark 1993).

The available evidence at the time suggested that many pension plans were funded in a manner consistent with ERISA standards. Even though passage of ERISA can be traced back, in part, to widely publicised instances of corporate bankruptcy and the total loss of accrued benefits, pension plan funding was a well-established technical craft sustained by principles drawn from trust law and related common law standards of behaviour (Langbein 1997). Further more APB standards introduced in the mid 1960s, though not compulsory, seemed to have "encouraged" some firms to report their long-term pension liability (Weiss 1976). Even so, Feldstein and Morck (1983) and their colleagues in the volume edited by Bodie and Shoven (1983) noted problems in ascertaining the true value of corporate pension liabilities. Although they argued that the market could (or should) "see through" accounting practices and attribute market values consistent with the relative level of pension under-funding, they recognised that there were significant measurement problems and variable accounting practices. Further more, they were unable to distinguish a causal logic between poor corporate financial performance (in general) and the level of pension under-funding (in particular).

In Friedman's (1983) paper, based upon 1977 DoL data drawn from more than 7800 plans sponsored by over 1800 firms, similar problems of measurement and accounting practices were identified. Nevertheless, he found that unfunded corporate pension liabilities were a function of the level of corporate debt; the higher corporate debt the higher unfunded liabilities. He also found that firms with high levels of debt and firms with significant volatility in their earnings preferred predictable, low risk investment regimes. In effect, new ERISA funding imperatives combined with inherited pension accounting practices seemed to have encouraged firms to balance high levels of corporate risk (on one side) against low pension risk (on the other side). By contrast, firms with high rates of (predictable) earnings growth tended to be firms with pension funds that pursued high risk-and-return investment strategies. In many cases, Friedman argued firms used their available discretion in making pension contributions and the reporting of unexpected gains and losses to smooth reported corporate earnings. Notwithstanding the legal separation between firms and their sponsored pension plans, it appeared that firms' financial strategies tended to integrate rather than divide pension liabilities from corporate assets and liabilities.

The relative transparency of corporate profit and loss statements and the practice of corporate financial management in relation to pension obligations were at the heart of FABS Statement 87 issued in late 1985. For many financial analysts, previous APB standards confused or failed to adequately distinguish between defined benefit plans and defined contribution plans. Further more, existing standards left too much discretion to firms, allowing the development of non-commensurate and competing reporting standards and procedures. During hearings held by FASB on their Preliminary Views (the forerunner to FASB 87), many major industrial corporations proclaimed the virtues of discretion, arguing that disclosure of pension assets and liabilities was best achieved taking into account the particular circumstances of each firm. Moreover, the chairman of General Motors argued that the proposed current valuation of pension assets and liabilities would be virtually impossible given the problems of fixing values of working and sunk capital (Leibtag 1984). Financial analysts, however, were under no such illusions: the available data was not consistent enough to discriminate between corporations on the basis of their underlying pension assets and liabilities (Miller 1987).

The introduction of FASB 87 set the parameters for US corporate finance slowly flowing-on, as we shall see, to most other advanced industrialised economies through national accounting boards and the International Accounting Standards Committee (IASC). In brief, the objectives of FASB 87 were as follows. (1) To provide a measure of corporations' net pension costs reflecting the nature of plans and employees' entitlements; (2) to provide a more transparent and comparable measure of pension costs; (3) to provide a means of disclosure consistent with plan sponsors' financial circumstances, and (4) to improve the reporting of US corporate finance (paraphrasing the original FASB announcement as summarised in Ernst & Whinney 1986, p. 2). Basically, FASB sought to standardise corporate pension cost reporting, ensuring information was available in corporate earnings statements in a timely and consistent manner. While every effort was made to require the current reporting of all pension assets and liabilities, FASB had to concede firms some discretion in the timing of reporting. Nevertheless, through the adoption of a common accounting framework and the promulgation of standardized templates, FASB achieved its objectives.

FASB then extended its pensions accounting standards to corporate health care benefits and related retiree benefits. Statement No. 106 was introduced in late 1992, with a limited transition period. As was the case in FASB 87, the guiding principle behind FASB 106 was full disclosure using consistent and comparable standards of valuation and reporting. Given that many of the firms sponsoring defined benefit plans also provided related but largely unfunded health care benefits, it was anticipated that FASB 106 would have significant effects on their reported profit and loss statements (Warshawsky et al. 1993). The available evidence at the time suggested that the market under-estimated the true costs of such benefits, reflected in market prices higher than expected (Mittelstaedt and Warshawsky 1993). In subsequent sections, we look in more detail at the flow-on of these accounting standards to other jurisdictions. In doing so, our historical record closes just before the announced re-formation of the IASC in May 2000 and the European Commission's announcement in June 2000 that it intended to present a proposal "requiring all EU listed companies to prepare their consolidated accounts in accordance with … International Accounting Standards (IAS)" (p.2).

Patterns of US Corporate Pension Liabilities

Through the 1990s, FASB 87 became firmly entrenched in US corporate financial accounting and the annual reporting of corporate earnings. Because the standards fashioned and implemented by FASB are recognised as "authoritative" by the US Securities and Exchange Commission (SEC), these standards must be observed by publicly-listed and traded companies registered with the SEC. As such, it has been identified by critics as one important institution (amongst others) responsible for the shift away from defined benefit plans towards defined contribution plans. It is arguable that, in conjunction with ERISA, FASB pension standards have prompted US corporations to separate human resource management functions from their financial functions. Not only have the costs of administrating defined benefit plans grown enormously (Mitchell 1999), the market valuation of health care and retirement benefits have effectively made such benefits part and parcel of the valuation of traded companies and hence the market for corporate control (Siegel 1996). In effect, defined contribution plans shift costs and financial risks to plan participants away from firm stockholders and management.[6]

Early fears that FASB 87 would result in corporate bankruptcies and the collapse of the PBGC proved unfounded. Notwithstanding the problems of financing corporate restructuring and the funding of defined pension benefits in the automobile and steel industries, the PBGC emerged unscathed in the early 1990s. The economic success of the first Clinton administration combined with the accelerated growth in US equity markets from the early to late 1990s effectively discounted the value of inherited defined benefit liabilities. By virtue of the extended period of transition allowed by FASB, and a compromise on reporting year-to-year unexpected gains and losses on pension fund assets, the transition occurred in an era of economic growth. More recently, with the run-up in Anglo-American market beginning around 1993-1994 rates of return on invested assets out-stripped conventional expectations. By year-end 1999, annualised US equity returns were more than 12 percent in real terms as many pension funds shifted assets towards equities and away from fixed income products (Clark 2000).

To better appreciate the nature and significance of US corporate pension obligations, we turn now to the results of a report published by Bear Stearns (McConnell et al. 1999). The Bear Stearns accounting practice compared net pension expenditures (and income) for publicly-listed firms included in the Standard and

Poor's 500 index for two years 1994 and 1998. As is well appreciated, the S&P 500 index is made-up of the largest NYSE listed firms as measured by capitalisation.[7] Of course, including firms listed in both years and before the "new economy" IPO boom meant that the database looked backwards rather than forwards. As such, the index was dominated by four sectors (in order): capital goods, consumer cyclicals, consumer staples and basic materials. Of the 500 firms, there were about 370 that reported on defined benefit and retiree health care expenditures and expected liabilities. The majority of firms (approximately 70 percent) reported net pension expenditure for both years, although a minority of firms (about 12 percent) reported shifting from a net expenditure position to a net income position.

In more detail, of the 350 firms included in the report 32.6 percent reported a decrease in their net pension contributions while another 10 percent reported no change in their contributions. However, another 10 percent reported a shift from net pension expenditure to a neutral position (neither a net contribution nor a net income result). In effect a majority of the 350 S&P500 reporting firms saw their pension contribution expenditures decrease in real terms (adjusting for wage and price inflation over the four-year period). Only 12 percent of firms reported a net pension expenditure increase, while a tiny fraction of firms reported moving from a net income or neutral position to a net expenditure position. Remarkably, a significant number of firms reported net pension income rather than net pension expenditure as part of their consolidated corporate earnings. As noted above about 12 percent of firms reported a shift from net expenditure to net income, about 6 percent reported moving from a neutral position to net pension income and another 5 percent of firms reported an increase in their net pension income. In effect, about 20 percent of firms added to their corporate operating income by virtue of their accounting practices.

