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Strategic management accounting in the public sector context: the case of the Swedish Transport Administration

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Abstract

Purpose – The objective of this paper is to generate further knowledge about strategic management accounting (SMA) in the public sector context. The authors attempt to do this through a study of SMA work in a public sector agency (PSA), the Swedish Transport Administration (STA). The paper elaborates on the formation of the agency's strategies and the challenges the agency's SMA work had to deal with, and focuses its analysis on the interplay between SMA and the characteristics of the public sector as well as how it is constitutive of strategy. **Design/methodology/approach** – The empirical material was gathered between 2013 and 2015 and consists of documents that include the STA's appropriation, mandate, strategic and operational plans, and balanced scorecard, as well as interviews with 35 civil servants at various levels of the STA.

Findings – The study finds that, depending on the performances of PSAs in their specific environment and the influences from the environment's constituents, SMA may function as an instrument that makes or breaks strategies. The characteristics of the public sector context may therefore affect SMA, and by extension, strategy, in several ways. First, the present case shows that the inherent reduction that the focus of SMA techniques entails, and their inability to deal with the complexity of a PSA's context, places them at constant risk of becoming strategically irrelevant in the eyes of knowledgeable local managers in a PSA. Second, interventions from the government may override a PSA's SMA and in effect make a PSA's strategic focus ambiguous. Third, outside monitoring performed by such actors as the National Audit Office and the mass media may influence a PSA's SMA work both directly and indirectly when the agency and the government are responsive to the agenda set by such scrutiny.

Originality/value – The paper broadens the scope of earlier SMA research in the public sector by including the specific characteristics of the public sector in the analysis and how accounting techniques may come to compete for strategic placement as they are propelled from within and from without the organization.

Keywords Public sector agencies, Strategic management accounting, Central government **Paper type** Research paper



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Strategic

management

1. Introduction

Accounting scholars have long taken an interest in the relationship between management accounting and broader aspects of organizational management. One such body of research is concerned with the concept of strategic management accounting (SMA). Although previous research on SMA presents somewhat different views of what it is, a common notion is that SMA is a set of management accounting practices, such as cost analyses and performance measurements, that have a strategic orientation and can therefore be used for implementation, evaluation, and development of strategy (Simmonds, 1981; Bromwich, 1990; Dixon and Smith, 1993; Roslender and Hart, 2002, 2003; Langfield-Smith, 2008; Cadez and Guilding, 2012).

Most research on SMA consists of descriptive survey-based studies that focus on the identification and adoption of SMA techniques as well as case studies, often normative, that evaluate the implementation of SMA and draw attention to the fit between SMA designs and strategy (Langfield-Smith, 2008; Malleret et al., 2015). This research is mostly based on a traditional view of strategy that conceptualizes strategy as unidirectional, deliberate, and superior to accounting and situates strategy in a fairly stable context spawned from Porter's (1985) 30-year-old conception of competitive advantage (Carlsson-Wall et al., 2015). Since then, however, the context and the nature of competition have changed (Nixon and Burns, 2012), new conceptions of strategy have been introduced (Nixon and Burns, 2012; Cuganesan et al., 2012; Carlsson-Wall et al., 2015) and the concept of strategy has been introduced to the public sector (Cuganesan et al., 2012).

Against this background, a strand of SMA research has emerged that consists of case studies focusing on understanding how SMA practices are related to the organization as a whole and its strategic processes, e.g. how strategies emerge, how they appear and the role management accounting plays in shaping them (Cuganesan *et al.*, 2012; Jørgensen and Messner, 2010; Kober *et al.*, 2007; Modell, 2012; Skærbæk and Tryggestad, 2010). Instead of viewing the relationship between strategy and management accounting as unidirectional and accounting as subordinate to strategy, this stream of studies acknowledges that management accounting affects strategy (Jørgensen and Messner, 2010; Skærbæk and Tryggestad, 2010) and challenges the view of SMA as a set of pre-defined techniques and generic practices by claiming that SMA should be understood in relation to its specific organizational environment (Cuganesan *et al.*, 2012; Malleret *et al.*, 2015; Modell, 2012).

This paper is positioned within this strand of SMA research and focuses on SMA in the context of the public sector, which is a relatively under-researched area. In fact, few SMA studies have been conducted in public sector organizations (Malleret *et al.*, 2015) and even fewer take into consideration the specific characteristics of the public sector context, with the notable exceptions of Cuganesan *et al.* (2012) and Modell (2012). Our interest emanates from the observation of a public sector agency (PSA) that, despite its autonomy to formulate and execute its own strategies, struggled to do so in part because of the inability of its current SMA to deal with the complexities of the organization's environment and in part because of the influences from the government and other external actors on its SMA, which eventually challenged the significance of the agency's strategies. This finding raises questions about the specifics of the public sector context and their implications for strategy formation in PSAs given the constitutional role of SMA techniques.

Previous studies of SMA that do consider the public sector have specifically drawn attention to the strategic consequences of costing techniques (Cuganesan *et al.*, 2012) and government regulation (Modell, 2012), and pointed to the constitutional role of SMA in the formation of strategy. In this paper we acknowledge the constitutional role of SMA as well as the importance of both costing techniques and government regulation, and we also highlight the ambiguity that the constitutional role of SMA and government regulation engenders in PSAs. As Jørgensen and Messner (2010) write, one of the strategic implications of accounting

is that accounting engenders shared understandings or mediates where strategic interpretations diverge. However, we find that multiple accounting practices driven by different interests, as is the case in many public sector organizations (Rajala *et al.*, 2018), may hinder the galvanizing role of specific accounting techniques and potentially obscure strategy. Therefore, this study focuses on SMA in the public sector context and how it is constitutive of strategy by emphasizing what becomes of SMA as it is influenced by internal and external actors and what that entails for strategy.

