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**Managerialism, Accounting and Accountability  
in the Italian local governments: an empirical analysis**

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# **Managerialism, Accounting and Accountability in the Italian local governments: an empirical analysis<sup>\*</sup>**

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## **ABSTRACT**

The paper aims to investigate the intricate relationship between accounting information systems, managerialism and accountability in Local Governments. The exploratory case study was conducted using a mix of method both qualitative and quantitative, in the context of a medium-size Italian municipality. The findings confirm that the quality of accounting information systems is central in the managerial development of an organisation, public but also private, and the presence of internally coherent systems of accountability. The technological and procedural slack of the AIS allows managers to develop their private information systems to fulfil also accountability obligations or needs. The uncontrolled introduction of the reforms brought about the development of conflicting forms of accountability, the search for internal and external legitimisation by managers, to protect themselves from the political influence and the attempt to evaluate their performance. The paper provides interesting insights on the impact of accounting/managerial based public sector reforms on the inner functioning of Local Government, emphasising the risk of delivering changes not foreseen by the official aims.

**Keywords:** accounting information systems, accountability, managerialism, local government  
JEL Classification: M48; M21

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## **Introduction**

The Italian local governments (LGs) have been in the throat of different reform processes, starting from the 1990s. Similarly to other OECD countries, some of the relevant changes can be related to the managerialisation of LGs in terms of new accountabilities (Humphrey, et al., 1993), accounting techniques and accounting information systems (AISs) (Guthrie, et al., 1999; Lapsley, 1999).

The attempt to modernise Italian LGs was based on two main aspects (Mussari, 1997): the move to a management by result approach, the creation of high level of managerial authority on one hand, and the introduction of accounting innovations on the other hand. Indeed, the reform increased managers' responsibility in terms of resource allocation and the performance achievement, with the introduction of result-based incentives scheme.

The accounting changes are related to the debate developed, in the '90s, around the opportunity to move from a financial-based accounting system to an accrual-based one. The result of this debate was the introduction of modified financial accounting. Among the main innovations, the introduction of a budget-like system tries to link resource allocation to performance management, strategic and management accounting tools. The reforms, thus, conducted towards the introduction of new accounting techniques as a support of the managerialisation process. The accountability focus moved to the outcomes of the activity, in terms of efficiency, effectiveness and economy (the three Es). In a public sector context, the effects of accounting based reforms and various forms of accountability are not so obvious and are required to be assessed, taking into account the national, social and organisational contexts (Broadbent, 1999; Broadbent e Guthrie, 1992).

As a consequence, LGs developed more sophisticated AISs, for different purposes: management accounting, managers' evaluation and incentive schemes, accountability. Accounting, indeed, must not be considered as a plain practice, but as part of a process of "rationalising, modernising of the New Public Sector" (Lapsley, 1999: 201). The expected consequences on management behaviour can be related to a widespread use of AISs, since the reinforcement of AISs' quality and technology may support managers' decision-making and control. Moreover, the increased responsibility of managers is expected to lead to improved cost and performance consciousnesses, and more attentive internal and external accountability. In particular, accountability in public sector CEOs has shown to encompass multiple and sometimes conflicting meanings (Sinclair, 1995), with the risk of increasing the information asymmetry and, thus, opportunistic behaviour.

In the time of writing, there is still a little empirical evidence on the development of AISs and the factors involved in their use both for internal purpose (management accounting) and external purpose (accountability). Christensen and Skáræk (2007) discussed the need for a system understanding of the accountability reforms in public sector, in order to understand the "stronger forces" within organisations that hinder them to succeed. Caccia and Steccolini (2006) presented a longitudinal case study on accounting information system development in one municipality, while another study (Steccolini, 2004) showed the limitation of the reporting practices for accountability purposes. Besides, Panozzo (2000) argued about the paradox of Italian public sector reforms where accounting and managerial technologies were introduced as a matter of legal compliance, rather than as a mechanism for enabling change.

This paper attempts to contribute to the literature, through a case study focussed on the relationship between the role of AISs in supporting the managerialism development, and the accountability system in LGs.

The case study was conducted in a middle-size municipality and adopted a theoretical framework developed drawing from accounting information system, management accounting, accountability, and public sector reform literatures. The data were collected through a triangulation of methods, mixing quantitative analysis (questionnaire) and qualitative one (direct observation, interviews, document analysis), over a period of 18 months. The results suggest the existence of missing links among AISs, decision management and control, and accountability. In particular, AISs seems to play a fundamental role both for the development of managerialism and for accountability purposes, despite the technological and organisational limitations found in the studied LG. It was confirmed the existence of a multiple set of meanings in the use of accounting for accountability purposes (Sinclair, 1995) and the need for a systemic approach for public sector organisation when facing the introduction of accounting and accountability reforms.

The remainder of the paper contains five sections. “Background and research questions” provides an overview of the reform changes that have affected Italian local authorities and underlines the research questions the study attempts to tackle. “Theoretical notes and research design” discusses the literature used to draw the initial hypothesis and to structure the design of the research, which is followed by the “methodology” that guided the analysis. The final sections present the analysis and discussion of the results and some concluding comments.

### **Background and research questions**

Public sector reforms, under the label New Public Management (NPM), put efforts to improve governmental performance emphasising the need for performance measurement as a means for decision-making, and the managerialism of public administrations and their accountability (Hood, 1995).

Also in the Italian LGs these principles have been introduced. The reforms have been enforced through the enactment of a number of laws concerning different aspects, such as new governance structures, more advanced systems of accounting and auditing, new external and internal controls (Mussari, 1995; Marcon and Panozzo, 1998, Caccia and Steccolini, 2006). The key themes have been “efficiency” and “effectiveness”, via the promotion of a managerial approach to foster greater cost consciousness and tension towards the outputs of the activity. On this regard, the Italian case does not differ from the international trends of reducing the operating differences between public and private sector organisations. In doing so, the adoption by law of a managerial language can be considered the clear attempt to colonize the cultural endeavour in which LGs operate. Managerial talks have been defined as the Latin of our times, the language that everybody ought to know and use in order to survive in the present environment (Engwall, 1990). However, the way in which each country adopted the NPM reforms vary enormously this is due to institutional differences and different degree of intensity of managerial tools (Hood, 1995). The Italian case has been characterised by a lower impact of NPM, compared to other countries due to highly institutionalised public sector organisations. In such endeavours, we expect that traditional frameworks and professional cultures will maintain their formal position and legitimisation, and will hinder the diffusion of managerial values and culture. Moreover, as suggested by

Panozzo (2000), the introduction of managerial instruments by decree involves an additional problem of translation. In this sense, NPM principles and tools embedded in the reforms were introduced within LGs by non-specialists with a different cultural background, creating hybrid form of expertise (Kurunmäki, 2004; Kurunmäki and Miller, 2006). The possible outcomes of NPM changes may be either a significant transformation in the set of public managers capacities or boundary modifications due to higher resistance to change (Kurunmäki, 2004).

