WHEN ARE CHANGES EFFECTIVE IN PERFORMANCE MANAGEMENT? THE CASE OF THE JAPANESE AGENCIES

Preliminary draft, do not quote.

Dra. Ana Yetano* and Dr. Takami Matsuo⁺

*Dpt. Accounting and Finance University of Zaragoza - Faculty of Economics and Business Gran Vía, 2 50005 Zaragoza (Spain) ayetano@unizar.es http://gespublica.unizar.es; https://sites.google.com/site/anayetano/

⁺ Kobe University – Graduate School of Business Administration
 Zip: 657-8501
 2-1 Rokkodai, Nada, Kobe Japan
 mats@kobe-u.ac.jp

WHEN ARE CHANGES EFFECTIVE IN PERFORMANCE MANAGEMENT? THE CASE OF THE JAPANESE AGENCIES

ABSTRACT

Agencies were re-invented under the auspices of the NPM. Besides the different configurations of the agencies, all aimed at improving the public sector performance by transferring central-state activities to various forms of semi-autonomous bodies. This paper explores the implementation and use of Performance Measurement and Management (PMM) in Japanese agencies. The use of PMM seems to benefit agencies, but this use seems to be unequal. Thus, it became necessary identify the reasons of the divergences in PMM use. Are differences due to organizational cultural or contextual factors, are they related with the implementation effort or are they related with the predisposition to change? We found passive and purposeful adoption of PMM, being cultural factors more explicative the rest.

WHEN ARE CHANGES EFFECTIVE IN PERFORMANCE MANAGEMENT? THE CASE OF THE JAPANESE AGENCIES

1. INTRODUCTION

Agencies were re-invented under the auspices of the NPM. Besides the different configurations of agencies, showed by Verhoest et al. (2012), all reforms aimed at improving the public sector performance by transferring central-state activities to various forms of semi-autonomous bodies. They also shared a strong emphasis on output-focused financial and operational performance targets and on separation between policy and management (Van Thield, 2012). Agencies were disaggregated from the core government to enable more business-like management, which was expected to be performance or result driven and to have a high level of managerial autonomy.

In this setting, it is expected a shift from the use of traditional ex-ante and input oriented monitoring to ex-post and result oriented control mechanisms. As autonomy by itself has proven to be an insufficient condition to improve agency management and performance (Van Thield, et al., 2012), it is expected that agencies implement performance measurement and management (PMM) systems. Thus, agencies become key organizations to study the diffusion of PMM and/or management control systems. It is important to understand why, as previous research has shown, exante controls are still predominantly (Van Thield, et al., 2012). James et al (2012) indicate that performance systems used by agencies have been criticized for an inadequate focus on output and outcome targets.

The difficulties of establishing ex-post or result oriented control mechanisms are not new. Regarding to PMM it has been argued the practice of using it to influence decisions or to improve services is less apparent and far less documented (Hatry, 2002; Ammons and Rivenbark, 2008). There is a broad agreement in theory on the numerous ways that PMM can help, even though there is a debate about its failings in practice (Poister and Streib, 1999; Bouckaert and Peters, 2002; Grizzle, 2002; Kelly, 2002; Sanger, 2008). Public officials and employees have questioned the net value of collecting measures and scholars have noted the gap between rhetoric and reality (Streib and Poister, 1999; Bouckaert and Peters, 2002; Grizzle, 2002; Kelly, 2002).

This paper explores the implementation and use of PMM by Japanese agencies. We aim to establish to what extent these agencies have implemented PMM. But more importantly, our concerns in this paper are oriented towards identify the distinguish characteristics of those agencies that are using PMM. We aim to answer: why agencies shown different levels of PMM implementation and use? Are there specific characteristics that may PMM more suitable or easier to introduce?. Schedler (2003) pointed out, that reforms are killed not so much by their concepts as by their deficient implementation. The answers to these questions will help government officials to develop approaches to introduce ex-post control mechanisms. They also will provide valuable information to organizations, planners and policy makers to effectively assist agencies in the PMM implementation process.

The structure of the paper is as follows. In Section 2, we provide the characteristics of the Japanese public-administrative culture and of its agency reform. Section 3 introduces the theoretical framework. Section 4 includes the methodology and section 5 presents the analysis of results. Finally, section 6 discusses the findings and draws the conclusions.

2. THE JAPANESE PUBLIC SECTOR AND ITS AGENCIES

Japan followed the NPM reforms, initiated in the 1980s in the UK and New Zealand, a decade later (Osumi, 1999). The Japanese administrative reforms used the Anglo-American model as a mean of legitimation of the reform programs, as this model fostered the idea of a global and international trend (Asako, et al., 1991). These reforms, focused primarily on privatization, deregulation and governmental efficiency, had different preconditions in Japan. Their welfare programs were fairly recent. They were institutionalized in the 1970s (Muramatsu and Krauss, 1996) (see Figure 1). Moreover, Japan had the smallest size of government in terms of personnel size and of public expenditure as proportion of GDP and citizens enjoyed of low tax rates¹. Nevertheless, public sector expenditure grew rapidly and the general government gross financial liabilities as a percentage of GDP reached the 205.3% in 2011, in comparison with the 95.2 of the EU area².

Insert Figure 1

With regards to the public administration style, on the one hand, it has been argued that Japan was highly influenced by the American Occupation principles: 1) to become increasingly efficient and 2) to constraint the size of government budget. Both progressive and conservative parties agreed in the importance of the public sector but also in keeping it small (Muramatsu and Krauss, 1996). On the other hand, in Japan, as in Germany, the state was based on the Weberian culture, with a clear distinction between public and private sectors. The reform packages implemented considered that the villain was the bureaucracy rather than the public sector itself. Muramatsu and Krauss (Muramatsu and Krauss, 1996) highlighted two characteristics of reform success in Japan, the organizational memory (it has a permanent elite civil service up to the vice-ministerial level with only a few political appointments at the top), and the same party since the post war era.