In the following section, we elaborate in more detail on the concept of SMA in the public sector and the characteristics of the public sector context. Next, we describe the methods we used in this study and then we present the case of SMA in the STA. The paper ends with a discussion of our findings and conclusions and contributions to our knowledge about SMA in the public sector.

2. SMA in the public sector

Though no agreed-upon definition of SMA can be gathered from the literature (Langfield-Smith, 2008), there is broad agreement that SMA is a matter of planning, implementation, and control (Nixon and Burns, 2012, p. 236), and examples of techniques commonly associated with SMA are customer profitability analysis, strategic pricing, performance measurement methods, and costing methods (Malleret et al., 2015; see also Cadez and Guilding, 2012 for a similar categorization). Most research on SMA, however, addresses the private sector, which is surprising in view of the fact that the context of PSAs has now been shaped by new public management (NPM) reforms for several decades. In effect, NPM-informed reforms, which emphasize the importance of value for the tax payers' money, increased transparency, and accountability for results, have led to increased expectations on PSAs to report both conduct and results in various ways (Speklé and Verbeeten, 2014; Lewis, 2015; Lowe and Wilson, 2017). Thus, PSAs are accountable for good management practices as well as for the achievement of goals and objectives, and consequently began to be concerned with both strategy and SMA (Broadbent and Guthrie, 1992; Llewelyn and Tappin, 2003; Bryson et al., 2010; Cuganesan et al., 2012: Favoreu et al., 2016) as a means of reporting and improving public sector performance (Andrews et al., 2009; Bryson et al., 2010; Cuganesan et al., 2012; Modell, 2012).

Research on SMA in the public sector is scant (Malleret *et al.*, 2015). Aside from studies that focus on the incidence and lack thereof of SMA in, for example, public sector hospitals (Lachmann *et al.*, 2013) and universities (Agasisti *et al.*, 2008), a few studies have focused on the mutually constitutive relationship between strategy and management control. In effect, Skærbæk and Tryggestad (2010) show how accounting techniques played a role in the reformulation of strategies in a national ferry division while Kober *et al.* (2007) show how a management control system in a public health care organization facilitated a reformulation of strategies and how the management control system was then adapted to the new strategies.

Yet these studies do not take the characteristics of the public sector into consideration in their analyses (Cuganesan *et al.*, 2012), although there are several reasons to do so. First, PSAs tend to act in monopoly situations with no profit imperatives, meaning that SMA techniques commonly taken for granted in the private sector, such as strategic pricing and customer profitability analysis (Malleret *et al.*, 2015), are peripheral or even irrelevant (Cuganesan *et al.*, 2012). Second, PSAs face an institutional environment in which they are accountable to a wide range of constituencies and in which the legitimacy of their operations and strategies are constantly at stake. Thus, PSAs need to respond to several and sometimes inconsistent demands from a variety of stakeholders (Lewis, 2015; Rajala *et al.*, 2018) and to plan and execute strategies that take such demands into consideration may be challenging (Llewellyn and Tappin, 2003). A third and related issue is the fact that PSAs are regulated by the government and therefore act in a politicized environment where political regulation, which at times can be both short-term and very detail oriented, may collide with and override the PSAs' own long-

term strategies (Modell, 2012). Fourth, performance measurement and control practices in PSAs differ to some extent from those in private sector organizations. PSAs tend to deal with "insoluble problems" (Llewellyn and Tappin, 2003, p. 957), i.e. goals, objectives, and strategies tend to concern long-term societal outcomes, and the link between an agency's activities and their outcome is difficult to establish because outcomes are produced by the interaction among many different actors (Smith, 1993; Lowe, 2013). Therefore, PSAs' contributions to outcomes is often unclear and open to interpretation (Lowe and Wilson, 2017), which, along with the non-profit imperative, makes it challenging to evaluate the effectiveness of strategies. Fifth, PSAs tend to be responsible for "finding efficiencies" (Cuganesan, et al., 2012, p. 257), that is, constantly finding more cost-effective ways to generate long-term outcomes. The strategic challenge here lies in the fact that cost reduction is relatively easy to measure and follow up on, which in turn means that such activities tend to get a lot of attention at the expense of long-term strategic work with more vague goals and objectives (Smith, 1995; Cuganesan et al., 2012).

However, there are two studies that recognize the influence of the public sector context on SMA and how it is constitutive of strategy. To that effect, Cuganesan *et al.* (2012) show that the prevalence of strategic costing techniques points to the constant pressure faced by PSAs to efficiently generate greater value for money. More importantly, they show how management accounting plays a role beyond facilitation of, and influence in, decision-making insofar as it directs attention and action toward specific strategic concerns that result from the focus embodied by management accounting techniques, i.e. in their case study, the generation of greater value and outcomes while concomitantly focusing on efficiency and minimizing costs. The use of techniques such as "strategic costing techniques [...] and value chain costing" (Cuganesan *et al.*, 2012, p. 257) fit well with the constant pressure that PSAs experience to become more efficient and to save costs while others, such as competitor and customer accounting techniques were irrelevant to the public organization studied.

Modell (2012) shows how the notion of strategy evolved from a long-term to a short-term perspective in the case studied and was so constituted by government regulation through changes in leadership. In effect, he writes, SMA techniques such as the balanced scorecard as well as "target maps" affected the re-construction of the notion of strategy in a PSA and these SMA techniques were intertwined with political regulation, ultimately transforming strategy into a short-term-focused notion based on a limited number of particular regulatory priorities. Modell (2012) encourages researchers to further explore the intertwining of political regulation and SMA techniques and how this, in turn, affects emerging notions of strategy.

