

**ACCOUNTING INNOVATIONS:  
A CONTINGENT VIEW ON ITALIAN LOCAL GOVERNMENTS**

Eugenio Anessi-Pessina, Greta Nasi, and Ileana Steccolini\*

**ABSTRACT.** Accounting innovations, and especially the introduction of accruals accounting, are often portrayed as fundamental aspects of public-sector reforms. An increasing body of literature has been studying the experiences of different countries and levels of government, often referring to Lueder's (1992) "contingency model" and its subsequent developments. This model highlights a number of social, political, and administrative variables that are likely to affect government accounting innovations. It applies at a country-wide level and is mainly intended to describe and compare the environments within which accounting reforms take place, as well as the technical features of such reforms. Our paper, on the contrary, tries to expand the contingency model by applying it to individual organisations and by testing its explanatory power.

**INTRODUCTION**

Accounting innovations, and especially the introduction of accruals accounting, are often portrayed as fundamental aspects of public-sector reforms (Hood, 1991, 1995; Lueder, 1992;

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\* *Eugenio Anessi-Pessina, Ph.D., is a Professor, Department of Management, Università Cattolica del Sacro Cuore (Italy). His research interests include public sector accounting and accountability, accounting reforms, and health-care management. Greta Nasi, Ph.D., is an Assistant Professor, Department of Institutional Analysis and Public Management, Università Bocconi (Italy). Her research interests include government innovation, accounting reforms, e-government and e-health. Ileana Steccolini, Ph.D., is an Associate Professor, Department of Institutional Analysis and Public Management, Università Bocconi (Italy). Her research interests include public sector accounting and accountability, accounting reforms and change in the public sector.*

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International Federation of Accountants - Public Sector Committee, 1997; Olson *et al.*, 1998; Lapsley, 1999). Many countries worldwide have long been experimenting with accruals accounting for all or some tiers of government (International Federation of Accountants - Public Sector Committee, 1997): among them New Zealand, Australia, the United Kingdom, Spain, Sweden, Canada, France, Belgium, Ireland, and Finland. The European Union and the United Nations have recently chosen to adopt accrual-based International Public Sector Accounting Standards (IPSASs). “Official” discourse on public-sector reforms generally praises the benefits deriving from accruals accounting.

The introduction of accruals accounting in the public sector, however, has not been without controversy. An increasing body of literature has criticised it on both theoretical grounds (Oettle, 1990; Ma & Matthews, 1993; McRae & Aiken, 1994; Guthrie & Johnson, 1994; Carnegie & Wolnizer, 1995; Lewis, 1995; Montesinos, Pina, & Vela, 1995; Stanton & Stanton, 1998; Guthrie, 1998; Monsen & Näsi, 1998; 1999, 2000; Christiaens, 1999; Ellwood, 1999; Monsen, 2002) and practical considerations (Guthrie, 1998; Stanton & Stanton, 1998; Newberry, 2002; Carlin & Guthrie, 2003; Hodges & Mellett, 2003).

Similar to New Public Management (NPM) in general, the literature initially focused on accruals accounting’s technical features and expected effects (Lapsley & Pallot, 2000, p. 215). More recently, the emphasis has been shifting towards actual implementation and impacts. In particular, several studies have been published that compare the experiences of different countries and levels of government (among others, see for example, Chan, Jones, & Lueder, 1996, and Lueder & Jones, 2003). One of the main findings of these analyses is that “accruals accounting” is not a clearly defined and unequivocal concept. Rather, like NPM itself, it is an umbrella term designating a wide range of solutions. In some countries and levels of government, accruals accounting replaces traditional budgetary accounting, while elsewhere the latter remains firmly in place. In between, a large variety of approaches exists, ranging from the adoption of accrual-based reporting in conjunction with cash or commitment-based budgeting, to the use of accruals data only for management-control purposes, to the introduction of some sort of accrual-based management accounting for specific classes of inputs

(e.g., supplies) within an otherwise traditional budgetary-accounting system. As to actual impacts, they have often failed to meet expectations (Guthrie, 1998; Monsen, 2002).