According to McConnell et al. (1999, p. 10), the reported reduction in net pension expenditure for many firms and the shift to net pension income for a minority of firms reflected, in part, change in the assumed expected return on pension fund assets. Also suggested was the possibility that some firms had benefited from the "amortization of actual returns in excess of expected returns." The expected return on assets is a positive function of the equity-bias in pension fund investment strategies. Because FASB 87 requires defined benefit plan sponsors to look forward when reporting pension assets and liabilities, there is a temptation for pension fund investment officers to follow markets upwards, thereby reducing the year-to-year financial burden on plan sponsors. In this instance, the average expected rate of return increased from 9.08 percent in 1994 to 9.19 percent in 1998.[8] Even so, some 50 or more firms reported no change in expected returns over the period 1991 to 1998 and only a handful of firms reported a yearly revision in their expected returns over the period 1993 to 1998. Furthermore, there were no apparent patterns between firms' expected return policies and the extent of under- or over-funding in relation to expected long-term obligations.[9]

Nevertheless, there was considerable variation between S&P500 firms' net pension cost accounting policies. For 1998, some firms held to very conservative assumptions about expected returns (eg. Alcan Aluminium 7.20 percent) while a few firms had very aggressive assumptions (eg. Weyerhauser 11.50 percent). For some firms with mature pension plans (large numbers of retirees to active participants), however, an aggressive equity strategy would be wholly inconsistent with protecting retirees' welfare and the financial integrity of the firm. Even so, M^{c}Connell et al. (1999) suggested that some firms seemed to be managing overall reported corporate income by varying expected returns. Because FASB 87 requires a single net cost value firms are be able to adjust, and perhaps vary according to broader corporate objectives the various components that make-up net pension cost. In effect, and notwithstanding the objectives behind the introduction of FASB 87, firms retain considerable discretion reporting pension costs. Indeed, McConnell et al. suggested that in some cases reported corporate earnings are considerably less once "pension income" is taken into account.

This finding is consistent with Lowenstein's (1996) argument that firms manage what is measured: "[i]t is inevitable, therefore, that management often will manage not for the economically better outcome but for the *measured* outcome, or they will simply manipulate the reported numbers" (p. 1355).[10] This point was under-scored by M^{c}Connell et al. and in more recent related studies by independent analysts and consulting firms (see the report in Pensions & Investments 26th June 2000, p.1). While it is impossible to determine the extent to which FASB accounting measures of defined benefit pension liabilities have contributed to the growth of employer-sponsored defined contribution plans, market analysts have become highly-tuned to the potential risks associated with defined benefit plans. There can be little doubt that transparency has prompted the discounting of existing and potential financial risks associated with sponsored pension plans.

Evolution of Global Accounting Standards

By this account, FASB has become an essential cog in the web of regulatory institutions that over-see US corporate governance and the market for corporate control. Its professional associations and independent appointment system buttress its mandate as an independent expert authority on accounting practice. FASB has many of the attributes and functions identified by Power (1998) as a private institution of social governance (as opposed to government). It is a self-organising institution that relies upon decentralised management mechanisms like self-measurement and self-reporting to sustain corporate compliance with codes of practice for the benefit of third party market agents. In this case, of course, FASB operates in a regulatory space in part provided by the SEC. It functions in the light caste by the SEC as well as its professional membership not just in the shadows caste by government regulation in general (compare with Power 1998, p. 9). In this sense, it is less an institution of trust than it is a non-profit institution with legitimate coercive powers of discipline.[11]

Arguably FASB and its pension accounting rules should be considered a distinctive feature of US financial markets, referencing what Hancher and Moran (1989, p. 290-91) would identify as <u>local</u> legal, social and economic factors that sustain the institution. As is well appreciated, there is considerable debate about this general proposition. Some suggest that domestic elites and their interests represented and allied with nation-states are fundamental constraints on convergence. By implication, the emerging map of twenty-first century capitalism is best understood as meditated by nation-states relying upon retained powers over property and competition, negotiated exceptions, trade-offs and compromises, and reinforced by ambiguity over the implementation of common agreements (Crouch and Streeck 1997). Yet there are also those who emphasise the relative autonomy of large firms. The historical interests of such firms in domestic rules and regulation (concerning competition and labour-management relations) can be juxtaposed (in theory and practice) against their growing interests in access to global consumer and capital markets (see generally Mayer and Whittington 1999).

In this regard, regulation of the global financial services industry is increasingly at the center of debate over nation-state autonomy. For example, Rhodes and Apeldoorn (1998, 423) noted that the European and global harmonization of accounting rules and regulation is an especially contested sphere of public policy.

They suggested that the mutual recognition of nations' different rules and regulation would be one way forward in accommodating, on one hand, corporate interests in a pan-European regulatory framework consistent with their increasing geographical scope of operations and, on the other hand, the traditional powers of the nation-state.[12] At the same time, FASB, the SEC, the UK ASB, the International Organisation of Securities Commissions (IOSCO), and the IASC (amongst many other institutions) have actively pursued convergence. Identified by Braithwaite and Drahos (2000, p. 121) as a "private sector business organization which is committed to a process of continuous improvement in the development of international accounting standards for financial reporting" they noted that the IASC is "[o]f profound importance to the globalization of financial regulation". Indeed, they argued that the IASC has sought harmonization "to progressively higher standards."

This reading of the IASC's goals and objectives is not entirely consistent with its evolution since being established in 1973.[13] Braithwaite and Drahos blur different phases of its development, ignoring the initial tentative steps towards consensus. Even so, in the last few years FASB has found few instances where IASC standards could be judged inferior to US GAAP while there are a number of instances where IASC standards could be judged more comprehensive and inclusive than US GAAP (Bloomer 1999). It is beyond the scope of this paper to review the FASB evaluation of ISAC, standard by standard. But it is worth noting that IAS 19 (employee benefits) was revised between 1993 and 1998 in consultation with a wide variety of related organisations and individuals including FASB and the SEC.[14] In assessing the "new" IAS 19 against relevant FASB standards, Petrone (1999) suggested that there was close conformity across a wide range of issues. Where there were differences, IAS 19 standards were judged more exacting in some cases (multi-employer plans, unanticipated extra costs, and anticipated changes in government regulations) and "different" in other cases (especially the treatment of defined contribution plans). One slight difference was that IAS 19 does not require corporations to report their minimum defined benefit liability whereas FAS 87 does. Apart from this issue, Petrone suggested that market agents would readily understand any other differences.

