NEW DEVELOPMENT: DETERMINANTS OF FINANCIAL PERFORMANCE IN PUBLIC ORGANIZATIONS.

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

KEYWORDS- Contingency theory, local government, public service performance, new public management, municipalities.

IMPLICATIONS FOR PRACTITIONERS- An easy way to criticize management reforms in the public sector is to say "management does not matter" to achieve financial performance (FP). Indeed, NPM sceptics might argue that the organization's budget, size, past performance and client need/deprivation are far more instrumental to FP than any management practice. We counter this argument and illustrate that although these contingencies correlate with FP – ample variation remains unexplained and could be the "playing field" of management. We thus present an evidence-based counterfactual to NPM sceptics who argue that FP is a "given", based on an organization's contingencies, and management is of little importance.

INTRODUCTION

As a result of NPM reforms as well as austerity regimes throughout the public sector, the financial performance (FP) of public organizations is high on the agenda of policymakers, public officials and academics. Indeed, NPM promotes parsimonious resource use and efficient as well as effective public organizations as counterbalance to the traditional, bureaucratic model of government (Hood 1991). In order to achieve NPM's intended outcomes, NPM agendas typically look at private sector management practices as the leading example of how things should be done (Diefenbach 2009). Hence, practices such as performance management and strategic planning have conquered the public sector. In local government in particular, there have been several NPM-like reforms that coerced local governments to plan, monitor and report their performance to some form of central authority (e.g. George, Desmidt, and De Moyer 2016, Boyne et al. 2002). Importantly, such performance reports do not necessarily remain dead letter and can be linked to a system of financial incentives for "good" performers or even punitive measures for underachievers (Bovaird 2008).

Despite NPM's intent to enhance public service performance (PSP), its predominant focus on efficiency and effectiveness as well as private-sector management practices has been criticized (Diefenbach 2009). One point of criticism lies in the assumption that management practices help shape future performance in public organizations. NPM sceptics seemingly argue that the impact of management on performance might be trivial and other important factors elucidate government's performance. Such factors are dubbed as "contingencies" and include organizational and environmental variables that are not necessarily within the span of control of management (Donaldson 2001). Following this line of thought one could argue that management has but a trivial part to play and policymakers should better focus their attention on, for instance, increasing an organization's budget or number of employees or decreasing the need/deprivation of an organizations' client base.

Although the above-mentioned criticism is grounded within sincere and relevant concerns for the future of the public sector, there is the underlying danger of, again, evolving towards a big and unsustainable government with rigid and standardized procedures. This Weberian bureaucratic model has never really "left" the public sector and still dominates in many countries today (Hammerschmid et al. 2016). Conclusively, 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 indeed matter for FP but do not necessarily explain the largest "chunk" of performance variation across public organizations – there is thus a necessity to also focus on other potential performance drivers including private-sector management practices.

NON-MANAGERIAL DETERMINANTS OF FINANCIAL PERFORMANCE

Contingency theory argues that organizations as well as organizational practices are influenced by factors that are – to some extent – exogenous to the management process (e.g. size, budget, client base) (Donaldson 2001). We focus on two sets of contingencies that are often mentioned in the PSP literature, namely organizational contingencies and environmental contingencies (e.g. Walker et al. 2010, Andrews et al. 2009), and hypothesize their impact on FP. The conceptual model is presented in Figure 1.

[Insert Figure 1 about here]

Organizational contingencies and financial performance

We hypothesize that three organizational contingencies are particularly relevant to elucidate FP: A public organization's budget, size and previous FP. First, a prosperous municipality might be able to "buy" good FP, thus a positive relation with FP is expected (Andrews et al. 2009). Second, an organization with a big staff base is more likely to attract and possess the necessary expertise in house 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 previous FP is positively related to FP.

Environmental contingencies and financial performance

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

H4: Client need of an organization is negatively related to FP.

H5: Client deprivation of an organization is negatively related to FP.

METHODS

Empirical setting

In this study, we test our hypotheses on Flemish municipalities. Flemish municipalities are multipurpose public organizations with wide-ranging autonomy authorizing them 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 the fiscal year 2014

(George et al. 2016). The introduction of the PMC was aimed at improving Flemish municipalities' financial situation. A new measure of FP – the 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 new financial objective, the SFM, is the dependent variable of our analysis. The SFM is a measure of FP that evaluates the long term financial stability of a municipality. It is calculated by reducing the exploitation income with the exploitation expenditures and with the loan charges which consist of capital repayments and interest from outstanding loans. A positive SFM indicates that the municipality is, in the long run, able to generate sufficient resources from the normal exploitation to cover the charges of taking up a loan. A positive SFM allows a municipality to invest without having to take on another loan or invoke additional loan charges. In our analysis, the SFM is expressed in thousands per capita.

