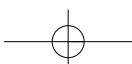
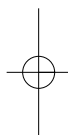
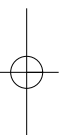


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The Association now has members in virtually all third level colleges that employ accounting and finance academics in both Northern Ireland and the Republic of Ireland. The annual membership fee is €35/£25.

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All submissions to the *Irish Accounting Review* should be made to either:

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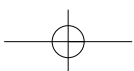
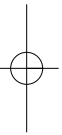
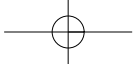
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REFORMING FINANCIAL ACCOUNTS IN THE PUBLIC SECTOR: THE CASE OF UNIVERSITIES

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ABSTRACT

The introduction of accrual accounting in the public sector has been one of the main business-like devices of New Public Management. Governments and researchers have been extremely interested in the merits of accrual accounting since it was first introduced. However, the debate on this reform is still ongoing. This paper is set in this context, and it explores the case of four Italian universities which have voluntarily adopted an accrual system in a context of legislative autonomy for financial accounting practices. The paper's aim is to study the process of adoption of accrual accounting, specifically investigating two elements: (1) what forces led these universities to adopt accrual accounting, and (2) what accounting framework has been used for their financial statements. In order to interpret the empirical evidence the study has made use of institutional theory and, in particular, more recent developments. The results reveal a complex picture in which three forces differently influence the adoption and implementation of accrual accounting: the individual action of 'champions' of accrual accounting, a favourable organisational context and the isomorphism of private organisations.

INTRODUCTION

In the last twenty years, there has been a general tendency in the public sector to reform traditional cash accounting by adopting business-like accrual accounting¹

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(see, for example, Jones, Scott, Kimbro and Ingram, 1985; Parker and Guthrie, 1990; Pallot, 1994; Mellett, 1997; Lapsley, 1998; Lapsley and Oldfield, 2001; Lye, Perera and Rahman, 2005). This change is part of New Public Management (NPM) where accounting plays a central role as an instrument to improve public sector performances (Hood, 1991, 1995). The debate on the transformation of financial accounting in the public sector, and in particular on the benefits of accrual versus cash accounting, is extensive and still open. Moreover, the shift from cash to accrual accounting raises several issues concerning both the difficulties of implementing new accounting practices and the benefits derived from the accrual system. The main identified difficulties are related to the recognition and evaluation of assets (Pallot, 1994). For instance, a major problem is the evaluation of resources of historical and cultural value, such as buildings, monuments and libraries, for which there is an ongoing debate about the recognition and the appropriate evaluation method (e.g. cost and fair value). Similar issues have been highlighted by authorities when determining the value of assets such as roads and infrastructures. These common problems have led international accounting associations (e.g. the International Federation of Accountants) to undertake projects to define accounting standards for public organisations (e.g. International Public Sector Accounting Standards - IPSAS). As far as the benefits are concerned, a first claimed advantage is the improvement of internal decision-making processes (see, for example, Ezzamel, Hyndman, Johnsen, Lapsley and Pallot, 2005; Mack and Ryan, 2006). In particular, adopters suggest the fairer picture of economic results (including asset depreciations and amortisations), and the addition of a long-term perspective on organisational resources and debt as being beneficial. A second benefit is an enhanced external accountability. Many researchers have explored this issue, often highlighting a low 'external use' of the annual reports, where the main users remain governments and auditors (Mayston, 1992; Jones, 1992; Ryan, 1998; Jones and Pendlebury, 2004; Barton, 2005).

This shift to accrual accounting also impacts on universities: organisations that are facing continuous challenges concerning accountability and results as part of a wider process for reforming higher education. The earliest and richest stream of research on this topic focused on the process of adoption, examining the external and internal factors that influence the endorsement of accrual accounting by universities (Gray and Haslam, 1990; Cameron and Guthrie, 1993; Pallot, 1994). Gray and Haslam (1990) examined the interaction between the environment and the organisation, recognising that reporting is driven by policy prescription rather than by user demand. They also highlighted a response of university reports to an 'unstable environment' by moving towards more focused reports centred upon the language of finance. Cameron and Guthrie (1993) extended the study by more specifically analysing environmental factors (internal and external) that could influence university annual reporting. Their conclusions (p. 8) showed little evidence of external influences (in particular regulations) and a growing tendency to have more 'commercially oriented reports' as a response to a 'voluntary act' of the studied university. Two recent contributions have revitalised the debate by analysing the adoption, implementation and use of accrual accounting (Venieris and Cohen, 2004; Skærbæk, 2005). Venieris

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and Cohen (2004, p. 200) examined the 'odyssey of introducing accrual accounting and management accounting' in Greek public universities, and provided evidence of several unsuccessful implementations. Skærbæk (2005) also presented a controversial picture in which accrual accounting appears to be a device that is used to conform to the external environment. These contributions have paid marginal attention to the structure of the accounting system and the framework of annual reports, and have neglected the *output*. An interesting contribution which tried to fill this gap is the study of Flemish universities by Christiaens and De Wielemaker (2003) using the universities' annual accounts as a basis for their analysis.

While recognising the merits of these previous studies, this paper aims at analysing the voluntary adoption of accrual accounting by four Italian universities through a combined methodology, which has recently been claimed as beneficial for accounting studies (Guthrie and Abeysekera, 2006). We have used a content analysis of the annual reports together with semi-structured interviews. The case studies represent a distinctive situation, as the four universities, two public and two private non-profit, voluntarily adopted accrual accounting. Italian regulations do not provide precise rules on the annual financial reports, and the universities are given autonomy to undertake different approaches. The exceptional situation of the four universities which moved to accrual accounting is interpreted from an institutional perspective, analysing the influence of environmental forces (DiMaggio and Powell, 1983), but conceding the importance of the organisational ecology and individual action (Covaleski and Dirsmith, 1988).

This research has two specific objectives: (1) to detect why the universities studied here adopted accrual accounting and (2) to analyse the structure and contents of the annual reports that show the influence of institutional forces. The paper is organised into five sections: first a brief analysis of the Italian higher education context is illustrated; the research is then explained; the third section describes the theoretical framework that was adopted; the fourth section shows the results; and the conclusions are presented in the last section.

RESEARCH APPROACH

The exploration of the adoption of accrual accounting by Italian universities was carried out using a mixed methodology which combines content analysis and semi-structured interviews. The research was divided into three steps: (1) preliminary semi-structured interviews to investigate the reasons behind the adoption of accrual accounting, (2) a content analysis of the annual reports and (3) semi-structured interviews to triangulate the findings obtained from the content analysis. This choice was suggested by previous research into accounting narrative which highlighted the benefits of combining content analysis with other research methodologies that do not share the same methodological weaknesses. Some studies have examined the advantages of carrying out content analysis with semi-structured interviews (Abeysekera and Guthrie, 2004; Guthrie, Petty, Yongvanich and Ricceri, 2004; Haigh, Carlin and Guthrie, 2005). This combination has allowed

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the authors to have further insights into the differences among accounting reports and to speculate upon their evolution and disclosure. The research was carried out in four universities, two public (PUB1 and PUB2) and two private non-profit institutions (NP1 and NP2). The selection of the two public organisations was straightforward as they are the only public institutions that have adopted the accrual accounting. The non-profit universities were selected on the basis of their accounting history and size. Table 1 reports the main characteristics of the four universities involved in the study.

The semi-structured interviews were carried out face-to-face with key informants in the four organisations and they, on average, lasted one hour in phase 1 and forty minutes in phase 3; several phone interviews were also made during the research to integrate and validate the previous findings. Table 2 shows the informants in each university.

The content analysis refers to the categories of the accounting framework adopted by private companies in Italy, which was the endorsed rationale for all

TABLE 1: MAIN CHARACTERISTICS OF THE UNIVERSITIES INVOLVED IN THE STUDY

University	Number of Students	Total Income (Million Euros)
PUB1	<15,000	<250
PUB2	<15,000	<250
NPI	25,000–50,000	500–1,000
NP2	<15,000	<250

TABLE 2: PEOPLE INTERVIEWED IN THE CASE STUDIES

University	Designation	Wider role in the accounting innovation
PUB1	Administrative director	Initiator
	Accounting officer	Implementer and recipient
	Head of accounting	Implementer and recipient
PUB2	Administrative director	Initiator
	Head of accounting	Recipient
	Accounting officer	Recipient
NPI	Administrative director	Recipient
	Member of the academic board	Recipient
	Head of accounting	Implementer and recipient
	Accounting officer	Recipient
NP2	Member of the evaluation committee	Recipient
	Administrative director	Implementer
	Accounting officer	Recipient

Note: Initiators indicate people who initiate the introduction of accrual accounting; implementers are people in charge of the actual implementation; recipients are users of the system.

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the universities involved in this study (Italian Civil Code, articles 2423–2427). Italian principles include four documents: the management report, the balance sheet, the income statement(s) and the notes. The management report was studied observing the presence and balance of quantitative and qualitative information, which reflects the universities' use of language (Gray and Haslam, 1990) in the document presentation. The balance sheet and the income statement were examined considering their format and structure, the included items, and the recognition and measurement principles. Research began in 2003 with the preliminary interviews and concluded in 2007 after the follow-up phone interviews. The analysis of the financial statements refers to 2004; no major changes were revealed in the 2005 and 2006 reports.

CONCEPTUAL FRAMEWORK

The endorsement of accrual principles by the four Italian universities shows a distinctive situation: in a context of complete autonomy, these organisations adopted accrual accounting and thus did not conform to the 'traditional', widespread practice that is cash accounting. The phenomenon is analysed from an institutional perspective, drawing on some more recent developments which recognise an intertwined role of self interests, organisational power and the wider social context forces to 'actively invent and then articulate institutionalized expectations regarding organizational policies and procedures' (Covaleski and Dirsmith, 1988, p. 562; see also Covaleski, Dirsmith and Samuel, 1996; Dacin, 1997).

This section reviews the institutional forces which may suggest answers to the research questions: (1) which forces played a role in the decision to adopt accrual accounting, (2) which model was adopted and (3) why. In discussing these elements we refer to the institutional setting and distinguish three different realms (Carpenter and Feroz, 2001): (1) the wider environment, (2) the organisational environment and (3) individuals.

The Wider Environment

This first realm refers to institutional contributions which emerged in the late 1970s and early 1980s. These theories developed in reaction to prevailing conceptions of organisations as bounded, relatively autonomous, rational actors. The institutional theory stresses social construction, as individuals and organisations make sense of their everyday purpose in the context of their own *wider social environment*. The main themes on which the theory is based are summarised by Scott and Meyer (1994) as follows: (1) the visible structures and routines that make up organisations are a direct reflection on, and the effects of, rules and structures built into (or institutionalised within) the wider environment; (2) the dependence of organisations on the patterns built up in wider environments – rather than on a purely internal technical and functional logic – produces organisational forms that

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are often rather loosely integrated (or decoupled) structures; (3) the environmental patterns that drive organisational routines through linkages and effects go beyond simple direct control; and (4) the environmental pattern that creates and changes organisations can be described as rationalised and rationalising (Scott and Meyer, 1994, pp. 2-3).

Institutional theory interprets organisational behaviour as a response to external pressures, which force institutions to adopt structures and procedures that are socially widespread and accepted. In this perspective, the organisation as a whole is expected to respond homogeneously. This process is described as isomorphism by institutional theorists: 'a constraining process that forces one unit in a population to resemble other units that face the same set of environmental conditions' (DiMaggio and Powell, 1983, p. 149). This process of legitimation that takes place is known as 'institutional isomorphism' (Meyer and Rowan, 1977; Meyer and Scott, 1992; DiMaggio and Powell, 1983). This is the process by which organisations strive for similarity. DiMaggio and Powell (1983) identify three such processes: coercive, mimetic and normative. The first of these stems from political influence and the problem of legitimacy. Coercive isomorphism can result from formal and informal pressures exerted on organisations, including a government mandate. Mimetic isomorphism results from organisations that adopt standard responses to uncertainty. Normative isomorphism is associated with 'professionalisation'. While DiMaggio and Powell (1983) distinguish between these three strands of isomorphism, they acknowledge that these elements intermingle in empirical settings. In this study, the wider environment is the set of norms and available accounting frameworks that were presented in the research context.

The Organisational Environment

The institutional perspective presented above has been adopted in several studies into public sector changes and, though often signalling heterogeneity in the organisational response, not all the organisations in the same institutional environment respond in the same way. These situations have led some authors to complement the institutional theory with other perspectives that recognise the role of power and self-interest of the organisational actors. Covalleski and Dirsmith dealt with these issues in their study; they recognised that the accounting choice - the budget in their case - 'represents the positions of the various interest groups concerned with generating resources supplied to the organisation by society and with allocating these resources to the various subunits within the organisation' (1988, p. 566). Power and self-interest are not however seen as antagonistic by institutional theorists. For example, DiMaggio (1988) illustrated their complementarity while distinguishing institutionalisation as an outcome and as a process. Institutionalisation, as an outcome, places organisational practices and characteristics beyond the reach of interests and politics. Expectations of acceptable practices exist in a given environment, and organisations must passively conform to them to maintain legitimacy. Institutionalisation as a process instead

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is more political and it reflects the relative power of organised interests and the actors who mobilise around them.

The mobilisation of power was interestingly depicted by Hardy (1996), who showed four modes in which it can emerge: power over resources; power over decision-making; power over meaning; and power of the system. The first element, power over resources, refers to where actors deploy (or restrict) key resources to modify the behaviour of others. Power over decision-making processes means exerting power over subordinates' participation in decision-making. Power over meaning involves influencing actors' perceptions, cognitions and/or preferences so that they accept stability or change (here accounting). Finally, power of the systems refers to the existing, prevalent organisational values, cultures and structure. In relation to the organisational realm, Hardy's conceptualisation of power highlights the need to consider two elements that are relevant in this study to analyse change or stability: the governance model, and the shift in value and culture surrounding the university.

The governance model of Italian universities can be viewed in the context of four main roles: the academic board, which is composed of elected academics; the executive board, in which both academics and external stakeholders are represented (e.g. students, local government actors, industry representatives and chambers of commerce); the rector, the leading governor of the university who is elected by the academics; and finally the administrative director, who is usually appointed by the executive board on a proposal made by the rector. These four actors have different roles and power, and they can significantly influence the accounting decision to change (or not) the accounting system. The second element refers to the influence of changes (or stability) in the values and structure of an organisation. Other studies have shown how the search for organisational efficiency (e.g. Roberts and Greenwood, 1997; Bansal and Bogner, 2002) and major reorganisations (Leblebici, Salancik, Copay and King, 1991; Avgerou, 2000; Arnaboldi and Lapsley, 2004) can implicate, or justify, the adoption of new accounting and managerial techniques.

Individuals

The role of individuals has been recognised by several authors as influential in the process of institutionalisation of new accounting and managerial practices (e.g. Covaleski et al., 1996; Dacin, 1997; Burns, 2000; Arnaboldi and Lapsley, 2003; Brown, Booth and Giacobbe, 2004). The role of the key actors is closely intertwined with the previously presented concept of power: new ideas remain relegated unless the initiator and the implementer are assigned with considerable power. In particular, firstly, they need financial resources to undertake and deploy the project; secondly, their power over subordinates' participation in decision making may enhance participation in change or stability; finally, the support of other organisational key actors may give meaning to the change by catalysing efforts and attention. This specific issue has been analysed by

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Ribeiro and Scapens (2006), who set individuals and power within a wider institutional perspective:

Strategic actors, we suggest, propose representations and deploy strategies that are framed by the existing configuration of the circuits of power (e.g. the existing rules, distributions of resources, and available control devices) (Clegg, 1989), and they may also attempt to promote changes in those configurations. These strategies may in turn lead to new arrangements being introduced in individual organisations. Key organisational decision-makers – the actors responsible for, and able to dispose of, organisational resources – may accept solutions proposed by the enrolling actors; but they could also reject them (Ribeiro and Scapens, 2006, p. 99).

The authors highlight three important features in their study: first, the importance of key individuals as initiators in the process of change; second, their dependence on the context which surrounds them, as their action is encouraged or hampered by other institutional forces; and third, the attitude to enrol new 'champions' to effectively lead the change.

In this study there are two key strategic actors who may influence the process of adoption of accrual accounting: the initiator, referring to the person who initially suggests adopting this technique; and the implementer, intended here as the leading actor in guiding the implementation.

RESEARCH CONTEXT: THE WIDER ENVIRONMENT

In Italy, there are two different types of universities, namely public and private, which are regulated – in many areas – by different norms. As far as accounting norms are concerned, throughout the twentieth century, the effects on the two different types of universities will be discussed accordingly. While private universities have always been traditionally free to decide on their accounting procedures, public universities have been subjected, since the 1980s, to different, specific directives provided by the Ministry of Education about the content and the form of accounting reports. A first indication was a decree in 1982 (Decree of the President of the Republic, 4 March 1982, n. 371), which established a common reporting scheme for public universities, and provided a general indication about the adoption of cash accounting.

The situation changed in 1989, when a specific law (D.lgs 168/1989, 9 May 1989, n. 189 – article 7) was set up for the university sector as a whole, which included both private and public universities. With this law the central government stated the autonomy of universities (both public and private), and allowed each institution to set up their own criteria and structures for the annual accounts. Private universities in fact already had autonomy in this field, so the impact of the 1989 decree was rather limited. The main effect was that, for the first time, a national law recognised the existence of a *unique university system*, in which both public and private institutions operate. While previously

TABLE 3: THE ACCOUNTING SYSTEMS IN ITALIAN UNIVERSITIES (2005)

	Public Universities	Private Non-Profit Universities	Total
Accrual accounting	2 (3%)	9 (64%)	11 (14%)
Cash accounting	62 (97%)	5 (36%)	67 (86%)
Total	64	14	78

Source: Ministry of Education (MIUR) (2005).

the annual reports of public universities were drafted using a cash accounting method, this law offered the possibility of adopting different solutions, such as accrual accounting or intermediate approaches. The roots of the public sector in cash accounting led many universities to maintain a cash system, but some institutions voluntarily decided to shift to accrual accounting. Among the public universities, only two organisations actually transformed their system, while among the private non-profit institutions nine out of 14 used an accrual system – some of them already using it prior to 2005 (see Table 3).

Without affecting the 1989 law, the Ministry of Education and the Ministry of Treasury enacted a decree (decree, 5 December 2000) that obliges public universities to provide a yearly report on incomes and expenses, homogeneously defined for each university. Universities may (or may not) continue to maintain the structure of their annual reports but the decree imposes a further task of delivering the document to the central government. The homogenous scheme required by the decree actually forced universities to re-classify their reports according to a cash basis. However, the decree involved only public universities and it again produced a separation in the legislative framework between public and private universities – the latter were not required to submit their report in coherence with the new homogenous scheme. Finally, in 2007 (D.M. 76/2007, 1 March 2007) came a reform in which the Ministry of Education also required private universities to adhere to the homogenous classification of their reports. However there was a significant change because the Ministry defined two different schemes to report data to the ministries: one for universities that have adopted cash accounting and one for universities that have adopted accrual accounting. In this way, each autonomous choice made by universities concerning accounting procedures is respected and the objective is, in the medium-term, to allow each university to report its accounting information coherently with its accounting system, without forcing universities to adopt accrual accounting.