The reforms traced the path for change in the following convergent routes (Mussari, 1997):

- the increase of managers' autonomy and responsibility. After the decree law 29/1993, public managers are held responsible for the use of resources and the results achieved. One of the key issue was the separation between the articulation of policy (elected councillors) and its execution (managers);
- the introduction of new accounting tools, such as a management by objective, management accounting tools and the encouragement towards the adoption of accrual accounting (Anessi-Pessina and Steccolini, 2007);
- the change in accountability means. This is a consequence of the increased financial autonomy of Italian local authorities. In particular, the reform modified the system of accountability, in the attempt to lead away from the arbitrary and vague accountability by judgements to a more managerial, thus transparent and inter-subjective, set of tools and notions of what is a satisfying and adequate performance.

Besides, the '90 were characterised by a devolution process towards LG's, which are now the main actors in policy making and resource funding and allocation. Indeed, the average financial autonomy of LG's is about 55% (Istat, 2005), with peaks of 70-80%, of their current cash receipts. The rationale of the reform was that the higher the autonomy recognised to local units, the higher the responsibility and the efforts to performance improvement. However, Central Government maintained strict control on LG's spending, through spending limits and local taxation cap. This central control in connection with the reduction of financial transfer put LA's under a higher tension on costs and overall performances.

NPM reform sought to improve LGs' efficiency and to break the excessive influence of partisan politics on local decisions. The appointment of managers, with distinctive responsibilities, has been introduced in the attempt to ideally separate the articulation of policy from its execution. Their role becomes important, as professional expertise, also in informing public decisions (Feiock and Kim, 2001).

The expected consequences for AISs and management behaviour can be related to a widespread use and reinforcement of AISs' quality and technology. Geiger and Ittner (1996), on this respect, conclude that government units with higher financial autonomy (e.g. "pay their own way" through taxes, revenues or fees) are keener in developing more elaborated accounting systems. Indeed, AISs are aimed at two main functions (Zimmerman, 1997): decision making and control. In this sense, an adequate AIS improves management decision and control, since it provides managers with accurate, timely and appropriate information for the fulfilment of their functions. Moreover, the increased responsibility of managers is expected to lead to an improvement of cost and performance consciousnesses, and a more attentive internal and external accountability. The Italian public sector's reform, as elsewhere, attempted to spread the concept of

managerial accountability, involving the managers claim to account for the production of certain outputs and/or the use of resources to achieve determined ends.

In the time of writing, there is little empirical evidence on the development of AISs and the factors involved in their use in the Italian LGs. Caccia and Steccolini (2006) present a longitudinal case study on accounting information system development in one municipality, under a neo-institutional theory. In another study, Steccolini focussed her attention on the actual role played by local government annual reporting as a means of fulfilling accountability duties towards potential users (Steccolini, 2004). These empirical studies confirmed the institutional difficulties in bringing about managerial reforms within the Italian LGs context, due to the heavy institutionalisation of public administration (Panozzo, 2000). However, no specific studies have been directed towards the understanding the role of AISs in the context of LGs reforms.

We expect that after more than two decades from the reforms, managerialism has eventually spread. More responsible and accountable managers sought to impinge them in developing more accurate AISs. At the same time, the latter would help managers in adequately fulfilling the decision-making and control activity, and the accountability.

However, effective decision making and control may be limited by the lack of development of adequate accounting information systems. At the same time, effective decision making and control impact on the manager's consciousness over the unit costs and performances.

This study draws upon accounting information system, management accounting, accountability, and public sector reform literatures to examine two main research questions. What is the role of the accounting information systems in improving the decision making, both in terms of performance and cost consciousness, and which is the impact on the accountability system?

### **Theoretical notes and initial hypothesis**

#### *Information characteristics and decision management and decision control*

According to Zimmerman (1997) AISs have two main functions: supporting the decision-making process and enhancing the performance control. The first refers to the ability of information to foster rationality in all the phases of the decisional process (from the detection of the problem, to the implementation of the solution). As a consequence, AISs impact heavily on the quality of the decision, both strategic and operational. Anderson and Young (1999) present consistent evidence that implementation success is positively related to the relevance of the information for manager's decisions.

The second function refers to the activity to control the level of the organisation/unit's performance and the behaviour of the employees. In this case, AISs provide information related to past actions and results which should then be connected with some sort of incentive system, in order to motivate and align organisational behaviour. Moreover, in public organisation the AISs may provide information devoted to the fulfilling of accountability obligations towards different types of stakeholders.

The relationship between information and decisions highlights the tight connection between AISs and public managers' performance. The latter are the subject that received formal authority in terms of decisional autonomy and organisational responsibility over results and the use of resources. If the information related to unit/managers' performance and behaviour is not adequate, it is unlikely that decisions and control are going to be based on that information (Milgrom and Roberts, 1992). The

inability of existing AISs to provide quality information (i.e. valid, reliable, timely and cost effective) deter its use by managers for decision making, control and accountability purposes (Cavalluzzo and Ittner, 2004). Anthony (1965) underlined the importance of the design characteristics of AISs when it is utilized by an organization. Other studies demonstrated how the quality of the information system may influence its use and satisfaction by managers (for example, Ang and Koh, 1997).

Managers will use information in managing their units, on the extent they perceive that information as accurate, relevant, timely and ultimately cost-effective. Nicolau (2000), on this regard, concludes that the perceived satisfaction with the accuracy and monitoring effectiveness of information relates to the decision facilitation and control objectives of accounting information. This implies that the design of AISs should be based on the managers' requirements in term of which information is needed, when and in which format. The consequences, in case of perceived low quality of the AISs, would be twofold: the non-use of information and/or the creation of localised informal AISs.