From a theoretical viewpoint, most comparative studies are founded on Lueder's (1992) "contingency model" and its subsequent developments (e.g. Chan, Jones, & Lueder, 1996; Lueder, 1994; Jaruga & Wojciech, 1996; Monsen & Nasi, 1998). The contingency model highlights a number of social, political, and administrative variables that characterise different countries and are likely to affect government accounting innovations. The model thus applies at a country-wide level and is mainly intended to describe and compare the environments within which accounting reforms take place, as well as the technical features of such reforms.

On the contrary, in this paper, we expand the contingency model by applying it to individual organisations and by testing its explanatory power. Our purpose is to contribute to a better understanding of government accounting reforms (especially those oriented towards accruals accounting) and of the factors that may explain their degree of success. Our specific focus is on Local Government (LG) accounting innovations in Italy.

The paper is structured as follows. In Section 2 we present the contingency model of governmental accounting innovations. In Section 3 we provide some background on Italian LGs and specify the paper's data and methods. In Section 4 we summarise the findings. Finally, in Section 5, we discuss the results, draw some conclusions, and suggest further research avenues.

#### **THEORETICAL BACKGROUND: THE CONTINGENCY MODEL OF GOVERNMENTAL ACCOUNTING INNOVATIONS**

The contingency model of governmental accounting innovations was initially proposed by Lueder (1992) in order to analyse the transition from traditional governmental accounting to accruals accounting, viewed as "a more informative system" (Lueder, 1992, p. 108), that is, a system that provides a more faithful representation of a government's financial position and performance for both internal decision making and external accountability. The model was then progressively adapted as other scholars used it to guide their own analyses of government accounting reforms in different countries

(Lueder, 1994; Chan, Jones, & Lueder, 1996; Jaruga & Wojciech, 1996; El-Batanoni & Jones, 1996; Montesinos & Vela Bargues, 1996; Bac, 1996; Likierman, 1996; Monsen & Näsi, 1998).

The contingency model is fundamentally an economic model in that it assumes a market for governmental accounting information (Chan, Jones, & Lueder, 1996). It is mainly composed of four elements:

- Users of accounting information, e.g., citizens, members of Parliament, etc., whose attitudes and behaviours are affected by such “social structural variables” (Lueder, 1992, p. 99) as socioeconomic status (e.g., income and education levels) and political culture (e.g., degree of openness and participation by the citizenry in public decision-making processes).
- Producers of accounting information, whose attitudes and behaviours are affected by the “structural variables describing the politico-administrative system” (Lueder, 1992, p. 99), that is, by the features of both the political system (e.g., competition in the market for votes, competition between the executive and legislative bodies) and the bureaucracy (e.g., staff training and background, recruitment criteria and procedures, administrative culture).
- Stimuli, which may affect the interaction between producers and users and trigger accounting innovations. Examples include fiscal stress, financial scandals, incentives provided by capital markets, accounting standard-setting by bodies external to governments, professional interests.
- Implementation barriers, which may hinder the successful introduction of accounting reforms (e.g., fragmentation of financial management functions, features of the legal system, qualifications of accountancy staff, size of jurisdiction).

So far, the utilisation of this model has been characterised by the following features. First, the model has been used at a country-wide level, that is, to analyse and compare the accounting reforms of whole countries or, at most, of entire tiers of government within countries. Second, the model has been used more to describe the technical features of accounting reforms than to explain their causes and effects. Third, to the extent that the model has been used with

explanatory purposes, to predict or justify the degree of success of accounting innovations, this has been done in a purely qualitative way, without resorting to measured variables and statistical techniques.

In this paper, on the contrary, we take an explanatory and quantitative approach to analyse the determinants of successful implementation within individual public-sector organisations.

### CONTEXT, DATA AND METHODS

To operationalise the model and apply it to individual organisations, we focused on Italian Local Governments, translated the model's four components into a wider range of measurable variables and conducted a regression analysis.

#### **Context: Local Government Accounting in Italy**

In the early 1990s, Italian LGs were involved in the modernisation of the public sector, which was led by the objectives of decentralisation, downsizing, introduction of managerial concepts and techniques.

The 1995 reform of LG accounting introduced new requirements (in particular, to publish an accrual-based financial statement) and tools (e.g., management control systems) to meet the needs of internal decision makers for readable information, to support outsourcing decisions, and to serve external accountability purposes.