RESULTS: ADOPTION AND OUTCOME

The findings of this study are presented in two main parts, concerning (1) the adoption of accrual accounting and (2) the outcome (financial reports). The first

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part refers to the first research question (why did these universities adopt accrual accounting?). The second part shifts attention from the process to the outcome, presenting the comparison of the accounts published by the four universities. The third part concludes with some insights into the use of data, highlighting different attitudes and paying attention to the various documents, which have voluntarily been implemented.

The Adoption

The previous section showed that the *wider environment* provides autonomy, so that the universities may choose their accounting systems. In this setting, the four studied universities decided to endorse accrual accounting, in contrast with the prevailing choice of all the other institutions in Italy. This distinctive picture suggests a complex situation in which the elements of the wider context intermingle with the other two realms identified in the conceptual perspective: the organisational environment and key individuals. Drawing on this pluralistic dialogue, the four following sections present the process of adoption for the four cases and highlight their *organisational context* (in particular the governance model, values and major changes) and the role of *key individuals* (initiators and

TABLE 4: THE MAIN ATTRIBUTES OF THE ORGANISATIONAL REALM

University	PUB1	PUB2	NP1	NP2
Foundation	Early 1960s	Early 1960s	Early 1900s	Early 1920s
Number of university campuses	5	1	5	1
Geographical position of the campus	North	Centre	North and Centre	North
Teaching – research fields	Cognitive Sciences, Economics, Engineering, Philosophy, Law, Science and Sociology	Architecture, Medicine, Law, Science and Technology	Agriculture, Economics, Law, Arts, Medicine, Finance, Social Science, Modern Languages, Psychology	Economics, Business and Law
Accounting history – practising accrual accounting since	Mid-1990s	Early 2000s	Practised accrual accounting when founded Abandoned in 1980s Endorsed again in early 1990s	Since foundation
Organisational change	None	Early 2000s	During the 1980s	None

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TABLE 5: KEY INDIVIDUALS IN THE PROCESS OF ADOPTION

University	PUB1	PUB2	NPI	NP2
Initiator	Administrative director	Administrative director and rector	Academic board	Founders
Current implementation system	Internal staff and external consultants	Internal staff and external consultants	External expert, enrolled at the beginning	Internal chief financial officer

implementers). Tables 4 and 5 summarise the main elements that have been dealt with.

PUB1

The first public university studied – PUB1 – is located in the north-east of Italy and belongs to a province with above-average autonomy. There are only two autonomous provinces in Italy (out of 107), and these have been assigned greater powers by the central government for geographical and historical reasons. The most important deviation from the norm is their ability to establish new laws. PUB1 was founded in the early 1960s by the president of this autonomous province and since the beginning its history has been characterised by a close relationship with the community and the local authorities. This relationship is reflected in the governance model, above all in the executive board, which includes three members of the government of the autonomous province and nine members of other local entities. Furthermore, unlike the majority of public universities in Italy, the executive board has significant power in influencing decision-making processes and in directing the strategic plan of the university. This situation is due on one hand to the history of PUB1 (its foundation above all), but also to the fact that the power of the autonomous province on the university resources is very high (Hardy, 1996). A 1993 provincial law established a privileged link between the university and the authorities, through which the province has the power to assign, yearly, financial resources to action plans that are considered of benefit to the community. Another important element of the PUB1 organisational environment is that a major reorganisation was undertaken in the second half of the 1990s. This was a large project aimed at increasing the autonomy of departments and faculties, and improving the technical and administrative infrastructure to support these centres. The project was divided into four phases and finally ended in 2003. This major revision involved many areas: the organisational structure, information systems, planning and budgeting, and front line support services (in particular student support).

The adoption of accrual accounting was set in this context, in which the desire of PUB1 to appear modern was a priority for both the organisation members and the involved parties, the autonomous province in particular.

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However, the specific choice of the accounting systems lies in an *individual realm*: the director had a strong belief in accrual accounting, as the following comment shows:

Accrual accounting is the best system for our institution and it was essential to achieve the goals of the reorganisation. Accrual accounts allows costs to be determined instead of cash outflows, which allows resources, responsibilities and targets to be associated (Administrative Director at PUB1).

He considered accrual accounting to be the most appropriate instrument to have more refined information on 'revenues and costs', which were seen as prerequisites to increasing the autonomy of the faculties and departments while maintaining their accountability. This situation reflects a common issue for those who have adopted accrual accounting in the public sector: financial accounting is viewed more as a tool for managers than for external accountability. Unlike situations elsewhere, financial accounting in this case was not considered a substitute for management and cost accounting, which had been entirely renovated during the previous reorganisation; the revision of the financial statements was instead seen as essential to complete the innovation path. The implementation of the new system started in 1997 and ended in 1999 and it involved external consultants and internal personnel. The academic board defined a coordination committee which was formed by a professor, delegated by the rector, as the general supervisor; the administrative director as the project leader; and technical and administrative staff (mainly accounting and information systems staff).

The composition of the coordination committee shows that the involvement of staff, including professors and administrative officers, was considered important; the intervention was straightforward and no opposition was witnessed during the interviews. This again is a sign of the role of the 'champion' - the administrative director - using power over meaning (Hardy, 1996): he influenced the actors' perceptions and cognitions within the university to accept accrual accounting as the perfect instrument to achieve modernisation.

PUB2

The second public university examined - PUB2 - is a very small university located in central Italy in a rather remote city. It is an example of a traditional university in which there are two governing bodies (academic senate and administrative council) which act in a very collegial way. Like many small universities in Italy, the most important source of financing is the state; and this explains why PUB2 directed a great deal of attention to the central government's directives and rules in the sector. However, at the same time, PUB2 wanted 'its own place' in the university system, by innovating its practices in all the activities of the universities: teaching, research and support services.

Innovation in the accounting system was part of this modernisation process, decided on by the university bodies in an attempt to gain higher recognition

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within the university system in Italy. Even though this objective was clearly stated by the governing bodies, they had no specific idea on how to achieve this modernisation. They decided to enrol a new administrative director, who previously worked in the private sector, to innovate the support services and procedures. This choice clearly shows a process of mimicry of the business sector; the governing bodies did not have a clear idea of what they wanted to achieve, but they were convinced that the most efficient solutions could be found in the private sector. The specific choice of introducing accrual accounting was taken by the newly employed administrative director in 2001. A few months after his arrival at PUB2 he signalled the need to change the financial accounting system, as a means of innovating managerial practices:

The existing financial accounting was useless for efficient managing purposes, which instead was a priority of my mandate (past director of PUB2).

He considered accrual accounting as an answer to two main problems: (1) the necessity to attract more resources (the financial analysis showed a gap of about 6 per cent of the total budget) and (2) the re-organisation of the university in order to better trace how the resources were used. The governing bodies agreed with the necessity to solve these two problems, and they posed it as a priority. In this context, the starting point was that the director decided to share his ideas about the necessity of new accounting procedures with the rector and to set up a strong political committee for the process, and then he actively involved the staff in the operative work. After this, the new management also believed that more transparency in analysing the economic activity of the university should be a priority. For this reason, and on the basis of the director's solicitations, they decided to change the entire structure of the accounting process, moving towards the adoption of an accrual system. In this way, they created a new approach, which also permitted the responsibility centres and their objectives to be identified.

Practical implementation was delegated to a committee composed of internal staff and external consultants. Among the important issues to correctly understand the main reasons behind the change in accounting procedures, it is important to point out that the rector and the director decided to immediately clarify that one of the main objectives of accrual accounting was to create an innovative way of distributing resources among the departments. The governing bodies accepted the idea even though a complete and clear model for utilising the information derived from accrual accounting was not developed in the first stage. Only later was a rector's delegate charged with creating a new system within the accrual accounting framework to link objectives and resources; the accruals permitted the resource flows and related performance to be analysed more transparently.

From an examination of the PUB2 case study through the use of an institutional theory approach to interpret this university's experience, it can be stated that the key issue at PUB2 was the desire to introduce some innovation into a traditional (and completely non-innovative) context. In the governing body's mind, accounting procedures represented an effective way of introducing new ideas and objectives.

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NP1

NP1 is a non-profit university which was established by a foundation. Its main campus is located in the northern part of Italy, but it also has another important campus in Rome where there is the faculty of medicine. Considering the total number of students, NP1 can be defined as a medium-large university, with more than 40,000 students. The foundation which established the university is the owner of the assets and it also plays a prominent role in financing some particular activities.

A brief history of this institution's accounting experience is useful in understanding the decision to change to accrual accounting.

Until 1976, NP1 had not published its own separate annual report, but its financial results were included in the foundation's report. This decision was mainly driven by financing reasons, in particular the need to cross-subsidise the medicine faculty. The foundation had opted for an accrual accounting system. In 1976 the foundation, which includes both the university and a hospital, decided to publish two separate accounts, to deal with the new requirements of the Italian government, which involved presenting financial data for the hospital on a cash basis. Although NP1 initially maintained the accrual basis, in the middle of the 1980s they decided to move to cash accounting. The accounting change, however, created several problems concerning the adjustments that were necessary to the information systems as these were only partially updated.

At the beginning of the 1990s, a specific event occurred: the election of new academic and executive boards. This occasion represented a break with the past, as the new boards recognised the difficulties and the lack of transparency of their 'hybrid' accounting system. In particular, a very authoritative member of both boards, who was a manager in important private companies, suggested undertaking a major revision of the accounting system, and moving towards more transparent procedures, 'which should be inspired by the accounting habits of the private sector'. The executive board agreed with the views expressed by this influential member - the *initiator* - and the decision was taken and first pursued with the enrolment of a new financial manager, whose priority was to revise the accounting system.

With the aim of coherently following the board's suggestion, it was decided to look for a new financial manager from the business sector. Consequently, the industrial background of this new manager reflects the desire to mimic the business sector. The 'champion' of financial accounting immediately suggested moving to accrual accounting as an answer to several issues: liquidity, economic results, and asset and liability appraisal. Furthermore, the system appeared to be suitable to enhance external accountability, which was the main issue for the university board.

Without the strong commitment provided by the boards, more specifically by their most authoritative and influential members, I think it would have been impossible to change the dramatically confused accounting system which was operating when I was hired (past financial director of NP1).

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Among the main objectives for the accounting system suggested by the boards was that of reporting tangible and intangible assets. Moreover, NP1 also had assets with a strong cultural and historical value (antiquities, collections, monuments, etc.). In addition, as NP1 is the oldest university of the four universities studied, it is understandable that accounting procedures which capitalised heritage assets already existed there. Other recent universities, instead, tend not to capitalise their library stocks, for example, but rather expense them given that the asset value is not sufficiently high to justify the more complicated administration of the library stocks as an asset.

NP2

NP2 is a well-known non-profit university located in the north-west of Italy. Since its foundation at the beginning of the 1900s, the university has gained an international reputation, and its business school is ranked as one of the most important in Italy. This image of efficiency and high quality of teaching is a major aim of the university, which relies on students' fees as a major source of financing.

Both the documents and interviews showed that the executive board plays a major role in the strategic and operational decisions of the university. The executive board is composed of nineteen members: ten of these members belong to a foundation, which is the main financier of the university.

Sources of finance are particularly important to NP2, which mainly relies on two inflows: the financial support of the foundation and students' fees. These two elements of the organisational environment are reflected in the management processes, as the following comment of the accounting director shows:

The executive board is very interested in obtaining a transparent and precise picture of how we spend the money, they want to be sure that the margin of the commercial activity is positive. They also put pressure on controlling student receivables and even in monitoring their progress; students who have enrolled but do not pay the subsequent fees are considered a cost for the university and a risk for our image (financial manager at NP2).

The accounting history of NP2 shows a linear trend. Accrual accounting was adopted when the university was first established. The choice was influenced by its founders who were mainly involved in the private sector. Accrual accounting was considered the ideal system to provide external accountability to its financiers. This continuity also emerged during the interviews, in which managers highlighted how accrual accounting is the only system to have been considered. The existing information system was revised in the middle of the 1990s; the annual report structure has not changed significantly, but it has been constantly amended to maintain an alignment with private-sector legislation (not compulsory for them) and to shape the report with a 'more modern' image, as the financial manager said, an image in which accrual accounting is 'the only way to present financial results' (financial manager at NP2).

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The Outcome: The Financial Statements

All the four universities decided to endorse the framework and the principles adopted in the civil code by Italian private companies. This decision was straightforward in all the institutions as it was considered, at the time of adoption, as the most diffused and consolidated approach – suggesting the presence of a mimetic and isomorphic behaviour by universities (DiMaggio and Powell, 1983). This section presents the results of the financial statement analysis while making a double comparison: first with the general framework of companies (if and how they diverge); and second with the university statements. The content analysis was conducted using a technical approach (Christiaens and De Wielemaker, 2003) and it reflects the conceptual perspective and shows the influence of the previously defined three forces: the environment, the organisational field and the individual.

The civil code requires four documents to be included: the management report, the balance sheet, the income statement and the notes. Table 6 summarises the differences in the general presentation and structure. First the dimension of the reports differ in a range from 68 to 131 pages. The balance between the documents is not homogeneous either, and different emphasis has been placed on the elements included. For example PUB1, PUB2 and NP1 dedicate a significant part of their reports to the notes (55 per cent, 70 per cent and 70 per cent respectively), while NP2 highlights the management report by dedicating 22 pages to it (32 per cent).

A different emphasis on these elements also emerges from the order of presentation in Table 6. The two non-profit universities follow the order adopted by Italian accounting principles for industrial companies: management report, balance sheet, income statement, notes, and other documents. PUB1, instead, places the balance sheet and the income statement at the beginning of the report without any introduction, leaving the explanations to the subsequent sections.

TABLE 6: SIZE AND STRUCTURE OF THE ANNUAL REPORTS

	PUB1	NP1	PUB2	NP2
	No. of pages	No. of pages	No. of pages	No. of pages
	(% of total)	(% of total)	(% of total)	(% of total)
Management report	–	16	29	22
		(14%)	(24%)	(32%)
Balance sheet	4	2	4	1
	(5%)	(2%)	(1%)	(1%)
Income statement	3	2	5	1
	(4%)	(2%)	(1%)	(1%)
Notes	42	32	73	34
	(55%)	(70%)	(70%)	(50%)
Other documents	28	14	13	10
	(36%)	(12%)	(2%)	(15%)
Overall size	77	114	131	68
	(100%)	(100%)	(100%)	(100%)

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TABLE 7: SUPPLEMENTARY DOCUMENTS

Total Size	PUB1 28 pages	NPI 14 pages	PUB2 13 pages	NP2 10 pages
Documents	Cash flow statement	Cash flow statement	Balance sheet and income statement divided into units	Income statement for commercial activities
	Cash flow management	Statistics (Historical trend of key economic figures; students' taxes)	Report of external auditors	Report of external auditors
	Use of resources by function			Cash flow statement
	Report on the Agreement Programme with the Autonomous Province			

All the universities include additional documents which are reported in Table 7 in the order they appear in the reports. It is interesting to note that the two public universities included documents on the use of resources, reflecting the influence of the wider context: the government which requires more accountability on the use of public money. PUB1, in particular, includes five tables and two graphs showing the allocation of resources to activities, projects and organisational units. This choice reflects the individual desire of the two champions at PUB1 and PUB2 to adopt accrual systems to increase accountability for university departments, but their contents also show the influence of the forces in the organisational environment. This is particularly evident at PUB1, which included another document, the 'Report on the Agreement Programme with the Autonomous Province'. This part included a comment and two long and detailed tables on how the university spent the resources allocated by the province; this is a particular situation originated by the *power* of the province on decision-making and resources (Hardy, 1996).

The organisational environment and in particular the power of governing bodies also emerges at NP1, which produces an income statement for commercial activities as a supplementary document. The interviewees highlighted the importance of this document to the executive board:

Accrual accounting, as I said, is the only possible system here. During the executive committee meetings board members want to see the revenues and costs and in particular they are interested in seeing their division between institutional and

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commercial activities; the final line of the income statement of commercial activities, the net margin, is the first figure they look at (accounting director at NP1).

The same situation emerged at NP2: the implementer decided to add a final section on statistics in which detailed tables and graphs show the trend in students' taxes and in key economic figures:

We employed accrual accounting for transparency reasons to offer a real picture of revenues and costs to the executive and academic board; the most important figure is the value added (administrative director at NP2).

Finally, it is important to note that PUB2 and NP2 decided to have an external certification by auditors, a procedure that is not compulsory for universities.

The format and the structure of the balance sheet is quite similar in the four reports. All universities use a two-sided horizontal format, first presenting assets and then equity and liabilities. The assets are composed of fixed assets, current assets, prepayments and accrued incomes. The equity and liabilities are divided into capital and reserves, provisions for liabilities and charges, a specific item of the Italian legislation – *Trattamento di Fine Rapporto* (TFR) – which is a staff-leaving indemnity, debts, accruals and deferred costs. This situation is somewhat homogenous among the four case studies, which reflects the consolidated structure for industrial companies defined by the Italian Civil Code. Table 8 summarises the macro-items of the balance sheet, according to the Civil Code.

If we examine the items in detail, a first difference can be seen in the presence of the 'unpaid subscribed capital' in the balance sheet of the two public universities; this situation is determined by the desire to perfectly embrace the business frameworks, but also by the most recent developments of accrual accounting. NP1 and NP2 have longer histories in this field, which allowed them to adjust the items to their needs. However, the most interesting difference is the recognition of the library among the assets. As highlighted by Christiaens and De Wielemaker (2003), each university has one or several libraries containing publications, which may have a high cultural and historical value. There are three main decisions a university needs to make considering libraries: its recognition as an asset, its inclusion as a fixed asset or

TABLE 8: THE BALANCE SHEET: MACRO-ITEMS ACCORDING TO THE ITALIAN CIVIL CODE (ARTICLE 2424)

Assets	Liabilities
A) Unpaid subscribed capital	A) Capital and reserves
B) Fixed assets	B) Provisions for liabilities and charges
C) Current assets	C) Staff leaving indemnities (TFR)
D) Prepayments and accrued incomes	D) Creditors
	E) Accruals and deferred incomes

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inventory, and the evaluation criteria. The four cases studied show that only one university (NP1) explicitly accounts for the library, which is classified as a tangible asset. This choice was motivated by the implementer at NP1 for two main reasons: first to show the value to the stakeholders and second to explain the high cost of maintenance of old books and cultural assets shown in the income statement. The following paragraph reports the words of the administrative director on this topic, in which the pressure of *organisational forces* in shaping the accounting is clear:

In our library we have text books, we have old books and we even have Egyptian papyri. It is important to show the value we possess to the executive board. Furthermore they can better understand why we need to spend money on maintenance each year (administrative director at NP1).

The choice of the other universities is due to their more recent foundation and the presence of a lower library value; they consider the annual purchase of books as a cost because the asset value is not sufficiently high to justify the more complicated administration of the library as an asset.