We expect, then, that the perceived quality of the AISs is related tightly to the decision process and management control.

#### *Elected councillors influence over manager's decision*

NPM reforms aimed at recognising public managers the opportunity and responsibility to manage resources in achieving organisational results. The reduction of elected councillors' influence over decision making, and the enhancement of the role of professional expertise in informing public decisions are considered important issues of the overall reform processes. Political intervention, although necessary in a democratic institutional setting, may lead to political opportunism, rent seeking and a short-sighting decision-making horizon (Frant, 1996). Control of the decision management and decision control of local government by politicians may undermine the efficiency of the government's actions (Olson, 1964; Feiock, 2002). Whereas, if managers are left free to pursue the interests of the community and working toward professional standards, rather than political or personal interests, this may provide "a credible constraint on the efficiency-undermining rent-extraction activities of those in political power" (Miller, 2000: 314).

In the context of LGs' reform toward an enhanced managerialism we may expect that the behaviour of elected councillors becomes relevant in fostering or hindering the professional growth of managers.

#### *Decision Management and control, and performance and cost consciences*

Two main manager's activities are decision-making and controlling, which are triggered, as described above, by the quality of information they use. Decision-making is related to the resource allocation and definition of objectives to which the organisation should align to. NPM reforms have put much emphasis on the creation of a cultural shift into public organisation, along the rational-economic principle of efficiency (costs) and effectiveness (results/performance). Reliance on quantitative indicators (mainly accounting-based) has become more and more diffuse for decision-making and control (Modell, 2004).

The Italian local authorities' reforms followed a similar path introducing accounting innovations and new types of control of performances. Decree Law 289/2000 made a mandatory requirement for public administrations, also LGs, for a set of controls, namely: strategic control, managerial control and evaluation and *controllo di gestione*



(performance control). Public managers should be evaluated on their ability to achieve stated objectives, both financial and non-financial, with the set of resources available and within their degree of autonomy and responsibility.

In doing so, we expect that managers to have an increase their cost and performance consciousnesses. For cost consciousness we intend the managers' attitude to take into consideration the impact of their decisions on resource consumption (See Shields and Young, 1994). It implies that managers have sufficient information to know the actual and future level of cost. For performance consciousness we intend the manager's attitude to measure, or have measured, the results achieved for evaluation and control purposes. We expect LA's managers to have increased their performance consciousness fostered by decision management and control activities. Indeed, and coherently with the previous assumptions, these attitudes towards performance and cost is affected by the effectiveness of managers' decision-making and decision-control. The latter are enmeshed with the availability of accurate information. Indeed, Choe (2004), in a private firm, found a positive correlation between the provision of accounting information and the increase in production performance.

#### *Accountability and performance measurement*

The "accountable management" is one of the overriding concept in public sector reform, to go beyond mere compliance and legality, while focussing on results. The empowerment of public managers is unlikely to function without some form of accountability. Any form of empowerment denotes a "kind of delegation in which subordinate 'owns' the task she has been entrusted with and accepts full responsibility for it" (Statt, 1991: 40). Empowerment, thus, involves the delegation of decision-making and autonomy towards subordinates. Ogden et al. (2006) conclude their work underlying how manager's experience of empowerment may be affected by the presence of changes in accountability practices.

Despite its diffusion, the term accountability is still one of the most debated in the accounting literature. The discussion is not based on the need for accountability, but on its definition, contents and implication that are far from being resolved. This is particularly true in non English-speaking countries where there is no exact translation of the term, such as in Italy, where we may refer accountability to the broader concepts of autonomy and responsibility. Accountability, defined as "the giving and demanding of reasons for conduct" (Roberts and Scapens, 1985: 447), is necessarily connected with the existence of some possibility of autonomy, linked to some form of responsibility (Sinclair, 1995: 221). Accountability is then the exercise of the autonomy and responsibility of actions and use of resources in association with the scientific recognition of accounting methodologies (Hopwood, 1984).

In his classic work, *The functions of the executive*, Chester Barnard pronounced, "the first executive function is to develop and maintain a system of communication" (1938: 226). Translating this statement on our context, we may affirm that one of the main function of public managers is to be and become accountable; this involves inevitably the presence of a system of communication, stable for some stakeholders (e.g. elected councillors, the Major), and adaptable for some other (e.g. special interest associations). Indeed, accountability involves both giving of information and evaluating the information obtained in order to hold to account (Stewart, 1984: 14-15). In doing so, as well as decision-making and management control, there is the need, not only of

available information, but also of reliable, qualitatively satisfying, understandable, accessible and diffused information (Herzlinger, 1996).

AISs, consequently, are fundamental in the execution of accountability, and data limitations deter the use of performance measures for accountability and management control. These claim imply a direct relation between the managers' consciousness of their performances, both in terms of costs and results, and the level of accountability. Indeed, Cavalluzzo and Ittner (2004) found a positive correlation between the accountability and the measurement of performances. In other studies, performance measures, when used to increase managers' accountability, may increase the managers' incentives to use, then to be conscious, the information for decision making (Dixit, 1997; Smith, 1993; and Whynes, 1993).

### Research design

The analysis was conducted in a middle-size municipality in the North-East of Italy: 131.000 inhabitants and 1.400 employees. It has been experiencing a period of financial stress due to the decreasing of central government's transfer and the achievement of the local taxation upper limits. In the past years, there was an attempt to introduce managerial innovations appointing, for this purpose, a City Manager, which was suddenly sacked, as well as, his attempt of introduce management accounting systems, performance measurements and evaluation tools. In order to reach an initial agreement and involvement of the organisation, the research project was presented during a managers' meeting explaining them the aims, scope and the method used.

The methodology was characterised by two main phases. The starting point was a series of semi-structured interviews, from January 2006 to March 2006, to the top-managers discussing the following issues: the manager's role in the organisation, the accounting information systems, the level of accountability, the performance measurement and cost control. A total of 15 interviews were taped, transcribed and discussed with the managers (see table). They were aimed at gaining a better knowledge of the highly contextual characteristics of the organisations such as their perceptions of the managerial and accounting innovation brought about by the reform, verifying the actual implementation of management accounting tools and their impact across different areas of the municipality. The interviews enabled the direct access to original documents that were collected and analysed.