For some academic analysts the IASC is an extension of FASB being, by extension, the agent of the SEC which itself represents US nation-state interests in extending the geographical reach of US capital markets.[15] According to this view, and in defence of other types of national financial systems, due respect must be accorded to "local" interests in the design and adoption of accounting rules. While not disputing the need for nation-states to accommodate (in some fashion) to international financial standards, by this account geopolitics combined with market agents and interests "explain" the convergence of accounting rules and standards. In this paper, however, neither the SEC nor the US government is the *deus ex machina* of our argument—all-powerful agents driving accounting professionals towards the harmonization of global accounting standards. This kind of argument ignores important differences between institutions, it ignores the independent processes of consultation and advice used by the IASC, and it ignores the competition for agenda setting amongst national and international accounting standards institutions. Further more, this conspiracy view skates over apparent tensions within and between national institutions and their constituent members. Witness, for instance, the political difficulties encountered by FASB in the early to mid 1990s when it tried to introduce an accounting standard to fully account for the cost of stock-based employee compensation plans. So significant was industry and congressional opposition to the proposed standard that the very future of FASB was under threat until a compromise was reached.[16]

Here we consider aspects of the supply of harmonized accounting standards before focusing upon German corporate pension liability, international accounting standards and their implications for the provision of supplementary pensions. In the first instance, it should be recognised that the claimed conflict between international accounting standards and national financial autonomy may be less profound than sometimes implied. In McLeay et al's (2000) study of the German implementation of the Fourth European Company Law Directive (1985), they noted that the EU Directive radically challenged German accounting practices. While the Directive incorporated some aspects of Anglo-American accounting practices related to transparency, it also retained elements of German practice—consensus and compromise sensitive to "local" interests were deemed as necessary steps on the path towards a common regulatory framework. More recently, in 1998 the German federal government allowed listed companies to use FASB or IASC standards, recognising the interests of large German firms in gaining access to global capital markets if not the interests of many other domestic firms in lower-priced capital resources. Similarly, the SEC has allowed foreign firms to list on US financial markets even if this has meant accepting accounting standards at some variance to US GAAP.[17] In response, the UK ASB proposed a new rule on pension liability stronger than either FASB 87 or IAS 19.[18]

In the second instance, it should also be recognised that there is, more often than not, an idealised "client" behind the SEC, FASB, ASB, IOSCO and the IASC: capital market agents whose role it is to properly price the value of traded securities. And behind those agents are the normative goals of these institutions: the enhancement of the efficiency and fairness of global financial markets (Steinberg et al. 1999). By this logic, the enemies of market agents and market efficiency are firms and governments reluctant to disclose important financial information, and firms willing to manipulate the information so disclosed. But notice an implication hidden in these claims: information about corporate financial performance is a public good rather than a private matter that is the object of privileged access. Of course, information is not quite the same as reasoned knowledge; there is a vibrant market in the Anglo-American world for insight and opinion about the implications of disclosed information. But this model of markets and rules is, at base, very different from the German model of non-traded long-term banking relationships. Ideally, in the German system information is a perquisite of being an inside player. By the time such information gets to the market, insiders have surely reaped its value (according to Edwards and Weichenrieder 1999).

In the third instance, then, it should be recognised that global financial integration has had enormous implications for the autonomy of countries' accounting standards boards. There is considerable competition amongst financial markets for cross-border listings. Rapid advances in communication technologies and the development of real-time trading links have effectively opened-up many financial markets to London and New York. Thus, there is a temptation for "local" regulators to compromise on accepted standards. In this context, the IASC has become more important over the past five years than it may have been ten years ago as a means of avoiding any "race to the bottom" (compare Braithwaite and Drahos 2000). At the same time, alliances between financial markets to cross-list securities rely heavily upon either mutual recognition of different standards or, more likely, the implementation of one standard consistent with international standards. Gross differences between whole sets of countries in relation to their legal and regulatory heritages may, in effect, define the boundaries of these alliances (see La Porta et al. 1998). And yet, within these loosely related blocs of markets, there are firms with global ambitions. Defection to global markets is an obvious option even if their domestic competitors may be limited to local markets and banking relationships by reason of limited resources.

German Corporate Accounting Standards

The completion of the IASC code and its related employee benefit accounting standards has been accompanied by strong pressure from the SEC and FASB to create credible audit systems for monitoring compliance and credible sanctions for non-compliance. Partly in response, the IASC has proposed a plan designed to re-make the Committee, utilising a Board with a membership structure and set of powers capable of implementing the new international code.[19] At the same time, a number of advanced economies have moved to replace their own codes with the IASC code or, as in the German case, create accounting boards to deal with and/or implement international standards. In effect, IASC code has become the reference point for many countries wishing to adopt accounting standards consistent with, if not exactly the same as, international standards and expectations regarding the proper regulation of global financial markets and corporate governance.

Adoption of international accounting standards

German legislation (1998) allowing domiciled firms to use international accounting standards is indicative of the force behind global harmonization. But this legislation simply <u>allowed</u> rather than <u>required</u> the use of international accounting standards. Furthermore, as we have seen above, much of the theoretical literature on corporate disclosure and finance presumes firms are reluctant to disclose and will only report that information required by law (see Admati and Pfleiderer 1998 and Fishman and Hagerty 1997). Not only are there considerable costs associated with producing this kind of information, there is also some anxiety at the corporate level about the consequences of disclosure for firms' market positions. These anxieties were put into sharp relief by the extraordinary result that accompanied Daimler-Benz's adoption of US GAAP standards in 1993. As is well-known, and repeatedly discussed amongst market analysts, year-end earnings disclosure using these standards converted a German accounting standards' "profit" into a US GAAP "loss." These kinds of "surprises" can have enormous implications for how global financial markets value individual and groups of related firms.[20]

There are also academic theorists who, in any event, would argue against convergence in national systems of corporate governance. Invoking notions of path dependence and sunk costs consistent with economic geography (Clark et al. 2000), Bebchuk and Roe (1998) made the theoretical case for "continued divergence" rather than "convergence" in national systems of corporate governance (over 15 to 20 years). In doing so, they argued against simple-minded presumptions in favour of market solutions to conflicting national regulatory regimes. Even so they recognised that convergence was possible, depending upon the balance of forces between "competitive globalisation" and "path dependence". But they also suggested this was an empirical question, to be resolved by history not by the inexorable logic of economic theory (see also Berndt 1998a). These two authors have enviable reputations as theorists of law and economics (Bebchuk) and the institutional framework of nation-state markets (Roe). Thus there are clearly practical and theoretical reasons to be cautious about the likelihood of German firms switching towards international accounting standards (see the related argument underpinning Rhodes and Apeldoorn 1998, and McLeay et al. 2000).

To summarise, four hypotheses relevant to the adoption of international accounting standards flow from the arguments and authors summarized above. (1) *Firms are unlikely to voluntarily adopt higher international standards of reporting*. Not only would transparency represent a break with past non-traded relationships and impose limits on management discretion, any "surprises" in financial accounts may have severe economic costs for the firm and its shareholders. (2) *Given the option to adopt*, firms will tend to limit disclosure to that required by local laws rather than embracing international standards. (3) *Given an inherited capital stock and related corporate structure,* international standards of disclosure will be less relevant to the local situation than domestic standards. Alternatively, (4) *if adoption were to occur it would have less impact on corporate governance in these circumstances than in other more appropriate circumstances*. The implications of the literature are plain. German firms would not voluntarily adopt higher international standards, or would do so only in a manner that did not threaten their inherited systems of management and governance.

To assess these hypotheses, 1998 annual reports (published in 1999) for German publicly traded DAX 30 index (large) and non-DAX index (smaller) firms were assembled. These reports, made available through the Annual Reports Service of World Investor Link (and available at The Financial Times web site), included a wide variety of corporate incomes and expenditure accounting measures as well as statements regarding current and adopted accounting standards.[21] It should be noted that the DAX 30 index firms included the 30 largest German corporations, being dominated by international industrial firms like DaimlerChrysler and BASF though also including less well-known but nonetheless substantial domestic-oriented firms such as Metro AG and Henkel KGAA (Table 1).[22] Note that we ignored, for the moment, subsequent mergers and acquisitions that have affected the structure of the DAX 30. The DAX 30 index firms dominate total market capitalization. Their share of the market far out-strips the Dow Jones index share of total US market capitalization. At the same time, German publicly traded firms are less significant in relation to the stock of all traded and non-traded firms compared to US and UK markets. As for the sample of 36 smaller firms, many were very small indeed with less than DM100 million in reported assets. As should be appreciated, it is much harder to collect information on these firms.

Given expectations noted above, the patterns apparent in Table 2 may come as a surprise. Basically, the majority of DAX-listed firms immediately adopted international accounting standards (IAS and/or FASB) when permitted to do so. Indeed subsequent to publication of the 1998 annual reports most other DAX 30 index companies including Volkswagen and Siemens have indicated that they also will adopt these standards in the near future.[23] By contrast, only 3 of the 36 firms outside of the DAX 30 have switched to international standards (Appendix 1). Thus we can reject hypotheses (1) and (2) outright. But this leaves us the task of explaining the rate of adoption amongst DAX 30 as opposed to non-DAX 30 firms.