A final difference in assets is in the presentation of receivables. Three universities (NP1, PUB1 and PUB2) include the Ministry of Education in debtors and highlight a particular item called 'payable by the Ministry'. One university (NP2) also includes the students as debtors, highlighting an item, 'credits towards students', which involves the amounts still due for tuition fees. This situation reflects the organisational environment at NP2, in which the executive board is particularly interested in commercial activities originating from teaching, and also because of a strong financial dependency on tuition fees. As shown during the interviews, receivables from students are closely monitored and when there are delays in students' payments, demand notes are sent and phone calls are made.

Analysing equity, significant differences can be noted with the private sector framework; this is justified by the necessity to tailor the Civil Code scheme, which does not exactly fit the university setting. Table 9 shows the structure of equity of the four organisations. Comparing the four universities, the first difference is the number of items included, ranging from PUB1 with six elements to PUB2 with ten items. There is, however, a main difference in the structure of equity: NP1 and PUB2 divide their capital into restricted and non-restricted capital, with PUB2 explicitly indicating the nature of these restrictions (introduced by third parties or governing bodies). If we look at PUB2's case, its particular history, which explains the adoption of accrual accounting, also sheds more light on the particular characteristics of the adopted reports. Its schemes are in fact those that adhere most to those prescribed by the Civil Code (for example, PUB2 is the only university which explicitly reports the 'amounts related to third party properties', as mentioned in the Code). This behaviour is probably justified by the particular characteristics of PUB2, that is, the promoter of the change (the director) had a long experience in companies which adopted reports defined by the Civil Code.

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It is interesting to note that different categories are classified as 'capital' (see in particular university PUB2, item II):

- 'initial capital'; this item is conceptually equivalent to the initial subscribed capital in a business company
- 'contributions', which are amounts or facilities provided by third parties as donations to the universities
- 'funds', which are amounts provided by third parties or accumulated by the universities themselves, usually for a specific purpose (for instance, grants for students, expenses for the formation of the staff, etc.)

If we analyse the liabilities, a first (minor) difference concerns *provisions for liabilities and charges*. University NP2 only uses two lines: 'provision for taxation' and 'other provisions'. Universities PUB1 and PUB2, on the other hand, adopt three

TABLE 9: CLASSIFICATION OF CAPITAL AND RESERVES

PUB1 EQUITY	PUB2 EQUITY	NPI EQUITY	NP2 EQUITY
I. Initial fund	I. Non-restricted capital	I. Non-restricted equity	Initial fund
III. Reserves	A. Initial fund	A. Initial fund	Ordinary reserve
VI. Statutory reserves	B. Profit or loss for the year	B. Revaluation reserves	Extraordinary reserve
VII. Other reserves	C. Profits or losses brought forward	C. Additional paid in capital	Revaluation reserve
VIII. Profit or loss for the year	D. Non-restricted capital contributions	D. Profit or loss for the year	Risk reserve
IX. Profits or losses brought forward	E. Reserves	II. Capital with temporary restrictions	Fund for teaching, training and research
	II. Restricted Capital	III. Capital with permanent restrictions	Profit or loss for the year
	Funds restricted by third parties		
	Funds restricted by the decisions of the governing bodies		
	Contributions restricted by third parties		
	Contributions restricted by the decisions of the governing bodies		
	Restricted reserves		

TABLE 10: THE ITEMS INCLUDED IN MACRO-ITEM C (CREDITORS)

University	Number of Items
PUB1	12
PUB2	12
NP1	9
NP2	4

lines, including 'provision for pensions'. Finally, university NP1 divided provisions into six sub-items. The remaining main item in liabilities is *debt*. Here there are two differences. First NP2 places more attention on the payment time, being the only one to separately indicate the debts due and payable within the year or over the year. This is again related to the pressure of the executive board which is always worried about the image of NP2 regarding external stakeholders. A second difference is the number of items included in payables (see Table 10). The higher number (12) in the two public universities is related to the past cash accounting practice where the details of the cash outflows were very high. NP1 also suffers from its recent move from cash to accruals, while NP2 limits the details to four items.

Lastly, NP2 includes the item 'deferred income by students for tuition fees' in the accruals, but this item is not clearly shown in the three other reports. This is again a reflection of the *organisational environment*, that is, the executive board, who are particularly interested in monitoring teaching and commercial activities.

An analysis of the *measurement principles* has revealed a substantial uniformity of the initial valuation principle, though there are no specific regulations or recommendations on them. The methods adopted for the main items - tangible assets and intangible assets - are recognised at the original (historic) cost; debts towards customers are measured at the expected future values.

There are, however, several differences in the subsequent valuation. The first one concerns the criteria for depreciation of tangible assets: three universities (PUB1, PUB2 and NP1) adopt a depreciation rate that is proportional to the use of the assets, while NP2 adopts a method based on constant yearly values. A further diversity is in short-period investments: PUB2 uses the cost method, NP2 the market value, and NP1 the lower value between historical costs and market values. Finally, different methods are also adopted for debt: NP1 appraises them at the expected future values, while the others use the nominal values.

The Income Statement

The format of all four university income statements is vertical. It is interesting to note that the Italian professional body suggests, for the non-profit sector, that one articulates the income statement with a horizontal structure and according

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to its functions (CNDC, 2001). Each of the implementers in the four universities clearly stated that they preferred to use a private company system as they have a longer accrual accounting history and are considered the most modern organisations.

A major difference can be noted among the universities: NP2, PUB1 and PUB2 present the income statement based on the nature of the items of revenue and expense, while NP1 discloses operating results by function. This choice was motivated by the informants for two reasons, due to the different influences of specific organisational approaches: first, at the time of adoption private companies in Italy were not allowed to use a presentation by function system and, although not obliged to, they decided to follow this scheme; second, this presentation helps the stakeholder more clearly to understand the accounts in the shift from cash accounting, where the costs are presented by nature.

NP1 instead presents operating results and distinguishes costs by function; it defines a 'prime margin', highlighting revenues and costs from teaching and research, and a 'second margin', from which support service costs are also removed. This presentation reflects the organisational power of the administrative board, which immediately needs to see the margin of the commercial activities.

Another difference is the detailed analysis of the operating costs. While PUB1, NP1 and NP2 have 28, 33 and 23 sub-items respectively, PUB2 presents the costs in more detail, with 61 sub-items. This situation is related to the specific use of financial accounts at PUB2 and the pressure of the governing bodies: accrual accounting was implemented for managerial use, in particular to highlight cost consumption by the different departments and to assign financial resources on the basis of their efficiency. Details and transparency in analysing and showing the costs was a prerequisite to support the decision to change the internal method for allocating resources.

The Notes

The notes is the third document required by the Italian Civil Code. The regulations indicate the minimum content of the notes, which has the aim of providing additional and more detailed information on the balance sheet, income statement and other facts relevant to better understand the financial and economic situation of the organisation. All the studied universities enclose the notes; the length of this part ranges from 13 to 42 pages, showing common characteristics but also some differences. The structure of the notes is illustrated in Table 11.

Table 11 shows that all the studied universities have at least two common sections: measurement principles and further specification of the financial accounts (balance sheet and income statement). This is normal practice among the universities and also in the private sector.

There are only two notable differences. The first difference is the presence, in NP1, of the principles for consolidating accounting (B) and the principles for attributing mixed costs (C). Both documents are related to a particular feature of

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TABLE II: THE SECTIONS INCLUDED IN THE NOTES

PUB1	PUB2	NPI	NP2
A) Measurement principles	A) Measurement principles	A) Measurement principles	A) Measurement principles
B) Analysis of the main items included in the balance sheet	B) Analysis of the main items included in the balance sheet	B) Analysis of the main items included in the balance sheet	B) Principles for consolidating accounting
C) Analysis of the main items included in the income statement	C) Analysis of the main items included in the income statement	C) Analysis of the main items included in the income statement	C) Principles for attributing mixed costs
	D) Amounts related to third party properties		D) Analysis of the main items included in the balance sheet and income statement

NP2 specificity: the presence of a hospital (in which teaching and research activities are conducted in medical sciences) and several controlled organisations. Section B therefore illustrates the principles for consolidating the university and hospital accounts while section C shows the criteria used to apportion overheads to some autonomous organisations controlled by the university.

CONCLUSIONS

This paper has examined the adoption of accrual accounting in the Italian public sector, in particular addressing the case of universities. This is an important and unresolved topic which has been raising interest and concern among both practitioners and researchers for twenty years. Accrual accounting has been placed in the set of NPM business-like devices that may be enacted by public and non-profit organisations to achieve enhanced internal management and fairer external accountability. However, a number of authors have questioned the adoption of private sector accounting in a public sector context and have highlighted problems in the implementation and the scarce use of data (see, for example, Mellett, 1997; Barton, 2005). This research contributes, using a technical approach, to this still lively debate by presenting the process and the output (the annual reports) of the voluntary adoption of accrual accounting in four Italian universities which endorsed the scheme in a context of accounting autonomy.

Both the investigation of the process and the content analysis of the annual reports were interpreted by using institutional theory and in particular some recent developments which recognise the role of power and individual actors in the process of institutionalization (e.g. Covalleski and Dirsmith, 1988). We have

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highlighted three different 'realms' that may influence the choice and the format of the accrual accounts: the wider environment, the organisational ecology and the contribution of individual key actors (in particular the initiators and the implementers). The main findings of this study are related to the adoption phase and the resulting outcome (the report structure and content). The three realms are intertwined in the adoption phase, however, with a predominance of the organisational and individual forces.

As discussed in the conceptual framework, often the adoption of managerial and accounting techniques follows an isomorphic pressure, mirroring the practices and structures which are most successful in the wider environment (Scott and Meyer, 1994). The environmental stage in which these four universities are set instead did not provide major pressures to adopt accrual accounting. Referring to the three isomorphic processes described by DiMaggio and Powell (1983), the external forces appear limited: there are no specific laws imposing or 'suggesting' a move to accrual accounting; there are no legitimated professional bodies pressurising universities towards accrual accounting; and the majority of the organisations in the field (public and non-profit) still use cash accounting. The only environmental forces that emerged in the adoption is the mimicry of the private sector: accrual accounting is seen by all four universities as a 'modern' tool; its adoption was seen by the universities as a means to legitimate themselves as modern institutions.

The findings have instead shown that the forces which most influenced the adoption of the accrual system concern the *organisational environment*. As evidenced in the literature discussion, several authors regard these forces as central to the process of adoption of managerial techniques (Covaleski and Dirsmith, 1988, Covaleski et al., 1996; Dacin, 1997). These authors complement the initial vision of institutional theorists, which tend to depict institutions as passively reacting to their external environment. This issue was highlighted also by DiMaggio (1988), who conceded that by focusing on the process, institutionalisation often reflects the relative power of organised interests and actors within the organisations. Organisational power, exerted in different forms (Hardy, 1996), is at the centre of this second realm of forces and it is confirmed by this study. In all four universities the adoption of accrual accounting was an answer to the needs of the governing bodies to have higher transparency and accountability (both internal and external), and a more *modern* image (in particular PUB1 and PUB2). The key actors in the governing bodies were different: the autonomous province for PUB1, the rector for PUB2, the whole executive board for NP2 and a leading business manager in the executive board at NP1. In the first three situations their influence was mainly related to the power over resources and decision making (Hardy, 1996); at NP1, the power exerted by the member of the executive board was more over the meaning of accrual accounting for the university. A common characteristic in the adoption of accrual accounting at PUB1 and PUB2 was that this innovation was part of a wider strategy to modernise their university.

Finally it is important to highlight the importance of the individual's action. This third realm is strictly related to the organisational power as highlighted by Ribeiro and Scapens (2006, p. 99): 'strategic actors propose representation and deploy strategies that are framed by existing configurations of the circuit of

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powers'. In all the institutions in this study there were key actors who suggested specifically that the universities adopt accrual accounting, marrying or initiating the desire expressed by the governing bodies. At PUB1 and PUB2 the specific choice of accrual accounting was made by the administrative directors, seeing in this technique an answer to the desire of the governing body for higher transparency in the accounts. At NP1 and NP2 the initiators were key actors within the governing bodies. They strongly suggested endorsing accrual accounting, interpreting and directing the desire of the whole governing bodies: at NP2 this was an initial decision at the foundation of the university; while at NP1 the move was suggested by an influential member of a newly elected executive board, following the perceived need for higher transparency in financial data.

The second main area of findings is related to the outcome: the content and structure of the annual reports. The outcome again reflects the forces that come from the three realms. The influence of the wider environment seems to be more significant here than in the adoption phase: all the universities adopted the framework of private sector companies. Once the decision to move to accrual accounting was made, the choice of specific framework among the array available was considered obvious by all the universities: they all favoured the most diffused widespread practice without making an evaluation of the other available schemes (e.g. the framework for non-profit organisations). This behaviour signals the process of mimicry described by institutional theorists through which organisations try to legitimate and depict themselves as modern (Scott and Meyer, 1994).

This general framework, imported from the private sector, was then tailored by each university differently, putting emphasis on different parts of the financial reports. The role of the individual actors, specifically the implementers, was crucial in this process of translation: they emerged clearly as 'interpreters' of the organisational powers and needs, framing different desires of the governing bodies (Ribeiro and Scapens, 2006). In the two public universities the main need of the governing bodies was to provide higher transparency in the financial reports: for PUB1 being accountable to its major stakeholder – the autonomous province; for PUB2 providing a clearer picture of financial data internally. These objectives are reflected in the accounts. PUB1 included sections in order to be accountable towards the autonomous province; PUB2 included more details on operational cost for internal accountabilities among the departments.

The role of 'interpreter' of the governing body's desire is shown also in the structure and content of the annual report at NP1. The executive board, which is composed of several financiers, wanted a clear picture of the margin created by the university. The structure of the income statement reflects this need, evidencing a 'prime margin', highlighting revenues and costs from teaching and research, and a 'second margin', from which support service costs are also removed.

Finally at NP2, the key individual in the implementation – the administrative director – tailored the annual report to satisfy the desire of the executive board to have a complete picture of the resources of the university. For instance, this is the only university which decided to include the library within the assets; despite the difficulties in evaluating this type of asset, the implementer decided to appraise and to place emphasis on this item, responding to two needs of the

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governing bodies: showing externally the value of the assets held by the university (such as ancient books and papyri) and explaining the high cost of maintenance included in the income statement. The two sets of results discussed here highlight that accrual accounting can take on different shapes, according to different needs, and are mainly used as a response to the ecology more than to the wider environment; this may be an important element that policy-makers should take into consideration when they impose such a system.

NOTE

- ¹ Accrual accounting is defined by Connolly and Hyndman (2006, pp. 272–273) as ‘a method of recording expenses as they are incurred and income as it is earned during an accounting period (in contrast to cash accounting which records cash payments and receipts when they are made or received). A major aspect of accruals accounting is that there is much greater emphasis placed on the use and recording of capital assets’.

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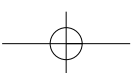
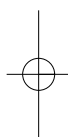
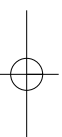
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ENGAGEMENT WITH ACTIVE LEARNING: REFLECTIONS ON THE EXPERIENCES OF IRISH ACCOUNTING STUDENTS

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ABSTRACT

Accounting students have been characterised as being in the main extrinsically motivated, introverted surface learners, who may fail to achieve higher learning outcomes and are reluctant to engage in active learning. Using a phenomenological approach, this study considers how Irish accounting students engaged with active learning methods, recounting the benefits which arose and the difficulties encountered. Its findings demonstrate that the difficulties encountered related to the application of active learning methods, rather than the methods themselves; all students can potentially benefit from active learning if carefully introduced into their programme of study.

INTRODUCTION

This study explores and reflects upon students' experiences of and engagement with active learning in accounting education at a third level institution. Accounting students have been characterised as extrinsically motivated, introverted surface learners, who may fail to achieve higher learning outcomes. The need to foster deeper learning has led to calls for moving beyond traditional teaching methods and towards a broader view of accounting education. Case-based learning and problem solving have been advocated as a means of fostering deeper learning. Using a phenomenological approach, this study considers how Irish accounting students engaged with such active learning methods, recounting the benefits which arose and the difficulties encountered.

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CHANGE IN ACCOUNTING EDUCATION

Pressure for change in accounting education over the last two decades has come from a variety of sources. These include the accounting profession as both employers and self-regulators, with support from the academic community; bodies concerned with 'quality promotion' in third level education, such as the Higher Education Authority (HEA), the Irish Universities Quality Board (IUQB) and the Quality Assurance Agency for Higher Education (QAA); and the output of academic research into third level education generally. Realising a broader view of accounting education however is not easy, with changes to traditional teaching methods advocated as one means of doing so (Boyce, Williams, Kelly and Yee, 2001).

The Accounting Education Change Commission (AECC) was formed in the United States in 1989 by the American Accounting Association (AAA) under pressure from and with the sponsorship of the then 'Big-8' accounting firms. It included representatives from the main professional accounting bodies as well as employers and academia. Over its nine-year existence the AECC promoted change in the accounting curricula in line with the findings of an earlier 'Big-8' white paper (Arthur Andersen & Co., Arthur Young, Coopers & Lybrand, Deloitte Haskins & Sells, Ernst & Whinney, Peat Marwick Main & Co., Price Waterhouse, and Touche Ross, 1989) and the Bedford committee report (American Accounting Association Committee on Future Structure Content and Scope of Accounting Education, 1986). The need to move accounting education from what was then a narrow and rigid curriculum which emphasised technical competencies was stressed. It was felt that, as the technical content of accounting programmes expanded in an increasingly complex regulatory environment, conceptual understanding had been crowded out. Furthermore, accounting students were not well adapted to change in an increasingly dynamic business environment. The solution proposed by the AECC was a move towards a broader curriculum, which included general knowledge and organisational and business knowledge, as well as accounting and auditing, and placed a new emphasis on skill-sets such as communications, presentation and critical thinking. Accountants could not possibly learn all they needed to know over the course of an undergraduate programme - hence the need for an emphasis on 'learning to learn'.

The pressure for change in the United States has been echoed in other jurisdictions: for example in the publications of the International Federation of Accountants (IFAC, 1994; IFAC, 1996); and in Australia, for example, in the Mathews Report (Mathews, Jackson and Brown, 1990). In Europe the European University Association (EUA) has been promoting change through its quality review procedures (European University Association, 2006). In the United Kingdom the QAA subject benchmarks for accounting include cognitive abilities and generic skills such as communication skills, the capacity for critical evaluation, and capacities for independent and self-managed learning (QAA, 2000).

STUDENT APPROACHES TO LEARNING

In parallel with the calls for change outlined above, academic research over the last twenty years in the field of education generally has paid an increasing amount of attention to the student's approach to learning and learning styles (see Gow, Kember and Cooper, 1994; Friedlan, 1995; Lucas, 1996; Sharma, 1997; Boyce et al., 2001; Byrne and Flood, 2004). Such research has highlighted the virtues of a deep approach to learning (see English, Luckett and Mladenovic, 2004). The idea of deep and surface learning dates from the work of Marton and Säljö (1976a, 1976b). Students who understand learning as something which is external to them, and who consider themselves to be passive recipients of knowledge, are characterised as 'surface learners'. On the other hand students characterised as 'deep learners' actively engage in the learning process; they abstract meaning and apply knowledge beyond the educational context. They are alive to alternative viewpoints and to personal change and development.

