# Anticipating the impact of IFRS on the management of German manufacturing companies: some observations from a British perspective.

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# Anticipating the impact of IFRS on the management of German manufacturing companies: some observations from a British perspective

ABSTRACT *The introduction of IFRS in 2005 marked a significant departure from Germany's traditional financial accounting practices. This paper questions whether this change may have consequential effects on the distinctive traditional management accounting practices in the field of Controlling. We examine the possible impact on manufacturing companies drawing upon perceptions and expectations of managers in three Bavarian companies and two management consultancy firms. We consider whether financial accounting will assume an increased importance within firms, and whether this may lead to abandonment of some traditional management accounting practices and the adoption of different techniques in internal reporting compatible with the new IFRS regime for external reporting. This prompts consideration of whether such changes would lead to financial accounting domination of management accounting in Germany analogous to that argued by Johnson & Kaplan (1987) in their 'Relevance Lost' thesis. We conclude that, at this juncture in the development of their information systems, German managers face an important choice between integrating external and internal reporting in ways that might fundamentally change established Controlling practices, or of continuing to operate dual accounting systems in much the same way as in the past so that adoption of IFRS is restricted to external reporting.*

## 1. Introduction

> Whatever style of running a business you use – whether you are organised by Anglo-Saxon principles, Rhineland capitalism, Latin family orientation, or French governmental direction – one thing is clear: the pressures in the search for capital are driving convergence on overarching principles of running a business and corporate governance guidelines provide a framework that establishes processes which give boards (or owners) confidence that they know what is going on in the business and how this is communicated to a wider audience (Graham Ward, past President of the Institute of Chartered Accountants England & Wales, in a presentation at INSEAD, 11 July 2001).

This bold claim launched Ward's argument that, within the EU, there is convergence of corporate governance principles, that financial accounting is paramount in this process, and that this is led by UK and US experience and expertise. The implementation of IFRS in Germany on 1 January 2005 may be seen as one element in what Ward sees as the globalization of business practices. This follows legislation of the Parliament and Council of the European Union in June 2000 that all EU listed companies[1] follow IASB accounting standards from 2005. The main emphases in academic papers relating to this change have

[1] Member States are permitted to extend the IFRS requirement to other companies and may exempt certain listed companies (but only until 2007).

been on the theoretical and practical differences between the existing German financial accounting system and the new IFRS, and with implementation issues regarding the adoption of the latter (for example, Leuz & Wustemann (2003); Haller & Eierle (2004); Macharzina & Langer (2004). This paper has a rather different focus being centrally concerned with how the IFRS system may set up new interactions between financial accounting and management accounting in Germany, and the impact these may have on the management of German enterprises more generally. In particular, we consider whether changes in *corporate governance and financial accounting* practice may trigger other changes in *management control and management accounting* practice. Will the adoption of IFRS prompt an integration of financial accounting and management accounting systems, or will traditional dual accounting systems be maintained? If the former, will the adoption of financial reporting standards that are in line with those long-established in the USA and UK lead to an external reporting/financial accounting domination of internal reporting/management accounting in the manner presented by Johnson & Kaplan (1987), or will Controlling retain its separate importance in German companies? Overall, the issue is whether German management will continue to conform to distinctive "German" traditions, or whether there will a convergence to a more general "international" mode of management. The issue is explored through the perceptions and expectations of managers in German manufacturing companies and management consultancies in the lead-up to IFRS implementation.

The paper is structured as follows. In Sections 2 and 3 we give an overview of the historical differences between German and first UK/US financial reporting, and second the IFRS model. In Section 4 we outline the research methods adopted in our field studies of accounting in German manufacturing. The findings of these studies are presented in Sections 5 and 6 that deal with the preparations being made to change to IFRS, and the anticipated effects of this change. In Sections 7, 8 and 9 the discussion moves to a more speculative mode as we consider the longer term prospects of the adoption of IFRS increasing the importance of financial accounting, changing management accounting, and changing the relationship between financial accounting and management accounting. We conclude that German managers face a genuine and important choice at this time and highlight this as an issue for future research.

## 2. Historical differences between German and UK/US financial reporting

It is generally accepted that the IFRS system is fairly closely modelled on "Anglo-American" financial accounting traditions and thus its adoption signals a marked departure from German traditions. In Germany, financial reporting has developed with particular regard to the interests of creditors and the requirements of the tax system and in this has been guided by statute - especially the Commercial Code. Haller & Eierle (2004) characterize the difference between the two systems as a German emphasis on income calculation versus a UK/US focus upon the information function of financial reporting systems; Ali & Hwang (2000) distinguish between bank-oriented and market-oriented accounting systems - the latter placing higher emphasis on value relevance**;** and Schneider (1995) notes that there is no support in German law for the concept of financial statements informing capital markets. Consequently, German accounting practices have been frequently criticized by English language financial commentators representing the international investor community.

> The main complaints are: too much discretion in German standards allows firms to manage income using large 'silent reserves'; German reporting is too heavily influenced by tax avoidance strategies; and German standards lack detailed disclosures designed to satisfy the information needs of investors and financial analysts (Leuz & Verrecchia, 2000, p.95).

Such commentators applaud firms' decisions to adopt financial reporting standards more closely aligned with UK/US styles that are aimed at satisfying investors' demands for greater transparency. They argue that such reporting "improves measurement and produces accounting numbers that have higher information content and are more value-relevant and timelier than German GAAP" (Leuz & Verrecchia, 2000, pp. 97-98). However, Wilson warns that such moves towards new reporting systems entail entering new and unfamiliar territory:

> accepting global accounting standards ... [involves] embracing a vision of financial reporting that is not widely known or understood. It is a vision that sees fair value measurement as paramount, but historical costs, accruals and the realisation principle as less relevant. Under this vision, the determination of taxable income or realised profits has no place in financial reporting. Under this system, measuring income will rely heavily on changes in the fair value of net assets. Income will be reported in a single statement of financial performance that aggregates all accrual-based income with all value changes, whether realised or unrealised … it calls into question any links between financial reporting and the determination of tax liabilities (Wilson, 2002, p.23).

These changes to the external reporting systems of German firms may be accompanied by consequential changes in internal reporting. Here again, German traditions have been in marked contrast with those of the UK and US. In Germany, following the seminal contribution of Schmalenbach early in the 20th century, there has been a strict separation of financial accounting and cost accounting: one dealing with transaction-based payments and receipts; the other with costs and benefits (Christensen & Wagenhofer, 1997; Schildbach, 1997; Weber & Weiβenberger, 1997; Kloock & Shiller, 1997). The latter has been the realm of Controllers who provide a "service in management accounting and financial analyses for managers which will enable them to plan and control their operations according to agreed objectives ... Controllers are internal economic consultants (advisors) to all decision-makers and act in the role of a navigator towards the achievement of goals" (ICS, 2004). In the absence of a financial accounting system that could lay claim to 'representational faithfulness', German Controlling developed independently under much stronger influence by economic theory than was the case in the UK where: "Most British accountants have only a superficial awareness of economic theories and ideas" (Napier, 1996, p.450).