Explaining patterns of adoption

Adoption is rarely studied in the Anglo-American literature because of the mandatory nature of accounting standards.[24] Explanations of adoption that would invoke firm size, industry affiliation, and export orientation are not convincing (compare Glaum et al. 1998). Each sector like automobiles, chemicals and engineering has exceptions making comparison between industrials and retail-commercial sectors (for example) less than compelling. Thus we leave aside the option of an econometric modelling strategy and concentrate on four propositions that may "explain" early adoption within the DAX 30 index environment.

Being included in the DAX 30 signifies a distinctive status with respect to competition between international financial markets, therein requiring reporting systems consistent with the standards of those markets. This argument has two parts. Firstly, we should recognize that demand for country-specific index-based passive equity investment products grew dramatically over the 1990s. The realization that the costs of active investment, more often than not, out-weigh the returns from stock selection in the soaring markets of the late 1990s prompted investment strategies that discounted firm-specific information in favor of indicative bundles of stocks. Secondly, the interest of European markets in being competitive with the burgeoning Wall St and City of London markets prompted those European markets to actively encourage index listed firms to adopt accounting standards that would facilitate the trading of assets between markets. Adding to this pressure, of course, was the introduction of the EURO in January 1999 and the prospect of European sector-wide market indices. Continental policy makers have sought to increase the European share of cross-border financial flows--being within the DAX 30 was to be a willing (or not so willing) partner in this competitive strategy amongst financial centres. For firms included in the DAX 30 index, disclosure according to internationally recognised accounting standards is a necessity if the Frankfurt Borse is to realise its global ambitions.

For German firms with global ambitions, conventional sources of finance are expensive relative to global finance markets. The simplest and most obvious reason for early adoption identified by industry insiders has to do with the shear size and significance of global (UK and US) equity markets compared to the Frankfurt and continental European markets. Whereas the first proposition implies that DAX 30 index firms are hostages to the ambitions of the Frankfurt Borse, these same firms have sought cheaper pools of finance to expand in eastern Europe and North America. Just as German banking relationships have not been as competitive as global markets for new finance, it may be that the Frankfurt market has neither the depth of resources nor the experience for adequately valuing corporate global investments and competitive strategies. In this context, disclosure is a vital informational signal in any move to attracting the interest of Wall Street ratings firms and the expertise of Anglo-American investment institutions. At the same time, expanding commercial relationships and market alliances between related German and Anglo-American firms have required open disclosure of interests and market value—common standards of disclosure have become an essential ingredient in establishing the "terms of trade" between firms coming from very different cultural and industrial traditions. Notice, however, that only 5 of the DAX 30 index firms have listed on the NYSE.[25] The adoption of international accounting standards may be a way of avoiding this prospect.

For German firms with significant Anglo-American holdings, their managerial experience with international accounting standards has developed their capacity to adjust and adapt to the putative new regulatory regime. A significant portion of DAX 30 index firms have US and UK holdings, allowing for learning between jurisdictions within the firm while reinforcing the need to rationalize accounting standards between units. For example, Allianz, BASF, Bayer, and DaimlerChrysler all have US units with local employees and sponsored pension plans. They use systems of accounting and financial reporting that meet US standards. This is especially apparent in areas like pension accounting where BASF, for example, manages both defined benefit and defined contribution plans in ways consistent with US federal ERISA regulations and US GAAP. The fact that many of these types of companies switch managers internally between jurisdictions encourages over-lapping knowledge, and in some cases convergence upon common internal standards. Of course, overlapping jurisdictions within firms does not always translate into convergence on one managerial system. An added incentive for the adoption of common international accounting frameworks has been the need to centralize investment decision making, drawing assets and liabilities often-times together across the firm in ways that allow these firms to make new investments to match or dominate their Anglo-American competitors.

Diversification of shareholding has become a desirable goal for managers and their traditional investors. By convention, German firms are described in terms of their overlapping shareholdings, managing investor relationships on the inside rather than the outside (the market). For some firms, this remains the dominant logic underpinning corporate strategy and management (witness BMW). But in other firms shareholding, if not control, is far more diverse (e.g. Mannesmann, DaimlerChrysler, and Deutsche Bank). Diversification of shareholding is increasingly a desirable option, especially as continental capital and consumer markets become more competitive. On the management side of the equation, diversification of ownership has two advantages. One is greater discretion, recognizing the limits on innovation posed by the close and overlapping interests of their traditional shareholders. Another advantage of diversification of shareholding is the opportunities for managers to tap expertise outside of their home jurisdictions. For traditional shareholders, over-invested in selected numbers of German firms, diversification allows dilution of interest and the spread of financial assets into new areas of the German and European economies. In this respect, then, a pre-condition for diversification of shareholding is greater transparency, consistency and comparability. Therefore FASB and IAS standards offer neutral reference points for new shareholders suspicious of the privileged position of traditional shareholders.

On balance, and with respect to those firms included in the DAX 30 index, the forces of competitive globalization seemed to out-weigh path dependence (compare Bebchuk and Roe 1998). Slowly emerging is a form of German corporate capitalism perhaps more consistent with that described by Berle and Means (1933) for the US than that associated with traditional German industry organisation (Berndt 1998b). Thus, even hypothesis 3 noted above should be rejected, at least for those large German firms included in the DAX 30 index.

German corporate pension liabilities

This, then, brings us to the pattern of <u>net</u> corporate pension liabilities reported in Table 2 and Figure 1. Before considering these data, we should acknowledge three important caveats about the reported data.[26] First, few annual reports made mention of the various mechanisms for funding German supplementary pensions. Included here are data for at least the *direktzusagen* and *pensionskassen* pension systems, the two most important private retirement income systems. While this is consistent with IAS 19 and FASB 87, some analysts would dispute the assumption that *direktzusagen* systems are properly treated as "unfunded". Notice as well, the data includes corporations' pension liabilities summed together from all countries in which it operates even if these liabilities reflect different regulatory regimes. Second, we should also recognise that the age of employees, the expected working lives and wages of employees, and the tenure structure of the firm are important variables determining defined benefit plan liabilities. Third, by definition, there are no pension "liabilities" for defined contribution plans; while we know that most if not all DAX 30 firms have defined benefit plans, some may have unreported defined contribution plans.

Two points stand out from Table 2. First, there was considerable diversity amongst firms with regard to their total net pension liability. DaimlerChrysler stands out as the "leading" firm with reported liabilities of over 16 billion euro, compared to the utility RWE (11 billion euro) and Siemens (10 billion euro) the diversified manufacturing and engineering company. At the other end of the spectrum, BMW reported (using German accounting standards) liabilities of just 1.3 billion euro. Many of the DAX 30 firms reported significant liabilities in the billions of euro. A second trend or pattern was that manufacturing firms tended to have higher liabilities than service firms or banking firms. The significance of these data can be over-played. But it is important to acknowledge that the total volume of net pension liabilities is important to financial analysts valuing German firms against their Anglo-American competitors. Given the incentives in the Anglo-American world to fully fund defined benefit expected liabilities, Anglo-American firms that might be thought direct competitors have little or no net pension liabilities. Further more, as we saw in previous sections of the paper, there are a significant number of Anglo-American firms that have managed their discount rates in favour of corporate earnings.

To better appreciate the underlying patterns of pension liability, we set total net pension liability against three variables: total reported employment, total reported liabilities, and total reported gross revenue (Figure 1). This is rarely done, if ever, for Anglo-American firms (for good reason, see above). In the German case, however, clear patterns emerged from this analysis. Most obvious from Figure 1 is the significant correlation (0.748) between pension liability as a percent of gross revenue against pension liability as a percent of total liabilities. Also significant but less strong was the correlation between pension liability per employee set against gross revenue (0.568). Initially, there was no significant correlation between pension liabilities per employee and total liabilities. But excluding DaimlerChrysler (DC) from the second and third tests of correlation, it became apparent that the underlying correlations were stronger and more significant (0.574) and (0.598) respectively. Finally, there were clear patterns by industry, with significant clusters according to banking and insurance compared to heavy industrials. Note that low pension liability per employee almost always means low pension liability against gross revenue. But there are interesting patterns: compare Deutsche Bank (DB) with Mannesmann (MN).