In sum, the characteristics of the public sector may be challenging for SMA practices related to planning, implementation and control. PSAs operate in a political and institutionally complex context that may affect both planning and execution of strategies. PSAs' long-term societal goals constitute significant challenges for follow-up practices that then make it difficult to evaluate strategies. Constant pressures to be more efficient may direct a focus on short-term efficiency at the expense of long-term strategic objectives. Previous studies have addressed political regulation and how it, in conjunction with SMA, costing techniques and the BSC, risks turning the focus of strategy from long-term to short-term. However, there is room for more studies on SMA in the public sector that focus on how other SMA techniques may come to influence PSAs and their strategies, and especially how the influence of public sector actors on PSAs' SMA may create ambiguity in relation to their strategy.

3. Method

Given the purpose of this study, i.e. to create further knowledge about SMA in the public sector context, the case of the Swedish Transport Administration (STA) was chosen because it provided us with the opportunity to study how a strategy and SMA in a PSA is formed as well as the challenges the agency has had to deal with in its SMA practices over time. More importantly, given the role of the STA as one of the biggest Swedish public sector agencies, it was clear that

many of the identified challenges could be attributed to the characteristics of the public sector context. The empirical material was gathered through document studies and interviews between 2013 and 2015. The material comprises more than 100 of the STA's documents, including its appropriation, mandate, strategic and operational plans, and balanced scorecard. These documents were used both in the analysis and also to describe the context in which the STA acts.

We conducted 35 interviews with different civil servants at the STA (see Appendix for a list of the interviewees). We began the interviews by asking questions about the history and background of the organization. Subsequently, we asked questions about the interviewees' positions and their work in relation to everyday work assignments, strategy, and performance evaluation. Because it was not possible for us to meet all the strategically important people, a cross-section was taken of different hierarchical levels in the organization, from senior and middle management to lower management. We also interviewed civil servants working in areas such as finance, administration, management, and control, and operational and strategic development. The interviews provided us with extensive information about the interviewees' view of the agency's strategies and the specific challenges they faced in relation to the agency's SMA, and how the interviewees dealt with those challenges. Through the discussions we had during the interviews we also gained insight into the influence the agency's external constituencies had on the agency's SMA work. All interviews were recorded and transcribed verbatim. The interviews lasted 60–120 min.

To complement the interviews and documents, we arranged three workshops/group interviews to address specific topics (see Table 1). We prepared broad, open-ended questions for each meeting to help us keep the discussions focused on the specific topic of interest. We organized the first two group interviews in 2014. For group interview 1, we invited people who worked with strategy at the STA to discuss strategy work, Twenty-five people participated and held discussions about the role and function of strategy and the relationship between strategy and the STA's management control. For the second meeting (group interview 2), we invited people who worked with management accounting and control and discussed evaluation and monitoring activities. Twenty-three people participated in this second meeting, which revolved around questions about the relationship between strategy and evaluation activities as well as concepts such as performance, output, and outcome. The third group interview was organized in autumn 2015, when we invited twenty people working with management control and strategy. During this meeting, we discussed questions about possible tensions between different management accounting and control tools at the agency, and the effects such tensions had on the agency's strategy work.

	Time	Number of participants	Participant's background	Discussion topic
Workshop/ Group interview 1	Autumn 2014	25	Strategy at the STA	The role and function of strategy and the relationship between strategy and the STA's management control
Workshop/ Group interview 2	Spring 2015	23	Management accounting and control at the STA	The relationship between strategy and evaluation activities, including performance, output and outcome
Workshop/ Group interview 3	Autumn 2015	20	Management control and strategy at the STA	Tensions between different management accounting and control tools at the agency and the effects such tensions had on the agency's strategy work

Table 1. Workshops/group interviews held with participants from the STA

Throughout the group interviews we led and moderated the discussions. Each interview started with us presenting the agenda for the day. Then, we divided the group into subgroups for more in-depth discussions about the specific topic of the day and one of us researchers participated in all subgroups. We then gathered the whole group again to elaborate on what each group had discussed. After this first session, we had lunch and then followed the same procedure in a second session in the afternoon. All discussions from the groups and subgroups were recorded and transcribed verbatim. Like the interviews, the workshops provided us with information about the agency's challenges with its SMA work, how the workshop participants dealt with those challenges, and the influence the agency's external constituencies had on the agency's SMA work. The workshops allowed us to verify the information we gained during the interviews and to deepen our understanding of and insights from the interviews. One example of this was the consequence of the heavy focus on "bad stories" in the balanced scorecards, which we elaborate on in the paper's empirical section.

To understand the challenges the STA had to deal with in its SMA, our analysis started with our empirical material. We began by going through a large amount of text, documents and interview transcripts, searching for instances of strategy and SMA work. At this first stage, we tried to be as inclusive as possible, and we included every instance where the interviews or documents reported something about strategy and SMA work, From this initial understanding, we focused on moving between an overall understanding of the STA's context and its relationship to the agency's work with strategy and SMA. This made us aware of the significant influence from the government and the mass media on the development and progression of the agency's strategy and SMA, as well as the tension between SMA techniques, government steering and the public sector environment in general. To understand this dynamic, we focused on the development of the STA's strategy and SMA work by emphasizing public sector characteristics such as efficiency considerations, political regulation, the role of other constituencies in the public sector, and the influence these public sector characteristics had on the STA's SMA work. Throughout the analysis we moved back and forth between the empirical material and our theoretical resources in order to develop our understanding of the role of the public sector context in the development of SMA in a PSA as well as the constitutive role that SMA plays for strategy.

4. Strategic management accounting in the Swedish Transport Administration (STA)

The STA is a Swedish central agency that was formed in 2010 and is responsible for long-term planning of the Swedish transport system including rail, shipping, road, and aviation. The agency works with long-term infrastructure planning and is also responsible for building, maintaining and operating railways and roads.

4.1 The formation of strategies and SMA in the STA

Even though public sector agencies are an extension of the government and are tasked to realize its political will, agencies in Sweden have long been relatively free to formulate their own strategies based on their assignments [1]. This has been strengthened by the introduction of performance management and customer focus, which brought legitimacy to the strategic practices within public sector agencies (Wargsjö and Hultén, 2015).