**Table 1- List of interviews**

Role	Date
General manager (2 interviews)	10.1.06 and 08.03.06
Financial unit manager (2 interviews)	11.1.06 and 09.03.06
Planning and control unit manager	12.1.06
Public works unit manager	17.1.06
Social services unit manager	18.1.06
Educational services unit manager	18.1.06
Urban development unit manager	31.1.06
Human resources unit manager	05.02.06
Local police unit manger	12.02.06
Cultural services unit manager	19.02.06
Theatre general manager	20.02.06
Legal service unit manager	01.03.06
IT unit manager	02.03.06

This qualitative phase was then followed by a quantitative analysis. Based on the research design, a structured questionnaire was created and tested with two public managers in order to avoid misinterpretations on misunderstandings of the items. The questionnaire was sent to all local authority's managers (N= 65) in an anonymous form. Questionnaires were submitted and collected during a period of two months length, 50 questionnaires were returned, with a response rate around 77%. There were, however, only 44 usable questionnaires for the processing. Managers were asked to answer to a set of statements, using a Likert's scale from complete disagreement (1), to complete agreement (7).

The results were then presented and discussed during an open meeting with the public managers and local councillors, in order to gain a wider understanding and to challenge the quantitative results obtained.

The sections of the questionnaire are now briefly described, before the analysis of the results and their comment.

#### *Information characteristics*

This section of the questionnaire was devoted to measure the managers' perceived satisfaction with the information characteristics, in terms of accuracy, timeliness and reliability. The latter can be considered the main attributes that an AIS should provide to foster decision-making and control processes, and then improve the formal authority of LGs' managers.

We based the instrument on the measures of information satisfaction developed in the information systems literature, in particular Doll and Torkzadeh (1988, 1998) and McHaney and Cronan (1998, 2000). A nine items section was then designed, including also an overall question asking managers to state their satisfaction with the AISs. The regression analysis showed that the nine items explained adequately ( $R^2$  59,8%, Adjusted  $R^2$  43,3%) the variance of the overall measure. Moreover, the factor analysis showed that the scale was unidimensional and the Cronbach  $\alpha$  coefficient of 0,92 supports the use of the summed measures.

#### *Use of AISs for decision management and decision control*

Different studies analysed the use of AISs for managers' decision-making and management control. They especially focussed on the role of budget, both in private firms (Swieringa and Moncur, 1975; Merchant, 1981) and not-for profit public organizations (Abernethy and Stoelwinder, 1991; Jones, 1993; Abernethy and Vagnoni, 2004). A four-item section was considered in the questionnaire to capture the use of budget-like information for decision management. Factor analysis provided enough confidence in the use of summed-up measure, and indicated a Cronbach  $\alpha$  coefficient of 0,73.

Decision control was considered in relation to the extent managers reported for budget and performance variances of their units. In doing so, we modified the items adopted by Abernethy and Vagnoni (2004), adding two items related specifically to the non-financial performance of the unit.

The decision control variable was measured through five items, and four of which demonstrated a relevant internal consistency, with a Cronbach  $\alpha$  coefficient of 0,78 that supports the use of the summed measures.

### *Elected councillors' influence over administration*

The relationship between elected councillors and the management is certainly one of the most controversial in public organisations. Indeed, it is not practically feasible to trace a clear-cut separation between the two, as to define when a political intervention over the administration is acceptable or not.

However, the absence of managerial orientation in public servant may be also caused by the little autonomy allowed. Moreover, political intervention in policy and administrative affairs may undercut the security of property rights and contract enforcement with negative impact on the economic and social environment (Clingermayer and Feiock, 1997). The political-administration dichotomy may be impossible to be fully accomplished, however it builds a cultural bias against partisan political influence and in favour of professional managerialism within public organisations (Lineberry and Fowler, 1967).

This variable was constructed using eight items regarding the perceived managers' need for more participation and autonomy in the decision-making processes and influence on annual definition and inter-annual changes in objectives due to political interventions.

The reliability test showed a Cronbach  $\alpha$  coefficient of 0,71, that supported the used of summed measure.

### *Cost and performance consciousnesses*

Cost consciousness is considered as the managers' attitude to take into consideration the consequences of their decisions in terms of resource consumption. This variable was expressed in a six-item section, adapting the tools used by Shields and Young (1994) in private firms and Abernethy and Vagnoni (2004) in public hospitals. An overall question was also included, and the regression analysis shows that the six items explain 97% of its variance. The factor analysis, moreover, shows a consistent Cronbach  $\alpha$  coefficient of 0,98.

Performance measurement has been one of the main element of the reforming public sector around the world. Indeed, the adoption of business like accounting and managerial tools implied the introduction of cost-accounting, accrual accounting, management accounting, with the intent to measure the level of efficiency and effectiveness and the move forward to improve the initial performances. Moreover, LGs' managers evaluation assessment is more and more based on their capacity to attain some stated results.

We expect, then, that public managers have put increased attention on the impact of their activity and decisions on performances. This variable was measured with a six item section, integrating those used by Melkers and Willoughby (2005) in studying the use of performance measurement in the U.S. local governments. The reliability test of the scale's factors was satisfying, Cronbach  $\alpha$  coefficient of 0,71, and support the use of the summed measures.

### *Accountability*

The increased managerialism in LGs is expected to entails some change in the accountability systems. Organisational processes of accountability, however, may vary in time and space, depending on the emphasis given to procedural aspects, rather than results or specific tasks. These differences may be reflected in the technological means that support the accountability systems, in terms of process, information systems, performance measures, in monitor and communicate certain outcomes.

The construct of this variable focussed on two related factors: the increased tension towards the accountability work, and the acceptance of accountability (Odgen et al., 2006). This variable was translated in the questionnaire in six items, adapting the four items structure used by Cavalluzzo and Ittner (2004: 252), and the Odgen et al.'s accountability construct (2006). The scale reliability test showed a satisfying integrity ( $\alpha$  0,90).

#### *Control variables*

In order to avoid some biases in the statistical analysis, we included two control variables. The first one distinguished between the top-managers (so called sector-manager) that oversee the activity of a set of LGs' services, and service managers that are responsible for a specific LGs' service or activity.

Moreover, the other control variable was the LG's units managers were belonging to. In both cases, we may expect some differences in the use and perceived need for AISs and the cost consciousness and measurement of performances.