In contrast to this development of "Controlling", cost accounting developed into a broader "management accounting" in the USA from the 1920s onwards, and in the UK from the 1950s. In both countries management accountants, organized by professional associations, came to occupy senior managerial positions, and management accounting became a crucial producer of management information. However, Johnson & Kaplan (1987) argue that management accounting came to be dominated by financial accounting in the period after 1925 and, as a consequence, management accounting became irrelevant (or worse) to managers in American manufacturing industry. In their view, the management of US industry became preoccupied by the information generated in external financial reports and this came to delineate the relevant information for internal reporting. Johnson & Kaplan's (1987) thesis has been subject to some scepticism (e.g. Ezzamel, Hoskin & Macve, 1990; Hopper and Armstrong, 1991; Bhimani, 1993; Miller & O'Leary, 1993) and their view of US developments is not paralleled in the UK where financial accounting only came to have a strong influence on management accounting much later, in the 1960s and 1970s (Dugdale & Jones, 2003). However, by the 1980s management accounting in the UK might be characterized as dominated by financial accounting in the same way as the USA with which it shared similar financial accounting standards (e.g. in relation to stock), computer hardware and software (especially MRP systems) and transatlantic corporate and consultancy models of 'best practice'. This influence, however, may have weakened in recent years (Dugdale, Jones & Green, 2004). Overall, it seems likely that, traditionally, external financial reports have had much more salience for UK and US managers than their German counterparts. Thus the introduction of UK/US style external reporting may have a significant impact on internal reporting systems. Some have little doubt that it will:

> Conversion to IAS will challenge many existing business models. It will provide a unique opportunity for a company to re-engineer the way it looks at itself through its internal management reporting … Adopting IAS will also have an impact on many other areas of the business (such as key performance indicators and performance-related rewards) (Wilson, 2002, p.23).

These external and internal reporting systems interact with different styles of management. Ahrens (1999) identifies three crucial features of traditional German management. First, the emphasis on *functional differentiation* in which the production function is recognized as of high specialist expertise not amenable to close interrogation by management accountants. Second, relatively *centralized and detailed operational control* which relied upon concrete, often physical, information. Third, a *conception of management* that emphasized specific, specialist, technical knowledge and did not encompass the kind of abstract, generalist notions of management - particularly "people management" - common the UK and USA nor the management jargon through which such notions were expressed. Embedded in such culturally-specific formations, Ahrens identified differing German and British management accounting practices with respect to *relating finance to strategy*, and to *styles of accountability*. He concluded that, in Germany, Controllers were diffident about intervening in operational matters, deferred to technical specialist opinion, and saw "Controlling" as a task of planning and informing that was at arm's length from management decision making. Thus we might characterize traditional German management as *technically-oriented.*

In contrast, UK and US management might be characterized as *financially-oriented.* There is a heavy reliance on "managing by the numbers" (Ezzamel *et al.*, 1990) in which the accounting's financial numbers are according a privileged role in portraying organizational reality (Hines, 1988) and accountants occupy key positions in business organizations (Armstrong, 1987a, 1987b, 1993; Anderson, Edwards & Mathews, 1997). In the UK and USA this has led to the crucial importance of external reporting in the medium of financial accounting, and internal reporting in the medium of management accounting. Contrasting German traditions with those of the UK, Ahrens (1999) found significant differences in the criteria against which people were held accountable, and how this accountability was conducted.

## 3. Ways in which traditional German financial accounting diverges from the IFRS model

Traditional German financial accounting has been largely regulated by a highly codified company law with a strong underlying emphasis on capital maintenance and creditor protection. The focus has been on guarding against excessive dividend payments by the prudent calculation of income. Of the two main aims: "determination of a prudent distributable income and informing the reader about the financial statements … priority is given to the first" (Macharzina & Langer, 2004, pp. 250-1). Through the 20th century German industry was dominated by the 'Mittelstand' (private family companies) with capital generally provided by banks, and so accounting has been driven by the needs of creditors rather than shareholders. By contrast IFRS, heavily influenced by the Anglo-American tradition, is based on a capital-market orientation. It focuses more on a dynamic portrayal of a company thereby providing "more relevant performance measures for (investor) decision making" (Weiβenberger, Stahl & Vorstius, 2004, p.6). It may be argued that while profitability has been the central concern of users of UK and US accounting, financial security (the balance sheet) has been of greater significance to German users.

Secondly, in the UK and US accounting practices have largely developed independently from tax law, requiring complex reconciliations between the annual financial report and tax accounts. This has not been the case in Germany where expenses such as provisions, and incentives such as accelerated depreciation, may only be claimed for tax in the *Steuerbilanz* if the same treatment is adopted in the statutory annual report (*Handelsbilanz)*. The origin, in 1874, of the similarity of treatment was the "alleviation for merchants, who would not need to draw up an independent income statement for tax purposes" (Schneider, 1995, p.144).

A third general characteristic of traditional German accounting has been a relatively narrow and selective disclosure of information. Applying an index of financial disclosure to companies in 41 countries, La Porta, Lopez-del-Silanes, Schliefer & Vishny (1998) rank Germany 25th whereas the UK and US took places 4 and 11 respectively. Ball, Kothari & Robin (2000) found that German firms engage in more earnings management than firms in the US or the UK. Leuz & Wustemann report a legal norm which gave management the right not to answer any annual general meeting questions concerning the difference between book value and the fair value of company assets - the court ruled that 'hidden reserves are viewed as a means to protect against possible risks of insolvency" (2003, p.26). They also state that "the audit report [as distinct from the brief 'audit opinion' or *Bestätigungsvermerk*] is not available for common shareholders, not even at the general meeting"(Leuz & Wustemann, 2003, p.24). Overall, there is a lower level of disclosure of information by German financial reporting and since "a switch from German GAAP to either IAS or US GAAP is thought to represent a substantial increase in a firm's commitment to greater disclosure … [this] should evidence measurable economic benefits in the form of a lower information asymmetry component of the cost of capital" (Leuz & Verrecchia, 2000, p.92).