Since its inception, the STA has been working on a new strategy, and in the summer of 2010 its new strategic direction was determined, approved by the board and launched. The strategic plan was developed by the STA's top management and consisted of six strategic challenges that were deemed critical to the realization of the goals set out by the National Transport Plan for 2010–2021 (see Table 2) [2]. A strategic challenge was defined as an area

with "gaps between the current and the desired state of the Swedish transport system" (STA annual report 2010, p. 5), i.e. areas in need of improvement and therefore in need of specific monitoring and control. An interviewee from the STA's top management explained that the decision to focus on "gaps between the current and desired state of affairs" was the way in which the agency dealt with its multifaceted assignment, the comprehensiveness of the National Transport Plan, and the complexity of its operations:

Our activity is incredibly complex and broad, and we agreed early on that we need to prioritize and focus, and then it helps to think in terms of [strategic] challenges. [R29]

Strategic challenges	Stra	ategic objectives
An energy-efficient transport system	(1)	Carbon dioxide emissions and energy use in the transport system are to decrease
Well-functioning traveling and	(1)	Contribute to a growth in public transport's share of passenger journeys made in metropolitan areas
transportation in big	(2)	Reduce congestion in metropolitan areas
cities	(3)	Greater accessibility to destinations for delivery and service transports in metropolitan areas
	(4)	More attractive environment in metropolitan areas
Efficient transport chains for the industry	(1)	Greater accessibility and reliability for long-distance goods transport on the strategic network
·	(2)	More climate-smart and attractive transport opportunities for the tourist sector
Robust and reliable infrastructure	(1)	Delivery quality on the road and rail system is to be achieved in accordance with the National Plan for the Transport System 2010–2021
	(2)	Citizens and the business community are to perceive information about disruptions as useful, reliable and easy to obtain
More value for the	(1)	Efficient planning – coordinated and intermodal
money	(2)	Efficient internal operations
,	(3)	Contribute to greater productivity in the construction industry
The STA: a modern	(1)	Customers should be satisfied with the performance of the administration
central agency	(2)	The administration is an active stakeholder globally and in the EU
- *	(3)	The administration is an attractive employer
	(4)	The administration has a strong brand

The STA's strategic challenges and strategic objectives (translation from STA annual report 2010)

Table 2.

It was also decided that the SMA technique that would facilitate the implementation of the strategic challenges was the balanced scorecard (Kaplan and Norton, 2001) and, in line with the finding of Skaerbaek and Tryggestad (2010) that accounting techniques play a role in defining strategy, the agency's development of the strategic challenges also took the balanced scorecards into consideration. The general director explained:

This is our way to make our assignment concrete [...] and make it manageable. This is our way to establish a chain between goals, strategies, plan of operation and the balanced scorecards. [R28]

The six strategic challenges accompanied by 16 strategic objectives and was formulated in the following way:

Subsequently the 16 strategic objectives and accompanying strategies/critical success factors were operationalized into performance targets in balanced scorecards (STA operational plan 2011–2013). The STA had one overall scorecard and then the agency's different departments had their own scorecards that were adapted for their specific activities. Figure 1 below illustrates the STA's overall balanced scorecard for 2011–2013.

Vision:

Everybody arrives smoothly, the green and safe way.

Strategic management

The government

Energy consumption in the transport sector should decrease by at least 400 GWh as a result of the STA's efforts

Sweden should be successful in at least 4 of the 6 most important EU-questions according to the STA's EU strategy (Arbestprogram för 2011)

Financial resources/internal

Efficiency gains will free up SEK 550m for prioritized measures that increase societal benefit

Employees

Employee satisfaction (ESI) should be at least 60

Customer (citizens and businesses)

Punctuality should increase

- Freight trains to at least 70% • Passenger trains to at least 90%
- Commuter trains in big cities to at least 85%

The proportion of satisfied travelers with information about disruptions in the railway traffic should increase to at least

Citizen and business satsifaction with the STA should increase to at least 66% (CSI)

Development

Develop a method for choices of action according to the fourstep principle and test it in 6 cases

Develop a strategy for traffic management in big cities together with incumbent partners

accounting

475

Figure 1. The STA's balanced scorecard 2011-2013 (Internal document, our translation)

The formation of the STA's balanced scorecard practice was marked by earlier experiences with scorecards. In effect, some of the former and now merged agencies had previous experiences with balanced scorecards that were overloaded with measures. The STA was thus well aware of the risks of ossification (Smith, 1995), i.e. organizational paralysis and ambiguity as a consequence of excesses in the number of performance indicators. To avoid such problems, the agency decided to focus on "critical" areas of the strategic challenges, which meant that the scorecards should only include aspects of the strategic challenges that were in most need of improvement, such as punctuality in the railway traffic. Thus, whereas the strategic challenges constituted a significant reduction of the STA's operations into critical areas, the balanced scorecards would reinforce that orientation by concentrating on critical areas within the critical areas identified by the strategic challenges.

4.2 A new way of reporting performance

During the STA's first year of operations, the Swedish railway system began to experience severe problems with the quality of the trains and the maintenance of the railroads. At the same time, Sweden had some exceptionally hard winters that caused massive train delays on numerous occasions. The problems with the railroads received massive mass-media attention. In effect, a PSA is not solely accountable to the government, but to many different constituencies, most notably in this case the public and the media (Lewis, 2015; Rajala et al., 2018). However, it was not only the Swedish railway's failure to secure operations during the winter that was reported on. Along with the criticism of the STA's management and performance, the government's actions also came under attack as the political opposition took part in the media posse by way of op-eds that referred to budget cuts in the operation and maintenance budget of the railways and the perceived shortcomings of future infrastructure investments and maintenance.