### **Discussion of results**

#### *Descriptive statistics*

The questionnaire is first analysed through some descriptive statistics, as shown in Table 1, and then will follow a correlation analysis in order to verify our initial hypothesis. The controlling variable did not show any relevant biases in the data. In particular, distinguishing between top managers and service (or middle) managers did not show relevant differences. In table 2, indeed, two more columns are added, one for top managers (N=9) and service – or middle – managers (N= 35). Their means did not show contradictory results. The managers involved in the analysis showed to be experienced, with an average of 8 years in the current position, but with 18 years working period within the same municipality. This data has positive and negative consequences. On one side, experienced managers can guarantee high level of knowledge embedded in the organisation as a whole and of its functions. However, on the other side, this is a sign of lack of mobility among managers that may create strong routines and resistance to change. Indeed, more than 59% of the managers are more than 50 years-old, with a high level of education, around 80% have University degree or some tertiary form of education (Master or specialisation courses). Their experience is reflected also in the number of years spent in managing the budget and resources, with 38% between 4-10 years, and 41% between 11-15 years.

The descriptive statistical analysis of the questionnaire let us suggest some comments and reflections. The POLITICAL INFLUENCE variable scores a mean value (4,56) that underline a relevant engagement of elected councillors in administrative management decisions. As described in the previous section, this may have a negative impact in the manager's professional development and the pursue of efficiency and effectiveness within the limited amount of resources available.

The managers' satisfaction of the AISs scored the lowest value, with a general discontent of the quality of information. The overall question (e.g. To what extent are you satisfied with the quality of the AISs) confirmed the dissatisfaction with a mean-value of 3,30.

However, the low satisfaction with the AISs seems not to have impact on the ability and capability of managers in relation to the other variables analysed. For instance, the ACCOUNTABILITY variable score an overall mean of 5,09, demonstrating the

declared managers' sensitivity towards being accountable towards internal or external stakeholders. Also, DECISION MANAGEMENT and DECISION CONTROL variables score 4,22 and 4,57 respectively, with some difference between top managers (4,86 and 5,42) and middle managers (4,13 and 4,49). This may be partly linked to the formal authority structure of the LG, where decision-making and decision control are mainly centralised.

The last two variables confirm the disconnection between the use of AISs and the ability to manage by managers. Indeed, LG's managers declared to have a very high cost consciousness and performance consciousness regard to their units (5,48 and 5,73 respectively), with a high-peak for top managers (6,09 and 5,94). The question that may be raised at this point is the following: how may managers be able to be accountable, to perform satisfying decision management and decision control activities, and to be conscious of the impact on costs and performances with such a low satisfaction with the use of the AISs of the LG? We will try to answer to this question later on the discussion of the result.

**Table 2- Descriptive statistics of the variable (Values from 1 to 7)**

Variable	Overall Mean	Std. Dev.	Mean top managers	Std. Dev	Mean Service managers	Std. Dev
Political influence	4,56	1,83	5,12	1,45	4,35	1,94
Information Characteristics	3,90	1,62	3,99	1,13	3,90	1,72
Accountability	5,09	1,54	5,12	1,28	5,03	1,60
Decision Management	4,22	2,18	4,86	1,85	4,13	2,24
Decision Control	4,57	2,00	5,42	1,58	4,49	2,03
Cost Consciousness	5,48	1,86	6,09	0,75	5,34	2,04
Performance Consciousness	5,73	1,15	5,94	0,79	5,67	1,23

*Statistical Correlation analysis*

The results from the correlation analysis confirm most of our initial hypothesis and suggest also some additional interesting points for further research. Table 3 presents the Spearman's correlation analysis among the factors. The characteristics of the AISs have a significant (0,307, P= 0,048) positive correlation with the decision management processes, confirming, then our initial hypothesis and prior studies. It follows that AISs, also in LGs, need to be designed and thought trying to maximize the managers' information requirements. This was confirmed steadily by several managers during the interviews:

*“To me, the AIS does not contribute at all to improve my job, or even worst, sometimes it is an obstacle, due to its trickiness and not friendly use”* (Environment Unit Manager).

The financial manager attempted to put some explanation to the unsatisfactory use of the AIS. In particular, she affirmed that the AIS was introduced as a tool for normative compliance, and not as a support for decision making and control, as she put it:

*“I believe the main reason lies in the way the AIS was introduced overtime. Indeed, its functions were to fulfil to legal requirements, not to support managers’ activities”* (Financial Manager).

Besides, Decision control seems not to be fostered or hindered by the quality of the AISs. On this aspect, we will return later on the paper.

The relationship between the political influence over decision management and control appears to have partial negative correlation. The results are supportive to the hypothesis but only between decision control and political influence on administrative tasks. This is may be explained by the fact that the political influence over decision making alter the possibility to assess the direct responsibility of the managers. Moreover, the erratic behaviour of elected councillors impedes a clear definition of manager’s objectives, thus their evaluation. During the interviews a number of managers talked about *“political schizophrenia”* in the way their annual objectives changed frequently and without any prior economic evaluation in terms of resources availability and cost-benefit analysis. Besides, on the time of writing the Municipality did not have an effective performance measurement systems and the managers were not evaluated based on the results achieved. This was considered justifiable by the managers following the fact that their decisions were altered and influenced by non-accountable political parties.

**Table 3 - Spearman correlations among the factors**

		Pol. Influence	Inf. Charac.	Accountab.	Decision Mng	Decision Control	Cost Consc.	Perf. Consc.
Pol. Influence	Correlation Coeff. Sig. (2-tailed)	1,000	-0,006 0,822	0,201 0,166	-0,126 0,387	-0,388 0,006 (**)	0,023 0,164	-0,007 0,963
Inf. Charac.	Correlation Coeff. Sig. (2-tailed)		1,000	0,332 0,032 (*)	0,307 0,048 (*)	0,225 0,152	0,183 0,247	0,120 0,448
Accountabil.	Correlation Coeff. Sig. (2-tailed)			1,000	0,127 0,425	0,160 0,313	0,006 0,970	0,468 0,002 (**)
Decision Mng	Correlation Coeff. Sig. (2-tailed)				1,000	0,338 0,028 (*)	0,336 0,030 (*)	0,182 0,249
Decision Control	Correlation Coeff. Sig. (2-tailed)					1,000	0,228 0,146	0,277 0,076
Cost Consc.	Correlation Coeff. Sig. (2-tailed)						1,000	0,186 0,237
Perf. Consc.	Correlation Coeff. Sig. (2-tailed)							1,000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