Independent variables

The first three hypotheses test the impact of organizational contingencies. H1 (i.e. on budget) is tested by looking at the municipalities' expenditures (EXPEND). EXPEND measures the level of expenditures (compliant with the ESA-standard) and is expressed in thousands per capita. To test H2, we operationalize SIZE through the number of full time equivalent staff members in the municipality, expressed per capita. The third organizational contingency concerns previous FP, which is operationalized by including the one year lagged value of SFM.

The environmental contingencies (i.e. client need and deprivation) are tested in the model by introducing POP and UNEMPL. The former is the number of inhabitants in the municipality (which is a proxy for client need), the latter is the local unemployment rate calculated as the percentage of inhabitants that is unemployed (which is a proxy for client deprivation). Before running our model, we

tested for the existence of multicollinearity in our dataset by running a correlation analysis – no issues were uncovered. Table 1 contains the descriptives, correlations and data sources.

[Insert Table 1 about here]

Statistical analysis

This article explains the FP of Flemish municipalities in 2014 (SFM_t) by a number of organizational ($EXPEND_t$, $SIZE_t$ and SFM_{t-1}) and environmental (POP_t and $UNEMP_t$) contingencies. The model equates as follows:

$$SFM_t = \beta_0 + \beta_1 * EXPEND_t + \beta_2 * SIZE_t + \beta_3 * SFM_{t-1} + \beta_4 * POP_t + \beta_5 * UNEMP_t + u_t$$

We run our model using Ordinary Least Squares (OLS), a widely used technique in public administration. To tackle possible heteroscedasticity issues we use the White heteroscedasticity-consistent standard errors. Autocorrelation issues are avoided by using a lagged measure of SFM as independent variable. Nevertheless, a lagged model may lead to wrong conclusions if the model is non-stationary and/or if the residuals are serially correlated (Keele and Kelly 2006). We control for both items by performing the Augmented Dickey-Fuller unit root test and Breusch–Godfrey serial correlation LM test respectively. The results of these tests suggest that there is no indication of non-stationarity, nor of serial correlation.

RESULTS

Table 2 presents the results of the estimation.

[Insert Table 2 about here]

From Table 2 it is clear that the model explains 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 ($EXPEND_t$) 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

The objective of this article was to illustrate that FP is not only determined by organizational and environmental contingencies but also by other potential performance drivers. Hence, we sought to contribute to the debate surrounding NPM-style management practices and identified that when controlling for several contingencies often argued to affect FP, significant variation in FP remained unexplained. Our findings have important theoretical and practical consequences.

Theoretical consequences

- Scholars that seek to investigate FP in public organizations should control for the effects of contingencies. In particular, budget and an autoregressive term of FP are important controls to include in statistical models.
- Future research should look for other potential performance drivers. In the Flemish case, NPM-style management practices have been imposed and, in time, we will be able to assess the effect of these practices on FP.
- Further evidence is needed to assess the validity underlying NPM. Simply "throwing out the baby with the bathwater" might be shortsighted – some elements of NPM (such as the usage of private-sector management tools) might hold better than others.

Practical consequences

- In times of austerity as well as migration issues, policymakers do not always have the flexibility to alter environmental and organizational contingencies. We illustrate 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.
- We do emphasize that budget and previous performance cannot be neglected. Public organizations with limited budgets as well as a historically bad FP have a harder time achieving new financial standards than their more prosperous and better performing counterparts.

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TABLES

Table 1: Descriptives, correlations and data sources

	SFM	EXPEND	SIZE	SFM_{t-1}	POP	UNEMP
Descriptives						
Mean	0,110	1,570	0,007	0,029	20814,980	2,143
Maximum	0,710	5,509	0,017	0,381	510610,000	4,894
Minimum	-0,161	1,000	0,003	-0,274	85,000	0,873
St. Deviation	0,106	0,479	0,002	0,095	34380,310	0,645
Correlations						
SFM	1,000	0,249	0,156	0,340	0,027	-0,020
EXPEND		1,000	0,682	0,218	0,324	0,230
SIZE			1,000	0,114	0,358	0,374
SFMt-1				1,000	0,014	-0,052
POP					1,000	0,425
UNEMP						1,000
Sources	1	1	2	1	3	3
	1 : Flemish Government (http://lokaalbestuur.vlaanderen.be/bbc/data-bbc 2 : Flemish Government (http://regionalestatistieken.vlaanderen.be/statistiek-financien-en-bestuur) 3 : Belgian Federal Public Service Economy, SME, Independent Professions and Energy (http://statbel.fgov.be/)					

Table 2: Regression results predicting financial performance

Dependent Var : SFM_t	Coefficient	t-value	Sign.
Constant	0,045	1,69	*
$EXPEND_t$	0,042	2,60	***
$SIZE_t$	0,950	0,25	
SFM_{t-1}	0,329	5,96	***
POP_t	$-8{,}10E^{-08}$	-0,51	
$UNEMP_t$	-0,007	-0,87	
R^2	0,151		
Adjusted R^2	0,136		

Note: n=308; t=2014; t-values between brackets; * significant at 10%, ** at 5% and *** at 1%

FIGURES

Figure 1: Conceptual model predicting financial performance