As a result, the government presented extraordinary funds dedicated to the maintenance of the railways in 2011 (Wargsjö and Hultén, 2015). In conjunction with the decision to provide extra funds for the agency's maintenance operations, the ministry also discussed the possibility of following up on the STA's maintenance operations in a better way. The latter

was not only a consequence of the criticism received in the mass media, but also from another influential constituent in the PSA context. In effect, in 2010 the Swedish National Audit Office (SNAO) had carried out a performance audit (2010, p. 16) of the Swedish railway administration (which included STA as well as the preceding rail administration and road administration) and concluded that "the government's direction over railway maintenance is weak" (SNAO, 2010, p. 6). Part of the criticism was the lack of outcome-based performance information (Lowe and Wilson, 2017) about links between the maintenance operations and their outcomes from a wider societal perspective and suggested there was a risk that taxes aimed for railway maintenance were not used effectively. Against this background, the SNAO provided the following recommendations to the government (Lowe and Wilson, 2017, p. 6):

The Government should instruct the Transport Administration to develop models and methods to assess the impact that maintenance actions produce for passengers and others who use or are affected by rail transport.

Against the background of public and media criticism, the criticisms and recommendations from the SNAO and increased funding, the Ministry of Innovation and Enterprise decided that a framework for governance should be developed in collaboration between the ministry and the STA. An interviewee who worked at the ministry at the time explained:

We [the ministry] said that maintenance of the railway is like a black box that we put money into, and we had received criticism from the SNAO; what do we get for all the money we spend on maintenance?

Consequently, in collaboration with the Ministry, the STA developed a general framework consisting of six "delivery qualities" (see Figure 2). Then the STA was given autonomy to develop the objectives and measurement within the framework. The delivery qualities aimed to construct clear links between financial input and a broader set of accomplishments in the transport system. The indicators were to be used to improve the governance and follow-up of the STA as descriptors of the STA's "ability to deliver a safe and accessible transport system that takes health and the environment into consideration" (STA annual report 2012, p. 14). The delivery qualities contain six categories that aim to capture the functionality of the

DELIVERY QUALITIES LINKED TO FUNCTIONAL ACCESSIBILITY

Punctuality

The transport system's ability to satisfy or deliver planned travel or transportation times and its ability to quickly provide accurate information in the event of disruptions

Capacity

The transport system's ability to handle the required volumes of travel and transportation

Robustness

The transport system's ability to prevent or manage disruptions

Usability

The transport system's ability to deal with the transport requirements of various customer groups

DELIVERY QUALITIES LINKED TO HEALTH, SAFETY AND ENVIRONMENTAL CONSIDERATIONS

Safety

The transport system's ability to minimise the number of traffic-related fatalities and serious injuries

Environment and

The transport system's ability to minimise its negative impact on the climate, countryside and health, and its ability to promote positive development in these areas.

Figure 2. The STA's Delivery Qualities (STA annual report 2012, p. 14)

transportation system in Sweden: Punctuality, Capacity, Robustness, Health and Environment, Usability and Safety.

Thus, the governance framework, with its delivery qualities, was a new way for the STA to report its performance to the government. This would make the ministry's monitoring and control of the STA more transparent and the ministry would be able to secure verified information about outcome development over time. The delivery qualities framework was implemented in 2013 and unlike the agency's strategies, which were not assessed on a regular basis, the STA had to account for the development of the delivery qualities' outcome indicators in its annual report. The delivery qualities were accounted for with arrows clearly indicating the progress of the agency's performance. Table 3 shows how the delivery quality Punctuality was accounted for, which is an example of how the delivery qualities were accounted for in the annual report.

Railway	Major city	Major routes	Other important routes	Lesser traffic	Insignificant or no traffic
Punctuality	\rightarrow	\rightarrow	7	\rightarrow	7
Percentage of arrivals within 5 minutes, passenger traffic	95.1%	90.3%	90.4%	91.0%	82.6%
Percentage of arrivals within 5 minutes, goods traffic	78.6%	78.4%	76.3%	82.0%	81.6%
Percentage of information and forecasts submitted in advance1 prior to departure			61.8%		
Percentage of information and forecasts exceeding a 20% margin of error			23.5%		

Table 3.
Results for delivery quality Punctuality for Railway. (STA annual report 2013. p. 16)

In sum, the legitimacy of the STA's operations, and therefore the strategy that was perceived to be their origin, came to be questioned by the public, the mass media, and the SNAO. The government also played a part in this crisis, but the blame was directed mostly at the STA, and when the government had made amends by way of an extraordinary fund injection to the maintenance of the railways, it turned again to the STA to create a better tool for monitoring and control of the STA, the delivery qualities. The delivery qualities were thus the political solution to the crisis. A solution that was not related to the STA's strategies or balanced scorecards even though some aspects, such as punctuality in the railway traffic, were included in both the scorecards and the delivery qualities. More importantly, the

delivery qualities also addressed several areas that were not included in the scorecards.

4.3 The role of the scorecard as SMA starts to be questioned

As the delivery qualities were introduced and implemented in 2013, the role of the Balanced Scorecard as the agency's main SMA technique began to be questioned. The main reason for the criticism was that the scorecard focused on "critical" aspects and that such a focus excluded many of the agency's activities from the formal management control chain. Exclusion from the scorecard was, on the one hand, regarded as a good thing because it meant that that which was excluded worked well.

Previously, if an objective was not included in the BSC, it was not achieved [...] now, we go through with it anyway because the balanced scorecard only focuses on certain critical aspects [...] I do no't believe that the BSC is as important as before. Rather, I would like to say that it may be a good thing to be excluded from the BSC, because that means that the activity works well [R22].

On the other hand, the exclusion of non-critical issues from the balanced scorecard led many to question the role and significance of the balanced scorecard. The problem arose because issues excluded from the scorecards still needed to be prioritized and acted upon and therefore the agency's strategic management appeared to lack focus and to be ambiguous. Another aspect adding to this feeling of strategic ambiguity was that the government could give the agency "specific assignments" that were given high priority even though such assignments were not necessarily included in the scorecards.