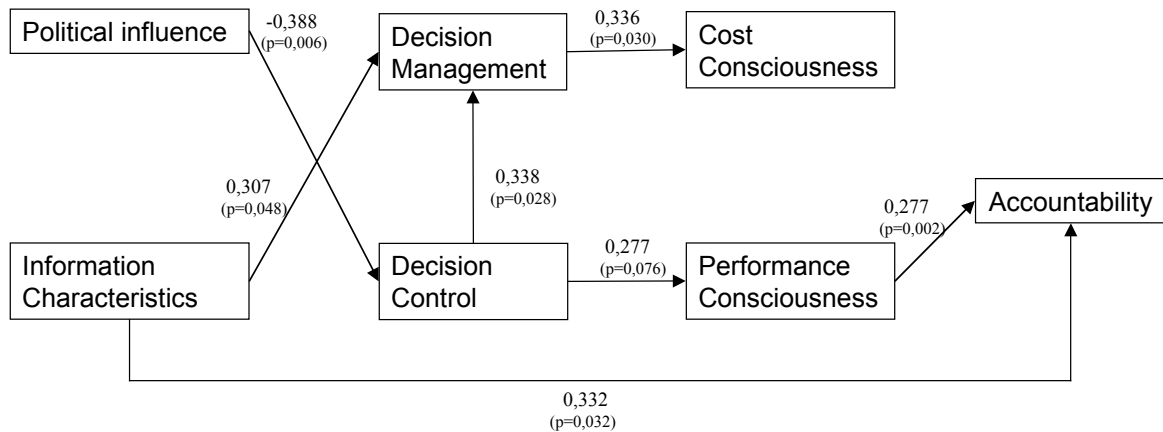


As one of the managers put it “How can I possibly manage my objectives, if they change without discussion by political intervention during the year, and also several times. Moreover, for any decision involving some sort of stakeholders’ compliant, I expect some elected councillors to intervene, trying to steer that decision” (Cultural Services Manager).

Decision management and decision control highlights a separate correlations with, respectively, cost consciousness and performance consciousness. The latter has not a complete significant value ( $P= 0,076$ ), even though it gives some support of the idea that the control by superiors may foster performance consciousness. However, our analysis showed a significant correlation also between decision management and decision control, and was not considered in our initial hypothesis. This may be due to the strict interdependencies existing between the two variables.

Indeed, the management of the budget is more related to the concept of resource consumption, rather than other non-financial performances. Whereas, decision control may foster managers to be interested on the impact on performances of their decisions.

**Figure 1 – Synthetic representation of the correlations among variables**



Accountability, as described before, has become one of the most important interest of managers, and it is expected to be positively correlated with both the manager’s consciousness of cost and performance. Our analysis confirmed the latter with a satisfying significance ( $0,277, P= 0,002$ ), whereas no significant correlation has been found between cost consciousness and the accountability.

The analysis showed also a significant positive correlation ( $0,332, P= 0,032$ ) between the information characteristics and the accountability. The finding suggests an interesting insight of further research and development, since the AISs seem to play an important role in the fulfilment of accountability. However, some prior studies (Jones, 1993; Kravchuk and Shank, 1996) concluded that the information system’s limitation may prevent managers from receiving timely and reliable data, affecting negatively the performance measurement system’s use for accountability purposes.

We attempt, at this point of the description, to answer to the question on where managers gather the information related to the performances of their units, since decision control and performance consciousness seems not correlated, directly or indirectly with the AIS. Indeed, during the interviews with the managers emerged clearly how they created separate and autonomous accounting information systems, dedicated to management accounting purposes.

*“(…), in my unit all the information I need for performance measurement are produced internally, so that I am sure about the quality of information. From time to time, we also provide information to the general AIS”* (Public Works Unit Manager).

It seems that the AIS of our case study is used by managers just in relation to their need for financial information, as another manager affirmed:

*“I use our AIS just for financial purposes, to control the level of my unit spending and to avoid budget slacks. All the information about the results of my unit are elaborated here not elsewhere”* (Social Service Unit Manager).

Such a situation was then confirmed by the financial manager of the municipality that underlined the criticalities of the actual AIS in use, and the fact that elected councillors have direct relationships with the unit managers in order to get the information about performance and the development of special projects and activities. In particular, it was pointed out the need for more technological investment, in order to overcome some, if not all, the actual AIS's limitations:

*“I have the perception that in almost all Units of the municipality there is a separate information system that does not dialogue with the central one. For most information, except for the financial one, we are to ask directly to unit manager, making the process inefficient and cumbersome. I think that future IT investment must overcome these limitations in the flow of information within the organisation”* (Financial Manager).

This finding confirms prior studies within the information technology literature (Kwon and Zmud, 1987) that indicate the technological issues as some of the key factors influencing the success of an information system.

Such a situation has an impact on the management control and evaluation. As described in the background section, LGs' managers are evaluated on a results basis, and they receive a financial incentive (up-to 10% of their annual salary). The limitations of the AIS impede the effective control of the results achieved, since the information about results comes directly from the managers. *“There is not objective evaluation of the ability of managers to achieve the results. Managers define their objectives without fixing a target, so that any performance is satisfying at the end of the year”* (Financial manager). This highlights the risk of Balkanization, as suggested by Bolman and Deal (1997: 71), if middle managers use autonomy to create centrifugal forces. Indeed, too much autonomy and too little control may hinder coordination and affect negatively the delivery of services in an efficient and effective manner.

### **Final comments**

This exploratory study aimed at enquiring the role of AISs in the Italian LGs and the use of accounting information by managers in fulfilling their activities (mainly decision-making and control) and accountability requirements.

This paper makes some important contributions to our knowledge of AISs in LGs in relation to NPM reforms, and accountability. These are the importance of AISs on fulfilling accountability duties and the managers' attitude to develop localised AISs to overcome ineffective and inadequate centralised AIS.

The managers' perception of AIS usefulness confirmed, also in the context of LGs, to play a key role in the managerialisation process. The latter, however, is limited by technological slacks, and by the influence of the elected councillors in administrative decision and tasks. The separation between politics and administration has been one of the main objective of the LGs' reform, but it seems far from being achieved.