It is apparent that there is wide agreement that IFRS, taken as a whole, will result in a more transparent and decision-relevant exposure of the economic situation of a company than those traditional German practices that make "both the balance sheet as well as the income statement less informative" (Weiβenberger *et al*., 2004, p.4). Although German law has a 'true and fair' requirement implying attention to economic substance as well as legal form, there is not an 'override'; so an accounting treatment considered to present a 'true and fair picture' may not take precedence over individual specific legal requirements: "Company accounts have to be legal and correct according to the rules, which is by no means the same as true and fair" (Sheridan, 1995, p.289); though, if "circumstances result in the financial statements not showing a true and fair view, additional disclosures are required in the notes" ( Macharzina & Langer, 2004, p.250). Overall, "although the Fourth Directive has increased substantially the level of information disclosed (in continental Europe), it does not emphasise the principle of substance over form" (Naciri & Hoarau, 2000, p.237).

At the more detailed level, German financial accounting rules are determined by reference to the Commercial Code (*Handelsgesetzbuch*). Although there has already been considerable change over the recent past (partly attributable to the EU Directives and the establishment of the, largely advisory, German Accounting Standards Committee in 1998) the adoption of IFRS will lead to a large number of fundamental alterations. We identify, below, various ways in which German tradition prescribes different treatment from that which will be required under IFRS[2].

- Two *formats of income statement* are permitted in Germany. One is similar to the IFRS 'cost of sales' approach (except that some non-production overheads are included in cost

[2] These items are intended to be illustrative rather than to provide a comprehensive list of differences for the details of which readers should refer to publications such as Crampton, Dorofeyev, Kolb & Meyer-Hollatz (2001) and KPMG (2003).

of sales), but the more common 'total costs' format - the only format allowed until 1985 - classifies expenses according to their nature (e.g. wages, depreciation) rather than their function (e.g. manufacture, selling, administration) and does not show 'gross profit'. Two other differences of format are a greater freedom to isolate from income the effects of unusual events by treating them as extraordinary items, and the flexibility to net off similar items of income and expense. An example of a typical income statement is shown in the Appendix I.

- *Unrealized gains*. Only realized gains are recognized as part of income under German rules; and in order for revenue from a transaction to be recognized there is a requirement of written evidence of an arrangement.
- *Capitalization of interest paid.* Unlike IFRS, German rules do not permit 'general' borrowing costs to be capitalized under any circumstances; they may be capitalized only if the underlying liability was used directly to finance the production of a specified asset.
- *Business start-up and expansion expenses.* These may be capitalized under German rules but not under IFRS. However, once the business is operating, development expenses must be written off as they are incurred[3].
- *Purchased goodwill and other intangibles.* In Germany, due to provisions of tax law, goodwill is normally capitalized and amortized over 15 years, but companies may (in contrast to IFRS) write it off against reserves. There is no provision in German rules for goodwill 'impairment' reviews. Also internally generated assets such as software or brands may not be capitalized even if these have readily ascertainable market values.
- *Tangible assets.* In Germany, tangible assets may not be revalued upwards and depreciation is generally at the highest rate allowed for tax purposes rather than any attempt to reflect economic values. Leases are generally not capitalized (Macharzina & Langer, 2004, p.261). On the basis of tax law, items costing less than approximately €700 are not capitalized. Together with accelerated depreciation, this allows income smoothing since in good years asset expansion can occur and in subsequent bad years there are lower depreciation charges against revenue.
- *Stock valuation.* Under German rules stock values may include some general administration overheads and interest paid on borrowings. Because of its effect of lowering profits and therefore tax, the LIFO valuation method (not allowed under IFRS)

[3] This latter issue led, for instance, to a reconciling difference of €122 million between the Income Statement of BMW's 2002 IFRS Group Financial Statements and the 'internal' (German commercial code) Group Income Statement.

is commonly applied. Since stocks are valued at the lower of cost or replacement value, where stocks were bought in a foreign currency a subsequent change in exchange rates may lead to their value being written down. There is no provision for commodities held by mining companies or commodity brokers to value stocks at market values.

- *Debtors*. The value of receivables is discounted to present value unless they attract interest while unpaid.
- *Provisions*. Following the prudence concept, and tax laws, provisions are frequently as large as possible and are not discounted to present value. Any maintenance and repair expenditure incurred in the three months after year end is required to be accrued as a prior year expense. Furthermore, it is common for companies to build up discretionary provisions (hidden reserves) in good years and reverse them in bad years (Macharzina & Langer, 2004; Ball *et al*., 2000). It is a truism that understated profits in one year inevitably lead to overstated profits in some future year[4].
- *Pension liabilities*. Allowance is not made for future pay rises and the liability is discounted at 6% in line with tax rules rather than the market rate on corporate or government bonds, so the expense and balance sheet liability are less realistic.
- *Foreign currency translations*. If the effect is to reduce profit, or increase loss, foreign-denominated balances may be translated at rate prevailing at the time transactions rather than at the year end rate.
- *Unit of presentation*. Under German law financial statements must be presented in Euros while IFRS allows an enterprise to report its financial statements in a currency other than its measurement currency - for example, allowing a German company to present its statements in US dollars.

Later in the paper we will consider how some of these differences of financial accounting treatment may possibly influence the future development of German management accounting.

## 4. Fieldwork Methodology

Our discussion draws upon field research conducted in early 2004 involving investigations in three German manufacturing companies in Bavaria, and interviews with two German management consultants. The companies were selected not in order to produce a representative view of German companies but rather to provide a range of different organizational forms and practices to inform our discussion. Company A is a division of a German group of companies that was taken over by a US venture capital firm three years previously; Company B is a small family owned firm; and Company C is a large international business owned by a German family with head office in Germany. The company-based research had three elements. First, examination of the existing external and internal accounting documents, both those publicly available and those supplied on a confidential basis by the Controller; these were translated and sent to the researchers several weeks in advance of the field trips. Second, semi-structured interviews of about one and a half hours with four managers in each company who were able speak for, respectively, financial accounting, management accounting (Controlling), production and marketing (with the addition, in the case of Company C, of the British Financial Director of its UK subsidiary)[5]. The phrase “speak for” is used since we discovered that job titles such as “Production Manager” or “Sales Manager” seldom existed in these companies. Instead, corporate restructuring had produced “Business Unit Managers” responsible for a set of activities or functions including R&D, purchasing, production, marketing, quality, human resources, and so on. However, managers were selected in each company on the grounds that between them they had particular expertise in either production or marketing so that we could ensure that these issues were comprehensively. In this paper we will concentrate on the discussions of the Financial Accountants and Controllers. The interviews were supplemented by a factory tour in each visit, and usually informal lunchtime or evening “chats” as well. Both of these activities produced relaxed ‘off-the-record’ comments that helped to interpret the more formal responses. Third, follow-up emailing completed the process enabling us to seek clarification or gain missing information. In a parallel strand of research, we interviewed two German management consultants, one with a German firm and the other with an international organization. These individuals were asked to use their consultancy experience across a large number of firms to comment on our findings in the three case companies. The interviews were conducted by the two authors of this paper accompanied by a German-speaking research assistant[6]. The majority of the interviews were conducted in English with pauses for translation of difficult terms; but two were conducted almost entirely in German interspersed

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[4] The effects of this practice were famously apparent in Daimler-Benz’s reconciliations of German to US rules in the 1990s (see Nobes, 1997).
[5] Copies of the interview schedules can be obtained from the authors.

with summary interpretations of responses to each question. All interviews were tape-recorded for later analysis in both English and German[7].