The strategies' focus on aspects in need of critical improvement also meant that there was a strong emphasis in the formal management and control chain, and consequently also in the internal follow-up, on that which did not work well at the agency. When the agency's evaluation of results was discussed in one of the workshops, the following discussion was held:

Participant A: ... what is it that we focus on? The scorecard logic is built on the idea that what is critical should figure [in the scorecard], not [necessarily] what is important. In other words, we should focus on what we really need to focus on... but that presupposes that all other areas [not included in the scorecard] work well [...], and then we have very strong focus on negative deviations, and that is all we think about [...]

Participant B: But it's like it kind of defines the other question about what is a good and a bad result, and very quickly we end up facing the fact that we are very bad at knowing what a good result is... we focus very much on bad results.

Participant C: And where do we get the "heroes" of our organization, where are the role models in that type of management rule? [...]

In sum, the challenges associated with the focus on critical aspects had several dimensions. First, the balanced scorecards excluded activities that were also regarded as important and still had to be performed by the agency. Second, influences from the government, i.e. "specific assignments" were given high priority even though they were not included in the balanced scorecards and this added to the idea of strategic ambiguity in the STA. Third, the focus on critical aspects gave precedence to bad stories at the expense of good stories and this, in turn, made it difficult to "see" good strategic results and to use such results to learn and develop best practices for strategy work, which is often understood as one of the main purposes of SMA (Roslender and Hart, 2002, 2003; Langfield-Smith, 2008; Cadez and Guilding, 2012). The legitimacy of the scorecard as a strategic management accounting and control technique was thus questioned from inside the agency and as more and more criticisms surfaced, its legitimacy as a SMA technique weakened.

4.4 Further strategic ambiguity caused by the delivery qualities

Even though the delivery qualities were initially intended to be a tool for external reporting to and communication with the government, they gradually came to be regarded

not only as such, but also as a tool for communication with society as a whole. The main actor that the agency felt a need to respond to was the mass media. The negative media attention was a heavy burden for the agency and to be able to communicate with media first of all, but also with other stakeholders and to be able to respond and to some extent also defend itself when it was criticized, the STA needed to support its arguments with information about the value the agency created in society. In this regard, the agency's SMA technique, i.e., the balanced scorecards, were not helpful since they tended to provide "bad stories" about the agency's operations. But the governance framework and its promise to deliver information based on the relationship between the STA's efforts and their impact were exactly the tools the agency needed to defend itself in the debate about its performance within the Swedish central government as well as in Swedish society at large.

[The delivery qualities] are a way for us to communicate with the outside world what we do for the money we receive [...] The governance framework and the delivery qualities have received... how should I say this... a cult status in the agency. I think the reason for this is that we finally have something that verifies what we do in this organization [R9].

Thus, the delivery qualities came to be regarded as a communication tool to inform the government, the media and other important actors, and by extension the general public, about the operations of the STA. For that reason, the delivery qualities also generated confusion at the STA as to what should be understood as the agency's strategies. The fact that the delivery qualities were initiated by the agency's governing ministry meant that the delivery qualities gained significant importance in the organization, which in turn made the agency's strategic management accounting confusing.

Well, this is a bit problematic. Right now, we have different "tracks" that we have to relate to the agency's general management. One [track] is the new governance framework [the delivery qualities] that has to be related to our strategic management. Now, we even call it 'the governance framework', and this is confusing [R30].

In effect, some interviewees stated that the delivery qualities were more important than the strategic challenges and the scorecards that had been developed earlier. In several ways, the delivery quality framework came to be assessed as the proper solution to the problems with the agency's strategic challenges and scorecards. Two of our interviewees explained:

[The delivery qualities] should be possible to use for both follow-up and management of the agency. It will take a while before it is perfect but I think it is a well-functioning way forward [R2].

I think the strategic challenges should be based on the delivery qualities [...][T]his does not seem to happen, and then we have to ask ourselves: Do the strategic challenges add any value? I think we should have strategies for every delivery quality [...] Do the six strategic challenges add any value? Not according to me [R3].

Several respondents also explained that the delivery qualities were more useful for managing the agency because they informed the agency about what they were supposed to achieve and how they should make priorities:

Similar to the strategic challenges, I think the balanced scorecards should be connected to the delivery qualities. Now, many aspects [of the delivery qualities] are excluded [from the balanced scorecards], but we have to understand that the delivery qualities should steer our priorities [R25].

I think the strategic challenges should build on the delivery qualities, because if the strategic plan is to help us prioritize, the delivery qualities have to be included. The ministry governs us on the basis of the delivery qualities. If we do no't build the strategic challenges on the delivery qualities, we will continue to have two tracks [R9].

In summary, the delivery qualities were regarded as important in the agency because they were initiated and developed in collaboration with the government. Moreover, the delivery qualities included areas that were excluded by the scorecard, areas that many of the interviewees regarded as relevant in relation to their own understanding of the agency's role and function in society. In that sense, the delivery qualities came to be deemed by many to be the better SMA technique because they could generate relevant information about the STA's impact in the Swedish transport system much better than the scorecard. This information was important for the STA's communication with its stakeholders. Thus, for these reasons, the delivery qualities began to override the strategy developed by the agency and undermine the legitimacy of the STA's scorecard as the agency's SMA technique.

5. Discussion

Throughout this study, we tried to show some of the complexities and nuances of a PSA's SMA. By doing so we answer the calls for studies of SMA in the context of the public sector that also consider its intricacies (Cuganesan *et al.*, 2012; Modell, 2012). In the introduction we highlighted some of the characteristic features of PSAs and the context in which they operate. In what follows, we discuss the interplay between the constituents of a PSA and their influence on SMA, and also elaborate on the consequences of this public sector context for PSAs' strategy.