Prior research has also established a definite relationship between deep approaches to learning and higher order learning outcomes (see Trigwell and Prosser, 1991; Eley, 1992). However, this is not to say surface learning is inappropriate where surface outcomes are desired. Some students, as identified by Biggs (1979), can adopt the approach to learning most likely to achieve the highest grades. Biggs (1979) characterised such students as 'achievers'. Other studies describe them as 'strategic learners' (Ramsden, 1979): they are motivated to succeed and their approach is largely context-driven, based on what they see as the particular requirements for success in a given educational context.

As research in higher education developed over the years since the seminal research of Marton and Säljö (1976a, 1976b), there has been much debate about whether approaches to learning are fixed, i.e. inherent in the individual, or variable, i.e. responsive to the learning context. Accounting students have been characterised as being more likely than others to adopt surface or strategic learning approaches (Booth and Winzar, 1993). This finding has been attributed partly to their personality types; they have been depicted as 'introverted-sensing-thinking-judging' (ISTJ) types, with a preference for reading rather than discussion and for individual rather than group work (Booth and Winzar, 1993). Byrne and Flood (2004) found that Irish accounting students' conceptions of learning pre-dispose them to adopting a surface approach to learning. Unless the learning context is constructed to foster deeper learning, they are, for the most part, likely to resort to strategies of rote memorisation rather than critical reflection. However a student's approach can be modified by specific learning situations, thus providing an argument for a strategy of intervention (Beattie, Collins and McInnes, 1997). As English et al. (2004) state, 'while educators cannot influence the orientations to learning that students' *bring* to their studies, they are able to manipulate the learning *context*, providing a *window of opportunity* to influence the approach students adopt, and therefore the quality of student learning. The *learning context* includes both the *nature of the course* and the *teaching within the course*' (English et al., 2004, p. 463; emphasis as per original).

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THE CASE FOR ACTIVE LEARNING

Elements of the learning context which have been suggested as likely to foster deep approaches to learning are the motivational context; active learning; interaction with others; and a sound knowledge base (Biggs, 1994). This has led to increasing advocacy of active learning as an alternative to traditional teaching methods (Boyce et al., 2001). Active learning comprises a number of key features, summarised by Lucas (1997) as follows: 'a search for meaning and understanding, a greater student responsibility for learning, a concern with skills as well as knowledge, and an approach to the curriculum which looks beyond graduation to wider career and social settings' (Lucas, 1997, p. 189). Active learning thus refers to any instructional method that engages students in the learning process through activities which are introduced into the classroom (Prince, 2004). Examples include but are not limited to case-based discussion, problem-based learning and role-play. This is contrasted with traditional instruction where students passively receive information from the instructor.

Accounting educators however have been reported as reluctant to use such activities and to change from the traditional didactic style of teaching. They are reported as being accepting of the need to expand the competencies of accounting graduates, but less accepting of the need to change their own teaching approaches (Adler and Milne, 1997). In part this reluctance to change can be attributed to a perceived resistance to such methods on the part of students. Libby (1991) found that educators believe student attitudes to be an impediment to case usage. Despite the beliefs of educators there is some evidence that accounting students have responded positively to more innovative interactive teaching methods. Adler and Milne (1997) found that students perceive the active learning components of a management accounting course to have a positive impact on the development of lifelong learning skills. Similarly Stout (1996) noted that undergraduate accounting students found the case study experience to be simultaneously more interesting, more valuable and more difficult. However Weil, Oyelere, Yeoh and Firer (2001) and Weil, Oyelere and Rainsbury (2004) reported variations amongst students, according to gender, language and prior educational achievement, in their response to active learning.

Rebele (2002) argues that in instances where accounting education programmes did try to change, 'too many have made changes for the sake of making changes, without giving enough thought to how effective such changes will be for improving accounting education over the long-term' (Rebele, 2002, p. 4). Adler, Whiting and Wynn-Williams (2004) suggest that the link between the use of case studies and the development of personal and interpersonal skills is not as automatic as once thought in some instances and that where students do not become empowered to adopt a self-directed approach, some approaches to case teaching may actually threaten students' future learning. Milne and McConnell (2001) suggest that student resistance to problem-based learning is to be expected but that it is important to differentiate between anxiety and insecurity connected with gaps in their knowledge base, and an avoidance of responsibility and effort in uncomfortable situations. Lord and Robertson (2006) suggest that those

accounting students who approach their learning with the intention of understanding will find value in both traditional, didactic approaches and more interactive approaches; however students who approach their learning using a surface approach are less likely to derive value from an active, discussion-based approach. In contrast Cullen, Richardson and O'Brien (2004) report a positive response to using 'messy stories', with no evidence of accounting students' resistance to the problem-based learning approach as a result of existing learning preferences.

The manner in which accounting students experience active learning is not well understood. Uncertainty about the student response can reinforce attitudinal barriers on the part of instructors towards using active learning methods. For those who do engage in active learning a lack of understanding of the student experience hampers efforts to anticipate and avoid difficulties in achieving the learning objectives. Greater understanding of and insights into student experiences of active learning contexts is needed to inform the discussion on whether and how to expand active learning approaches within accounting education.

RESEARCH APPROACH

Student experiences of active learning approaches (i.e. approaches requiring active participation) form the focus of this research project. The research objective therefore is to reflect on how students experience such active learning contexts, towards enabling a greater understanding of the issues arising from the use of such approaches. Phenomenology is concerned with how individuals experience and make sense of the world around them (Bryman and Bell, 2003) and can be defined as 'the empirical study of the limited number of qualitatively different ways in which various phenomena in, and aspects of, the world around us are experienced, conceptualized, understood, perceived and apprehended' (Marton, 1994, p. 4424, cited in Ashworth and Lucas, 2000, p. 296). A phenomenological approach therefore was chosen by the researchers as the most appropriate research design.

Phenomenological research demands a 'bracketing' of prior conceptions of the phenomena under investigation, towards allowing the research phenomena to 'present itself' (Pietersen, 2002, p. 5). The researchers do not set out to question whether the experiences described in the research findings either conform to or contradict those previously documented by other studies. Instead, the researchers must remain open to viewing the evidence from the points of view of those providing it and no pre-conceptions or suppositions of any form should influence its collection and analysis (Ashworth and Lucas, 2000). However some shared sense of the research topic and context is needed at the outset of any research project.

To minimise the imposition of researcher pre-conceptions and suppositions on the design of the questionnaire used to gather the research evidence a student focus group was convened in April 2006 to identify issues bearing on the

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student experience of active learning. Focus group members self-selected in response to a request for volunteers to participate. A broad-ranging discussion was held covering a series of issues prompted largely by matters raised on end-of-year student course evaluation forms and by the students themselves during the course of the focus group session. Four key themes emerged from the focus group findings as a whole: (1) benefits from active learning methods were viewed largely in terms of personal development; (2) challenges exist for students arising from the need to move to an active, participative role; (3) the key role of assessment as a motivator; and (4) specific benefits and challenges arise from group work.

In exploring further the findings of the focus group, and bearing in mind the importance of the researchers striving to enter the 'life world' of each individual student, an open-ended set of questions, based on the issues identified by the students themselves, was drawn up. These questions were stated in terms of what students experienced as the objective of the module under review; the 'gains' and 'difficulties' associated with the student's experience of that module; and consideration of possible changes that could be made in how the module was approached by both the lecturer and the individual student (see Appendix 1 for the full list of questions used). For each of the modules, the questionnaire was administered by one of the module coordinators, at a time-tabled session within the overall programme of study. The case-based and problem-based modules are the only modules on offer to accounting students where active learning comprises the totality of the module. The traditional module chosen was typical of the remaining module offerings in Accounting and Finance.

The specific context of this study concerns student's perceptions of active learning methods. The experiences of three groups of respondents are presented in this paper, initially organised in terms of the particular module in which a given respondent was enrolled. Table 1 presents summary details of the respondents. The specific modules chosen are not intended to provide a means of comparison of each against the other; their choice is instead intended to provide the researchers with the possibility of a breadth of experiences emergent from the questionnaire responses. There was no possibility of over-lap between courses; each of the respondents could only have taken one of the three modules, depending on their programme of study. When the questionnaire was administered (April 2007), each student had completed the given module on which they based their response but did not know the grade allocated to them for that module – a situation within the normal context of course evaluations conducted generally for such students and expected by them at the end of each academic cycle.

To analyse and interpret the output of phenomenological research, it is vital that the researchers also bracket all prior expectations of the research findings (Lucas, 2001), towards facilitating the emergence of issues grounded in the student's own experiences, rather than being either arbitrarily derived or (perhaps worse) products of the experiences of the researchers. All completed student questionnaires were coded in terms of the module to which they related. Each researcher then independently read and reviewed the responses a number of times to become familiar with the data contained therein.

TABLE 1: INFORMATION ON TYPES OF RESPONDENTS

Module	Active Learning		Traditional
	AC3021	AIS531	AC3111
Learning context	Active: 'case study-based learning'; in-class group presentations	Active: 'problem-based learning'; in-class group presentations	Traditional: lectures and tutorials
Subject area	Finance	Management Accounting and Information Systems	Financial Accounting
Level of student	Penultimate year – undergraduate Finance programme	Year 1 (of 2) – post-graduate 'conversion' masters programme in Management Accounting & Information Systems	Final year – undergraduate Accounting programme
Module is... Assessment	Core; 5 credits Group-work: 70% Individual project work: 30% No end-of-year exam	Core; 10 credits Group-work: 100% No end-of-year exam	Core; 10 credits Group work: 30% End-of-year exam: 70%
Number registered for the module	28	20	70
Number of descriptions collected	26	15	44

The importance of revealing the individual students' experiences of each module forced the researchers into a slow, careful analysis of each open-ended response. Constant care and vigilance was required to avoid drawing comparisons between responses and to remain focused on the search for 'themes', represented by the identification of differences, amongst the total set of experiences presented. Ashworth and Lucas (2000) stress the need for empathy with the student experiences throughout the research process, in the sense of 'imaginative engagement with the world that is being described by the student' (Ashworth and Lucas, 2000, p. 299). Given the written nature of the research data, this involved careful consideration of the sentiments of each response rather than simply focusing on just the particular words or phrases used per se. Responses to questions regarding possible changes that could be made also enabled the researchers to better consider answers to questions regarding 'gains' and 'difficulties', by allowing the respondents to also express these sentiments in other terms and thereby affording the researchers to view a greater depth of 'experience' than that offered by just considering the written responses regarding 'gains' and 'difficulties' in isolation. After many sessions of review and discussion, the student experiences, as described in the following section, began to emerge.

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DOCUMENTING THE STUDENT EXPERIENCES

Difficulties Experienced with a Particular Module

Each student was prompted in three different ways to describe difficulties with their particular module. They were asked to identify the biggest difficulty they had with the course, what change(s) the lecturer should make to the course, and what change(s) they would make to how they themselves had approached the course. Considering the focus group findings, it might have been anticipated that difficulties would centre on areas such as presentations, participation, group work and assessment. However, rather than search for these aspects amongst the experiences provided, the researchers had instead to allow the actual difficulties experienced by the respondents emerge. Table 2 summarises four distinct types of difficulties that actually emerged from the analysis of the student responses and lists the number of students expressing sentiments akin to that category of response. It is interesting also to note that a number of students described experiencing no difficulties whatsoever.

The difficulties presented in Table 2 relate to module content, teaching method, level of support offered and timetabling issues, with clear differences emerging in the experiences within each module. The traditional module generated least difficulty for its students, with 20 per cent (9 out of 44) experiencing no problems whatsoever. The main difficulty reported concerned the module content. It was mainly focused on International Accounting Standards (IAS) – a topic which the students variously described as being ‘boring’, ‘repetitive’, ‘complex’ and ‘lacking in numbers’. Typical responses were:

Some of the IASs were hard this year, especially pensions.

Learning the IAS ...[I] found them very repetitive.

TABLE 2: DIFFICULTIES ENCOUNTERED

	Active Learning			Traditional	
	Case-Based	Problem-Based	%	Lecture-Based	%
Subject matter too complex/too theoretical	4	1	12	18	41
Difficulties with group work/presentations	10	3	32	6	14
Support and direction	3	9	29	9	20
Timetabling issues	6	2	20	2	5
No difficulty experienced	3	0	7	9	20
Total	26	15	100	44	100

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However while the students taking the traditional module stated that content was the main source of difficulty, they were also looking to address this (and other difficulties) via requests for increased levels of support, particularly tutorial support, and for greater guidance on the exam, rather than through changes in the course content itself. Only three of the eighteen students who expressed difficulty with module content suggested any changes to that content. 50 per cent of the students felt that they had approached the module appropriately while the other half felt they should have worked harder in the earlier stages or attended more lectures.

The experiences of students taking the case-based module were quite different. For this module the main source of difficulty was the learning context itself (case study-based) and in particular the group work elements of it:

The group assignments... not that they were difficult... it's just that different people were prepared to spend more time doing them in class.

Presenting opinions that the group had come up with that you weren't sure of yourself....

Although students generally found the module challenging, by and large the teaching method was accepted or even welcomed by the students. The changes suggested by students focused on adding additional topics to the course rather than changing the teaching method itself. Only four of the twenty-six students suggested any changes to the method. Many of the students also felt that the initial difficulties they experienced had been overcome. For example, one student said the following:

My biggest fear was the first presentation but once I got over that I was happy to do more.

More than half of the students felt that they should have approached the module differently by preparing more for classes and reading or thinking more widely. This did not mean by working harder however, but by working differently. A typical example of this response was:

I would look at the broader picture more. This was something I learned later in the course - but now I know it's important to consider the wider, less obvious consequences of a decision.

Students taking the problem-based learning module experienced difficulties regarding issues arising from the manner in which the module and their overall programme were delivered, particularly in relation to what they considered the provision of inadequate support. These students conveyed a sense of having been 'thrown in the deep end':

Too much may have been expected of us too soon into the project.

Not having enough knowledge to do something at the right time.

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Reactions to these experiences were strongly echoed in the changes proposed for future iterations of the module. Eleven of the fifteen students suggested changes which would enhance the levels of support and direction given, such as:

More clarity on the requirements from the outset.

Whilst students taking the traditional module (delivered via a lectures and tutorials format) acknowledged that they should have *worked harder*, and students taking the case-based module felt that should have *worked differently*, the overall sentiments from the problem-based learning module was that the students felt they should have *worked smarter*. They felt that strategically they put in too much effort and let the module take over their approach to their programme. For example one student, when asked what (s)he would change about how (s)he approached the module, wrote:

Spend more time on my other modules rather than stressing about the overall project.

Benefits Experienced

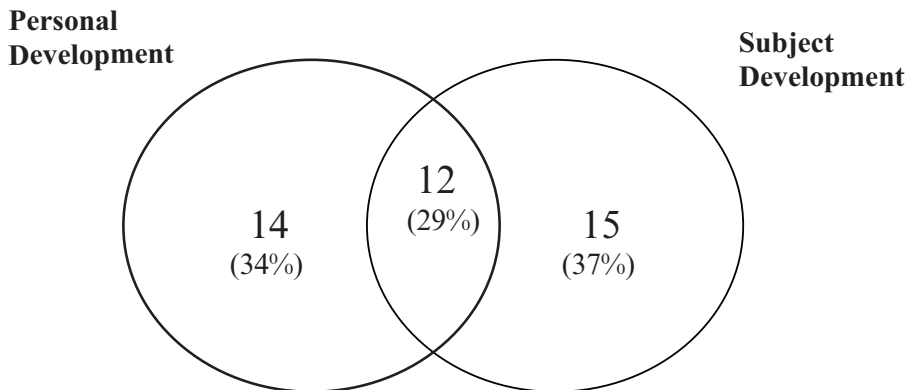
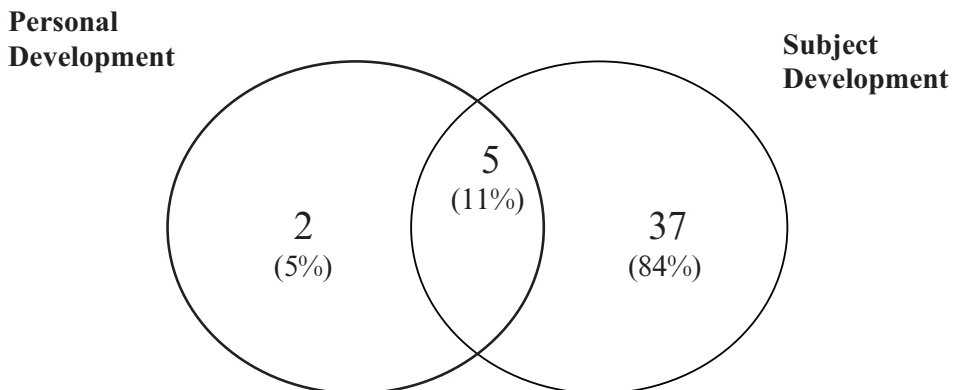
All students were asked 'what did you gain from this course?' There was a clear and marked difference in the responses between the students taking the traditional module and those taking the active learning modules. Two distinct types of response emerged in terms of the experiences of the students. One set describes benefits in terms of personal development or transferable skills. Benefits experienced here were expressed in terms of confidence in expressing opinions, ability to work in teams and self-learning. The second set of responses described a broader or deeper understanding within the confines of the curriculum: deepening of knowledge and elaboration of knowledge. Figures 1 and 2 summarise this categorisation of the student survey responses.

In the 'traditional' module the majority of students (84 per cent or 37 out of 44) experienced benefits expressed solely in term of subject-specific skills. While subject-specific skills were important on the 'active' modules also - with 66 per cent (27 out of 41) of the students describing some subject-related benefits - students also described benefits in terms of personal development. 34 per cent (14 out of 41) of the students taking the active learning modules expressed the benefits solely in terms of personal development.

Personal Development

Some students saw the primary benefits of their module as outside the confines of the subject matter being studied. For example, for one student taking the problem-based learning module the main benefit was described as:

Learn[ing] to work in groups and how to teach myself things fast; how to deal with people.... We learnt every lesson the hard way.

FIGURE 1: BENEFITS FROM LEARNING VIA 'ACTIVE' LEARNING**FIGURE 2: BENEFITS FROM LEARNING VIA 'TRADITIONAL' LEARNING**

Students of the case-based module found the material challenging and a distinct theme in their descriptions was that of gaining confidence or of overcoming difficulties:

I gained confidence when speaking publicly; when doing presentations for other classes I now find that I am not so nervous.

Critical thinking and self-learning skills were also reported as benefits gained on both of the active learning modules:

Learn and understand the things [I] didn't know before; developed self-learning skills; knowledge extension.

I think that after this course I have a critical attitude when I read the newspaper or watch economic news in TV.

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Subject Development

A second category which emerged from the responses was those students who saw the benefits in terms of acquiring new, course-specific skills or as building on the skills and knowledge attained elsewhere in their programme. Their understanding of specific topics had improved, or they had gained tools in financial analysis, or a deeper understanding of how companies make decisions:

Learned how to analyse different aspects of a business and that individuals as well as financial decisions are important when it comes to making a decision.

Different ways of problem solving... stronger understanding and application ability.