Clearly pension policy, and pension liability management varies a great deal within DAX 30 index firms. To make more sense of these patterns requires greater knowledge of the circumstances of individual firms (compare Berndt 1998b). In general, we have shown that DAX 30 index firms are closely integrated with the evolving international accounting standards regime. We have also shown that reported pension liabilities amongst these firms are very significant. And for those firms not reporting liabilities, the inherited German accounting standards regime can not be considered a refuge from global finance. Whether adoption of these standards will affect corporate governance (hypothesis 4), however remains unclear.

Management Discretion and Retirement Plans

There are a variety of implications to be drawn from this discussion for German corporate structure (in general) and the future of German corporate-sponsored supplementary pensions (in particular). To assess hypothesis 4, let us begin by making three entirely obvious comments about the goals behind international accounting standards. One goal has been to displace the interests of insiders for the interests of outsiders. This means displacing those with special access to price-sensitive information in favor of market agents and shareholders without privileged channels of access. Another goal has been to regulate managers, not just by imposing rules and regulations on their behavior but also by imposing rules and regulations on the disclosure of information about the performance of their firms. Yet another goal has been to improve the economic efficiency of resource allocation between firms and between sectors. According to FASB and the IASC, access to capital is a better economic process if it is a disembodied process of market supply and demand. For German firms traditionally biased in favour of insiders, reliant upon overlapping and reinforcing supervisory boards, and the beneficiaries of non-traded preferential financial terms and conditions, harmonization to IASC rules presages a very different world of markets and competition for financial resources.

The introduction of international accounting standards will alter managers' discretion, will change their available options, and will impose constraints on the use of inherited modes of financial decision-making. This will not, however, mean the end of managers' discretion. Concerns, noted above, about earnings management within the existing US GAAP regime is evidence enough about the remaining scope for action (and subversion). Moreover, the new regime of market intermediation may actually strengthen German corporate management in relation to claims for special status made by other stakeholders. We suggest here that the introduction of IASC accounting standards may actually drive a wedge between the interests of corporate management, the interests of their supervisory boards, and the process of (labor-management) co-determination. To illustrate, consider the implications of these observations for German employer-sponsored supplementary pensions given the under-funding of *direktzusagen* and *pensionskassen* pension systems.

By default, IAS 19 and its variants blur historical distinctions between the various ways German firms finance retirement income. Recall that the *direktzusagen* pension system is a means of re-cycling employer pension contributions as self-managed self-investment funds. Assuming success, corporate long-term retirement obligations are to be paid out of the resulting proceeds of long term growth (measured by revenue flow and higher labor productivity). Many theorists of comparative corporate governance believe that the *direktzusagen* system under-wrote post-1945 German economic growth. Further more, the existence of these systems of internal finance are often invoked to account for the distinctive capital-rich profiles of German industrial firms compared to their Anglo-American competitors (Hopt et al. 1998). However, international accounting standards are neither required to be sensitive to the national economic significance of this institution, nor are they necessarily sensitive to the implied social contract between successive generations of company workers. Annual net pension cost, the IASC prospective corporate balance sheet entry, stands instead of the various social mechanisms of funding long-term corporate pension liability.

International accounting standards will likely re-write long-term pension liabilities, not counted against current income in German accounting practices, as short-term liabilities. Thus the under-funding of long-term pension obligations, characteristic of *direktzusagen* systems and common to corporate *pensionskassen* funds, will be charged against the current value of the firm. Given the extent of net pension liabilities in many leading German industrial firms (Table 2 and Figure 1), it is possible that these liabilities could translate into lower corporate quoted market prices relative to similar Anglo-American firms operating from IASC and FASB compliant jurisdictions. Even if firms were to remain loyal to German accounting standards, market agents will likely draw implications about their underlying pension liabilities using the information available on German firms that report according to international standards. A low relative market price accompanied by modern capital assets and advantageous market positions are, as well, opportunities for rival firms to mount hostile take-over offers. In effect, German corporate supplementary pensions may become implicated in the pan-European market for corporate control. This would re-play the recent history of US employer-sponsored pensions, including the interaction between pension liabilities and corporate restructuring (Clark 1993).

Importantly, the discounting of corporate value may also be accompanied by the introduction of external benchmarks for judging investment returns. In the absence of deep German and European equity markets, for many years the benchmark for internal investment was long-term government bonds. As well, given the quantitative regulation of asset allocations in favor of bonds and against equities, long-term bonds were the favored investment class for *pensionskassen* funds. But as the integration of European financial markets has accelerated over the past five years, bond rates have converged and yields have declined relative to the performance of global equity markets. In the context of the development of pan-European sector-based equity portfolios by institutional investors, it has become difficult to justify a benchmark rate of return set to bond rates. Even so, the adoption of equity related benchmarks would be quite problematic. There are few obvious ways of increasing the internal rate of return (and reducing the opportunity cost of capital) without tackling the organization of the firm (or other firms, the possible targets of hostile take-overs). Just beyond the horizon lurk global financial institutions with interests in the corporate restructuring of German and European industry.

Extending this argument, in brief, for some of the largest German firms, adoption of international accounting standards has prompted moves to re-organize the management of their *pensionskassen* funds. Anglo-American investment consultants and managers have come to play increasingly important roles in this regard, bringing with them advanced asset-liability models (ALM) and networks of advisors based in the Anglo-American investment industry. Of course, the inherited system of corporate governance and co-determination overlaps with and structures the management and investment of *pensionskassen* funds. While this may be thought different from Anglo-American pension investment management systems, in fact there are commonalties with US and UK public and (some) private jointly trusteed pension funds. At the limit, however, recent developments in the investment management systems of the largest Anglo-American firms threaten the status and responsibilities of co-determination. The possible placement of pension management in corporate treasuries rather than remaining in human resources and labor relations administrative units could result in a re-allocation of powers within German firms quite at odds with precedent.

Thus, the disclosure of under-funded pension liabilities is a threat to, and an opportunity to re-make, managers' discretion in relation to historical privileges. Not surprisingly, there has been a significant shift over the past ten years amongst large German firms away from *direktzusagen* systems. Another response has been to slowly increase funding of *pensionskassen* obligations thereby reducing overall reported corporate pension liability. These trends imply, of course, significant short-term financial costs for corporate stakeholders in the form of lower profits, rates of return, and lower real wages. And there are conflicting interests embedded in German firms that make this strategy more problematic than often supposed. Whereas corporate managers have a short-term interest in sheltering from the emerging European market for corporate control, not all stakeholders may accept the nature of re-organization, and boards of supervisors may be compelled to defend their historic claims for preferential status. Similarly, the threat to co-determination posed by Anglo-American investment practices may amplify the current political debate about the funding of German pay-as-you-go social insurance as workers and beneficiaries are charged with the costs of full funding.

The current and long term funding of *direktzusagen* and *pensionskassen* liabilities may require re-writing internal corporate relationships in favor of corporate managers and external shareholders. The imperatives of global capital markets embedded in international accounting standards pose a significant challenge to accepted practices and relationships. Not unrelated, then, is the most radical option: to closeout current defined benefit pension schemes and replace them with defined contribution schemes. By doing so, the risks and liabilities associated DB plans would be transferred to employees, thereby removing those items entirely from corporate accounting. Here, the full consequences of FASB 87 for US corporate pension funding would be incorporated into the German arena. This would not remove the necessity of funding current obligations. There would remain significant financial burdens to be resolved and distributed over time. And there would be powerful political forces to be over-come if such a re-allocation of risk were to be accepted by German workers. But it is an option advocated by a number of German banks and the Anglo-American investment management industry. Indeed, the debate about EU pension regulation is thoroughly permeated by the tensions engendered by German pension liabilities.