The research is of an exploratory nature and based on a qualitative hermeneutic methodology aimed at generating understanding (*verstehen*) through interrogating the perceptions and interpretations of social actors (see Jones, 1992). The focus is upon the 'reflexive monitoring' (Giddens, 1990; Jones & Dugdale, 2001) of the experiences of participants in change in German manufacturing companies. This produces material that "brings the issues to life"[8]. It enables abstract notions such as 'globalization', 'international harmonization', 'best practice', and 'tradition' to be comprehended in concrete terms as they are variously apprehended by, and shape the actions of, particular individuals. And the way that social, economic, political, legal, technological and cultural contexts are seen as generating opportunities and constraints for this action. The strength of such a research method is that it facilitates a deep or 'rich' understanding of the phenomena under study. It enables respondents to shape the research process so that it is not dominated by the preconceptions of the researchers. It also uncovers social mechanisms that link phenomena together through a chain of events and thus supplies representations of causality. The limitation of the approach is that it cannot provide direct evidence of representativeness. There is no way of telling whether our observations are commonplace, widespread, typical or rare, particular, exceptional except through the evaluations of this issue made by our respondents. The research method uncovers *how* and *why* phenomena can be associated, and the goal is to discover diversity, to identify a range of different patterns of change. Questions about the *extent* and *distribution* of phenomena may be left to later quantitative researches that employ large-scale data collection methods. At present, faced with a very new, and largely unknown, phenomenon - the introduction of IFRS into German companies - we consider the exploratory advantages of qualitative method make it particularly appropriate for our research.

## 5. Preparing for change

Our fieldwork was carried in the early months of 2004. The forthcoming general introduction of IFRS in Germany, to be operational from 1 January 2005, was on the minds of the each of

[6] We are extremely grateful to our research assistant, Astrid Unterreieder of the University of Innsbruck, for her translation of company documents and interpretation (as well as general participation) at interviews. Without her excellent support this research would not have been possible.

[7] In the verbatim quotations that follow we ask readers to remember that they are, in nearly all cases, spoken in the respondent's second language, and so exact terminology and grammatical precision should not be expected.

the Financial Accountants, Controllers and management consultants be interviewed. For the management consultants the introduction of IFRS was an important part of their current consulting activities. The new IFRS system was seen as a solution to a significant weakness in the traditional German system of external reporting - that is, its orientation to creditor and taxation issues rather than to the reporting of the economic performance of the firm:

> It is a great problem in Germany and there are great deficiencies that financial accountants have not achieved to give practitioners any kind of mindset, or set of figures, by which they can gear an enterprise (Consultant, German firm).

For this reason managers have rarely used financial accounting as a main source of information for business decisions. This relative marginalization of financial accounting in management is reinforced by the organizational separation of financial and management accounting:

> In Germany usually you have two totally different or separated departments. You have a Controlling department and sometimes you have the cost accounting there ... and you have these Controllers, but they have nothing to do with the external accountants. So it is statutory reporting and tax reporting that will be done by accountants. And so that is also a problem in Germany (Consultant, international firm).

> In Germany there is a division between financial accounting and Controlling. The financial accountant prepares the yearly report for the company but the Controllers haven't anything to do with this. (Consultant, German firm).

The separation of personnel was matched by the separation of financial figures; those used by Controllers being distanced from those of the Financial Accountants:

> So that if you think about where the cost accounting came from, it came from - they need information about how to run a business and how to control efficiency and everything - because the statutory reporting in Germany was not able to do this and they had other purposes and goals (Consultant, German firm).

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[8] In the words of an anonymous *Accounting in Europe* referee.

However, the move to IFRS was seen as stimulating more interest in financial figures not only amongst owners and other ‘external’ users but also amongst managers. Overall, the consultants’ opinion was that IFRS was having a significant impact on the thinking of German companies of all types, and not only large, publicly-quoted corporations. In addition to technical concerns in moving from German GAAP to the new international standards there were also signs of a rethinking of the role and importance of financial accounting for businesses.

In Company A, a division within a wider group of German companies that had recently come under US ownership, preparations for IFRS were still in the “project” stage. Although the Financial Accountant could identify some changes that would result from adoption of IFRS - different calculation of the valuation of stock and buildings - he believed that these would make little material difference to the financial results. In any case, the project was being handled at group level and he expected it to be rolled out at that level first and not be implemented by the division until 2006-7. Even then this would only be for their external reporting formats, and the internal accounting would, he anticipated, remain unchanged.

In Company B, a small organization under family owner-management, external reporting was not an important management issue nor would a change to IFRS be required by German statute. Thus, changes in January 2005 would not directly affect the company. Nevertheless, the Chief Executive was interested in the progress of the IFRS system:

> I think in the long run you have to adapt yourself more and more to those standards and I think in 8–10 years everybody is going to be using this standard. I think there is a little bit of quarrelling between IAS and the other standard being used. They are fighting which system they want to use (Chief Executive, Company B).

This company, like many in Germany, had a close relationship with its bank, which was a subsidiary of a much larger “alliance” of banks that was listed in the USA and thus had to conform to US regulations. We wondered whether this would lead to the bank having an interest in Company B adopting an international financial accounting regime:

> They are not yet forcing us. On the other hand ... they have to have the IAS system totally adopted and of course it would be easier if the customers of the bank are according to this system and then they can adapt it easier. But as yet we are not forced.

Thus, in Company B, IFRS was not being actively pursued by the owner-manager but was a development that was anticipated to impact on the firm because of the generally changing financial information environment; and particularly the policies of the company's bank.

Company C, very much larger and with international operations but nevertheless family owned, was again not required to produce external reports for owners, but was committed to adopting IFRS on 1 January 2005. The current so-called "Annual Report" produced by the company was more of a public relations publicity document than statement of its economic performance. The Financial Accountant stated that it was designed to give away as little useful financial information as possible. It seemed curious therefore that the company should be so firm in its decision to adopt the new system and we asked what the reasons for this were:

> It is interest in anything new. There are no real reasons for it. We might want to be prepared, just in case, for anything that comes up. But there is nothing to hide. There are no real plans for IPO or anything like that (Financial accountant, Company C).