In the traditional module the students were strongly focused on the development of their subject-based skills. A typical response was:

[Knowledge of] the effect other issues have on the information contained in the financial statements.

Combined Benefits

The most positive experiences described were for those students who gained transferable skills and deepened their understanding of the subject area, perhaps typified in the following quote from a student of the case-based module:

Confidence... confidence in that I understood all that I have learned over the years in Finance. Confidence to stand up in front of people and give presentations.

Approaches to Learning on the Active Learning Modules

The opening question on the student survey asked each student what learning meant to them. When the answers were reviewed 63 per cent described a surface conception of learning, while 37 per cent exhibited a deep conception. This breakdown in conceptions of learning is broadly similar to that reported for Irish students by Byrne and Flood (2004), thus serving to validate our initial analysis of the student descriptions and provide us with confidence in our use of the phenomenological method.

The purpose of exploring the conceptions of learning is to determine whether there was any discernible connection between students' description of the benefits of active learning and the approach to learning inherent in their stated conception. Table 3 presents the benefits from learning experienced by those respondents taking modules involving active learning (as shown in Figure 1), subdivided into those who articulated a surface conception of learning and those who described a deeper conception. As is evident from the table, the student's conception of learning does not seem to influence the nature of the benefits obtained using active learning methods.

TABLE 3: CONCEPTIONS OF LEARNING ON THE ACTIVE LEARNING MODULES

	Surface		Deep	
	No.	%	No.	%
Personal development	10	40	4	27
Subject development	9	36	5	33
Combined benefits	6	24	6	40
Total	25	100	15	100

TABLE 4: REACTION TO ASSESSMENT

	Active Learning			Traditional	
	Case-Based	Problem-Based	%	Lecture-Based	%
'Assessment is fair'	8	6	34	27	61.5
'Individual assessment preferable'	4	0	9	1	2
'Alter the assessment method'	4	2	15	9	20.5
'Expectations are not clear'	5	1	15	7	16
'Alter the timing/weighting'	5	6	27	0	—
Total	26	15	100	44	100

Reaction to Assessment

Consideration of how students experienced assessment on these modules fell into five broad categorisations as shown in the first column of Table 4. Students of the active learning modules were evaluated primarily through group work, with assessment elements including reflection, written reports and group presentations. 70 per cent of the marks for the case-based module were for group work, as were 100 per cent of the marks on the problem-based learning module. The traditional module was assessed by way of an end-of-year examination (70 per cent of marks available) and a group project (30 per cent).

'Assessment is Fair'

Most frequently the responses (from 41 students) described a lack of problems with the assessment process:

Project-based assessment is far [more] innovative for studying; written exam is purely [an] overview of the course.

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'Individual Assessment is Preferable to Group Work'

Issues concerning the nature of assessment (identified by 5 students) largely related to problems with working in a group, rather than as an individual:

I think that there should be more individual assessments as I feel that people work better on their own.

'Alter the Assessment Method'

These issues were most frequently expressed in the traditional module where students suggested replacing the project with an interim exam.

Project took a long time in relation to the marks that were going for it.... An interim exam would be much more successful as [we] have to study the topics anyway.

'Expectations are Not Clear'

Concerns about what is expected of the student were also apparent in both traditional and active learning modules. Such concerns echo the requests for greater support and direction and are as apparent in the traditional as the active learning modules:

Make it more precise so that when a question is asked about a case study there will be a definite answer which a student can aim for.

Give examples of the type of questions that could be on the exam.... Better guidance on what was expected in project and presentation.

'Alter the Timing/Weighting'

Reactions in relation to the timing of assessments were relatively minor, with students mainly concerned with the balance of their workload across modules over the academic year. Some deeper concerns were expressed however in the problem-based learning module regarding the assessment of material prior to it being judged (by the students) to have been adequately covered.

DISCUSSION AND CONCLUSIONS

The benefits experienced by students in engaging in each of the modules tie closely to the learning objectives of the modules concerned. In the active learning modules all students experienced benefits - in spite of their initial trepidation in

entering the process. Students described significant benefits relating to the acquisition of life-long skills such as team-working, confidence and self-learning. They also reported deeper or broader understandings of their subject areas and in many cases combined both subject- and skill-based benefits. Very strong curriculum-based benefits were experienced by those taking the traditional module; however these students reported few benefits in terms of skills or personal development. These differences in the nature of the benefits described points to complementarity between what are sometimes seen as alternative teaching methods (traditional and active). Neither method is simultaneously satisfying the demands of the curriculum and the need for a broader accounting education.

Prior literature (see Stout, 1996; Milne and McConnell, 2001; Lord and Robertson, 2006), discussions of the focus group and anecdotal evidence suggest that accounting and finance students experience significant difficulty in engaging in active learning. Certainly more students on the active learning modules than on the traditional module articulated experiencing difficulties, but it is also worth noting that the majority of students on *all* of the modules experienced difficulties. An element of the learning objectives of the active learning modules is to challenge students to acquire new skills so some difficulty, at least at the initial stage, is to be expected. In the case-based module particularly, difficulties in areas such as group work were seen as challenges to be overcome and few students felt that the learning method should change. Some students recognised that, with hindsight, they would have approached the module differently. This suggests that greater direction at the outset is needed to encourage students to take responsibility for their own learning. Students were not clear how much pre-class reading was required for them to participate effectively in a classroom setting. This echoes Milne and McConnell (2001) who argue that instructors need to be more directing at the early stages of an active learning module. In the problem-based learning module a number of students clearly articulated a need for greater support at the earlier stages where they felt thrown in at the deep end. Here however the student experience of active learning was hampered by the lack of a sound knowledge base, particularly in relation to key skills needed to complete the project.

The student experience documented in this paper emphasises the need for active learning to be integrated into the programme of study as a whole, with consideration given to the appropriate sequencing of activities. In summary therefore the difficulties encountered by students were related to the *application of the methods* rather than the methods themselves. There was no sense that active learning proved an insurmountable challenge to any students but there was a sense of the need to prepare students for the change in teaching method and to be realistic about the prior skills and knowledge of the students.

The students in this study reported conceptions of learning which are typical of accounting students generally. Prior literature suggests that students with surface conceptions of learning as more likely to be subject-oriented and to be less likely to report benefits from active learning, at least in the short term (Lord and Robertson, 2006). The evidence of this paper however is not supportive of the student response to active learning being negatively affected by a surface conception of learning – a finding which accords more with the experience of Cullen et al.

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(2004). Students categorised as surface learners experienced a far wider range of benefits from active learning, even in the short run, than that categorisation might have implied. How this experience in turn might affect their approach to learning in the future is unclear. The disconnection between the conception of learning as expressed by the students in this study and the categories of benefits experienced from coping with active learning leads us to question the extent to which researchers can rely on the validity of *articulated* conceptions of learning. The students have clearly engaged with and learned from the use of active learning methods; the extent to which they consciously see those benefits as part a process of learning however is not evident.

The student focus group made much of the difficulties with assessment. Issues concerning the free-rider problem, the fairness or equity of awarding a common grade to all group members, and an over-riding focus on the end-of-year final grade were the dominant concerns of the focus group members. Learning outcomes which are rooted in the desire to engender critical, reflective thinking can also be more difficult to assess (Hand, Sanderson and O'Neill, 1996). Against this background we might have been expected to find major issues arising in relation to assessment. However, the forms of assessment used on the active learning modules were not seen by the students as being problematic. Concerns may have been over-stated within the focus group format, leaving the researchers to speculate on the extent of the real versus the perceived barriers to the use of such methods in the learning environment. In fact there were more calls for change from the students on the traditional course. Difficulties which are described seem minor and easily remedied. Many of these difficulties relate to student demands for structure and predictability and relate to an articulated dislike of ambiguity.

In summary, this study gives voice to the student experience of active learning. The students presented an enthusiastic account of the acquisition of broad skills and personal development from the active learning modules which were not reported for the traditionally delivered module. Areas for improvement related to the need to prepare students for the change in learning approach and the need to ensure the requisite key skills and knowledge. Difficulties reported elsewhere in relation to group work and assessment were not evident on the ground. Whatever the learning approach, it appears that *all* students can potentially benefit from active learning *if* carefully introduced. This study is limited in its focus on the student experience in retrospect; further research could, for example, track the student experiences throughout the duration of a module. The use of other research methods – e.g. in-depth interviewing – might also enhance the findings. Research documenting the concurrent experiences of the lecturers of such modules would complement existing evidence.

APPENDIX 1: STUDENT SURVEY QUESTIONS

- What does learning mean to you?
- What do you see as the main objectives of the [module name] course?
- What was your biggest difficulty with this course?

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- What did you gain from the course?
- Can you suggest any changes to the assessment of the course?
- Do you think the course objectives were met?
- If [lecturer] were to change one thing for next year's course what should it be?
- If you were to change one thing about how you approached the course what would it be?

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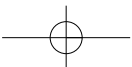
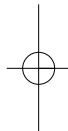
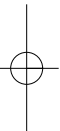
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ROLE VARIATIONS OF PERFORMANCE MEASUREMENT IN DUTCH LOCAL GOVERNMENT

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ABSTRACT

This paper examines differences in roles of performance measurement in Dutch local government under diverging contexts – businesslike and political – and varying degrees of standardisation of activities. The research shows that some of these roles apply irrespective of the values of both contingency variables. This holds for the so-called standard roles of diagnostic control, influencing future budgets and reporting. However, other roles of performance measurement, especially signalling and learning, only emerge related to specific contextual circumstances. If a policy field is, for instance, highly politically sensitive, these additional roles are important, and can even lead to tight controls. In these circumstances the standard roles also become more pronounced.

INTRODUCTION

During the last two decades New Public Management (NPM) has been an important international trend in the public sector (Hood, 1995). NPM also substantially influenced the public sector in the Netherlands. Two major changes are generally associated with this influence. The first is a change in the organisational structure of public sector organisations, i.e. from centralisation to decentralisation and autonomy of organisational units. The second change refers to the introduction of businesslike planning and control instruments, such as medium-term plans, output budgets, hierarchical planning and control systems, and performance

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reports (van Helden and Johnsen, 2002, p. 77; ter Bogt and van Helden, 2005, pp. 255–260).

At the core of the second change especially is performance measurement (PM), which can be used for both external-oriented communication and for internal-oriented strategic, political and operational reasons (ter Bogt, 2003, 2004). Many Dutch local government organisations currently have adopted financial and non-financial performance indicators for accounting and control purposes (Bordewijk and Klaassen, 2000; van Helden and ter Bogt, 2001; van Helden and Johnsen, 2002, p. 77). Although the adoption of performance measurement systems seems to be inevitable in almost all Western countries, there is still a huge debate on both their content and the conditions under which those systems are successful or at least appreciated by relevant stakeholders (de Bruijn, 2002, chapter 2; Behn, 2003).

This also holds for Dutch local government. Unlike the widespread adoption of performance measurement systems in Dutch municipalities, research findings point to a limited use of these systems. Various reasons for this arise from research. First, the relevance of PM information for decision making and control is questioned, because performance indicators mainly refer to numbers of service units, whereas cost per unit and quality indicators are scarce (van Helden and Johnsen, 2002, p. 88). Second, municipal performance indicators are often decoupled from budgets, which also implies that PM information is hardly used for budget allocation purposes (Bordewijk and Klaassen, 2000). Third, municipal politicians do not intensively use PM information for planning and control and for evaluation of their top managers, because they seem to prefer 'rich', verbal and informal information (ter Bogt, 2003, 2004).

The research indicated above emphasises a tension between, on the one hand, a widespread adoption of PM information, and, on the other hand, a limited 'rational' use for formal organisational control (see Anthony, 1988, p. 133–134). This raises the following question: if PM is not primarily used in a rational way for organisational control, for what reasons is PM then applied? Or, to put it differently, which roles can PM play under varying circumstances in governmental organisations in general and in Dutch municipalities in particular? This study concentrates on this last question, and aims to explain the roles of PM in Dutch local government.

The paper is structured as follows. The next section develops a theoretical framework for understanding different roles of PM. Then, the research design is discussed. The fourth section presents the case research findings. After this, a redesign of the theoretical framework is discussed. The final section presents some reflections and conclusions.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK

The introduction of businesslike planning and control and performance measurement can be regarded as a change in the management control of local government. In this paper, management control includes 'all the devices managers use to

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ensure that the behaviour and decisions of people in the organization are consistent with the organization's objectives and strategies' (Merchant and Van der Stede, 2003, p. 4). These devices can in practice involve many kinds of control mechanisms, which can be formal or informal in nature. Such a broad definition of management control could also be denoted as organisational control (see, for example, Birnberg, Turopolec and Young, 1983, p. 117; Birnberg, 1998, pp. 37-39; see also Chenhall, 2003, p. 129).

During the last decades various authors have discussed management control and the role that accounting and performance information in different situations could have to control organisations. An accounting information system (AIS) is a system that can support management control; it refers to formal routines and procedures, the use of information and a focus on patterns of activities. Taking an orthodox management accounting perspective, the function of the AIS is to facilitate decision making and to control behaviour (Zimmerman, 2000, p. 3). Research in the field of contingency theory has focused, for example, on factors that could explain the design and role of the AIS. That is, the AIS has to 'fit' one or more contingency variables, for example size, task uncertainty or strategy (Chenhall, 2003, pp. 160-161). Donaldson (2001, pp. 215, 218-226) suggests that there is 'overwhelming evidence' that fit indeed affects organisational performance.

This section presents the ideas about management control and the role of accounting and performance information of some 'classical' authors, such as Ouchi, Hofstede, and Earl and Hopwood, and links them to ideas presented more recently by authors like Simons, Chapman, and Merchant and Van der Stede. Then, based on this literature review, a theoretical framework will be developed.

Performance Measurement and Control

Ouchi (1979, p. 833) analyses three fundamentally different mechanisms to evaluate and control organisations. The applicability of these control forms, i.e. markets, bureaucracies and clans, depends on the measurability of organisational outputs and the knowledge of the transformation process, i.e. the programmability of tasks (Perrow, 1970). In Ouchi's (1979) control model, behaviour controls can be applied when the knowledge of the transformation process is high. Organisations may use output or results controls when the measurability of the outputs is high. When the knowledge of the transformation process and the measurability of outputs are low, i.e. the possibility to assess performance is unclear, an organisation is likely to use more informal, social, ritualised or ceremonial forms of control. However, Ouchi (1979, p. 840) adds, organisations in practice will contain some features of each of the control forms.

Implicit in Ouchi's (1979) analysis is the assumption that organisational control operates whilst agreement on goals and objectives exists (Birnberg et al., 1983, p. 115). It is, however, doubtful whether this assumption of unambiguous

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objectives is always valid. Hofstede (1981, p. 194) argues that unambiguity of objectives is 'the most crucial criterion for management control'. He states:

When ambiguities in objectives exist, control is always political control, dependent on power structures, negotiation processes, the need for the distribution of scarce resources, particular interests and conflicting values: however, political control at the top of an organization can go together with other forms of control inside the organization, because, for members, the political top may have resolved the ambiguities (Hofstede, 1981, p. 198).

Apart from ambiguity of objectives, Hofstede (1981) uses three other criteria in his framework, i.e. measurability of outputs, knowledge of the effects of management interventions and the level of repetitiveness of activities. In principle, when objectives are unambiguous and outputs are measurable, cybernetic control models can be applied (i.e. it is possible to calculate variances between actual performance and pre-set norms to decide whether intervention in the task execution or adjustment of norms is appropriate). Control models will become less cybernetic when goals are ambiguous, or when effects of interventions are not known. Non-cybernetic control may rely more on the values and rituals, i.e. the culture, of the group in which decision-makers operate (see also Macintosh, 1994, pp. 128-141). No universally optimal procedures for non-cybernetic control exist. Political control is, as Hofstede (1981, p. 202) puts it, 'a vague model'.

Although its role may vary according to the circumstances, the AIS can be of help to control organisations. Budgeting is a major feature of most AIS. Dutch municipalities use budgets, for instance in their hierarchical planning and control documents, which support various functions, such as planning, information provision, accountability and control (van Helden and ter Bogt, 2001). In the Dutch government sector, performance measures relate primarily to activities, outputs and outcome (ter Bogt, 2004). Nowadays, performance measures are an important part of governmental budgets in the Netherlands (van Helden and Johnsen, 2002, p. 76).

Budgets can contribute considerably to the tightness of formal control systems, but budgetary control is only one way to exercise tight control; personnel and cultural control can also contribute to tight control. Budgetary control is considered to be tighter if it has a greater effect on decision making or if it provides a higher degree of certainty that employees act in a desired way (Merchant and Van der Stede, 2003, pp. 124-131). Control tightness is in general related to diagnostic controls, which are in essence cybernetic controls, using budgets and variance analysis on important targets to focus managers' attention (Simons, 1995, pp. 60-61, 161). Tightness is, however, not exclusively related to diagnostic controls, as research by Van der Stede (2001) shows.

The notion that the role of an AIS in decision making and control can be different in different situations was normatively explored by Earl and Hopwood (1979) and Burchell, Clubb, Hopwood, Hughes and Nahapiet (1980; see also Macintosh, 1994, pp. 150-162; Chenhall, 2003, p. 140). Earl and Hopwood (1979)

distinguished between two forms of uncertainty, namely uncertainty over objectives (or disagreement on objectives) and uncertainty of cause and effect (that is, the relationship between actions and their consequences, which is similar to the concepts of programmability of tasks or task uncertainty). Earl and Hopwood (1979) and Burchell et al. (1980) argue that when uncertainty on both dimensions is low, decision-making is structured and can be based on computation, and control is assumed to be programmable. The associated role of AIS is labelled as 'answering machine'. In a situation in which uncertainty about objectives is low and uncertainty of cause and effect is high, the AIS cannot provide answers, but it could assist to explore problems, ask questions and analyse the analysable. Earl and Hopwood (1979, p. 8) labelled this as a 'learning machine role'.

Earl and Hopwood (1979) indicate that in a situation of uncertainty or disagreement over objectives and relative certainty on causation (on the relationship between actions and consequences), the AIS can have the role of a 'dialogue machine', in which values, interests, conflicts and bargaining play a main role. In that situation, political processes, which often include discussion, seeking conflict resolution, or just talking, are important. Probably somewhat more 'cynical', Earl and Hopwood (1979) and Burchell et al. (1980) suggest that in reality in this situation the role of accounting information could be that of an 'ammunition machine', through which interested parties seek to promote their particular positions. When causation and objectives are highly uncertain they argue that, with a need for inspiring and creativity-triggering information, the AIS ideally could be used as an 'idea machine'. However, somewhat cynically again, in reality in such a situation the AIS might rather serve as a 'rationalisation machine', the main purpose of which is to legitimise the organisation and its actions towards its external constituencies (Earl and Hopwood, 1979, p. 9; Burchell et al., 1980, p. 15).