Conclusions

In this paper, we have traced the evolution of US corporate accounting practices from APB Opinions through to the current SEC and FASB co-sponsored regime of Generally Accepted Accounting Principles (GAAP). The focus of argument and discussion was the treatment of pension liabilities, and inevitably those liabilities associated with defined benefit or final salary pension schemes. Drawing upon debate around the time FASB 87 and 106 were introduced, we demonstrated that issues raised then (over twenty years ago) are highly relevant to the German scene. In fact, recent evidence drawn from German corporate annual reports suggests that many of the largest DAX 30 index firms have rapidly embraced these standards, notwithstanding the apparent implications for pension funding from such adoption. As FASB, the IASC and the ASB have converged upon a harmonized set of accounting standards that promote transparency, consistency and comparability, financial and corporate governance systems outside of these standards have had to adapt to, if not always adopt, these standards.

In doing so, we assessed the evolution of core systems of financial accounting in the Anglo-American world against changes at the margins of German financial and corporate practice. That is, our argument took the historical evolution of US accounting standards over a period of about 40 years and set the results of that history against German institutions in the context of EU integration over the past five years or so. There are clearly significant conceptual and empirical dangers inherent in such a strategy. Whereas history was assumed to slowly unfold in one context (the US), we have argued that history is currently under threat in another context (Germany). In one, path dependence is the motive force of history, in the other lock-in is almost immediately resolved by the forces of global finance and economic logic. This may well be the case, empirically speaking. Remarkably, the largest German firms have proved far more responsive than theory would suggest. But it does not do justice to the coherence and persistence of German institutions and traditions; we also need to look more closely at the ways in which such threats are accommodated within these institutions rather than accepting the proclaimed "end of history". This is the subject of a related forthcoming paper. It looks at the ways in which nation-specific social expectations and co-determination interact with German corporate investment practice.

Still, notwithstanding these reasonable doubts about the force of our argument, it should be noted that the process of harmonization to international accounting standards is quite unlike many other multilateral negotiations over trade etc. Whereas we have come to expect that nation-states are the active agents behind such negotiations, balancing internal social and economic interests against the interests of global trading partners, in corporate finance independent accounting professionals have become the negotiators and standard setters. As recent debate about the restructuring of the IASC has shown, the idea that accounting professionals ought to "represent" or in some way "balance" their underlying "national interests" with the professional harmonization of global accounting standards has been soundly rejected. The IASC has eschewed "representative nationalism" in favour of the interests of their idealised clients in global capital markets. This has been a difficult lesson for the SEC, a bastion of financial nationalism, and has only been slowly accepted by the ASB. On the other hand, for many smaller advanced economies, it is an ideal readily accepted and incorporated into national regulations.

Whatever the interests of nation-states, the international accounting profession has moved far faster and far more comprehensively than many believed possible. They have done so in the context of the interests of private market agents, thereby sustaining the globalization of markets for financial services. In these ways, the market valuation of corporate earnings against accepted international accounting standards has become the raison d'être of private rating agencies, investment firms and mutual funds companies. Indeed, FASB, the IOSCO and the IASC and their related partners have made possible the growth of a global market for corporate control as opposed to the long-term non-traded relationships that dominate the German economy. This rule-based system of valuation has become a key element facilitating globalization, and a key element driving the externalization of corporate information to remotely located electronically linked buyers and sellers of corporate securities. If incomplete in terms of its coverage of the advanced industrialized world, each new initiative aimed at harmonization according to international standards brings global capital market integration closer to national systems of corporate governance once assumed fundamentally different and impervious to change. As powerful economic nations like Germany come to terms with global finance, the pressure on other European nations to re-assess the relevance of their own institutions can only be thought to increase.

Table 1 DAX 30 Index Firms' Reported Market Capitalisation Accounting Standards and Sectors (1998)

Company	*1998 Market Capitalisation* **(_bn)**[1]	**1998 Accounting Standard**	*Industrial Sector*
Adidas-Solomon AG	4.399	IAS	Household and Textiles
Allianz AG	83.148	IAS	Insurance
Basf AG	20.523	US GAAP	Chemicals
Bayer AG	27.388	IAS	Chemicals
Bayerische HypoVereinsbank	25.979	IAS	Banks
BMW AG	12.702	German	Automobiles
Commerzbank	13.771	IAS	Banks
Daimler-Chrysler AG [2]	87.652	US GAAP	Automobiles
Degussa Huels AG	7.682	German	Chemicals
Deutsche Bank AG	28.142	IAS	Banks
Deutsche Lufthansa AG	7.498	IAS	Transport
Deutsche Telekom AG [2]	87.25	US GAAP	Telecommunications
Dresdner Bank AG	18.891	IAS	Banks
Fresenius Medical Care AG [2]		US GAAP	Health Care
Henkel KGAA	4.677	IAS	Personal & Household
Karstadt Quelle AG		German	Retail
Linde AG	4.446	German	Engineering and Machinery
Man AG	2.718	German	Engineering and Machinery
Mannesmann AG [2]	42.883	US GAAP	Telecommunication
Metro AG	21.842	German	General Retailers
Munchener RE	18.502	German	Insurance
Preussag AG	6.485	German	Engineering and Machinery
RWE AG	23.461	German	Diversified Industrials
SAP AG [2]	17.258	US GAAP	Software and Computer
Schering AG	7.504	German	Pharmaceuticals
Siemens AG	37.287	German	Electronic and Electrical
Thyssen Krupp AG	5.714	German US GAAP	Engineering and Machinery
Veba AG [2]	26.749	US GAAP	Diversified Industrials
Viag AG	13.6	IAS	Diversified Industrials
Volkswagen AG	22.894	German	Automobiles

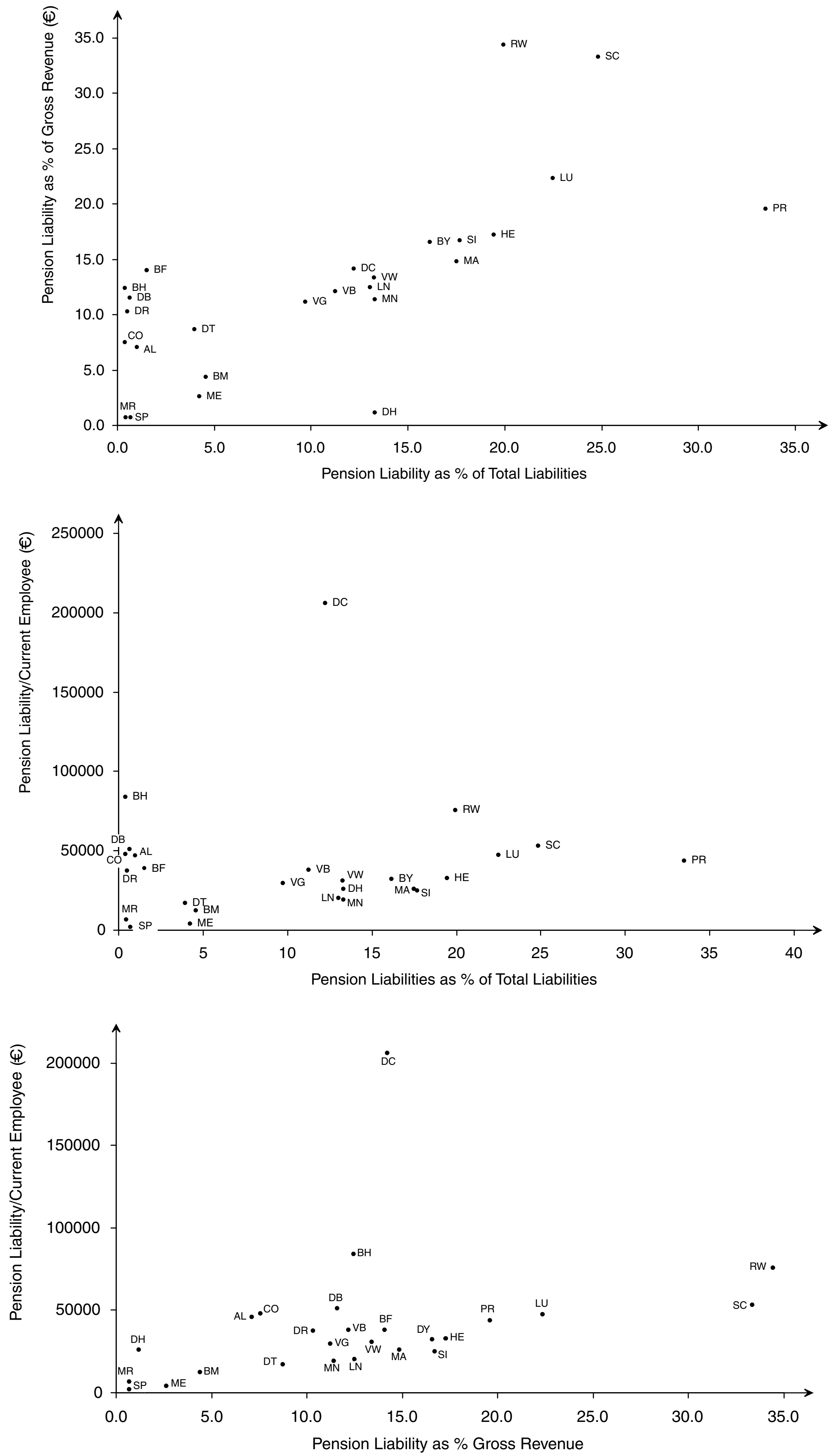
[1] Source: FT (1999)
[2] Company listed on the New York Stock Exchange