However, in very general terms the adoption of IFRS might create a good impression amongst the company's suppliers and bank.

In all three cases there was an anticipation of change towards IFRS even where this would not be required under German law. The move towards change might come from the owning Group, or from the company's bank, or from some vaguely stated interest in being ready for possible developments such as a take-over bid or a stock exchange floatation to fund major expansions. Whatever the impetus, it was clear that IFRS was seen as the coming thing. This confirms the view of Haller & Eierle that "a trend can be recognised, that provisions which were originally restricted to publicly traded companies will increasingly be expanded" (2004, p.43). The perception was that the days of traditional German financial accounting were numbered; in its place IFRS would offer more valid economic information.

**6. Anticipating the effects of change**

Both of the consultants we interviewed were busily preoccupied with advising companies on IFRS change which was an important part of the business of their agencies.

My opinion is that if you want to sell some kind of consultancy, you make a great deal with selling them figures. It is sad but it is like that. Figures out of the management accounting or the financial accounting. (Consultant, German firm).

*I am not sure I understand. When you are consulting what managers want to have is more financial information, more numbers, and that is really the leading edge of what you are selling?(Interviewer)*

Yes it is one of our leading edges that is true.

This perceived deficiency in German financial accounting was seen to derive partly from its development in relation to taxation requirements and partly from its consequent irrelevance to management information requirements and its separation from cost accounting and Controlling. The traditional German pattern had already begun to change due to international merger activity in the 1990s with US, UK and French companies buying medium-sized German firms:

And so it all changed - the total view of accounting - that is for sure. They had to change the German view on accounting for that reason ... You have to give people like shareholders a better and fair view on your accounting (Consultant, international firm).

This new "fair value" approach to informing shareholders might continue to remain distanced from the information supplied to managers since there had traditionally been little connection between the two forms of accounting. On the other hand the introduction of IFRS offered an opportunity to pause, take stock of accounting developments, and consider the possibilities of creating a unified or integrated accounting system covering both financial and management dimensions. For the consultant with the international firm, who had spent some years working in the USA, this was clearly the desired path and it was a major part of the business of his firm to develop integrated "solutions" for their clients. He had already seen some German companies go down this route:

So people and companies, especially the bigger ones, tend to harmonize their accounting because it doesn't make sense to have now IFRS and then your local GAAP - especially for tax purposes. And your internal [accounting] , you can't manage on the internal different numbers when you also have this IFRS number. So people try to harmonize and say "What I have now is right numbers, correct numbers" ... I think this will really change the situation especially in Germany with the internal and external views, there will be kind of harmonization especially for the bigger ones. Even maybe if they think about integrating two departments, I would say that this would be a huge impact on cost accounting so that instead of being a separate department there may be now also a department which supports the external reporting, delivering to data, for instance for project controlling or plant budgeting (Consultant, international firm).

The logic of this approach is that, following the primary harmonization with international financial accounting, there would be a secondary harmonization of financial and management accounting within the firm. Although this was an initiative being vigorously pursued by the international management consulting firm, there was some resistance:

You have sometimes to force them or you have to convince them. Especially this [example company] automotive supplier in Germany. They [managers] are really convinced that they can do this with these three different GAAPs - if you say internal [accounting] is also a kind of GAAP. And they don't like to harmonize. [But] I've seen a lot of other companies who are now in the process of going to IFRS, they say "That is our own standard and this will become our monthly reporting standard" ... Nothing else anymore. So they only have to do a local GAAP for tax purposes on an annual basis, that is it. So they do this kind of adjustments from the US GAAP to the German GAAP only once a year and I think that will be a trend I would say (Consultant, international firm).

The consultant in the German firm held similar views:

*Will it [adoption of IFRS] change the Controlling or management accounting side as well? (Interviewer).*

Yes, this is just the beginning of a great tide because very big companies like [named companies] are introducing IAS. Meanwhile we have smaller companies, one example I know is a company with 1,500 people and 2 million euros turnover which are already

> considering IAS. So this is a tide that will grow stronger and stronger (Consultant, German firm).

For these consultants, IFRS was a strong force affecting German financial accounting even in companies that were not statutorily required to adopt the framework and furthermore it would also increasingly affect the management accounting/Controlling practices of German firms.

None of the three companies we visited was required to adopt IFRS; two because they were privately owned and one because it was a division within a reporting unit. Nevertheless, all three were preparing to make some change to their reporting procedures in line with the new guidelines. In Companies A and B the changes were anticipated to affect only the external reporting system. In Company A (the Division) a project was about to be launched which would involve the Group guiding change but this would entail only the Financial Accountant and his staff and the Controller had no particular interest in it. In Company B (the small family-owned firm) the change was planned for a couple of years into the future and its impact was anticipated to be restricted to relationships with the bank. Neither company was preparing for widespread changes to their internal management information.

In Company C, however, more wide-ranging changes were already being anticipated. Under the traditional accounting system separate external and internal accounts were kept.

> What we are doing with the external reserves is they are trying to be quite close to the possibilities we have from a legal and especially tax point of view. That doesn't really show a realistic picture for management purposes. So for example if you have the right to make a special depreciation in Germany of about 50% for a building, you would have that in the external reporting. You would never show that in the management accounts, because it is an unrealistic picture (Financial Accountant, Company C).

This raised an issue we had met in UK companies about the circulation of two different, perhaps conflicting, sets of accounting information within a company. So we probed the availability of the information.

> *And you are not worried about the existence of two separate accounts for the company? (Interviewer)*

> Not as long as we can reconcile them (Financial Accountant).

> *That pushes the questions further, a lot of accountants think that they can handle two sets of accounts for a company, but they don't want other managers to see that.*
>
> No, that is an open book policy we have here at [Company C]. Everybody knows, well that is not the case.

Following IFRS, however, this dual accounting would be discontinued:

> Yes, so the main reason is for sure the efficiency because now we have two separate systems to collect the figures and all kinds of stuff. We will get rid of that. We will just have one system (Financial Accountant).

When we suggested that, in some firms, the move to IFRS was expected to result in the Financial Accounting and the Controlling functions working more closely together, he readily agreed:

> That will happen here too (Financial Accountant).
>
> *So will you two [i.e. Financial Accountant and Controller] be working much closer together in the future than you have been in the past? (Interviewer).*
>
> Absolutely. You might have to distinguish between a Business Unit Controller and a Central Controller. So the control of the management accounts is done by the Central Controllers and those who are working closer together with my people will consolidate the external accounting. Whereas other Controllers have different tasks and targets.