With their explicit notion that accounting information can have a different role in different situations and their categorisation of these roles, Earl and Hopwood (1979) offer a partial basis for studying the ways in which performance information is used in Dutch local government. Some later developments in control literature seem to (partly) fit the Earl and Hopwood (1979) model. For example, Chapman (1997, p. 201) also suggests a relationship between accounting roles and uncertainty. Further, it seems that the answering machine role shows a high degree of correspondence with Simons' diagnostic role (see also Simons, 1995, pp. 71-74, 124; Abernethy and Brownell, 1997, p. 191; Chenhall, 2003, p. 133). Probably, this role could specifically be applied in situations in which Hofstede (1981) would suggest a cybernetic control model. Simons (1995) indicates that interactive control particularly plays a part in situations with 'strategic uncertainties'. Although strategic uncertainties are not specifically recognised by Earl and Hopwood (1979), interactive control - which implicitly supposes a functional use for accounting information, i.e. a use to increase economic performance - might be linked to an 'open-minded' learning dialogue role of AIS. However, as Hofstede (1981, p. 198) indicates, with uncertain objectives control will be political control, dependent on power structures and negotiation processes. 'Open-mindedness' might not be a feature then. As probably is also suggested by the more 'cynical' view of Earl and Hopwood (1979) and Burchell et al. (1980), in reality the ammunition

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and rationalisation roles of AIS might have some strong links with situations in which Hofstede (1981) would apply a form of political control. The beliefs and boundaries mentioned in Simons' (1995) control model particularly might play a role in situations where political control is applied, in that they might influence the 'mindset' of participants in the organisation.

The Earl and Hopwood (1979) framework, combined with some other elements from control theory, draws attention to various aspects that might play a part in the control of Dutch local government organisations. Probably, elements of the roles of an AIS that are distinguished by Earl and Hopwood (1979) can be found in every organisation, but to a different extent. The framework, combined with the contributions of Hofstede (1981) and Simons (1990, 1995) and other authors, is a source of inspiration to find elements to focus on in the empirical research.

Building the Theoretical Framework

Based on the previously discussed literature, a framework is developed which can give guidance to the empirical case research. For the empirical research, it is necessary to make the various concepts previously presented operational and measurable. In line with the previously discussed theory, the theoretical framework focuses on two main building blocks, i.e. the control context and the roles of PM in a planning and control cycle. With an eye on the empirical research, each of the two blocks and its main concepts, as well as the way to measure them, will be briefly discussed below.

Control Context and Antecedents

Two control contexts are distinguished here: a businesslike and a political one. The businesslike context stresses the importance of the formal organisational structure and processes, rules and routines. This context is associated with relatively certain, clear or unambiguous organisational objectives, which is one of the dimensions in the Earl and Hopwood (1979) framework (see also Hofstede, 1981; Birnberg et al., 1983). In this paper, clearly defined organisational objectives are assumed to be achieved by a comprehensive and coordinated set of goals, objectives and targets at various levels of the organisation, or by sets of integrated performance indicators throughout the organisational hierarchy. Budget systems are considered to be important control systems at managerial levels, and are part of the formal control structures and processes (Merchant and Van der Stede, 2003). Therefore, budget tightness is also used as an element of a businesslike control context.

The *political context* stresses the importance of the gain for organisational legitimacy, and addresses the organisation and its confrontation with internal and external institutions (Hofstede, 1981; Meyer and Rowan, 1977; see also van Helden and Johnsen, 2002, pp. 81-83). This perspective attaches meaning to the budgeting process beyond the formal role of coordination and control (Covaleski, Evans, Luft and Shields, 2003). The presence of a political control context can be

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identified by focusing on possible conflicting pressures on organisational objectives by groups of people, or the possible results of conflicting pressures such as *uncertain* or *ambiguous objectives*. This paper primarily focuses on uncertainty and ambiguity of objectives.

Task uncertainty, or *uncertainty over the consequences of actions*, is the second dimension (see Earl and Hopwood, 1979; Ouchi, 1979; see also Chapman, 1997, p. 201). Task uncertainty relates to both the businesslike and political control context. Task uncertainty can be measured in various ways. In this paper, the level of routine of tasks is considered an indication of task uncertainty (see Perrow, 1970; Abernethy and Brownell, 1997, pp. 234–237). *Routineness* is supposed to be defined by two dimensions: well-established or analysable techniques for task execution and the degree of variety in tasks encountered. The routineness of tasks is high when they are highly analysable and the number of exceptions is low (Perrow, 1970).

As was indicated before, the level of clearness, uncertainty or ambiguity of objectives is supposed to be a determinant of a businesslike or political context. Measuring ambiguity of objectives is an area that is not well covered within management accounting literature. Indications of the level of ambiguity of objectives can be obtained by measuring possible conflicts of interest between relevant groups of persons (Hofstede, 1981). Oliver's (1991, p. 162) notion of multiplicity, as 'the degree of multiple, conflicting, constituent expectations exerted on an organization' is used to capture the likeliness of ambiguous objectives.

It seems that limited accounting research has been published on the integration of PM in governmental organisations. Two different concepts of integration are suggested in this paper, i.e. between financial and non-financial PM and between lower and higher hierarchical levels in the organisation (see also Brignall and Modell, 2000).

In this paper, tightness of budgetary control is measured by four factors suggested by Van der Stede (2001, p. 134): tolerance of interim budget deviation, detailed line-item follow-ups, intense discussions of budget results and strong emphasis on meeting short-run budget targets.

As the empirical research was conducted in a qualitative, case-based setting, the instruments to measure integration, tightness, routineness, and uncertainty and ambiguity of objectives had to be used in a qualitative way.

Roles of PM

The roles of PM may vary according to its antecedents (context of control and uncertainty of tasks). Four archetypical roles of PM can be briefly characterised by highlighting the key issues:

The *diagnostic role*:

- the main role of PM is to diagnose (compare actual and budgeted performance, use of variance information)

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- relates to a businesslike context of management control
- relates to relatively high levels of task routine

The *learning role*:

- the main role of PM is to learn and to change ways of doing, and to unequivocally signal what is important (additional information is important: actual, budget and variance information is used as a reference)
- relates to a businesslike context of management control
- relates to relatively low levels of task routine

The *influencing and bargaining role*:

- the main role of PM is signalling what is important (focus on key issues) and influencing future budget increases (influencing decision-makers to obtain future budgets; no clarity on importance of actual, variance or additional information)
- relates to a political context of management control
- relates to relatively high levels of task routine

The *legitimising role*:

- the main role of PM is to report on past performances for reasons of justification (use of historical budget information on achieved performances; no clarity on importance of actual, variance or additional information)
- relates to a political context of management control
- relates to relatively low levels of task routine

Table 1 presents the archetypical roles of PM developed in this section.

To conclude, it seems that theory on accounting information systems and management control as it has developed during the last few decades offers various clues for empirical research in a local government organisation, even though much of this theory originally focused on organisations in the for-profit sector. Based on literature, in this section a framework was developed that provides a basis for the PM roles and related antecedents to focus on in the empirical research.

RESEARCH DESIGN AND METHODS

The theoretical framework can be seen as a fairly open framework of some specific and some generally defined theoretical concepts. The suggestion that different control contexts can influence the roles of PM is used as a starting point. However, although by now these ideas have some history, it seems that little empirical research was conducted into the relationship between the control context and the applied roles. Consequently, this study is concerned with an exploration of

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TABLE I: POSITIONING OF THE ARCHETYPICAL ROLES OF PERFORMANCE MEASURES

		Control Context	
		Businesslike	Political
Task uncertainty	Low	<i>'Diagnostic' role</i> providing variance information	<i>'Influencing and bargaining' role</i> promoting particular interests
	High	<i>'Learning' role</i> assisting decision making	<i>'Legitimising' role</i> providing retroactive understanding

practices, and if necessary refining of existing theory, and not with a quantitative analysis and testing of hypotheses. This study focuses on the control relationship between politicians and top professional managers, as well as the next lower organisational level.

Given the focus on exploration, case study research seems to be the preferred research method (Berry and Otley, 2004, pp. 235, 242-245; see also Chapman, 1997, p. 203). As the cases are intended to produce theoretical replications and contrasting results four cases with contrasting values of the contextual variables are selected (see Yin, 1989, pp. 52-54).

The first step in the selection process is to search for (groups of) organisational activities for which the roles of PM are expected to vary strongly. For this purpose, interviews were held with eleven city managers (the top professional manager in a municipality) from various larger Dutch municipalities (circa 100,000 inhabitants or more). The main purpose of the interviews was to identify groups of activities that are assumed to relate to different levels of task uncertainty and different control contexts (businesslike or political). The interviews were also used to identify alternative suggestions and insights that could be relevant for the case research later on.

To recognise the more political perspective of control, ambiguity of objectives was used as a key selection criterion, by recording the conflicts regarding organisational objectives. The city managers were asked to indicate a number of functions, in the sense of a group of related activities, which they considered to be under very high and very low conflicting pressures of stakeholders. Interviewees indicated that the levels of conflict of functions, or parts of functions, differed significantly in their organisations. Discussing multiplicity, and the associated level of dispute, it appeared to be easier to indicate functions with high levels than with low levels of dispute.

In general, the city managers were of the opinion that task uncertainty varied less than multiplicity of objectives. They perceived little difference in the level of task uncertainty between different functions. The routineness of almost all organisational functions was regarded as relatively high.

Choosing a case for the combination 'businesslike context and low task uncertainty' and 'political context and high task uncertainty' appeared to be quite straightforward. The interviews pointed to sewerage and spatial planning as

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TABLE 2: SELECTED POLICY FIELDS FOR THE CASE RESEARCH

		Control Context	
		Businesslike	Political
Task uncertainty	Low	Sewerage	Welfare payments
	High	Economic policy	Spatial planning

reasonably clear examples of these two positions, respectively. But the interviews were far less straightforward for the other diagonal of the framework. Welfare payment was eventually selected as a function that relates to a 'political context and low task uncertainty', and economic policy was selected as an example of a function that is related to a 'businesslike context and high task uncertainty'. Table 2 summarises the four selected policy fields.

The second step in the selection process is the selection of organisation(s) to conduct empirical research. Because the case study approach is relying on observations in a small number of cases, the selection of cases within one organisation could be preferable. This could eliminate a number of organisational factors that could otherwise influence the case findings.

The validity of research is improved by including relevant control factors in the selection process. Contingency literature on management accounting indicates that, amongst other things, environment, technology, size, structure and strategy are relevant factors that can influence the design and use of the management control system (see, for example, Chenhall, 2003). The use of the concepts ambiguity of objectives and task uncertainty means that both environment and technology are explicitly integrated in the theoretical framework.

Organisational size is another important factor. This study analyses the use of formal controls in a hierarchical setting; consequently, the selected organisation should not be small. The embedded level of analysis imposes another restriction on organisational size. The hierarchical levels must be directly related, and preferably be able to capture possible conflicts in values or interests. Consequently, the organisational size ought to facilitate an embedded level of analysis between top management and professionals. This excludes very large organisations with multiple management levels. The selected organisation should, at least potentially, also provide the variety of organisational functions which are the subject of this study. The conclusion was that the preferred organisational size would be a municipality with around 100,000 inhabitants or more.

Accounting systems are often seen as being related to organisational structure and centralised or decentralised decision making (see, for example, Chapman, 1997, pp. 193–195). This study is using an instrumental way to measure decentralisation, and uses the existence of departments at an operational level as an indication of a decentralised organisational structure.

On the basis of the selection criteria mentioned above, the municipality of Leeuwarden was chosen as a suitable organisation within which to conduct the

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empirical research. The city is situated in the northern part of the Netherlands, and is the capital of the province of Fryslân.

Each of the four case studies in Leeuwarden is based on about five interviews with politicians and official managers at various organisational levels. Besides this, a lot of evidence was collected from the planning and control documents of the budget years 2004 and 2005. The interviews were summarised in a report, on which the interviewees were asked to comment. The definitive report was used as a basis for the research. For each case researched a report was written which was discussed with some participants in the organisation.

FINDINGS FROM THE CASE RESEARCH

Different Types of Analysis

As was indicated above, our theoretical framework is inspired by an admittedly simplistic but suggestive framework by Earl and Hopwood (1979; Burchell et al., 1980, p. 15). However, to find out to what extent their suggestions could be of help to explain reality, our analysis started with a straightforward application of our theoretical framework. This means that the focus is first on the question of whether different values of the contextual variables (i.e. the antecedents) give rise to the assumed roles of PM. As will be shown below, the results of this analysis indicated that the theoretical framework could explain PM roles in the cases only to a limited extent. Therefore, the cases were analysed further, in order to provide a better understanding of PM roles in varying circumstances. The latter analysis has informed the redesign of the theoretical framework presented in the next section.

Findings Based on the Theoretical Framework

Table 3 provides an overview of the assumed and observed roles in each of the four case studies. Each of the four cases was selected because of its presumed extreme position in the theoretical framework, pointing to a specific archetypical role of PM. However, reality was less clear than was supposed on the basis of the interviews with the city managers, and the empirical research showed that the values of the contextual variables were less extreme than expected. This also induced a more diffuse picture of the assumed PM roles, as a comparison of the first and second row for each case in Table 3 reveals. The research also gave evidence about the observed roles, i.e. the role of PM in practice. As can be seen from Table 3, in the cases the assumed roles are often partly and sometimes only limitedly observed or even absent (see the second and third rows for each case). Moreover, occasionally roles are observed in situations where they were not assumed. These findings suggest that the relationships between a particular position in the theoretical framework and the various roles of PM are far less straightforward than originally thought.

Not only are the positions of the cases in the framework less extreme than expected (compare the archetypical and assumed roles), the empirical research also

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TABLE 3: DIFFERENCES IN ARCHETYPICAL, ASSUMED AND OBSERVED ROLES OF PM IN THE CASES

Case study	Contextual variables		Archetypical, assumed or observed roles	Types of roles			
	Context	Task uncertainty		Diagnostic	Learning	Influencing and bargaining	Legitimising
<i>Sewerage</i>	Businesslike	Low	Archetypical				
			Assumed				
			Observed	Partly			Partly
<i>Economic Policy</i>	Businesslike	High	Archetypical				
			Assumed				
			Observed	Limited	Partly	Limited	Present
<i>Welfare Payment</i>	Political	Low	Archetypical				
			Assumed				
			Observed	Partly	Present	Present	Present
<i>Spatial Planning</i>	Political	High	Archetypical				
			Assumed				
			Observed	Partly	Limited	Present	Present

suggests that in practice the various roles of PM are not exclusively related to specific contextual situations according to this framework (compare the assumed and observed roles). For that reason we investigated whether a more sophisticated framework could take this analysis further. In the following subsections the case study findings are analysed in more detail to explain the roles of PM-use in Dutch municipalities. This will ultimately result in a more appropriate framework.

Further Analysis of the Four Cases

Each of the four case studies will be analysed now, using both constructs from the theoretical framework and important insights arising from each of the case studies.

Thereafter, some pointers for an adapted framework will be provided. In this analysis a fifth role is added to the aforementioned four roles of PM, which combines aspects of the learning and influencing/bargaining role. This additional role is expected to signal what is important to the user of information.

Welfare Payment Case

The activities of welfare payment are to provide financial support to people who cannot support themselves. Municipal welfare payments are largely paid for by central government but, for example, the municipality has to take care of the costs of unforeseen increases in the number of citizens entitled to welfare payment, which is a considerable financial risk.

Although the objectives of this policy field are clear, various stakeholders are committed to their own objectives: central government to reducing the number of clients dependent upon welfare payment, the city council on providing opportunities for temporary jobs for people having no regular job, and the professional managers to guaranteeing that relevant processes will function adequately. Furthermore, welfare payment is characterised by standardised activities. Although the expectation was that this case would relate to a political context, it thus combines characteristics of a political and a businesslike context. The context is political because of conflicting objectives, but it is businesslike because the policy field is characterised by undisputable objectives.

The fact that the organisation is faced with high political risks (in a financial sense and related to the proper execution of law) seems to be crucial to the use of PM. The work load of the division is highly dependent on developments in unemployment, which are not controllable by the municipality. This explains why variances between budgeted and actual levels of welfare payments are not really important, while it is crucial to monitor actual developments of the number of clients asking for a welfare payment, because these determine the actual workload of the division. Moreover, inadequate monitoring of this workload is a source of risk for the city (e.g. financially, or because of increased risks of misapplication of the rules).

There is both financial and non-financial information in budgets and reports at all levels of the hierarchy, e.g. the political level, the division level and the level of operational management. Experiences with the five roles of PM can be summarised as follows. The diagnostic role (e.g. variance analysis) seems to be constrained to aggregated financial information for the top of the organisation, which has a certain interest in remaining within budgetary limits. Variance analysis of non-financial information is mainly applied at lower levels of the hierarchy. The learning role is of importance because non-financial information is used to discuss changes in working methods or policies. The signalling role, which highlights both financial and non-financial aspects, is even more important. The influencing role, in which information about changing circumstances is used to underline budget changes (especially increases in the budget), is crucial. Finally, the reporting role, which explains past performance, is also clearly apparent.

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When the number of clients is known, tasks to be performed are quite clear, which indicates a businesslike context at the operational level. At this level, concrete aspects of the activities of the division, such as taking decisions on applications for a welfare payment in time, the extent of welfare fraud and the number of debtors, can be controlled, as corresponding PMs are. These items, therefore, play a role in the planning and control at the operational level.

Generally speaking, control is rather tight, both at the political and the operational level.

Sewerage Case

The activities of the sewerage division are to develop and maintain a sewer system in the municipality that transports wastewater and rainwater out of the city (where it can be treated by a water board and discharged into canals and lakes). The objectives of sewerage are clear, although the political level focuses on issues (giving attention to complaints about sewerage works) other than those of the operational level (which is interested in such issues as progress in the execution of sewerage projects). However, in general, the context is regarded as businesslike. Although activities are characterised as routine, the execution of sewerage works (new investments or maintenance works) is uncertain to a fairly high extent. This is due to the fact that the execution of sewerage works is only controllable to a limited degree by the sewerage division and highly dependent upon decisions made outside the sewerage division, e.g. by the spatial planning and roads works department (which takes a high interest in the prevention of traffic problems).

At the political level, control is very distant, a point which can be observed from the fact that only once every four years, when plans are made, is there political involvement to some extent. This distant form of control by the political level is mainly caused by a lack of political interest in this policy field, which is reinforced by the absence of financial or non-financial problems and organisational risks during the last decade. For this reason, at the political level neither financial nor non-financial PMs seem to play an important role. At the operational level, operational performances are important, especially those related to projects being completed in time. However, financial aspects seem to play a rather peculiar role at that level, in the sense that it is more important to avoid underspending (due to delays in projects) than to avoid overspending of budgets.

The budget roles can be characterised more particularly. The diagnostic role is only important at the operational level in order to scrutinise the progress of the sewerage projects. Control aspects are time (completion of projects within the agreed time frame) and required project quality. The diagnostic role of financial information is developed to a limited extent because of a lack of financial stress and little interest at the political level. The learning and signalling roles of budgets are largely absent. The influencing role and legitimising roles are present but not important, due to the fact that the sewerage planning cycle is based on a multi-year time frame and because financial issues are not very constraining.

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Controls at the political level are in general loose, whereas at the operational level controls of sewerage projects are rather tight.

