

Taylor & Francis Group



Public Money & Management

ISSN: 0954-0962 (Print) 1467-9302 (Online) Journal homepage: http://www.tandfonline.com/loi/rpmm20

# New development: Determinants of financial performance in public organizations

Stijn Goeminne & Bert George

**To cite this article:** Stijn Goeminne & Bert George (2018): New development: Determinants of financial performance in public organizations, Public Money & Management, DOI: <u>10.1080/09540962.2018.1476309</u>

To link to this article: https://doi.org/10.1080/09540962.2018.1476309

© 2018 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group



6

Published online: 06 Jun 2018.

	•
Ø	

Submit your article to this journal 🕝

Article views: 659



View Crossmark data 🗹

## New development: Determinants of financial performance in public organizations

### **Stijn Goeminne and Bert George**

In the slipstream of NPM, public organizations worldwide have had to increase their financial performance by adopting management practices. Nonetheless, financial performance (FP) might be mostly predicted by contingencies that are not within direct managerial control. Drawing on evidence from 308 Flemish municipalities, this article shows that organizational and environmental contingencies affect FP, but a significant amount of variation in FP is unexplained—indicating that management could well matter.

Keywords: Contingency theory; local government; municipalities; New Public Management; public service performance.

As a result of New Public Management (NPM) reforms, as well as austerity regimes throughout the public sector, the financial performance (FP) of public organizations is high on the agenda of policy-makers, public officials and academics. NPM promotes parsimonious resource use and efficient, as well as effective, public organizations as an alternative to the traditional, bureaucratic model of government (Hood, 1991). NPM agendas typically look at private sector management practices as the best way of doing things (Diefenbach, 2009). Hence, practices such as performance management and strategic planning have conquered the public sector in many countries. In local government, in particular, there have been several NPM-like reforms that require local governments to plan, monitor and report their performance to a central authority (see, for example, Boyne *et al.*, 2002; George et al., 2016, 2017). Importantly, such performance can be linked to financial incentives for 'good' performers or punitive measures for under-achievers (Bovaird, 2008).

Although NPM is intended to enhance public service performance, its focus on efficiency and effectiveness, as well as private sector management practices, has been criticized (Diefenbach, 2009). One criticism lies in the assumption that management practices help shape future performance in public organizations. NPM sceptics argue that the impact of management on performance might be trivial in terms of affecting performance. Such factors, or 'contingencies', include organizational and environmental variables that might not be under management control (Donaldson, 2001). Following this line of thought, one could argue that management has a trivial part to play and that policy-makers should focus their attention on, for instance, increasing an organization's budget or number of employees, or reducing the need/deprivation of an organization's client base. However, there is an underlying danger that, by doing this, a big and unsustainable government will re-emerge with rigid and standardized procedures. This Weberian bureaucratic model has never really 'left' the public sector and still dominates in many countries (Hammerschmid et al., 2016). The debate between NPM proponents and NPM opponents is far from over and there is a stringent need for more evidence to inform this debate and identify which NPM assumptions hold and which do not.

In this article, we draw on data from 308 Flemish municipalities to empirically test one of NPM's core assumptions: namely that contingencies matter for FPbut do not necessarily explain the largest 'chunk' of performance variation across public organizations—there is thus a necessity to look at other potential performance drivers including private sector management practices.

#### Non-managerial determinants of FP

Contingency theory argues that organizations, as well as organizational practices, are influenced by factors that are—to some extent—exogenous to the management process (for example size, budget, client base) (Donaldson, 2001). We focus here on two sets of contingencies that are often mentioned in public sector performance literature, namely organizational contingencies Stijn Goeminne is Associate Professor in the Department of Economics, Ghent University, Belgium.

Bert George is Assistant Professor in the Department of Public Administration, Erasmus University Rotterdam, The Netherlands.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial re-use, distribution, and reproduction

in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

<sup>© 2018</sup> The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group

2

and environmental contingencies (see, for example, Andrews *et al.*, 2009; Walker *et al.*, 2010). Our conceptual model is presented in figure 1.