This view was shared by the (British) Financial Director of Company C's UK subsidiary.

> [At present] we use contribution margins, which is a straightforward sales less direct materials less direct labour. So that is changing next year when we change to IFRS ... From January 2005 the structure will be different and its going down the more traditional UK route and that is part of the basis of IFRS. So the traditional cost of sales method so you have the variable manufacturing costs and variable manufacturing

> overheads are above the line rather than below it. So we have a new accounting format for next year ... Well that is the major change that we face in the next year which brings German reporting more in line with UK reporting (Financial Director, UK subsidiary of Company C).
>
> *In many companies that would only be related to financial accounting but you are saying in your company it will affect your management figures - figures that are used by management as well? (Interviewer).*
>
> Yes because in Germany they are using the opportunity of the IFRS to align and bring together the Finance and Controlling functions whereby in Germany they are two very different functions historically, or have been.

This new alignment of financial and management accounting would be based on a single accounting format embedded in new computer systems:

> At the moment we have two [software brandname] applications we use; one for Controlling and one for Finance. Next year that is going to be consolidated into one under this new format. So it meets the requirements of IFRS and for Controlling (Financial Director).
>
> *So strategically they are going to use the IFRS to change the relationship between controlling and historic cost accounting? (Interviewer).*
>
> Yes it is just more to bring them together and to go from where at the moment as I said we have two different applications on [computer system] and so hence two different submissions. That will go to one from January, into one set of data that we send over and they [German parent company] will use it for financial and controlling functions.

Thus, in Company C, the adoption of IFRS in January 2005 was expected to influence the firm far more broadly than merely in its external reporting practices. The new system was seen as providing a strategic opportunity for a *technical* coordination of financial accounting and management accounting practice and this would be facilitated by new computing systems. In parallel with this, an *organizational* change was anticipated in which the previously loosely connected Financial Accounting department and the Controlling department would find themselves in closer working arrangements.

## 7. Prospects of IFRS increasing the importance of financial accounting

Our discussion of the adoption of IFRS in Germany has identified significant differences between this financial accounting system and traditional practices. For supporters of IFRS it offers an approach which is centred on "fair value" and which will thus produce information on the firm's true economic performance, which will be more useful to shareholders, because it has greater decision relevance (Haller & Eierle, 2004). The traditional German system had narrow concerns with (the avoidance of) taxation and the (prudent) calculation of income. Although these are clearly important matters for the company, they are not strongly relevant to the strategic or operational management of firms. For some supporters of IFRS, the new approach will change this, making external financial reporting more relevant to management needs:

> IFRSs are perceived to be accounting standards with a higher quality of decision-usefulness information than German rules … As financial accounting figures are also used for management information, a general application of IFRSs would provide (owner) managers with more relevant and reliable data for managing purposes than if traditional German rules were applied (Haller & Eierle, 2004, p.35).

Another objective of German firms in adopting IFRS, as found in the empirical study by Weiβenberger *et al*. (2004), was the integration of internal and external reporting systems. Although it was not a principal motivation *ex ante*, early adopters of international standards did rate it significantly more highly as a positive *ex post* outcome. The integration of accounting systems was advocated by the management consultants we interviewed and in one of our three case companies. The main elements of the rationale for this are that the adoption of IFRS:

- offers a superior form of economic information on business performance and now *could* be the basis for internal as well as external accounting information systems;
- represents a switch from a tax and statute orientation to a shareholder orientation and so *should* be of greater relevance and importance to Controllers and to managers more generally;
- enables integrated financial and management accounting systems that *should* be preferred on grounds of efficiency in data collection and processing. (This efficiency

argument has ominous parallels with the case made, in 1874, for similarity of treatment of tax accounting and stewardship/financial accounting, a compromise which did not serve German financial accounting well). And, finally

- *could* be harnessed to the integrative potential of modern business computing systems in operationalizing the new accounting regime.

The highlighting of "could" and "should" in these statements is intended to emphasize that we are not suggesting a direct causal connection between adoption of IFRS and the development of integrated financial and management accounting systems (in the sense that it is a necessary and sufficient condition). Rather, the introduction of IFRS presents managers with what Cohen, March & Olsen (1972) describe as a "choice opportunity"; a moment where various participants identify, perhaps unrelated, "problems" and "solutions" that may have lain dormant within the company for some time, but which can now become activated. Thus the adoption of IFRS may trigger other changes that are desired for many reasons - some of which may be longstanding and/or undisclosed. In the case of Company C this presented itself as a strategic opportunity to align financial and management accounting.

We detect among some of our German respondents something of the zeal of the convert in confronting this choice opportunity. Those who have long considered German financial reporting to be "deficient" are embracing IFRS with enthusiasm. Perceiving it to give a "better" or "fairer" view of the company, they argue that it should become the definitive view - shared externally and internally. In this way the "fair value" orientation of IFRS is given a privileged status as the definitive expression of corporate reality[9] (see Hines, 1988).

The enthusiasm of German financial accountants and consultants for more integrated accounting systems might also be related to the occupational and organizational potential that might be opened up. In the past the tax and statute oriented nature of financial accounting has also meant that the role of the financial accountant has been relatively peripheral in the German firm. The claim that financial accounting is more relevant to managing may, simultaneously, be a claim that the financial accountant should be regarded as a more central and important member of corporate management. Behind the expectation that Financial Accounting and Controlling departments will work more closely together there may be some tentative aspiration that Financial Accountants may displace Controllers as the prime providers of management information.

[9] In this, we suspect that our German respondents are more enthusiastic and less sceptical than their UK counterparts. For example, Rees & Chandler (2004) in their questionnaire survey found only 45% of UK

There seem to be other trends underway that already point to an increased importance of financial information in the management of manufacturing firms. In all three of our case companies, functional organizational structures (with separate departments of purchasing, production, marketing, and so on) had been replaced, since 2000/2001, with organizational forms based upon business units. The management consultants confirmed that this was a wider trend in German manufacturing and that they had come across numerous such examples in their consulting work. The key organizational feature of such business units was that the Unit Manager was responsible for a number of functions - purchasing, production, quality control, marketing, sometimes R&D, and sometimes with Controllers assigned to each unit. In our interviews, business unit managers reported to us that this, recent, organizational change had involved a fundamental shift in organizational culture. In place of the traditional German *technical* emphasis in management (see Ahrens, 1999) the modern approach was to stress the *entrepreneurial* nature of managing; to see each business unit as a kind of mini-business within the company. In place of technical evaluations, management control of these business units was on the basis of newly-introduced “key performance indicators” of which financial performance indicators were considered to be the most important. In these companies profit-oriented measures had become highly significant in the monitoring of managers. This was reinforced by the introduction, or extension, of management bonus “profit sharing systems” with between 10% and 50% of management salary (depending on the company, and the level in the organization) dependent on profit-oriented measures. Thus, from both an organizational and personal perspective, financial accounting had become more important to these German managers. Many of the managers we interviewed interpreted these changes as shifting the management of companies from German traditions to more “American” or “international” management styles.