Table 2 DAX 30 Index Firms' Pension Liabilities (1998)

Short Code	Company	**Pension Liabilities (_m)**	**Short Code**	**Company**	**Pension Liabilities (_m)**
AD	Adidas-Solomon AG	N/A	KQ	Karstadt Quelle AG	N/A
AL	Allianz AG	3 387	LN	Linde AG	624
BF	Basf AG	4 062	MA	Man AG	1 648
BY	Bayer AG	4 717	MN	Mannesmann AG	2 305
BH	Bayerische HypoVereinsbank	1 828	ME	Metro AG	800
BM	BMW AG	1 394	MR	Munchener RE	163
CO	Commerzbank	1 269	PR	Preussag AG	2 824
DC	Daimler-Chrysler AG	16 618	RW	RWE AG	11 030
DH	Degussa Huels AG	686	SP	SAP AG	22
DB	Deutsche Bank AG	3 855	SC	Schering AG	1 134
LU	Deutsche Lufthansa AG	2 760	SI	Siemens AG	10 124
DT	Deutsche Telekom AG	3 130	TK	Thyssen Krupp AG	N/A
DR	Dresdner Bank AG	1 846	VB	Veba AG	4 845
FM	Fresenius Medical Care AG	51	VG	Viag AG	2 891
HE	Henkel KGAA	1 773	VW	Volkswagen AG	7 955

Source: Annual Reports, authors' calculations

Figure 1. Pension liability (1998) for German DAX 30 firms



Appendix 1: Smaller German Dax-listed Companies' Pensions Data (1998) (DM Millions)

Company	Assets	Pension Liabilities	Accounting Standard
Barmag	577.1	65.3	German
Brau und Brunen AG*	1546.4	429.9	German
Buderus	2205.8	480.1	German
Cewe Color Holding AG*	363.9	7.6	German
Deutsche Beteilungs AG*	472.9	12.2	IAS
Deutsche Pfandbrief- und Hypothekenbank AG	236038.2	146.7	German
Dr Scheller Cosmetics AG*	51.8	6.9	German
Durr	1084.3	26.9	German
Elexis*	358.5	81.1	German/FASB
FAG Kugelfischer	3623.7	875.2	German
Fielman	613.1	0.57	German
Gerresheimer	1583	376.1	German
Gesco AG*	105.1	0.52	German
Gold Zack	162.9	7	German
Graphitwerk Kropfmuhl AG*	98.5	8.5	German
Hanover Re	22212	52.1	[German]
Heidelberg[1]	7676.8	834.7	IAS
Herlitz*	1925.8	47.3	German
Integrata Training AG	20.7	0.38	German
IWKA AG	1906.8	187.6	German
Jenoptik AG*	2122.3	132.4	German
Metallgesellschaft	6925.8	1047	German
MWB* [2]	23.7	1	German
Net.Ipo*			[German]
R. Stahl*	142.7	16.1	German
Sauer Inc*			[German]
Schleicher	48.1	1.4	German
Schwarz Pharma	1291.9	40.6	German
Sudzucker	7112.3	585.7	German
TFG Venture Capital*	47.2		[German]
Uzin*	89.3	0.5	German
VEH Valora	5.8		[German]
WCM	2217.7	17	German
Wedeco*	29.6		IAS
Wesumat Holding AG*	132.3	0.38	[German]
Wunsche AG*	631.8	4.5	[German]

[1] Converted from Euros at DM-fixed rate _1 = DM 1.95583

[2] Annual, not consolidated balance sheet data

* Listed on Deutsche Börse

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Endnotes

[1]/. Despite the economic problems occasioned by reunification, recent evidence points to a revival in macro-economic conditions as measured by employment growth and GDP growth (OECD 1999).

[2]/. Pension reform is a very contentious issue inside and outside of German national politics. Successive OECD reports on the German economy have emphasized policy initiatives, reversals of initiatives, and gaps in policy left unfilled (see, for example, OECD 1998 and 1999). Tensions amongst the coalition partners over these issues have raised expectations of extraordinary departures from established priorities, perhaps the re-aligning of social security payments with price inflation rather than real wage trends, and even tax incentives for corporate-sponsored supplementary pensions.

[3] /. To characterise corporate *direktzusagen* pensions as "unfunded" runs the risk of mis-representing the distinctive financial structure of such systems. When firms set-aside each payroll period an amount equal to the present value of earnt pension benefits, they are required to utilise a mandated interest (discount) rate. Such systems may be thought, by some, to be fully funded not unfunded even if "all pension assets are invested in a single security: the debt of the sponsoring firm" (Pesando 2000, 352). Pension benefits, are also protected by a mandatory insurance scheme, analogous to solvency insurance. However, for financial agents the intermingling of corporate and pension financial assets and liabilities is very problematic. See the IASC (2000, 634) where mention is made of the necessity of providing accounting reports that show "the net assets available for benefits" (IAS 26, Accounting and Reporting by Retirement Benefit Plans).

[4]/. See Allen and Gale (1994) where they begin by identifying Germany at "one extreme" and the United States at "the other extreme". In their view, German financial institutions and instruments are controlled by dominant banks in contrast with the US model where markets play crucial roles in the allocation of financial assets. La Porta et al. (1998) develop a comprehensive cross-national data base for the comparison of countries' legal systems, their financial structures, and the robustness of financial markets. Again, the German model is explicitly identified as a system different from the Anglo-American model (amongst others). Here, though, doubts are raised about the effects of such differences on nations' relative economic performance. See also Carlin and Mayer (1999) who dispute the generality of any

connection between financial structure and economic performance. Berndt (1998a, 1998b) also assesses the robustness of the German model, weaving together sectoral and firm-based studies with geographical differentiation. He is less sanguine about the persistence of the German model in the context of globalization.

[5]/. The American Institute of Certified Public Accountants established the Financial Accounting Standards Board in 1973. It is an autonomous professional body, with a large membership drawn from a wide variety of sectors and industries. As part of its mandate, it sets so-called "generally accepted accounting principles" (GAAP) for its members. These principles incorporate many of the original APB opinions but has evolved a research and development function in keeping with the demand for accounting standards perceived by its leadership and membership. Details on its role and status can be found at www.rutgers.edu/accounting/raw/fasb/facts/fasfact1.html

[6]/. See also Ford (1994) on the financial and human consequences of the introduction of FASB 106 for the provision of retiree health care benefits. By her account, and the experience of industrial unions, the transition to reporting the full costs of such liabilities resulted in the termination of many retiree health care plans.