#### Organizational contingencies and FP

We hypothesize that three organizational contingencies are particularly relevant to elucidate FP: a public sector organization's budget, size and previous FP. First, a prosperous municipality might be able to 'buy' good FP, thus a positive impact of the expenditure level on FP is expected (Andrews et al., 2009). Second, an organization with a large staff is more likely to attract and possess the necessary expertise inhouse to address financial challenges and, again, improve FP (Jung, 2013). Third, public organizations are viewed as autoregressive systems that change incrementally over time. This implies that an organization's activities today are highly conditioned by what it did yesterday-we thus expect future FP to be strongly influenced by FP at a specific baseline (Walker *et al.*, 2010). This results in following three hypotheses:

- H1: An organization's budget is positively related to FP.
- H2: An organization's size is positively related to FP.
- H3: An organization's past FP is positively related to its current FP.

#### **Environmental contingencies and FP**

We hypothesize two environmental contingencies that could influence FP in public organizations: client need and client deprivation. Client need indicates the number of clients serviced: a higher number of clients imposes additional pressures on an organization's finances as measures to address all of these clients' needs need to be imposed (Andrews*etal.*, 2010). Client deprivation relates to the type of client being serviced. The more deprived clients are, the more services that might be required—placing additional pressure on an organization's finances (Walker *et al.*, 2010):

#### Figure 1. Conceptual model predicting financial performance.



#### Methods

#### Empirical setting

We tested our hypotheses on Flemish municipalities. Flemish municipalities are multipurpose public organizations with wide-ranging autonomy to pursue any policy that promotes the interests of their inhabitants. Inspired by the NPM trend, the 'traditional' Flemish municipal budget cycle was exchanged by a new policy and management cycle (PMC) starting from fiscal year 2014 (George et al., 2016, 2017). The PMC was introduced to improve Flemish municipalities' finances. A new measure of FPthe 'self-financing margin' (SFM)-was introduced to evaluate the FP of Flemish municipalities. The Flemish regional government, which supervises Flemish municipalities, imposed a strict financial objective-the SFM has to be positive at the end of each policy cycle.

#### Dependent variable

The SFM is our dependent variable. The SFM evaluates the long-term financial stability of a municipality and is calculated by reducing exploitation income (income from regular annual transactions in the municipality and therefore relating to the day-to-day administration of the municipality, for example tax receipts, fees and dividend yields) with exploitation expenditures (for example wages, office equipment and energy expenditure) and with loan charges (capital repayments and interest on outstanding loans). A positive SFM indicates that the municipality will, in the long run, be able to generate sufficient resources from normal exploitation to cover the charges of taking a loan. A positive SFM allows a municipality to invest without having to take on additional loan charges. In our analysis, we expressed SFM in thousands of euros per capita.

#### Independent variables

Our first three hypotheses concern the impact of organizational contingencies. H1 (on budget) was tested by looking at the municipalities' expenditures. EXPEND measures the level of expenditures (compliant with the ESA standard) and is expressed in thousands of euros per capita. To test H2, we operationalized SIZE through the number of the municipality's fulltime equivalent staff. The third organizational contingency concerns previous FP, which was operationalized by including the one year lagged value of SFM. The environmental contingencies (client need and deprivation) were tested in the model by introducing POP and UNEMPL. POP is the number of inhabitants in the municipality (which is a proxy for client need). UNEMPL is the local unemployment rate calculated as the percentage of inhabitants who are unemployed (which is a proxy for client deprivation). Before running our model, we tested for multicollinearity in our dataset with a correlation analysis—no issues were uncovered. Table 1 contains the descriptives, correlations and data sources.