Another interesting finding is the managers' attitude to create a "private" information system to support their day by day operations and management functions. Despite the managers knowledge about the costs and results of their units, these information resides into localised repository, which allow managers to fulfil accountability requirements, but, at the same time, to carve spaces for unaccountable objects and subjects. This has important implications on the way accountability is conceived and constructed. Indeed, securing accountability involves shared agreement about how it is manifested, and most of all "presupposes agreement about what constitutes an acceptable performance" (Day and Klein, 1987). It then turns that accountability and its contents are socially constructed and change in time and space, being affected by ideologies, motifs and language of our times (Sinclair, 1995: 221). The definition of measures of accountability, moreover, depends also on the level of knowledge related to a particular activity or organisation. In presence of information asymmetry, those who detain the repository of information may influence the way accountability and its measures are defined in a particular point in time.

The information asymmetry existing between the centre and the managers is the space for negotiation, conflict development and resolution, and potential opportunistic behaviours. In this context, we may consider the accounting systems as information, as a system of accountability in which managers create a legitimised institution through the management of boundaries (Llewellyn, 1994).

In conclusion, our findings suggest the limited impact of LGs' reform on AIS, which have been developed just to comply to existing norms, regardless the manager's needs in terms of information. The development of professional managers, moreover, seems to be limited by the significant influence of elected councillors, limiting the effective diffusion of some system of managerial accountability. Managers counteracted introducing localised information systems to satisfy their internal needs, the accountability requirements and to protect their organisational units from critics. Our analysis confirms the tendency of managers to create organisational silos to protect against public and political criticism, and in so doing inhibiting innovation and transparency (Norman, 2001). The absence of central control, and the autonomy of managers led to several organisational drawbacks, such as lack of coordination and information asymmetry. This contrast with the apparent simplicity and clarity of NPM's rational and tools, suggesting more attention on how the reforms are introduced within an organisational setting to make such systems work.

## References

- Abernethy M. A., Stoelwinder J.U. (1991), Budget use, task uncertainty, system goal orientation and subunit performance: a test of the "fit" hypothesis in not-for-profit hospitals, *Accounting, Organizations and Society*, 16(2), 105-120
- Abernethy, M. A., Vagnoni, E. (2004), Power, organization design and managerial behaviour. *Accounting Organizations and Society*, Vol. 29, 207-225.
- Anderson, S.W., Young, S.M. (1999). The impact of contextual and process factors on the evaluation of activity-based costing systems. *Accounting, Organizations and Society*, 24, 525-559.

- Anessi-Pessina, E., Steccolini I. (2007), Effects of budgetary and accruals accounting coexistence: evidence from Italian local governments. *Financial Accountability and Management*, 23(2), 113-131.
- Ang, J., Koh, S. (1997), Exploring the relationships between user satisfaction and job satisfaction. *International Journal of Information Management*, 103, 411-423.
- Anthony, R.A. (1965), *Planning and control system: a framework for analysis*, Harvard University Press, Boston.
- Barnard, C.J. (1938), *The Functions of the Executive*. Harvard University Press: Cambridge MA.
- Bolman, L.G., Deal, T.E. (1997), *Reframing organizations: artistry, choice and leadership*. Jossey-Bass: San Francisco.
- Broadbent, J. (1999), New Public Financial Management and Issues of Policy: Where Do We Go From Here?, in Olson O., Guthrie J., Humphrey C., (Eds.), *Global Warning! Debating International Developments in New Public Financial Management*, Cappelen Akademisk Forlag, 415-434.
- Broadbent, J., Guthrie, J. (1992), Changes in the public sector: A review of recent "alternative" accounting research, *Accounting, Auditing and Accountability Journal*, 5(2), 3-31.
- Caccia, L., Steccolini, I., (2006), Accounting and Organisational Change in Italian Local Governments: What's beyond managerial fashion?. *Critical Perspective on Accounting*, n. 1, 154-174.
- Cavalluzzo, K.S., Ittner, C.D., (2004) Implementing performance measurement innovations: evidence from government. *Accounting, Organisations and Society*, 29, 243-267.
- Choe, J. (2004), The relationships among management accounting information, organizational learning and production performance. *Journal of Strategic Information Systems*. 13, 61-85.
- Cristensen, M., Skárbæk, P. (2007), Framing and overflowing of public sector accountability innovations. *Accounting, Auditing and Accountability Journal*, 101-132.
- Clingermayer, J., Feiock, R.C. (1997), Leadership Turnover, Transaction Costs, and External Service Delivery. *Public Administration Review*, 57(3), 231-240.
- Day, P., Klein, R. (1987), *Accountabilities: Five Public Services*. Tavistock: London.
- Dixit, A. (1997). Power of incentives in private versus public organizations. *American Economic Review*, 87(2), 378-382.
- Doll, W.J., Torkzadeh, G. (1988), The measurement of end-user computing satisfaction. *MIS Quarterly*, June, 319-340.
- Doll, W.J., Torkzadeh, G. (1998), Developing a multidimensional measure of system-use in an organizational context. *Information and Management*, 33(4), 171-185.
- Engwall, L. (1990), *Mercury meets Minerva*. Department of Business Studies, Uppsala University.