However, the reform also required LGs to maintain their traditional cash- and commitment-based systems. Moreover, it did not require accrual-based *accounting*, but only accrual-based *reporting*. More specifically, the budget is still structured according to the commitment basis of accounting; financial reports must include a balance sheet and an operating statement as a supplement to the traditional cash- and commitment-based statements; double-entry bookkeeping, however, is not mandatory. In this last regard, in fact, Italian LGs have been given the opportunity to opt out of accruals accounting and simply derive their balance sheets and operating statements from their (cash- and commitment-based) budgetary-accounting statements through a complex system of year-end adjustments. LGs can thus be classified into two groups according to

whether or not they have introduced double-entry accruals-based bookkeeping.

### **Operationalisation of the Model**

In order to apply the contingency model to individual LGs, the dependent variable (configuration of the accounting system, *CONFIG*) was defined as a dummy for whether or not the LG introduced double-entry, accrual-based bookkeeping. The following measures were identified for the model's four components.

#### ***User Related Variables: Social and Economic Variables***

Socio-economic status supposedly affects the basic attitudes of information users towards more informative forms of public-sector financial reporting. Social factors include racial and religious heterogeneity, education, immigration, and household composition. Economic determinants include unemployment, poverty rates, and income levels (Putnam, 2000; Norris & Moon, 2005; Alexander, 2007). Most of these variables, however, are not adequately measured at the local level, at least in Italy. In this paper, we thus used per capita added value (*PCADDEDVALUE*) to capture economic factors, and the percentage of people aged 19 and above and holding at least a high-school degree (*EDU*) to capture social factors. Per capita added value is a measure of the additional value generated in the production process by the institutions operating in a given context; it has been proposed to reflect the local capacity to react to stimuli (Porter, 1998). The percentage of people aged 19 and above and holding at least a high-school degree is viewed by the National Statistical Institute (ISTAT) as a reliable measure of above-mandatory education, since the Italian minimum legal requirement for education is set at secondary-school diploma.

In addition, we introduced a measure of social capital. Social capital refers to the institutions, relationships, attitudes and values governing the interactions within a community and contributing to the community's economic and social development (Iyer, Kitson, & Toh, 2005). It depends upon social and economic determinants as well as some demographic characteristics. In this paper, the amount of social capital was measured by a dummy variable (*UNI*) for the presence of universities in the LG's territory. This is an admittedly gross proxy, but the economic and social determinants that are commonly discussed

in the social capital literature are not adequately measured in the Italian context, at least at such a detailed level as individual LGs. The expected sign for all three variables (*PCADDEDVALUE*, *EDU*, and *UNI*) was positive.

Furthermore, in the Italian context, significant regional differences exist across a wide range of features, including the communities' willingness and ability to react to stimuli. Existing research shows that Northern Italy is usually keener on innovation than the rest of the country (Putnam, *et al.*, 1993). In addition, some studies (Nasi & Frosini, 2007) have hinted that political orientation may also matter, with left-of-centre administrations keener on managerial innovations than right-of-centre ones. We thus introduced a dummy variable (*POLATT*) for the LG having a left-wing (0) or right-wing (1) administration. We then used three further dummy variables to reflect the National Statistical Institute's classification of geographical areas: North-West (baseline), North-East (*NORTHEAST*), Centre (*CENTRE*), and South (*SOUTH*). The expected sign was negative for both *POLATT* and *SOUTH*.

#### ***Producer Related Variables: Politico-Administrative System Variables***

Producer-related variables cover the features of both the political system and the bureaucracy. With respect to the political system, political competition is generally expected to increase the attention towards a more informative system of accounting. In this paper, we used a dummy variable (*POLSTAB*) for whether the LG's administration had changed its political orientation (left or right-of-centre) over the last two mandates. The expected sign was positive.

As for the bureaucracy, staff training and recruiting criteria were omitted, mainly because they are invariant across LGs since personnel policies are highly regulated at the national level. This omission implies that the findings of this study apply only to highly regulated environments.