In line with many other public sector agencies, the STA operates within the context of management by objectives. The government stipulates goals and objectives while PSAs are responsible for achieving them efficiently. In this context, strategic management is relevant inasmuch as strategies and SMA can be understood as integral parts of a plan, or an outline, of the means needed to achieve the desired ends. Along with the suggestion that goal-directed strategic planning has a positive effect on the performance of PSAs (Walker *et al.*, 2010), the increased interest in strategic management in the public sector can be seen as a natural development of NPM reforms in which management by objectives, with its associated emphasis on decentralized decision making and absence of governmental micromanagement, is crucial.

However, this study shows that the government's influence does not stop with the stipulation of goals. Whereas Modell (2012) shows how the government's influence leads to short-sightedness, the present study shows how "specific assignments" from the government may override an agency's formal management and control chain, which includes its main SMA technique, without explicitly changing it. This, as was the case for the STA, may in turn throw an agency's strategic management into disarray by introducing ambiguity and lack of focus.

Furthermore, central agencies tend to have broad and rather complex assignments and the vast amount of goals an agency is supposed to fulfill makes the translation of an agency's assignment into a concrete SMA technique a challenge. In the case of the STA, the way to deal with this challenge was to zero in on areas in critical need of improvement. Moreover, in an effort to avoid unintended consequences such as ossification (Smith, 1995), the STA's scorecard entailed an even more intensified focus that only permitted critical aspects to be included in the scorecard. Whereas Jørgensen and Messner (2010) as well as Cuganesan *et al.* (2012) find that SMA techniques form general understandings about the importance of certain strategic issues that can then be used to reshape strategies, the case at the STA was more complicated. The reductive focus created by the agency's scorecard brought about (1) the absence of good stories, which made it difficult to develop best strategic practices and (2) a translation of strategies into a minimum of indicators that at times made the scorecard strategically irrelevant in the eyes of its users. The influence of the scorecard on strategy formation was thus not limited to the reformulation of strategy in measurable and reductive

terms. It also brought about a focus on criticalness and concomitantly the exclusion of that which was not deemed critical, e.g. good stories, from the agency's formal follow-up system. Hence, good models and best practices were made invisible and thus difficult to communicate, spread and use to re-shape the organization's strategy. The inability of the scorecard to represent organizational action led in turn to a loss in the benefit of the scorecard as an SMA practice, a position that moreover came to be challenged by the rise of the Delivery Qualities as a monitoring tool turned MA technique.

Therefore, our results are in line with Cuganesan et al. (2012), Modell (2012) and Jørgensen and Messner (2010), who show that management accounting is not only a product of strategic processes in need of strategy-based accounting information and that it plays an active role in the reformulation of strategy, not least because it is not always possible to unambiguously translate strategic objectives into the language of accounting. Against this background and that of previous studies on strategy formation (Carter et al., 2010; Modell, 2012), which suggest that SMA techniques such as the BSC privilege certain interests while marginalizing others and therefore exert a powerful influence on strategy formation, one might expect that the activities excluded from the STA's scorecard would have been downplayed. On the contrary, however, the focus on critical measures led some local managers in the STA to resist the STA's scorecard by acting outside the chain of formal management accounting and control in order to attend to particular issues that were not included in it. Even though acting outside of the formal management control chain allows for a certain flexibility for individual managers, the interplay between the reductive focus of the scorecard and the actions the individual manager makes for an ad hoc strategic direction that becomes difficult to identify with the formal strategy. The inherent reduction that SMA techniques entail also places SMA at risk of becoming strategically irrelevant in the eyes of knowledgeable local managers if the techniques are unable to deal with the complexity and influences of a PSA's context.

In contrast to Cuganesan et al. (2012), who find that the importance of outcome measures and objectified outcome information may be downplayed due to the significant metrological challenges associated with outcome measurement (Cuganesan and Lacey, 2011; Modell and Grönlund, 2007), the delivery qualities quickly gained significant importance in the STA. In effect, although the delivery qualities were introduced as an accounting device to report to the government and for the government to monitor the STA, the delivery qualities quickly rose as an SMA contender that challenged the relevance of the scorecards. Moreover, the reason why the governance framework gained so much importance in the STA can only partly be related to the fact that it was imposed by the government. In line with Modell (2012) and Andrews et al. (2009), who suggest that strategies in the public sector tend to be the result of intertwined political regulations and management accounting techniques, the delivery qualities can be regarded as a typical example of a management accounting technique that is a result of political regulation. But the example is also one whose impetus lies in the public perception, spearheaded by the media coverage of the Swedish railway's performance. This finding seems to support Hadid and Al-Sayed's (2021) general proposition that contexts in which long-term outcomes are regarded as a crucial part of an organization's performance (which is the case for many PSA's) tend to facilitate the implementation of management accounting techniques with a long-term orientation and outward focus, such as the delivery qualities. The delivery qualities put the STA's strategic work in a different light and the present case shows that PSAs' outcome measurements are related to legitimation of both PSAs and the government and are therefore strategic not only in terms performance but also customer satisfaction and media optics.

The case of the STA and the delivery qualities allows us to broaden the analytical scope of strategy formation in the public sector beyond that of political regulation (Andrews *et al.*, 2009; Modell, 2012) to include the public and the media as actors with significant constitutive influence on strategy formation in the public sector context. Due to PSAs' position as

tax-funded organizations in monopoly situations (Cuganesan *et al.*, 2012), PSAs are under constant pressure to communicate their achievements (Jackson, 2011) to the government as well as to the general public. The answer to the lack of consensus about SMA and "how, by whom, and for whom" it should be conducted (Nixon and Burns, 2012) in the public sector is thus, at the macro level, that it should be conducted by the people and for the people and, at the micro level, that it is through management accounting practices brought about in the interaction between PSAs and their context to allow for legitimate accountability discharge. As Power (2004) suggests, the demand for quantification and measurable results tends to increase in circumstances where there is a lack of trust. The STA's balanced scorecards and the "bad stories" they produced did not generate any material for external communication. But the delivery qualities framework with its promise to solve the challenging task of measuring the agency's long-term results and making them visible with numbers, was quickly embraced by the STA as a tool to report to the government and communicate with the media and the general public as well as a contender for SMA supremacy at the agency.