#### Statistical analysis

Our model was designed to explain the FP of the full sample of 308 Flemish municipalities in 2014 (SFM<sub>t</sub>) by a number of organizational (EXPEND<sub>t</sub>, SIZE<sub>t</sub> and SFM<sub>t-1</sub>) and environmental (POP<sub>t</sub> and UNEMP<sub>t</sub>) contingencies:

$$SFM_{t} = \beta_{0} + \beta_{1}*EXPEND_{t} + \beta_{2}*SIZE_{t} + \beta_{3}*SFM_{t-1} + \beta_{4}*POP_{t} + \beta_{5}*UNEMP_{t} + u_{t}$$

We used ordinary least squares (OLS)—a common technique in public administration. To tackle possible heteroscedasticity issues, we used the White heteroscedasticity-consistent standard errors. Autocorrelation issues were avoided by using a lagged measure of SFM as an independent variable. Nevertheless, a lagged model may lead to incorrect conclusions if the model is non-stationary and/or if the residuals are serially correlated (Keele and Kelly, 2006). We controlled for both items by performing the Augmented Dickey-Fuller unit root test and Breusch-Godfrey serial correlation LM test respectively. The results of

#### Table 1. Descriptives, correlations and data sources.

	SFM	EXPEND	SIZE	SFM <sub>t-1</sub>	POP	UNEMP
<i>Descriptives</i> Mean	0.110	1.570	0.007	0.029	20814.980	2.143
Maximum Minimum SD	$0.710 \\ -0.161 \\ 0.106$	$5.509 \\ 1.000 \\ 0.479$	$0.017 \\ 0.003 \\ 0.002$	$0.381 \\ -0.274 \\ 0.095$	$510610.000\ 85.000\ 34380.310$	$\begin{array}{c} 4.894 \\ 0.873 \\ 0.645 \end{array}$
Correlations SFM EXPEND	1.000	$0.249 \\ 1.000$	$0.156 \\ 0.682$	$\begin{array}{c} 0.340\\ 0.218\end{array}$	$0.027 \\ 0.324$	-0.020 0.230
SIZE SFMt-1 POP			1.000	$0.114 \\ 1.000$	$0.358 \\ 0.014 \\ 1.000$	$0.374 \\ -0.052 \\ 0.425$
UNEMP Sources	1	1	2	1	3	$\frac{1.000}{3}$

1: Flemish Government (http://lokaalbestuur.vlaanderen.be/bbc/data-bbc).

2: Flemish Government (http://regionalestatistieken.vlaanderen.be/statistiek-financien-en-bestuur).

3: Belgian Staistical Office, Statbel (http://statbel.fgov.be/).

#### Results

Table 2 presents the results of the estimation. From this, it is clear that the model explained about 15% of the variance of FP, thus indicating that 85% remains unexplained by organizational and environmental contingencies. The coefficients indicate that the results match the expected relations between FP and the independent variables. The coefficients all present the expected signs. The impact of organizational contingencies is indeed positive, while that of environmental contingencies is indeed negative. However, only budget (EXPEND,) and previous FP  $(SFM_{t,1})$  present significant coefficients (i.e. acceptance of H1 and H3), whereas the impact of the other contingencies is insignificant.

#### Discussion

Our objective was to show that FP is not only determined by organizational and environmental contingencies, but also by other performance drivers, in order to contribute to the debate surrounding NPM-style management practices. When we controlled for several contingencies that are often argued to affect FP, significant variation in FP remained unexplained. Our findings have important theoretical and practical consequences.

#### Theoretical consequences

• Scholars investigating FP in public sector organizations should control for the effects of contingencies. In particular, budget and an autoregressive term of FP need to be included in statistical models.

 Table 2. Regression results predicting financial performance.

Dependent variable: SFM <sub>t</sub>	Coefficient	t value	Significance
Constant	0.045	1.69	*
EXPEND	0.042	2.60	***
SIZE.	0.950	0.25	
SFM	0.329	5.96	***
POP,	-8.10E <sup>-08</sup>	-0.51	
UNĖMP.	-0.007	-0.87	
R <sup>2</sup>	0.151		
Adjusted R <sup>2</sup>	0.136		

*Notes*: *N* = 308; t = 2014. \*Significant at 10%. \*\*Significant at 5%. \*\*\*Significant at 1%.