In terms of administrative culture, we focused on the attitudes of Chief Financial Officers (CFOs) towards accruals accounting (*MYCONFIG*). In the literature, the perception by key individuals of particular needs and potential advantages is often identified as an important determinant of innovation adoption (Nedovic-Budic & Godschalk, 1996; Heintze & Bretschneider, 2000), although *per se* insufficient to ensure that the innovation is actually implemented

(Kanter, 1992). In the Italian context, where LGs are structured as silo organisations (Rebora, 1983), with individual departments developing their own culture and working methods and pursuing their goals under a function-centric approach, CFOs embed the professionalism of their role and function, decide for their own group, are often more sensitive to their profession's norms and judgements than to their organisations' needs and expectations, and react to calls for innovations and to institutional pressures. Therefore, if CFOs declare their support for the *replacement* of budgetary accounting with accruals accounting (*MYCONFIG=1*), we can expect the adoption of innovative accounting tools by the relevant LGs to become more likely. The expected sign was positive.

### **Stimuli**

Fiscal stress refers to governmental financial conditions and the sustainability of public debt. To capture it, we used the per capita cumulated surplus/deficit (*CUMSURPLUS*), which is the official bottom line for Italian LGs, as measured by traditional budgetary accounting ("risultato di amministrazione"). The relevant data are available at the Department of the Interior's website. The expected sign was negative in that poorer results should mean greater stress and thus the need for more comprehensive financial disclosure.

Financial scandal concerns cases of significant waste of financial resources. For Italian LGs, a valuable proxy could be the status of "bankruptcy" or "structural financial deficit" as defined by legislation, but the relevant data sets have not been made public by the Department of the Interior (no Freedom of Information Act in Italy, unfortunately). The variable has thus been omitted. This omission, however, may not be particularly critical in that "bankruptcy" and "structural financial deficit" are simply the final phases of increasing financial stress, so much so that they are declared on the basis of financial stress parameters exceeding given thresholds: therefore, the data on fiscal stress should suffice.

The need to access capital markets is also expected to increase LGs' likelihood to adopt accruals accounting (see also Stalebrink & Sacco, 2003). As accruals accounting is generally recognised to provide better information than budgetary accounting (Lueder, 1992), access to capital markets should be facilitated by its adoption. In this paper, access to capital markets was measured by two dummy



variables: one (*RATING*) for whether the LG had been rated by at least one major rating agency (Moody's, S&P, Fitch), as reported in the agencies' websites; the other (*BONDS*) for whether the LG had issued bonds, as reported by the Department of the Interior. The expected sign was positive for both variables.

Other potential stimuli, such as external standard-setting and professional bodies' interests, are invariant across Italian LGs and were consequently omitted.

### ***Implementation Barriers***

In the contingency model, the fragmentation of financial management functions is expected to hinder the development of consistent accounting innovations. In this paper, we focused on the absence of separate offices for budgetary / financial accounting and management control functions (*POSITIONMCO*). The expected sign was positive.

In the original contingency model, size was viewed as reflecting system complexity and thus supposedly hindering accounting innovations. In our paper, we considered it as a proxy for both organisational complexity and external visibility. Similar to system complexity, size as organisational complexity may impede accounting innovation. At the same time, as organisations become larger, they need to handle and provide greater quantities of information, which leads to more detailed control tools and should thus favour the introduction of more advanced accounting solutions (Khandwalla, 1972; Child & Mansfield, 1972; Burns & Waterhouse, 1975; Merchant, 1981; Anderson & Lanen, 1999; Haldma & Lääts, 2002). As a proxy for external visibility, on the other hand, size implies that larger organisations will pay greater attention to the adoption of administrative techniques which are considered desirable and innovative. In organisational terms, size was measured by the LG's number of employees (*EMP*). As a proxy for visibility, it was defined as the LG's population (*POP*), as reported in the 2001 census by the National Statistical Institute. The expected sign for *POP* was positive, while *EMP* could not be signed *a priori*.

The legal system is invariant across Italian LGs and its features were consequently omitted. The qualification of LG accountants is certified by formal recruitment policies and was omitted for lack of

variation as well as, once again, for absence of publicly available data.

### Sample and Analysis

The study sought to examine all 286 Local Governments (municipalities and provinces) with populations greater than 40,000. The population threshold was chosen to include all LGs that were first involved in the process of accounting reform in 1997 (LGs with populations above 100,000) and 1998 (LGs with populations between 40,000 and 100,000). Italian provinces are “intermediate-level” local authorities whose main functions relate to regulation of economic activities (including agriculture, hunting, and fishing), highways and transport infrastructures, environmental protection, and education and cultural activities. They do not generally provide services directly to constituents. Municipalities are the lowest tier of government and thus the one that is closest to the citizens. They provide local public services in the fields of social care and assistance, local transport, urban planning and security, waste disposal. They also perform the basic administrative tasks connected to civil rights (e.g., registry of births and deaths) and commercial activities.