For a number of reasons then, January 2005 may be regarded as a potential turning point in the development of German manufacturing management. One possibility is that Germany, with a new confidence in the credibility of the imported systems, will develop in a similar fashion to the US and UK in the 1980s in its reliance on financial accounting information. As financial accounting becomes more important to the company it may come to exert more influence, even to dominate, management accounting in the manner argued by Johnson & Kaplan (1987) arguments in relation to American manufacturing. The next section begins to

financial directors considered that the adoption of international accounting standards would result in “transparent” financial reporting and fewer than 40% that it would produce “relevant and reliable information”.

explore the possible impacts of IFRS on management accounting; what changes in German Controlling practices might we anticipate?

**8. Prospects of IFRS changing management accounting**

A distinctive feature of management accounting in German manufacturing companies is the use of the contribution margin. In internal reporting, the key income statement records budget and actual data in a format that may have three, four, or five levels of contribution margin; apparently five levels of contribution is the standard within the German cost accounting system taught at schools and universities. (An example is shown in Appendix II). It seems likely that the development of this contribution margin income statement produced by Controllers owes its origin partly to the inadequacies of the conventional financial accounting listing of expenses according to their nature (see Appendix I). If accounting systems are integrated, the international 'cost of sales' format showing gross profit may replace the Controlling's characteristically multi-layered format. For instance, Contribution Margin 1 (sales revenue less material costs and direct labour) that has apparently been useful to German managers over many years may disappear. Furthermore, in manufacturing operations, a cost of goods sold sub-total will be identified which will tie in with the valuation of finished goods. This inventory valuation will therefore change and no longer include general administration overheads and interest paid on borrowings. While these changes will reduce stock values, the outlawing of LIFO will work in the opposite direction; this move to FIFO will privilege the relevance of the balance sheet relative to measures of income.

Inventory valuations and measures of income will also be altered if another characteristically German Controlling practice - depreciation based on replacement cost - is jettisoned. German financial accounting depreciation, being tax driven and seen as misleading for managers, spawned the provision of alternative "economically realistic" depreciation charges in the Control accounts. These have been based on the replacement, rather than historical, cost of the assets being used up and, accordingly, are a better measure of sacrifice. So, in this respect, a move to fairer, but higher, IFRS-based financial accounting profits may be paralleled by management accounting profits becoming lower and less relevant.

The sophisticated practice of accounting for imputed, or notional, opportunity costs is also likely to be a casualty of a move to integrated systems. For example, notional interest like replacement cost depreciation, is an attempt to capture real (but not transactions based) opportunity costs. The imputed interest charges, which are in some firms capitalized into inventory valuations and influence pricing, reflect the difference between the historical transaction-based cost of output and the real, or necessary, economic cost. In one of our case companies, the cost of borrowing money to buy productive assets was treated as part of the production cost. Furthermore, the fact that this company, in common with many German firms, happened to fund their assets from family ownership and ploughed-back profits rather than borrowings, did not reduce their 'fair' opportunity cost. In an opposite direction, some German management accounts have conventionally isolated costs such as 'one-off' or discretionary donations from 'necessary expenditure' when measuring and reporting on performance. These practices may now disappear.

There will be less opportunity to artificially 'manage' earnings under the IFRS regime than exists under traditional financial accounting. The arbitrary writing off of low value assets will be prohibited, and provisions and accruals will have to better reflect economic reality. The extent to which this changes the management accounts prepared by Controllers will depend on how many supplementary calculations a firm has traditionally generated and on the extent to which the statutory accounts were seen to be manipulated. In some firms the reduction in extra, non-opaque Control information required will be less than in others. For those, generally smaller, firms that did not have supplementary management accounting but relied, for managerial purposes, on their financial accounts, the changes relating to depreciation, provisions, pension liabilities, extraordinary items, and generally fuller disclosure of information will lead to more realistic but more volatile patterns of reported profit and loss.

A more overarching, but less easily pinned down, shift relates to the perspective from which business performance is considered. While traditionally, German financial accounts have been drawn up with the tax assessor and creditors in mind, managers have had the freedom, in devising Control accounts, to provide themselves with a good reflection of the performance of the business from an inside managerial point of view. If this twin-track arrangement is dissolved owing to an integration of systems, the requirement to see the business from the perspective of actual or potential shareholders will influence management accounting. Perceived wisdom suggests that capital markets have a more myopic interest in 'residual figures' than managers who are more committed to the longer term returns to a broader set of stakeholders. We may expect internal Control reports, reinforced by performance related pay, to place more emphasis on 'proprietorship concept' measures such as 'return on equity' and earnings per share and less on 'entity concept' measures such as market share and 'return on total assets'. Also a shorter term perspective concentrates attention on total gains and losses, while managers are understandably more focused on ongoing results from core activities and thus inclined to isolate 'extraordinary items' and matters such as temporary fluctuations in exchange rates - this flexibility may decline with integration.

**9. Prospects for changing relationships between financial and management accounting**

There would be a strong element of irony if German manufacturing companies' adoption of IFRS were to lead to internal reporting/management accounting becoming dominated by external reporting/financial accounting since it was precisely this that Johnson & Kaplan (1987) held responsible for the decline of US manufacturing companies in relation to their international competitors - including Germany. It would also be at odds with the trend in the US and UK for greater, rather than less, distance between financial accounting and management accounting incorporating activity-based costing, balanced scorecard and other leading, non-financial performance measures. There are two aspects to the potential rise of financial accounting; first, the relevance and importance of financial reporting for management information within the firm; second, the influence of financial accounting on the practice of management accounting.

In the case of the USA, Johnson & Kaplan argued that reliance on financial accounting developed a remote management-at-a-distance approach that disassociated managers from operational realities. Further, under the domination of financial accounting, management accounting stagnated and thus became progressively less relevant to changing management needs. In the case of Germany, the prospects are for increasing credence being given to IFRS as the definitive portrayal of the economic realities of the company, and a deliberate reconstruction of management accounting so that it integrates with this form of financial accounting. Johnson & Kaplan argued that, in the USA, this led to management accounting becoming irrelevant to managers or, worse, providing them with misleading misinformation. In particular, critics of conventional management accounting cited the use of full absorption costing systems and variance analysis as resting on a spurious notion of "efficiency" based on "keep busy" attitudes and long-production runs even when this was for stock rather than to meet customer requirements. The outcome was sluggish and unresponsive organizations with long lead-times and poor customer due-date performance, choked with work-in-progress which was not relevant to current production schedules (Brimson, 1988).