Economic Policy Case

Economic policy performs several activities, mainly in the sphere of promotion, communication and coordination, which are intended to stimulate the economy and employment in the municipality. The objectives of economic policy are clear and undisputable, and particularly directed to achieving employment opportunities for the city. Consequently, this policy field is characterised as businesslike. Moreover, politicians show a high interest in and a strong commitment to this policy field. Economic policy is characterised by both routine activities (such as business visits and external communication) and non-routine activities, especially projects, some of which are difficult to foresee. Each of these projects is controlled by tailor-made plans and reports, while standardised cyclical controls are of minor importance.

Three factors explain why, unlike undisputable objectives and a strong political interest, PM does not play a key role. First, the relationship between objectives and actions is highly diffuse (due to internal uncertainty), i.e. the objectives do not give directives for actions. This is reinforced by the second factor: external influences, such as investment initiatives from companies, strongly determine outcomes of the economic policy field. In other words, external uncertainty leads to high uncontrollability. Third, economic policy is highly interdependent upon actions taken in other policy fields, such as infrastructure and housing.

The diagnostic role is apparent, but especially related to financial aspects at an aggregated level and to non-financial aspects at lower levels in the organisation. Both the signalling and learning role have some importance. Learning seems to be restricted to specific actions to be undertaken and not to discuss various ways to achieve certain policy goals. The influencing role is apparent, not only in reference to the future budget of the organisation, but also in influencing decision making in other related policy fields. The legitimising role, which informs on the progress of projects, is also applied.

Finally, controls, both financial and non-financial and at various organisational layers, are loose.

Spatial Planning Case

Spatial planning covers a wide area of activities in the field of supporting and planning civil developments, such as planning and development of zones and working out strategic visions on development. Politicians regard spatial planning as important and municipal politicians often participate in operational decision making. Some objectives are clear, but most of the objectives are stated in more general terms. These objectives appear to be purposely ambiguous, because this gives room for executional flexibility. Ambiguity does not seem to be a response

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to conflicting institutional pressures, but more a strategic choice. Consequently, the context combines aspects of a political context (ambiguous objectives) and a businesslike context (undisputable objectives). Spatial planning occasionally concerns routine tasks (like keeping regulation and zone planning up to date), but it more particularly concerns non-routine activities, e.g. spatial planning projects.

Next to financial targets, this policy field is characterised by rather vague, mainly process-related goals, such as having up-to date plans. At a high organisational level variance analysis plays a role, but with much room for interpretation, caused by complexity and uncontrollability. At a lower level, performance targets are concrete in terms of specific plans or activities. Then the diagnostic role of budgets is apparent from progress reports of the various projects. The learning and signalling roles of budgets are unimportant, but budgetary information is used to influence future budgets. The legitimising role, which explains to what extent projects are realised, is also of importance. Because organisational objectives and performances are seldom integrated with operational tasks, operational project control is loosely coupled with organisational objectives.

Financial and non-financial organisational control is characterised as rather loose.

SUMMARISED CASE FINDINGS AND A REDESIGN OF THE THEORETICAL FRAMEWORK

It seems that the importance attached to PM is primarily determined by the extent to which a policy field could be regarded as *politically sensitive*. Political sensitivity indicates that the political level considers regular attention to be required because politicians are interested in a policy field, want to consider possible interventions and/or foresee that they will be held accountable. An examination of the cases suggests that only sewerage could be perceived as highly politically insensitive. This implies that politicians confine themselves to distant control - looking at long-term developments - and leaving the yearly planning and control cycle mainly to managerial levels of the policy fields. Only when distortions occur - such as the need for a strong tariff increase, or serious complaints about the functioning of the sewerage system - the political level might consider being more closely involved, probably temporarily, in planning and control.

The research indicates that the other three policy fields are characterised by a relatively strong degree of political interest. However, only in the welfare payment case does this lead to a relatively strong tightness of the controls. The reason for this seems to be that, unlike the two other policy fields with a high political attention, welfare payment is faced with severe *political risks* (because of financial risks and misapplication of law and, for example, when clients have to wait too long for payments or when too little clients enter the regular labour market). Because of these risks, politicians and managers want to monitor a number of relevant performance indicators. It also means that many roles of PM are pronounced in this case.

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The two other cases, economic policy and spatial planning, reveal a rather limited use of PM. Although the political level shows an interest in these policy fields, businesslike controls seem to be inappropriate, except for financial indicators at an aggregated level. For this, two reasons seem to arise out of both cases.

First, in both cases non-routine activities, particularly projects, are relevant. This implies that it is difficult to aggregate non-financial information. This leads on the one hand to financial controls at the highest level (where financial resources of different projects can be compensated), whereas on the other hand non-financial information is decoupled between organisational layers.

The second reason relates to the fact that the relationship between objectives and actions is problematic (internal uncertainty), and/or influences of external factors are strong (external uncertainty). In these circumstances, non-financial controls are problematic. This reason suggests that diagnostic controls are of relatively low importance. At lower levels in the organisation improvisation and adaptability are important. PM is mainly used for legitimating previous actions and for supporting future budgets. Moreover, when PM is used controls are sometimes loose and in other cases tight.

Finally, we observe that many roles of PM apparently exist, irrespective of the value of both contingency variables, i.e. context and task uncertainty, in particular diagnostic financial control, influencing future budgets and progress reporting. As has been argued above, other PM roles, especially signalling and learning, only emerge in relationship with specific contextual circumstances when policy fields are of a high political interest or are faced with substantial political risks.

An Adjusted Framework

Based on theory, case findings and the considerations indicated above, Figure 1 suggests an adjusted framework. On the one hand, this framework is based on ideas drawn from Earl and Hopwood (1979), Hofstede (1981), Simons (1990, 1995), and Merchant and Van der Stede (2003). However, the empirical research indicates that the contributions of these authors do not suffice to properly explain practices observed in the cases. For that reason, the framework is also based on an interpretation of the case findings. The political sensitivity aspect, in particular, is not included in the framework and contingency literature discussed in this paper. However, the cases researched suggest that in practice political sensitivity is a very important aspect that influences the control forms applied and the roles of PM in local government organisations. This probably can be explained from the fact that politicians – and citizens, who are the voters in elections – are not only, or primarily, interested in control that is functional and efficient in an economic sense, but also in control that is functional and efficient in a political sense (see ter Bogt, 2003, p. 155, 2008, pp. 37–39).

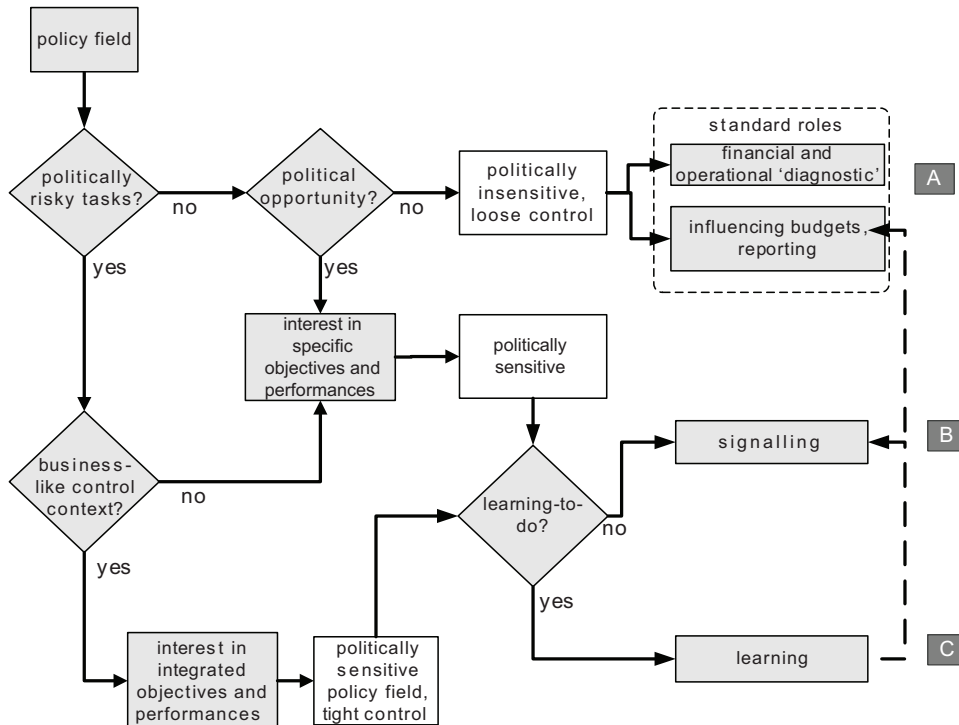
The adjusted framework in Figure 1 indicates that when the activities in a certain policy field are not politically risky (e.g. are not related to significant financial deficits, operational malfunction or the possibility of being held accountable for

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underperformance) and do not offer political opportunities (e.g. are not able to offer politicians the possibility of fulfilling their political ambitions), the policy field is seen politically as insensitive and control of performances will be loose. In that case, the applied roles of PM are restricted to 'standard' roles, some of which are not very pronounced, with some attention applied to such aspects as reporting. However, in general this 'standard' role also means that there is a considerable amount of attention for financial diagnostic control (or financial diagnostic control at the top level of the organisation and diagnostic operational control at the lower level).

When there are few political risks connected with a certain policy field, but politicians observe political opportunities with certain activities within this field, then there might be an interest in some specific objectives and performances and the activities can be labelled politically sensitive. The extent to which they are sensitive, and whether control will be loose or tight, seems to depend on the situation. When there is not a 'learning-to-do' attitude, the prime role of PM might be a signalling one (which, however, in practice will be combined with such standard roles as influencing budgets and progress reporting: indicated by the dotted line in Figure 1). However, when a learning-to-do attitude does exist, the prime role of PM might be the learning one (this role, again, is

FIGURE 1: ADJUSTED FRAMEWORK



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combined to some extent with a signalling role and the 'standard roles', such as progress reporting; see the dotted lines). When a policy field is regarded as politically risky and there is a businesslike control context (unambiguous organisational objectives and an integration of organisational and operational performance indicators) then an interest in integrated objectives and performances could be expected. The activities are politically sensitive and performances are controlled tightly.

The four cases studied can be positioned in Figure 1.

When there is no political interest and the policy field is not faced with political risks, PM roles are not pronounced. Variance analysis of financial issues at the top of the organisation is clearly apparent, as is variance analysis at lower levels of the organisation of operational (non-financial) aspects. However, the influencing and legitimising roles of PM are of minor importance, while the signalling and learning roles are completely absent. This pattern of PM roles applies to the sewerage case (see position A in Figure 1).

When there is a political interest in a certain policy field, almost all standard PM roles are applied. This regards the diagnostic role, the influencing role and the legitimising role. Often PM roles are more focused on financial issues at the top of the organisation, whereas at lower levels of the organisation relatively more attention is paid to operational issues, in the form of project control. The signalling and learning roles are also important. However, the learning role especially does not seem to be very pronounced, because it is restricted to assessing current working methods rather than discussing alternative practices to align them to the goals of the organisation. This pattern of PM roles could apply to both the economic policy and spatial planning cases (see position B in Figure 1).

Finally, next to being of political interest, a policy field may also face particular risks, such as a financial risk of achieving a deficit position or an operational risk of not meeting mandatory performance standards coming from central government. Then PM roles are similar to those indicated above for the economic policy and spatial planning cases, with one exception. Now the learning role is also more pronounced. The organisation is faced with pressures to continuously reassess its working methods related to the goals to be achieved. This pattern of PM roles seems to apply to the welfare payment case (see position C in Figure 1).

In the situations indicated at B and C in Figure 1, the standard roles also are of more importance than in situation A.

CONCLUSIONS AND REFLECTION

The research of four cases (policy fields) in the municipality of Leeuwarden showed that a theoretical framework based on the control context and uncertainty of tasks could hardly explain the observed roles of PM. It turned out that in reality the cases did not fit each of the four archetypes that were distinguished. Probably in practice policy fields often do not only take one extreme position, as

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is suggested by the theoretical framework. Moreover, PM roles in each of the four 'archetypical' cases were less straightforward than was suggested by the theoretical framework. In practice, various roles played a part to some extent. Besides this, the cases indicate that perceived political risks and interests play an important role in the control of a policy field and the role of accounting information. To some extent, ideas drawn from Ouchi (1979), Hofstede (1981), Earl and Hopwood (1979), Simons (1990) and Van der Stede (2001) are helpful in understanding the case findings. However, they could explain the four cases only to a limited extent. For that reason, an adjusted framework was developed in this paper, in which political sensitivity (related to political opportunity and risks) also plays an important role.

This study contributes in various ways to the existing body of knowledge on management control of governmental organisations. First, it has explored the distinction between political and businesslike control in a multidimensional sense. Four dimensions are at stake, i.e. the extent to which organisational objectives are clear and those objectives are undisputable, the degree of integration of performance measures (in the hierarchy and between financial and non-financial aspects), and control tightness. Second, roles of PM are explored by unbundling them into various sub-roles. Those recognised sub-roles are diagnostic financial and non-financial control, influencing future budgets, reporting, signalling and learning. Third, in the adjusted framework only two sub-roles are related to certain contextual circumstances, especially signalling and learning, whereas the other sub-roles apparently are largely unrelated to those circumstances. Finally, the research highlights the importance of political interest and political risks as antecedents of PM roles in the four cases.

Our field study in the public sector seems to supplement existing management control theory. Seminal contributions to theory in this field, which inspired our original theoretical framework, indicate that cybernetic forms of control are associated with contextual circumstances of clear and undisputable objectives, task certainty and measurable outputs. A cybernetic control form is characterised by setting targets, followed by monitoring actuals and analysis of variances between targets and actuals, and finally by considering corrective actions. One of our case studies, sewerage, seems to be an example of the contextual circumstances in which a cybernetic control form could be expected. This case, however, reveals an absence of control at the top level of the organisation, whereas the assumed way of control is only observed to some extent at lower levels in the hierarchy. In this case, absence of control at the top level of the organisation is primarily explained by low levels of political sensitivity.

This research viewed performance measurement mainly from a functional and rather narrow control perspective, particularly by examining the roles of PM in the planning and control cycle, in which local government politicians and top managers are the main actors. However, this perspective may insufficiently recognise other factors and influences and other types of actors, especially citizens, consumers of services and oversight bodies, who also have substantial

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interests in good performing governmental organisations (Chenhall, 2003, p. 131; Pollitt, 1988, 2006). This could imply that a broader view on PM systems is more likely to emphasise elements of equity, service quality and broader societal effects.

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WHAT THE 'OLD GUYS' CAN TELL US: EDWARDS AND BELL'S THE THEORY AND MEASUREMENT OF BUSINESS INCOME

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ABSTRACT*

In this article, Geoffrey Whittington reflects on the contribution of Edwards and Bell to the accounting literature. The paper suggests that the issues that Edwards and Bell addressed still underlie many of the contemporary debates, such as that on the conceptual framework of financial reporting. Edwards and Bell (1961) is not only an important historical document but also highly relevant to current thought and practice, and worthy of much better integration within the current accounting literature.

INTRODUCTION

When I was asked to write about a piece of accounting literature that had particularly interested me, the choice was instantaneous and inevitable: Edwards and Bell. Their book, first published by the University of California Press in 1961, has become a legend in the accounting literature, widely cited and very influential but, as with many legends, more often cited than closely studied. The date of publication was particularly apt, coming at the beginning of the golden decade of a priori accounting theory that saw the publication of seminal work by Chambers

* **Author's Note:** This paper is a response to the editors' invitation to write about the piece of accounting literature that has influenced me most. The decision to write about Edwards and Bell was made before the sad news of Philip Bell's death, although that event made the choice more poignant. Philip Bell was a good friend and colleague, as well as an outstanding contributor to accounting thought.

Editors' Note: This paper is the first of an occasional series where influential academicians are invited to reflect on an accounting literature which in turn influenced them. The purpose is to explore aspects of the accounting traditions which are significant in the formation of accounting thought and practice as represented by the author and to introduce this literature to a new generation of scholars and students of accounting.

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(1966), Gynther (1966), Sterling (1970) and others, all of whom were concerned centrally with the problem of measurement in financial reporting. Thus, in its first decade, Edwards and Bell was much cited and had a significant impact on accounting thought. It also had a significant impact on accounting practice during the brief reign of current cost accounting (CCA) in the late 1970s and early 1980s. Current cost operating profit was essentially the same concept as Edwards and Bell's preferred measure of current operating profit, although attempts by standard setters to adjust for general inflation by means of gearing adjustments and monetary working capital adjustments within a CCA framework were not consistent with the Edwards and Bell system, as the authors made clear in their introduction to the Garland reissue of the book (1995). They preferred to deal with general inflation by means of general price level adjustments, to obtain consistent measures in real terms.

Inevitably, interest in Edwards and Bell's work declined with the growth of interest in empirical studies in accounting research and the associated loss of interest in 'normative' theory, which occurred with increasing momentum in the 1970s. Equally, the interest of accounting standard setters and other policy makers declined after the withdrawal of current cost accounting in the 1980s. Edwards and Bell subsequently became a popular footnote reference, referring to the past rather than to current concerns: hence the predominance of citation over close study. Symptomatic of this was a fairly recent discussion on measurement between the present author and a very distinguished American accounting academic: when Edwards and Bell was cited as the source of an argument, the American academic responded, 'gee, these are old guys. I don't have to read that stuff!' Hence, the title of this paper.

As a result of this change of fashion, Edwards and Bell were never given the AAA (American Accounting Association) award for notable contributions to accounting literature, although they were belatedly admitted to the Accounting Hall of Fame (in 2003). Apart from personal considerations, this is unfortunate for the development of the accounting discipline, because the issues that Edwards and Bell addressed still underlie many of the contemporary debates, such as that on the conceptual framework of financial reporting.

EDWARDS AND BELL'S THEORY

Edwards and Bell approached their work as economists, which was their primary background, although the book contains an extremely thorough account of how the theory could be applied in practical accounting systems, complete with extensive journal entries. The great strength of the book is in its marrying of theory and practice by the sound application of principles derived from the economics of the firm to the problem of accountability.¹ The basic theory is stated in chapters 2 to 4 of the book. The starting point is that the firm is a profit-seeking entity and that the role of the financial accounts is to trace the firm's progress in achieving that end in an uncertain world. *Ex ante* subjective value (the discounted present value of expected future cash flows) drives decisions relating to the firm but expectations

are not reliable enough for financial accounting. The measures used in accounts have to be based on objective *ex post* transactions, events and market prices. Within this framework *ex post* income measures are seen as useful summary measures of progress towards realising subjective value, or, as the authors express it, the process of turning subjective goodwill into objective goodwill.

The complexity of the problem of measuring the economic progress of a business means that there is a variety of alternative income measures that can be useful. Each of the income measures proposed by Edwards and Bell articulates clearly with the balance sheet; the aggregate income measure being consistent with changes in net assets in the balance sheet. In this respect, the Edwards and Bell approach is consistent with the 'balance sheet' approach adopted in the International Accounting Standards Board's (IASB) framework, and with the comprehensive income approach to measuring performance that is currently being developed by the IASB. However, the Edwards and Bell approach also emphasises the importance of income measures and attaches particular importance to the disaggregation of the income statement into sub-components that reflect different sources of gain or loss.