Data gathering was composed of (a) a primary data collection, conducted through phone interviews to LGs’ CFOs, and (b) the collection of background information from official sources. In this last regard, demographic data were drawn from the most recent (2001) census by the National Statistical Institute; political and financial data were gathered from the Department of the Interior; rating information was collected from major rating agencies such as Moody’s, S&P, and Fitch.

For the telephone survey, the final return rate (Table 1) was 83% (237 LGs out of 286), with slightly higher percentages for municipalities (86%: 158 out of 183) than for provinces (77%: 79 out of 103). Overall, the sample of respondents seemed to sufficiently match the universe of LGs under study in terms of type, size, and geographical area. The model was tested using logistic regressions. The results proved robust to different specifications, including the introduction of a dummy variable to distinguish between the two types of LGs (provinces and municipalities) and even the identification of separate logistic regressions for the two types of LGs.

**TABLE 1**  
**Characteristics of the Respondents**

Types of Accounting Basis	Total		Type of Local Governments			
	Number	%	Municipalities		Provinces	
			Number	%	Number	%
Total LGs Responding	237	100	158	66.7	79	33.3
Cash- and commitment-based accounting	108	42.6	79	33.3	29	12.2
Accruals accounting	129	57.4	79	33.3	50	21.1

### RESULTS

Of the responding LGs, 57.4% had introduced double-entry, accrual-based bookkeeping, with higher rates in the following areas:

- For provinces (63%), compared to municipalities (50%).
- In the North-East (66%) compared to the Centre (60%), the North-West (57%), and especially the South (43%).

The regression results are summarised in Table 2. Some user- and producer-related variables seem to be actually affecting the adoption of accruals accounting, and so do some implementation barriers, although sometimes with unexpected signs. The relevance of stimuli, on the contrary, is seriously questioned. At 0.16, the R-squared is rather low.

Among producer-related variables, CFOs are shown to play a fundamental role in influencing accounting innovation, since their attitude towards the substitution of accruals for the traditional cash and commitment bases (*MYCONFIG*) is strongly and positively associated with the introduction of double-entry, accrual-based bookkeeping. On the contrary, political stability/competition (*POLSTAB*) does not seem relevant in explaining innovation.

Among user-related variables, geographic location is unsurprisingly shown to matter in that the coefficient for *SOUTH* is negative and borderline significant. LGs with left-of-centre administrations, moreover, are confirmed to be keener on innovation than right-of-centre ones (*POLATT* negative and significant at 5%).

**TABLE 2**  
**Logistic Regression**

LR chi2(15) = 32.69  
 Prob > chi2 = 0.0052  
 Log likelihood = -85.451587 Pseudo R2 = 0.1605

	Config	Coeff.	Std. Err.	Z	P>  z	95% Conf. Interval
Pcaddedvalue	-.0000275	.0000538	-0.51	0.609	-.000133	.000078
Edu	-.0616818	.0372865	-1.65	0.098	-.134762	.0113984
Uni	.2898872	.4347859	0.67	0.505	-.5622774	1.142052
Polatt	-.8725955	.4459433	-1.96	0.050	-1.746628	.0014374
Northeast	-.2640337	.6015665	-0.44	0.661	-1.443082	.915015
Centre	-.65853	.6405405	-1.03	0.304	-1.913966	.5969064
South	-1.417066	.756685	-1.87	0.061	-2.900141	.0660095
Polstab	.3340595	.4573013	0.73	0.465	-.5622346	1.230354
Myconfig	.6772076	.2963337	2.29	0.022	.0964042	1.258011
Cumsurplus	-.0051409	.0031598	-1.63	0.104	-.0113341	.0010522
Rating	.077352	.5200429	0.15	0.882	-.9419133	1.096617
Bonds	-.2940979	.4424388	-0.66	0.506	-1.161262	.5730663
Positionmco	-.8230872	.4465912	-1.84	0.065	-1.69839	.0522155
Pop	9.86e-07	8.89e-07	1.11	0.267	-7.56e-07	2.73e-06
Emp	-.0002202	.0001276	-1.73	0.084	-.0004703	.0000299
Cons	2.660234	1.691304	1.57	0.116	-.6546614	5.975129