- Feiock, R.C. (2002), A Quasi-Market Framework for Local Economic Development Competition. *Journal of Urban Affairs*, 24(2), 123-142.
- Feiock, R.C., Kim, J. (2001), Form of government, Administrative Organization, and Local Economic Development Policy. *Journal of Public Administration Research and Theory*, 11(1), 29-49.
- Frant, H. (1996), High-Power and Low-Power Incentives in the Public Sector. *Journal of Public Administration Research and Theory*, 6(3), 872-884.
- Geiger, D.R., Ittner, C. D. (1996), The influence of funding source and legislative requirements on government cost accounting practices. *Accounting Organizations and Society*, 21(6), 549-567.
- Guthrie J., Olson O., Humphrey C. (1999), “Debating developments in new public financial management: the limits of global theorising and some new ways forward”, *Financial Accountability and Management*, Vol. 15 n. 3 e 4.
- Herzlinger, R.E. (1996), Can Public Trust in Nonprofits and Governments Be Restored? *Harvard Business Review*, March-April, 97-107.
- Hood, C. (1995), The New Public Management in the 1980s: Variations on a Theme. *Accounting, Organizations and Society*, 20(2-3), 93-109.
- Hopwood, A. (1984), Accounting and the Pursuit of Efficiency, in Hopwood, A. and Tomkins, C. (eds.), *Issues in Public Sector Accounting* (Philip Allan - Oxford).
- Humphrey C., Miller P., Scapens R. (1993), Accounting, accountability and the UK public sector, special issue of *Accounting Auditing and Accountability*, Vol. 6 n. 3, 7-29.
- ISTAT (2005), *National statistics*. (Istat - Rome).
- Jensen, M.C., Meckling, W.H. (1992), Specific and general knowledge and organizational structure. In Werin, L, Wijkander, H. (eds.), *Contract economics*. (Blackwell Publishers – Cambridge).
- Jones, L.R. (1993), Counterpoint essay: nine reasons why the CFO act may not achieve its objectives. *Public Budgeting and Finance*, 13(1), 87.94.
- Kravchuk, R.S., Schack, R.W. (1996), Designing effective performance-measurement systems under the government performance and results act of 1993. *Public Administration Review*, 56 (4), 348-358.
- Kurunmäki, L. (2004), A Hybrid Profession: The Acquisition of Management Accounting Expertise by Medical Professionals. *Accounting, Organizations and Society*, 29, 327-348.
- Kurunmäki, L, Miller, P. (2006), Modernising Government: The Calculating Self, Hybridisation and Performance Measurement. *Financial Accountability and Management*, 22(1), 87-106.
- Kwon, R., Zmud, R. (1987), Unifying the fragmented models of information systems implementation. In Boland, R.J., Hirschiem, R. (eds.), *Critical issues in information systems research*. (John Wiley - New York).

- Lapsley, I. (1999), Accounting and the new public management: instruments of substantive efficiency or a rationalising modernity?. *Financial Accountability and Management*, 15(3-4), 201-207.
- Lineberry, R.L., Fowler, E. (1967), Reformism and Public Policies in American Cities. *American Political Science Review*, 61(3), 701-716.
- Llewellyn, S. (1994), Managing the Boundary: How Accounting is Implicated in Maintaining the Organization. *Accounting, Auditing and Accountability Journal*, 7(4), 4-23.
- Marcon, G., Panozzo, F. (1998), Reforming the reform. New accounting and management in the Italian health care sector. *European Accounting Review*, 7(2), 185-208.
- McHaney, R.M., Cronan, T.P. (1998), Computer simulation success: on the use of the end-user computing satisfaction instrument. *Decision Sciences*, 29(2), 525-534.
- McHaney, R.M., Cronan, T.P. (2000), Toward an empirical understanding of computer simulation implementation success. *Information and Management*, 37, 135-151.
- Melkers, J., Milloughby, K. (2005), Models of Performance-Measurement Use in Local Governments: Understanding Budgeting, Communication, and Lasting Effects. *Public Administration Review*. March/April, 65(2), 180-190.
- Merchant K. A. (1981), The design of the corporate budgeting system: influences on managerial behaviour and performance, *The Accounting Review*, 56, 813-829
- Milgrom, P., Roberts, J. (1992), *Economics, organization and management*. (Prentice-Hall International - Englewood Cliffs).
- Miller, G. (2000), Above Politics: Credible Commitment and Efficiency in the Design of Public Agencies. *Journal of Public Administration Research and Theory*, 10(2), 289-327.
- Modell, S. (2004), Performance measurement myths in the public sector: a research note. *Financial Accountability and Management*, 20(1), 39-55.
- Mussari, R. (1995), Italian municipal audit: Half a reform?. *Financial Accountability and Management*, 11, 127-140.
- Mussari, R. (1997), Autonomy responsibility and new public management, in Jones, L.R., Schedler, K. (eds), *International perspectives on the new public management*. (Jai Press – London).
- Nicolaou, A.I. (2000), A contingency model of perceived effectiveness in accounting information systems: Organizational coordination and control effects. *International Journal of Accounting Information Systems*, 1, 91-105.
- Norman, R. (2001), Letting and making managers manage: the effect of control systems on management action in New Zealand's central government. *International Public Management Journal*, 4, 65-89.
- Ogden, S., Glaister, K.W., Marginson, D. (2006), Empowerment and Accountability : Evidence from the UK Privatized Water Industry. *Journal of Management Studies*. 43(3), 521-555.

- Olson, M. (1964), *The Logic of Collective Action: Public Goods and the Theory of Groups*. (Harvard Business Press - Cambridge MA).
- Panozzo, F. (2000), Management by decree. Paradoxes in the reform of the Italian public sector. *Scandinavian Management Journal*. 16, 357-373.
- Roberts, J., Scapens, R. (1985). Accounting Systems and Systems of Accountability – Understanding Accounting Practices in their Organisational Context. *Accounting, Organizations and Society*, 443-456.
- Shields, M., Young, M (1994), Managing innovation costs: a study of cost conscious behaviour by R&D professionals. *Journal of Management Accounting Research*, 6, 175-196.
- Sinclair A. (1995), The chameleon of accountability: forms and discourses. *Accounting, Organizations and Society*. 20(2-3), 219-237.
- Smith, P. (1993), Outcome-related performance indicators and control in the public sector. *British Journal of Management*, 4, 135-151.
- Statt, D. (1991), *The Concise Dictionary of Management*. (Routledge – London).
- Steccolini, I. (2004), Is the annual report an accountability medium? An empirical investigation into the Italian Local Governments. *Financial Accountability and Management*, Vol. 20, n. 3, 327-350.
- Stewart, J.D. (1984), The role of information in public accountability. In: Hopwood A., Tomkins, C. (eds), *Issues in Public Sector Accounting*, 13-34, (Philip Allan Publishers – Oxford).
- Swieringa R. J., Moncur R. H. (1975), The relationship between managers' budget related behavior and selected attitude, position, size and performance measures, *Empirical Research in Accounting: Selected Studies, Supplement to Journal of Accounting Review*, 10, 194-205
- Whynes, D. K. (1993). Can performance monitoring solve the public services' principal-agent problem? *Scottish Journal of Political Economy*, 40(4), 434-446.
- Zimmerman, J. (1997), *Accounting for decision making and control*. (McGraw-Hill – Boston).