[7]/. The structure and composition of the S&P 500 index can be found at the Standard and Poor's web site; specifically www.spglobal.com/ssindexmain500text.html

[8]/. This appears to be a modest increase in the average expected return (10 basis points). The minimum reported expected return increased one hundred basis points (from 5.00 to 6.00 percent), and the standard deviation increased from 0.89 to 0.93 notwithstanding a decline in the maximum reported expected rate of return from 13.00 to 11.50 percent. Note that less than 50 percent of S&P 500 firms reported their expected rate of return for 1994 and 1998, indicating in a crude way the shift towards defined contribution plans amongst the US largest firms.

[9]/. Furthermore, there were few, if any, apparent trends by industry. For example in capital goods and basic materials, most firms were clustered around the 5 to 10 percent mark (pension expenditures as a percentage of reported operating income), with a decreased pension contribution in 1998 compared to 1994. Indeed, given the close clustered patterns of firm "locations" with respect to pension expenditures as a proportion of operating income in

S&P sectors (except technology stocks and health care stocks), the particular circumstances of individual firms seemed more important than sector.

[10]/. See also the comments of Arthur Levitt (June 29, 1999) the Chairman of the Securities Exchange Commission (SEC) at an Audit Committee Symposium decrying the common practice, it seems, of "earnings management—the practice of using accounting tricks to mask true operating performance." www.sec.gov/news/speeches/spch289.htm

[11]/. It should be noted, however, that the enthusiasm of US accountants and the SEC for FASB rules disclosing the market value of assets and liabilities does not always translate into ready acceptance by other finance professionals like economists. See Kaen's (1996, p. 7) doubts about the value and meaning of common US accounting rules that emphasize earnings per share. He argued that this measure is at once arbitrary in relation to the real interest of investors in cash flow, and often too short-run in orientation. Relevant for this paper, however, he also noted the important problems of interpretation that arise when attempting to compare different jurisdictions' measures of earnings per share (comparing Swedish and US standards).

[12]/. There is considerable doubt about the long-term viability of such an EU regulatory strategy. In a study comparing US and EU business law about a decade ago, Conard (1991) suggested that a model of EU regulation based upon "federal" minimum standards and nation-state discretion could easily degenerate into inter-jurisdictional rivalry. He wondered how it would be possible to stop some jurisdictions adopting so-called "lax" standards within the "federal" umbrella, thereby initiating a "race of laxity" amongst EU nation-states. More recently, Swaine (2000) has noted that member states lack a firmly entrenched constitutional principle of subsidiarity that could protect them from liability when discriminating between private actors like corporations on the basis of their national origin.

[13]/. Steinberg et al. (1999) have a detailed historical analysis of the origins and sponsors of the IASC. They refer to the role played by the EU, the International Organization of Securities Commissions (IOSCO), and US GAAP.

[14]/. See the detailed assessment (January 23, 1997) of the 1993 draft E54 (Employee benefits) addressed to Carsberg Secretary-General of the IASC by FASB, available at the FASB web site (endnote 3). More generally, FASB (1998) has also produced a report on their role in

international accounting standards setting. This report was issued prior to the release of the finished IASC code.

[15]/. Arthur Levitt, Chairman of the SEC, referred to the relationship between FASB and the SEC as a "partnership with the private sector [providing] a way to build input into the standard-setting process from all stakeholders in our capital markets, including preparers, auditors and users, as well as regulators." See his September 29 1997 speech at www.sec.gov/news/speeches/spch176.txt

[16]/. Here we refer to the FASB Exposure Draft 127-C (dated June 30, 1993) and the final FAS 123 (154-C) (dated October 1995). In the narrative accompanying the final draft, the Board goes into considerable detail about the arguments raised by those opposed to the Exposure Draft. The threat to their independence was noted, and concerns raised by Board members about the gap between sectoral interests and matters of financial principle expanded upon at length. Whether FASB would be willing to give in again is a matter open to debate within and without the Board.

[17]/. See the arguments by Cohen (1994) and Novak (1998) about the consequences of global financial market integration for the status of US securities markets in international finance and the need for the SEC to relax its stance regarding the primacy of FASB and US GAAP. Note the recent and related comments of Arthur Levitt (Chairman, SEC) accepting the need to respond to globalization and the effects of new communications technologies, notwithstanding the imperatives of sustaining the virtues of full disclosure and market transparency for market efficiency, fairness and economic stability (October 18, 1999). www.sec.gov/news/speeches/spch304.htm

[18]/. See the ASB report Financial Reporting Exposure Draft 20 (Retirement Benefits), issued November 1999. There has been considerable debate about FRED 20 in the UK accounting profession, available from the professional journal publishers Accountancy Magazines (London). For many accountants there has been only grudging acceptance of the proposal, noting the legacy of the Maxwell scandal and the need to remain consistent with the IASC (also a London-based organisation) (reflecting the comments made by Sir David Tweedie, Chairman of the ASB at a conference on international accounting standards sponsored by the Center for Financial Studies, University of Frankfurt, March 2000).

[19]/. For a general introduction to the SEC position on the IASC proposals see the comments of SEC Commissioner Hunt (February 17, 2000) at www.iasc.org.uk/news/cen8_159.htm

See also the news releases of the SEC at www.sec.gov/news/intlacct.htm (including a Fact sheet, Levitt remarks, and a detailed assessment—Concept release 34-42430). Details on the IASC strategy are to be found at www.iasc.org.uk/news/cen8_058.htm (including the Discussion paper, its appendices and summary). Doubts about its prospects as a robust international system of governance can be found in Licht (1997), being a critical analysis of the value of international securities regulation using game theory.

[20]/. See Arthur Levitt's use of this example to argue the case for high quality international accounting standards characterised by "transparency, consistency and comparability". www.sec.gov/news/speeches/spch304.htm Transparency refers to the mode of reporting, declaring the available information on corporate earnings, assets and liabilities in a manner that allows market agents to economize on information collection. Consistency refers to the nature of period-to-period reporting, allowing market agents to develop coherent accounts of the market value and circumstances of firms under scrutiny. Comparability takes transparency and consistency one-step further, relying upon common accounting standards implemented in accepted ways that facilitate comparison between firms over time. In effect, comparability allows market agents to scrutinize corporate reports for "value" across time and space.

[21]/. In the few instances where accounting standards were not reported, we labelled these companies as German rather than international. In essence, we assumed that non-reporting standards meant "German" by virtue of customary practice and the need to disclose any change in reporting standards.

[22]/. The structure, composition, and current prices of the Deutsche Borse DAX index can be found at www.kurse. exchange.de/exchange/de/kurseumsaetze.htm

[23]/. In fact, it is difficult to keep up with changes in the declared accounting standards. It seems that by 2001, all DAX 30-index firms except BMW will be IAS or US GAAP.

[24]/. One of the few studies related to the introduction of FASB 87 concluded that just one variable could explain "early adoption": increased reported earnings. Neither size, nor debt, nor industry affiliation was found significant. In this respect, Langer and Lev (1993) concluded that this was evidence of "earnings management" denying even the importance of administrative costs and resistance to compliance.

[25]/. As of March 2000, these firms were DaimlerChrysler, Deutsche Telekom, Fresenius Medical, SAP and Veda. No DAX-listed firms are listed on the NASDAQ, although there are 6 very small German firms so included. Of course, this does not preclude the possibility of further listings; BASF has recently announced that it will seek listing in June 2000.

[26]/. Whether corporate annual reports used IAS 19 or US GAAP, liability data include adjustments for the "fair value" of pension assets, the present value of accumulated and expected defined benefit obligations, and the "experience" of managing investment assets. The integrity of the data is difficult to determine; only year-to-year comparison over a reasonable time horizon can really make sense of individual corporate reports.