Nevertheless, the regression also shows some unexpected if not counterintuitive results: the community's level of education (*EDU*) is weakly ( $p=.098$ ) but negatively related to the presence of accruals accounting, while the measures for economic development (*PCADDEDVALUE*) and social capital (*UNI*) are statistically insignificant. A possible explanation for these results is that the contingency model posits a market for governmental accounting information, but such a market may still be largely underdeveloped, at least for Italian LGs. Previous research (Steccolini, 2004) shows that there are no significant numbers of external users of annual reports in Italian LGs. The only party that seems truly interested in LGs' financial conditions is the Central Government, since it must constitutionally ensure that a minimum level of services is guaranteed throughout the country, it may have to pick up LGs' deficits, and it must comply with the European Monetary Union's

“stability and growth pact”, whose thresholds and constraints apply to the financial position and performance of the public sector as a whole. The Central Government, however, looks only at cash and commitment-based data. Consistently, the goals and constraints it imposes on LGs and their constituents (e.g., balanced budgets) are expressed in terms of cash and commitments.

This lack of user interest, in turn, is probably part of a larger picture. Most likely, Italian LGs are not yet sufficiently accountable for their financial conditions to really matter to them and their constituents. Central government bail-outs, for instance, continue to be rather widespread. This is also consistent with the descriptive results of the survey in that, ten years after the reform, nearly half of all LGs are still choosing not to introduce proper accruals accounting and continue to derive their balance sheets and operating statements from cash and commitment accounting by means of year-end adjustments. These considerations would also help explain the apparent irrelevance of the stimuli-related variables (*CUMSURPLUS*, *BONDS*, *RATING*), none of which turns out to be statistically significant.

The apparent irrelevance of exposure to capital markets (*RATING* and *BONDS*) also suggests that lenders do not put any pressure on LGs to actually introduce proper accruals accounting. This is probably due to a certain disenchantment with the reliability of accruals-based reports in Italian LGs (Anessi Pessina & Steccolini, 2005, 2007), combined with a consolidated habit and ability to rely on traditional budgetary accounting statements. An additional argument is that, for subnational governments, liquidity and solvency have two key determinants that would not show up in LGs’ balance sheets and operating statements: the LG’s ability to raise additional taxes and the likelihood of a bail-out from an upper tier of government. Besides reliability, this remark calls into question the relevance of current accruals accounting frameworks for the public sector. Perhaps, even when reliable, existing accruals-based reports have not been adequately designed to capture the peculiarities of financial position and performance in public sector organisations.

When one considers implementation barriers, population (*POP*) is statistically insignificant, whereas the number of LG employees (*EMP*) is weakly but inversely related to the adoption of accounting reforms. This finding is plausible, although not fully expected. In the

interpretation, one should keep in mind that the smallest LGs (i.e., those with populations < 40,000) were excluded from the analysis. It is at that scale, however, that size may be particularly beneficial for accounting innovation. In our sample, a negative coefficient for *EMP* implies that *medium-sized* LGs (rather than *small* ones) are more likely to introduce accruals accounting than large LGs. Beyond a certain scale, in other words, the need for more and better information is apparently offset by the greater inertia that inevitably comes with size.

The absence of separate offices for budgetary / financial accounting and management control functions (*POSITIONMCO*) is weakly significant, but unexpectedly negative. In the original version of the contingency model, the fragmentation of administrative functions was seen as a weakness. However, one may argue that fragmentation could strengthen the development of specialised competencies and encourage fruitful, innovation-oriented competition among professionals within the same organisation. In the specific context of Italian LGs, moreover, most financial accounting offices tend to stick to traditional budgetary accounting, for reasons of both skills (they are more familiar with cash and commitments than with accruals) and power (traditional budgetary accounting gives them the power of the purse). Existing research (Nasi & Steccolini, 2008) has shown that many LGs use traditional budgetary accounting to derive not only their balance sheets and operating statements, but even their management accounting data. Specialised management accounting offices, on the contrary, pay more attention to accruals accounting, since their mission is to investigate the actual use of resources by individual organisational units.