- •Future research should look for other potential performance drivers. In the Flemish case, NPM-style management practices have been imposed and, in time, it will be possible to assess the effect of these practices on FP.
- Further evidence is needed to assess the validity underlying NPM. Simply 'throwing the baby out with the bathwater' might be shortsighted—some elements of NPM (such as using private sector management tools) might be better than others.

#### Practical consequences

- In times of austerity, as well as when dealing with migration issues, policy-makers do not always have the flexibility to alter environmental and organizational contingencies. We have shown that other routes to performance improvement are relevant and, potentially, more effective.
- •We provide an evidence-based argument to governments worldwide that are implementing management reforms. Those resisting change because of their belief that performance is only determined by organizational and environmental contingencies are mistaken.
- Budgets and previous performance cannot be neglected. Public organizations with tight budgets, as well as historically bad FP, will have a harder time achieving new financial standards than their more prosperous and better-performing counterparts.

#### IMPACT

NPM sceptics have argued that a public sector organization's budget, size, past performance and client need/deprivation have far more influence on FP than any management practice. We have demonstrated that, although these contingencies correlate with FP, ample variation remains unexplained and could be the 'playing-field' of management. This article is an evidence-based counterfactual to NPM sceptics who argue that FP is a 'given', based on an organization's contingencies, and that management is of little importance.

#### References

- Andrews, R., Boyne, G. A., Law, J. and Walker, R. M. (2009), Strategy formulation, strategy content and performance. *Public Management Review*, 11, 1, pp. 1–22.
- Andrews, R., Boyne, G. A., Moon, M. J. and Walker, R. M. (2010), Assessing organizational performance: exploring differences between internal and external measures. *International Public Management Journal*, 13, 2, pp. 105–129.
- Bovaird, T. (2008), Emergent strategic management and planning mechanisms in complex adaptive systems. The case of the UK best value initiative. *Public Management Review*, *10*, 3, pp. 319–340.
- Boyne, G. A., Gould-Williams, J. S., Law, J. and Walker, R. M. (2002), Plans, performance information and accountability: the case of best value. *Public Administration*, 80, 4, pp. 691–710.
- Diefenbach, T. (2009), New Public Management in public sector organizations: the dark sides of managerialistic 'enlightenment'. *Public Administration*, 87, pp. 892–909.
- Donaldson, L. (2001), *The Contingency Theory of Organizations* (Sage).
- George, B., Desmidt, S. and De Moyer, J. (2016), Strategic decision quality in Flemish municipalities. *Public Money & Management, 36*, 5, pp. 317–324.
- George, B., Desmidt, S., Nielsen, P. A. and Baekgaard, M. (2017), Rational planning and politicians' preferences for spending and reform: replication and extension of a survey experiment. *Public Management Review*, 19, 9, pp. 1251–1271.
- Hammerschmid, G., Van de Walle, S., Andrews, R. and Bezes, P. (2016), *Public Administration Reforms in Europe: The View from the Top* (Edward Elgar).
- Hood, C. (1991), A public management for all seasons? *Public Administration*, 69, 1, pp. 3–19.
- Jung, C. S. (2013), Navigating a rough terrain of public management: examining the relationship between organizational size and effectiveness. *Journal of Public Administration Research and Theory*, 23, 3, pp. 663–686.
- Keele, L. and Kelly, N. J. (2006), Dynamic models for dynamic theories: the ins and outs of lagged dependent variables. *Political Analysis*, 14, 2, pp. 186–205.
- Walker, R. M., Andrews, R., Boyne, G. A., Meier, K. J. and O'Toole, L. (2010), Wake-up call: strategic management, network alarms, and performance. *Public Administration Review*, 70, 5, pp. 731–741.