Two important dimensions of income are separated. These are, respectively, gains accruing over *time* and gains resulting from use in *operational* activities. The former are described as *holding gains* and the latter as *operating gains*. They are both components of income but they represent different sources of gain (or loss). The context is assumed to be a manufacturing firm, where the distinction between operations (manufacturing) and holding (stocks and fixed assets) is most clear; the position is more complicated in, for example, a financial institution whose operations include taking a position on price changes.

Having separated operating activities from holding activities, the next step is to define clearly the income of the period. Here the authors make the very important observation that *realised* income, which is the traditional basis used in historical cost accounting, includes the holding gains and losses of prior periods that are realised in the current period. The separation of holding from operating gains and the correct allocation of holding gains to the period enables a correct assessment of *periodic income*. This correct allocation is made by carrying the assets and liabilities at *current value*, which causes holding gains and losses to be recognised immediately the price change occurs, rather than on subsequent realisation, and thus avoiding the recognition of holding gains when they are realised (as in historical cost accounting) rather than when the value change occurs (as in current value accounting). The result of this is a two-part income statement, the first part of which shows current operating profit or loss (current revenue *less* current costs, where 'current' implies prices current in the period) and the second shows current holding gains and losses ('current' implying gains and losses arising from price changes that occurred in the period).

The next issue to be resolved is how to measure the current values on which holding gains are based. Edwards and Bell define two alternatives: current acquisition costs, described as *entry values*, and current realisable values, described as *exit values* or *opportunity costs*. It is acknowledged that both have a degree of relevance, but entry values are preferred for a *going concern* business,

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because they represent the current cost of resources available to be used in future operations. Such holding gains are described as *realisable cost savings* and the measure of profit that adds these to operating profit is known as *business profit*. The alternative measure of holding gains based on exit values (opportunity cost) is regarded as less relevant in a going concern manufacturing business because the assets are held for use rather than for sale in their present state. When the opportunity cost basis is used to measure holding gains and operating profit, the resulting total is described as *realisable profit*. It is recognised that the realisable profit measure is useful as a *short-run* measure of profit, showing whether the return from exit at opportunity cost at the end of the accounting period (a liquidation value) would have justified entry at opportunity cost at the beginning of the period. However, this is not the main consideration for going concern operations and, for such entities, Edwards and Bell prefer operating profit measured on an entry value basis (the operating profit component of business profit) as the key measure of performance. This profit measure shows the extent to which the current sales revenue exceeds the current cost of goods sold and is therefore a measure of the economic sustainability of the production process. Operating profit needs to be sufficient to provide an acceptable return on the current cost of the net assets used in production if replacement is to be justified; hence its characterisation as a long-run profit measure. The excess of expected operating surpluses over the cost of capital, defined by Edwards and Bell as *excess realisable profit*, is the source of subjective goodwill.²

The final distinction between the income measures that are proposed by Edwards and Bell is that between *money* income and *real* income, the latter being money income translated into real terms by being adjusted for general price level changes. They rightly point out that the primary problem is to record current prices at a common date for all individual assets and liabilities. Not only are these specific prices an important source of information in their own right (capturing the effects of relative price changes in money measures of income) but they facilitate the translation of money income into real income; once all items are recorded in money values established at a common date (and therefore in currency units of the same date), comparisons in real terms with values established at another date can be achieved merely by general index adjustment of the aggregate. This type of adjustment is, of course, particularly important in periods of high and variable inflation, and it is therefore not surprising that Edwards and Bell was widely cited in the inflation accounting debates of the 1970s and early 1980s (Tweedie and Whittington, 1984). Adjustment for inflation using general indices had been explored extensively by earlier writers, notably, in the English language, by Henry Sweeney (1936), who had also demonstrated the possibility of combining current (as opposed to historical cost) valuations with general index adjustment.³ However, Edwards and Bell made a unique contribution by emphasising the primary requirement to adjust for *specific* price changes (current values), with general index (real terms) adjustment as useful additional information (especially in periods of high and variable inflation), rather than as the primary problem of price change accounting. Furthermore, in the second part of their book, Edwards and Bell developed a simple and elegant

series of closing adjustments that would enable their system to be implemented without compromising the historical cost accounting records of the reporting entity.

THE CURRENT RELEVANCE OF EDWARDS AND BELL

Enough has been said to indicate that, in the past, Edwards and Bell's book has had a significant impact on accounting thought and practice, but why should we still study 'these old guys'?

For at least three reasons:

1. Insofar as their work underlies current thought and practice, we need to go back to the original source in order to achieve a proper understanding. Just as geometers still study Euclid, so accountants should study Edwards and Bell.
2. Some of their work is relevant to current issues in thought or practice but its lessons have been forgotten, or never learned by a generation that has been taught to ignore 'old guys'.
3. Insofar as their work is imperfect or incomplete (as is almost inevitable), ironing out the imperfections or completing the picture are tasks that should challenge the current researcher.

It is perhaps insufficient to enunciate these reasons *ex cathedra*, especially as the object of this paper is to attract the interest of those who have previously ignored Edwards and Bell's work, so the remainder of the paper is devoted to providing examples of each of the three types of case. In most cases, the ideas will also be found elsewhere in the accounting literature, but Edwards and Bell wove them into a unique theoretical framework and expressed them with a clarity and insight that repays study: 'what oft was thought but ne'er so well expressed'.

Embodiment in Current Thought and Practice

One of the most hotly debated issues in current financial reporting is the form of the income statement, and, in particular, the idea that it should be a *comprehensive income* statement, articulating with the balance sheet. Articulation, sometimes referred to as the 'clean surplus' relationship, requires that comprehensive income, less capital contributions from equity and less payments to equity, is equal to the change over the period in the amount of equity recorded in the balance sheet. This concept underlies the theory of Edwards and Bell, and their preferred concept of business profit. They explain both the mechanics and the underlying theoretical justification of comprehensive income measures with a clarity that has been achieved rarely, before or since 1961. Their income statement was divided into two sections: an operating profit measure and a statement of holding gains (realisable cost savings, using

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their preferred entry value measurement), the two components summing to a comprehensive income measure (business profit, on the entry value basis). An early attempt to apply a similar (but not identical) format in accounting standards was the ASB's FRS 3 (first issued in October 1992) (Accounting Standards Board, 1992), which presented a comprehensive income measure, total gains, in two statements, the first including a measure of operating profit (together with some other items) and the second (the Statement of Recognised Gains and Losses, or STRGL) adding in other recognised gains and losses to yield total gains.⁴ The IASB has also recently adopted a comprehensive income format (*Revision of IAS 1: Presentation of Financial Statements*, 2007). Hence, Edwards and Bell's fundamental insight that there should be a statement of comprehensive income, with separate disclosure of operating profit and other gains and losses, has made a significant impact on financial reporting practice.

An unresolved issue relating to this is the issue of subtotals within the comprehensive income statement, and particularly the definition of operating profit. Edwards and Bell's operating profit is similar in concept to the earnings figure that many preparers of accounts have advocated in their submissions to the IASB. A study of the Edwards and Bell concept and the theoretical case supporting it should illuminate the present debate. It would show the limitations of such a figure, as well as its possible strengths, and might also suggest restrictions on what should be included in it.⁵

A particular insight of Edwards and Bell relating to income statement presentation is their emphasis on identifying income *of the period* and separating the effects of holding gains and losses made in prior periods which are included in the realised gains recorded in historical cost measures of income. Although full current value accounting is necessary to achieve this fully, it is surely helpful within a mixed measurement system to separate out those current value gains that do clearly represent gains of the period from historical cost gains that may represent the realisation of gains accruing over a number of periods. Such a distinction was proposed by an unpublished International Accounting Standards Committee (IASC) advisory committee report and is still one of the issues to be considered in the IASB/FASB (International Accounting Standards Board/Financial Accounting Standards Board) project on reporting financial performance.

In addition to the obvious relevance of Edwards and Bell to reporting financial performance, their treatment of price change accounting is still relevant to practice and to current accounting standards. Their analysis of general price level adjustment, including a demonstration of how such adjustments can be made at the end of each accounting period, thus preserving the historical cost record, is consistent with the current international standard on accounting in hyperinflationary economies (IAS 29) but much clearer and better grounded in theory. Their message that such adjustments are best made when the individual items are measured at a common date is also an important one which should be heeded when IAS 29 is revised or if a new general standard on price change accounting is developed.⁶

Relevance to Current Issues

As a work of accounting theory, the most obvious relevance of Edwards and Bell is to the current development of a joint IASB/FASB conceptual framework for financial reporting. This new framework seems likely to influence the development and interpretation of accounting standards for many years to come. There are two important lessons that can be learned from Edwards and Bell in this context. First, the understanding of the setting in which financial reporting takes place, and second, the specific implications of this for the measurement debate, which is often characterised as the fair value question.

The IASB and FASB have exposed for comment, as the first stage of their revised joint conceptual framework, a discussion paper containing their preliminary views on the objectives of financial reporting (IASB, 2006). This would have been enhanced by taking account of the analysis of Edwards and Bell, who dig deeper into the fundamental reporting process and its relationship with the profit maximising objective. The current framework documents talk extensively about the need for financial accounting data to aid the prediction of future cash flows, but they lack Edwards and Bell's clarity in establishing the precise nature of this relationship. Edwards and Bell analyse accounting as an *ex post* process, reporting past transactions and events, whereas future cash flows are *ex ante* estimates, representing subjective goodwill and are not suitable for incorporation in financial reports. Therefore, accounting data can usefully show past and current progress towards achieving future targets and, in the process, can provide feedback to investors or managers that will be relevant to their decisions, but they do not attempt to provide complete information for decisions, by anticipating all relevant future events. Such elements as operating profit, for example, may be useful initial inputs to a model for predicting future operating cash flows (with additional assumptions about future trends in sales and margins), but they will not, by themselves, provide a complete assessment of 'subjective goodwill'. Thus, Edwards and Bell view the reporting process as *accountability* or *stewardship*, based on past transactions and events, rather than a direct source of predicting future cash flows.⁷ The removal of stewardship as a distinct objective of financial reporting was one of the more controversial aspects of the first chapter of the discussion draft of the new conceptual framework.⁸

The implications for measurement of the Edwards and Bell approach are also at variance with the current IASB/FASB approach in the conceptual framework revision project⁹ because, unlike the IASB and FASB, they do not aspire to identify a *single* ideal method of measurement. Rather, they see merit in a variety of valuation methods and income measures. Their preferred measure of business income is based on current replacement cost, but they are careful to demonstrate the potential usefulness of opportunity cost for some purposes. In particular, this is the case when an asset is surplus to operational requirements and is held for sale that will realise opportunity cost.¹⁰ This eclectic approach arises from their basic model, which recognises the fundamental *uncertainty* of the environment in which financial reporting takes place, and the role of financial reports in reducing, but not eliminating, that uncertainty by providing an objective account of the

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entity's progress to date. Their approach can be classified as an *information* approach rather than a *measurement* approach (Beaver and Demski, 1979; Hitz, 2007): they view accounting as providing useful *information* to be fed into models of valuation or decision making, rather than providing direct *measurements* of discounted cash flows or other economic phenomena.

Gaps and Limitations

It would be misleading to suggest and unrealistic to expect that Edwards and Bell, writing in 1961, had the final answer to all of the problems in the field of business income measurement. However, the limitations of their work should provide a starting point for their successors, and failure to understand those limitations would lead to misuse of their insights.

An obvious limitation of their work was that they assumed a standard productive firm which was a going concern. Hence, the preference for entry value measurement could be justified by the need for assets to be used in production and ultimately replaced. Edwards and Bell reverted to the 'opportunity cost' (exit) value only for 'short-run' profit measurement and in the case of assets that were to be sold as being surplus to requirements. However, in the case of a firm engaged in investment rather than production, the case for the replacement assumption is less persuasive, and the availability for sale of the assets strengthens the case for opportunity cost measurement.

The assumption of a firm that had productive operations also minimised the operational difficulties of separating holding gains from operating gains. This is a plausible dichotomy and would be very informative where it could be made precisely, and, to achieve this, Edwards and Bell made the arbitrary assumption that production was instantaneous. In reality, all production takes time, so that there is a degree of arbitrariness in allocating between operating profits and holding gains.¹¹ This problem becomes acute when input prices fluctuate widely and when the 'operational' element is difficult to define. That is why non-manufacturing firms fit less easily into the framework. Financial companies are a good example of the possible ambiguity of the operating/holding distinction. Holding financial instruments for gain may be a central part of their operational skills, and this challenges the relevance of the distinction between holding gains that occur as a result of price changes over time and operating gains that occur as a result of a production process. This is why the income presentation problems of financial institutions will receive special consideration at a later stage of the IASB/FASB project on reporting financial performance.

The practicality and usefulness of the operating/holding distinction are essentially empirical issues. A more fundamental limitation of the Edwards and Bell model is the *time horizon*. The business profit model assumes a going concern, which implies an indefinite and possibly infinite life for the entity. Thus, it seems likely that, to justify continuation, subjective goodwill will be positive at the end of any accounting period and it may be larger than it was at the beginning of the period because of new opportunities that have arisen during the year.

The assumption of indefinite life may seem to contradict Edwards and Bell's algebraic and numerical illustrations in chapter 2 of their book, 'Core of the Theory', which demonstrate how subjective goodwill is realised and converted to market value over the finite life of a firm or investment.¹² In reality, new investments will take place continuously and expectations about the returns to existing investment (and therefore the value of subjective goodwill) will change. Thus, over a realistically indefinite horizon, there will be no exact correspondence between realised and subjective profit: the closing position will always include an element of unrealised subjective goodwill. However, the illustrations over a finite life do serve to illustrate the relationship between *ex post* accounting measures and *ex ante* expectation measures: they are misleading only if it is not understood that, for an indefinite time horizon, the relationship is not an exact one for a whole entity.¹³

In evaluating the performance of a going concern business, Edwards and Bell's preferred measure is the operating profit component of business profit. This shows the extent to which current revenue exceeds the current cost of inputs and can provide a foundation for predicting future operating profits¹⁴ and therefore for estimating subjective goodwill. The holding gain elements of business profit (realisable cost savings) will also need to be taken into account in making future predictions, but these will be more difficult to model because, by their nature, they are likely to be unpredictable. The usefulness of the Edwards and Bell holding gain information for predictive purposes was not explored deeply in the book and is still a subject worthy of further research. An unfortunate consequence of the decline of interest in Edwards and Bell's work is that it has been substantially ignored in the extensive discussions of James Ohlson's important work (Ohlson, 1995) on the relationship between accounting information and stock market valuation. Ohlson's model provides an alternative dichotomisation of income (into permanent and transitory components) which might nevertheless be consistent with the Edwards and Bell model in some conditions: both models are derived from the residual income model originally identified by Preinreich (1938).

A further significant aspect of Edwards and Bell that might be regarded as incomplete is the important and topical question of measurement.¹⁵ The book acknowledges that both exit and entry values may be useful in different circumstances which define the likely disposition of the asset by a profit-maximising business: replacement costs are seen as most relevant to items that are to be replaced. One issue here is the definition of replacement cost in circumstances of technical change. Edwards and Bell preferred replacement with identical items, whereas recent literature and applications have preferred the 'modern equivalent asset' approach.¹⁶ One of the original authors (Edwards, 1975) subsequently expressed doubts about the original argument but concluded that the issue was not easily resolved. The authors also later espoused deprival value as being a clearer framework within which to justify the use of replacement cost (Edwards and Bell, 1995), but deprival value itself is still being evolved and debated (Stark, 1997; Van Zijl and Whittington, 2006). Thus, clarification is still required of the definition of and the precise case for using replacement cost.

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CONCLUSION

This has been a brief and rather superficial review of Edwards and Bell's work. A book of such importance can be appreciated properly only in its full original form. However, it is hoped that the author has fulfilled the basic purpose of the paper, which is to persuade the reader that Edwards and Bell is not only an important historical document but also highly relevant to current thought and practice, and worthy of much better integration within the current accounting literature. The 'old guys' are still well worth reading.

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NOTES

- ¹ The present paper, together with the majority of the subsequent literature that refers to Edwards and Bell, concentrates on *external* accountability, particularly to investors. The authors also stressed the value of their system for *internal* accountability to management. Management would have an explicit future plan or budget based on inside information, against which to evaluate *ex post* performance. Management's evaluation task would therefore be easier than that of the external user, whose assessment of 'subjective goodwill' is necessarily less well informed.
- ² Chapter 2, Appendix B.
- ³ Chapter 3 of Sweeney's book demonstrates how current values can be combined with general index adjustment, and also illustrates the separation of realised from unrealised gains. However, the chapter is very short and Sweeney did not emphasise this aspect of his work, preferring to concentrate on general price level adjustments. In a conversation with Philip Bell in the 1980s the present author was told that Edwards and Bell were unaware of the contents of Sweeney's chapter 3, although they cited his work as a standard reference on general price level adjustment ('stabilised accounting').
- ⁴ FRS 3 assumes the current mixed measurement methods used in current accounting standards and so does not yield the same measures as Edwards and Bell's business profit statement, but the basic aim of distinguishing operating gains from other gains and presenting a 'clean surplus' comprehensive income measure is present in both.
- ⁵ Some of the complexities involved in defining a concept of operating profits or earnings are explored in Barker (2004).
- ⁶ The international standard, IAS 15 (1981), now withdrawn, was an extremely permissive document, reflecting the lack of consensus on the subject at the time of its issuance. It merely recited the broad approaches available, in very general terms, and expressed no preference or requirement.
- ⁷ This argument is elaborated in Whittington (2008).
- ⁸ A revised version of the preliminary views on this part of the conceptual framework was published as an exposure draft in May 2008.

- ⁹ Details of the current state of this, and other IASB projects, can be found on the IASB website: <<http://www.iasb.org/Current+Projects/intro.htm>>.
- ¹⁰ In relation to the current debate on fair value, it should be noted that Edwards and Bell's opportunity cost is not the same as fair value (as defined in SFAS 157, 2006), because it represents the realisable proceeds, net of selling costs, rather than the selling price.
- ¹¹ Kay (1977), in a review of the Sandilands Report (1975), gave the vivid example of the price of gold changing whilst a gold watch was being manufactured.
- ¹² This result depends upon cash realisation at termination. This is the assumption used by Kay (1976), Peasnell (1982) and others to demonstrate the relationship, over the life of an investment, between the accounting rate of return and the internal rate of return. In the introduction to the 1995 re-issue of their book, Edwards and Bell acknowledge that Preinreich (1936, 1937 and 1938) anticipated their theoretical demonstration of the relationship between subjective (expected) and objective (realised) goodwill in a finite horizon context.
- ¹³ It will be exact for particular projects that have terminated by the end of the period, but a going concern entity will have uncompleted projects that have associated subjective goodwill.
- ¹⁴ This is discussed in Revsine (1973), chapters 4 and 5.
- ¹⁵ Stevenson (2007) provides a recent evaluation of Edwards and Bell's relevance to the current measurement debate in financial reporting.
- ¹⁶ See Byatt (1986), Sandilands (1975) and Edwards, Kay and Mayer (1987). The FASB standard, FAS 33 (1979), and the Accounting Standards Committee (ASC) standard, SSAP 16, all advocate economic cost of replacement of the *service* rather than the specific asset.

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