Finally, the low figure for the R-squared implies that much variation has been left unexplained. This probably indicates that, to be effectively applied at the micro level, Lueder's model needs to be enriched with further variables that capture individual organisations' peculiarities.

## CONCLUSIONS

The purpose of this paper is to gain a better understanding of government accounting reforms and the factors that affect their success. To this end, Lueder's (1992) contingency model is applied to the individual government level and its explanatory potential is

verified through the use of statistical methods. The context for the analysis is the subset of Italian LGs with populations above 40,000. Of these, only 57% have introduced accruals accounting (in the full-fledged form of double-entry, accrual-based bookkeeping) as a consequence of the 1995 reform.

In trying to explain this degree of implementation, our results show that user and producer attitudes seem to be captured by such variables as geographic location, political orientation, and especially CFOs' own preferences; that size is in fact an implementation barrier, while some forms of administrative fragmentation may unexpectedly play a positive role; that the stimuli highlighted by the contingency model are apparently of little relevance. To sum up, accounting innovations are more likely in middle-sized LGs, located no more southerly than Rome, with left-of-centre administrations, and whose CFOs declare a preference for accruals accounting and must deal with another organisational unit in charge of management control.

Altogether, these results point to the limited accountability of Italian LGs. Most likely, Italian LGs are not yet sufficiently autonomous and accountable to appreciate the full benefits of better information for internal and external purposes. At this stage, there is no real need or incentive for Italian LGs to use accruals-based information for decision making, for raising money, or for increasing consensus among the electorate.

In terms of the contingency model, stimuli do exist, but they are filtered by users and producers. Users tend to downplay these stimuli because LG financial conditions do not matter much and, to the extent they do, they matter only in their cash and commitment-based expressions. Producers are certainly more active and influential, especially with reference to accountants, much less so to politicians. This proactivity, however, is seemingly induced by personal and professional motivations much more than external incentives. In fact, producers often end up amplifying the stimuli to pursue accounting innovations that they would regardlessly deem appropriate, based on their own personal beliefs or on the norms of their professional networks. Even some of the supposedly "user-related" or "implementation-barrier" variables (namely geographic location, political orientation, administrative fragmentation) may in fact reflect or affect mostly the producers' attitudes.

At the same time, the current configuration of accruals accounting standards for LGs is also called into question. The lack of interest on the part of lenders, in particular, may be partially due to a vicious circle of limited user interest and poor reliability. At least to some extent, however, it also stems from two major design faults: the coexistence of accruals accounting with traditional budgetary accounting, on the one hand; the adoption of private-sector accounting standards with only marginal and superficial adjustments, on the other.

From a theoretical viewpoint, our results call for a two-fold revision of the contingency model, at least for applications to individual governments as opposed to entire government systems. In general terms, further developments of the model may want to investigate the interactions between contextual socio-economic and political variables on the one hand, user- and producer-related variables on the other, to better predict the impact of these elements on accounting innovations. With specific respect to the model's four sets of variables, such sets could be expanded to capture a greater share of variability: for application at the micro level, the variables that are invariant across individual governments must be omitted; conversely, the model should be enriched with further variables capturing individual organisations' peculiarities. Legal provisions and mandates, for instance, are an important source of stimuli, at least in the Italian public sector (Panozzo, 2000): although invariant, they may be differently filtered by different organisations. External stimuli, moreover, should be supplemented by organisational stimuli, such as leadership, interdepartmental competition, and other human factors. With respect to user-related variables, in light of the apparent absence of actual external users for LG accounting information, an extended model could consider users' attitudes directly and not only through the contextual variables that may affect them. Similarly, for producers, additional variables could include the presence and effects of rivalry, competition, and networking among professionals within organisations.

In terms of policy implications, the most immediate is that CFOs and their networks can significantly affect the successful implementation of accounting reforms. Consequently, they must be involved in policy formulation and reassured about their potential role under the new system of accounting. Another important implication is



that change cannot be achieved merely by introducing innovative legislation: other variables must be taken into account, including the competencies, abilities, perceptions, and overall willingness to change of managers and politicians. This, in turn, posits two requisites. On the one hand, LGs and individuals within them must be given proper incentives, starting from greater accountability for the LG's financial position and performance. On the other hand, accruals accounting standards must be developed that pay due attention to public-sector peculiarities and provide actual and effective guidance to LG accountants.

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