6. Conclusion

As previous studies have pointed out (e.g. Llewellyn and Tappin, 2003; Cuganesan *et al.*, 2012), the public sector has certain specificities that influence strategy work in PSAs, and outside monitoring performed by the National Audit Office as well as other auditing bodies in central government can be added to those specificities. As we have shown, the public and the media should also be considered important actors of the public sector context. The media is an important actor with influence in public administration and policy making and plays an important role both in terms of how issues are framed and how much attention issues get (Cobb and Elder, 1983; Klijn *et al.*, 2016; Strömbäck, 2011; Van Aelst and Walgrave, 2011). In the case of the STA, the criticism from the public and the scrutiny from the media drove politicians to demand a better monitoring tool, i.e. the governance framework and its delivery qualities, which would eventually challenge the relevance of the agency's management control chain.

Through this study we have shown how, depending on the institutional environment and the performance of a PSA in that environment, management accounting and control practices can function as instruments that make or break strategies as a result of the influence from the environment's constituents. In relation to previous studies of SMA in the public sector context (Cuganesan *et al.*, 2012; Modell, 2012), the case of the STA shows that it is not only costing techniques and cost efficiency concerns (Cuganesan *et al.*, 2012) that may be constitutive of strategy in PSAs. In the STA's case, it was outcome indicators that were initially meant as a monitoring tool for the government. Eventually, in the minds of many at the STA, they also became a contender SMA technique because they were thought to provide a better fit to the STA's strategy than the scorecards did or constitute a more relevant strategy than the formal one and serve as a tool to report to the government and in the communication with the media about the agency's performance.

Finally, this study provides some evidence that what determines the validity of management accounting techniques as SMAs is the relative strength of the actors and agendas that drive these particular techniques. To understand this, we need to take the formal governance structures and political influence into account (Modell, 2012; Andrews et al., 2009). As Modell (2012) explains, we know little about how strategy, political regulation and SMA techniques are intertwined. With this paper, we acknowledge the importance of such studies, but we also emphasize the importance of broadening the analytical scope beyond the formal governance structures and include other influential actors, external as well as internal, to unravel the relationships between specific SMA techniques and the public sector context as a whole. More importantly, we have shown how such influence may throw

an agency's SMA and strategy into ambiguity and disarray through the introduction of an accounting technique that gained relevance externally and internally and came to challenge the formal management control chain.

Future research should continue the task of critical scholars by further unpacking other processes that lead to new strategies and SMA techniques, not only to understand the possibilities for resistance that such emergent influences enable (Carter et al., 2010; Modell, 2012), but also to zero in on the ambiguity and conflict that they engender and how they paradoxically may lead to change from the inside of a PSA.

Notes

- Swedish central agencies have two main steering documents provided by the government: the
 annual appropriation letter, which includes the budget, annual assignments and reporting
 requirements, and the agency's instructions, which contain statements that define the agency's main
 role and function in society.
- 2. Along with the first instruction and appropriation letter for the STA, the government issued the National Transport Plan for 2010–2021, which was the first infrastructure plan that included all types of transports in Sweden.

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Appendix

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Table A1. List of interviewees

Respondent	Position	Department	Date
R1	Head of Department	Society; Societal Development	2014-09-18
R2	Head of Department	Society; Societal Needs	2014-06-05
R3	Branch Head	Society; Societal Needs	2014-06-17
R4	Branch Head	Society; Planning	2014-06-24
R5	Branch Head	Society; Planning	2014-09-08
R6	Planning Director	Society; Planning	2014-09-19
R7	Operations Developer	Society; Customer Services	2014-09-10
R8	Controller	Society; Customer Services	2014-09-12
R9	Main responsible for the STA's management accounting	Society; Management and Control	2014-09-08
R10	Controller	Society; Management and Control	2014-09-12
R11	Branch Head	Society; Regional Development (middle region)	2013-03-22
R12	Operations Developer	Maintenance; Management and Control	2014-04-14
R13	Head of Department	Maintenance; Management and Control	2014-06-23
R14	Controller	Maintenance; Management and Control	2014-09-19
R15	Controller	Maintenance; Management and Control	2014-09-05
R16	Head of Department	Maintenance; Construction Development	2014-09-05
R17	Region Manager	Maintenance; Maintenance Development	2014-09-19
R18	Railway Expert	Maintenance; Maintenance Development	2014-11-13
R19	Head of Department	Maintenance; Maintenance Development	2014-11-28
R20	Branch Head	Maintenance; Development and Environment	2014-11-11
R21	Operations Developer	Maintenance	2013-04-08
R22	Planning Director	Maintenance	2014-11-25
R23	Head of Department	Maintenance	2013-08-30
224	Risk Manager	Central Function; Management and Control	2014-06-24
R25	Operations Developer	Central Function; Strategic Development	2014-09-08
R26	Head of Department	Traffic Management	2013-03-27
R27	Chairman of the Board	The STA Board	2013-10-04
R28	General Director	Central Function	2013-09-10
R29	Head of Department	Central Function; Strategic Development	2013-09-10
R30	Operations Developer	Central Function; Strategic Development	2013-02-26; 2014-03-03
R31	Operations Developer	Central Function; Strategic Development	2013-02-26
R32	Operations Developer	Central Function; Strategic Development	2013-02-26
R33	Operations Developer	Central Function; Strategic Development	2013-06-13
R34	Operations Developer	Central Function; Strategic Development	2013-06-13
R35	Goal Director	Central Function	2013-03-11

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