In the case of the USA, the prescription for what was diagnosed as the failure of conventional management accounting was the introduction of new techniques such as "activity-based costing" (Cooper, 1988a, 1988b, 1989a, 1989b, 1989c; Cooper & Kaplan, 1988a, 1988b, 1992) and "balanced scorecard" (Kaplan & Norton, 1992). Although the Controllers in each of our case companies were aware of these techniques, they were not currently implemented nor was there any active consideration of introducing them. Nor were the introduction of such practices a significant part of the business of the management consultants. This would seem to indicate that, if German manufacturing is moving towards a more "American" or "international" mode of management accounting then it is likely to be of the "conventional" rather than the "new" forms proposed by US academic-consultants. All of this would run counter to those features that have been identified as characteristic of traditional German management that relied upon detailed, technical, operational knowledge as the basis of management control (Ahrens, 1999).

Thus, one scenario for the development of German manufacturing management is that it will increasingly privilege the picture of economic reality presented in external (IFRS) reports and place this at the centre of management information, and that management accounting will increasingly be subordinated to this financial accounting. This is the path that is favoured by our management consultants and in Company C. It promises the efficiency and certainty of an integrated accounting system but may also raise the spectre of German manufacturing succumbing to exactly the same disease that Johnson & Kaplan (1987) diagnosed in the USA.

However, this is by no means a certain outcome. The Johnson & Kaplan thesis has been criticized from many quarters. It has been argued that their evidence was based on their observations in a limited number of US manufacturing concerns (Anthony, 1989: Holzer & Norreklit, 1991). There have also been doubts raised about whether management accounting really did stagnate after the 1920s and alternative histories have been proposed (Ezzamel *et al.*, 1990; Bhimani, 1993; Miller and O'Leary, 1993). Even if we accept that management accounting had become "irrelevant" in US manufacturing in the 1970s and 1980s there may be other reasons for this; such as the changing relationship between capital and labour during the period (Hopper and Armstrong, 1991). Thus, there is some scepticism about the plausibility of the thesis even in relation to its original location - US manufacturing.

Just as significant for our concerns here, is the question of whether US experience, however identified, can be readily translated into developments in other countries. In our view, the evidence from the UK does not conform to the Johnson & Kaplan financial domination thesis (see Dugdale & Jones, 2003). Management accounting in the UK did not stagnate after 1925. Instead there were acrimonious debates between supporters of rival costing theories that were never ultimately resolved. In practice, costing techniques did not become standardized and settled until after the Second World War. Even then there **were** wide variations in the valuation of stock and work in progress that still troubled standard-setters in the 1970s. Nor do financial reporting requirements appear to be a dominant influence on practices for most of the period. The reasons advanced for introducing "modern" accounting methods of budgeting and standard costing (usually based on absorption costing) in the 1950s and 1960s were improved information for decision-making (especially pricing decisions) and for planning and control. Financial reporting requirements only became important influences on costing practices in the 1960s, stimulated by Inland Revenue's concerns and enshrined in UK GAAP (SSAP9) in 1975. Therefore, the existence of powerful market-oriented external reporting does not inevitably result in financial accounting domination.

The current position in the UK confirms this and discloses a loose-coupling of financial and management accounting (Dugdale, Jones & Green, 2004). In particular, and of prime relevance here, many UK manufacturing companies use contribution margin methods despite their conflict with the principles enshrined in financial reporting standards. Typically such companies either operate dual accounting systems, make year-end adjustments, make some compromises in their marginal costing methods, or ignore differences on the grounds that they are "immaterial". Whatever procedures are employed, it is clear that UK manufacturing companies do not necessarily exclude nor abandon contribution margin practices on the grounds of compliance with UK GAAP or IFRS. Similarly, German companies may continue to employ dual accounting systems with those of Controlling relying on traditional contribution margin statements - as are the intentions of  Companies A and B in our field research. Indeed it may be that some German firms that have attempted to implement integrated accounting systems may already be considering moving back to separate accounting systems (Weiβenberger, 2005).

## 10. Conclusion

German managers face a genuine and important choice at this juncture in the development of their information systems. One possibility, is that external and internal accounting systems will become are integrated in changes that will not only create financial accounting systems that differ fundamental from German traditions, but also change their management accounting systems in ways that would mark an equally significant departure from established Controlling practices. In turn this might entail a changed relationship between financial accounting and Controlling departments and, conceivably, enhance the occupational and organization position of financial accountants in relation to Controllers. However, another possibility is to operate dual accounting in much the same way as in the past with the adoption of IFRS being contained within the strictly limited terrain of external reporting. At present (this being written in January 2005) the possibilities are still open; no trend has been established.

We have identified some key areas where traditional practices of German Controlling are vulnerable to change under the influence of IFRS. These begin with the overall multi-layered contribution margin format of internal income statements. They encompass detailed practices such as depreciation based on replacement cost, and the use of imputed (opportunity) costs. They cover the ability of German companies to use devices that aid their "managing" of earnings. In the broadest sense they concern what is meant by business "performance", to whom this performance is directed, and how and over what time-period it is measured. We suggest that these are all fruitful areas for future research. German manufacturing management, and its accounting systems, may retain its distinctive "traditional" form (or some new variant of this). Or it may move, perhaps rapidly, to more "American", "international" or "globalized" management forms. Developments in German manufacturing management over the next few years will be a especially interesting territory for study of organizational change.

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**Appendix I:**
**Typical financial accounting income statement under German accounting rules with expenses classified by their nature (*Gesamtkostenverfahren)***

Sales
Increase/decrease in finished goods & WIP
Own work capitalised
Other operating income
Cost of materials
Personnel expenses
Depreciation
Other operating expenses
Income from participations
Income from other investments
Other interest and similar income
Amortization of fixed assets
Interest and similar expenses
Extraordinary income and expenses
Taxes on income
Other taxes
Net income/loss for the year.

## Appendix II:
## Typical internal income statement for a German manufacturing company

Gross sales
- Sales reduction
= Net sales
- Direct material costs
- Direct production costs
- Job order production
= *Contribution I*
- Fixed production costs
= *Contribution II*
- Special direct costs of distribution and marketing
- Distribution and marketing costs
= *Contribution III*
- Construction / R&D
- Order centre
- Quality assurance
= *Contribution IV*
- Administration
-/+ Production variances
-/+ Miscellaneous absorption areas
= *Contribution V* = Operating profit
-/+ Miscellaneous expenses/earnings
= EBIT
-/+ Financing balance
= EBT
% rate of return