The Japanese agency reform began in 1999 (Act on General Rules for Incorporated Administrative Agency). Public entities such as research laboratories, museums, libraries, universities, hospitals, foundations or the Mint became independent agencies. Fifty-seven agencies were initially established in 2001, merged to 42 in 2004. In 2012, they grew to 102 (including the national hospital under which there are 144 hospitals). Additionally, all national universities became incorporated under the National University Corporation Law (2003). As a result, there were 86 national universities transformed into agencies. The purposes of the agency reform were: "to efficiently provide administrative services that meet the needs of citizens, to achieve an autonomous administration of the agencies, and to secure of transparency of business operations" (Ministry of Internal Affairs and Communications, 2013). The reform was aimed to avoid previous problems, such as unclearness of management responsibilities, inefficiency, lack of transparency, and lack of managerial autonomy (Yamamoto, 2001, 162-164).

Japanese agencies became legally independent bodies under public law, but were kept under close control of government. The planning and management functions were separated. The ministries are in charge of medium-term plans, which define the goals for 3 to 5 years. The agencies elaborate the annual plan having autonomy to define the targets and processes of services provision. The agencies report both on the medium-term and annual plans. The monitoring process is done by two evaluation committees. One of the committees is a commission set by the ministry of which the agency depends –"Ministerial committee"- and there is one per Ministry. The second committee is the "Evaluation Council" (see Figure 2), that depends from the Ministry of Public Management,

4

¹ The expenditure of general government as percentage of the GDP for Japan in 2010 was 40.7% in comparison with the 50.9% of the EU area, and the average income tax rate (%) per single person at 100% of average earnings with no child was in 2010 7.72% for Japan and the 15.2% in the EU area (OECD statistics: http://stats.oecd.org, last access December 2012).

² OECD http://stats.oecd.org (last access December 2012).

Home Affairs, Post and Telecommunications and which evaluates all agencies. These committees are integrated by public and private sector members (such as university professors, certified public accountants, lawyers, private senior managers, etc.).

The number of executives in the agencies was limited by law and there was a centralization of authority in the head of the agency. The appointment of executives is done on the basis of "right person in the right place". They can come from private or public sector. The rest of employees are civil servants. The agencies employees represent the 22% of the national civil servants³. Other reforms in the agency setting are the introduction of accrual accounting and auditing⁴. These audits have to be carried out by private firms if the assets exceed 10 billion yens or the debts exceed 20 billion yens. Over eighty percent of agencies are audited by the private sector. They have to publish the financial statements, evaluations and salaries of executives. They manage more than the 50% of the central government public sector expenditure⁵.

Furthermore, agencies were obliged to implement an Agency Assessment System, which requires the agencies to elaborate performance measures with their corresponding targets and information about the cost of the services. Thus, Japanese agencies rather that implement voluntarily PMM were obliged to do it. Nevertheless, legal reforms not always foster a meaningful implementation of PMM (Ohemeng, 2011) and lead to different levels of use of PMM. On paper, the Japanese agencies represent the ideal framework for implementing and using PMM, with entities with a high degree of the decentralization and with a "strong" control of a government that demands performance reporting.

3. THEORETICAL FRAMEWORK

The institutional theory has been extensively used by academics to explain the adoption of accounting innovations (Ribeiro and Scapens, 2006; Pina, et al., 2009), as it is PMM. This theory claims that if organizations operating within a given context want to be successful, they are obliged to conform to the dictates of their institutional environment. An essential aspect of this institutionalization process is the legitimacy (Scott, 2008; Ohemeng, 2011). It is assumed that a common means of gaining legitimacy is an alignment with some rationalised institutional myths (Meyer and Rowan, 1977). Through a process of isomorphism, organizations will adopt changes with the aim of gaining that legitimacy (DiMaggio and Powell, 1983; DiMaggio and Powell, 1991). This will justify why the agency reform (Verhoest, et al., 2012) and the performance management movement (Van Dooren and Van de Walle, 2008) can be found in most public sector reform agendas (Pollitt and Bouckaert, 2000, 2011). Most innovations in the public sector are taking place in the area of performance measurement with many public sector organizations implementing it (Lapsley and Wright, 2004; Moynihan, et al., 2011), into almost all management functions (Van Dooren, 2008; Van Dooren, 2011). The symbolic benefits of PMM systems have made them an attractive reform (Moynihan, 2009).

The adoption of the agency reform and the Agency Assessment system shows a process of coercive isomorphism⁶ that requires the "new" agencies to conform to the international trend of

³ Data from the National Institute of Population and Social Security Research (http://www.ipss.go.jp/ssj-db/ssj-db-top.html, last access in December 2012).

⁴ It should be noticed that most public sector organizations in Japan apply cash based accounting.

⁵ Data from the National Institute of Population and Social Security Research (http://www.ipss.go.jp/ssj-db/ssj-db-top.html, last access in December 2012)

⁶ Three classifications of isomorphism are proposed: coercive, mimetic and normative (DiMaggio and Powell, 1983): a) coercive, results from both formal and informal pressure imposed on an organization by legal, hierarchical or resource dependence (in the case of local governments, from central or regional governments); b) mimetic, in which organizations may imitate practices and models of leading organizations in their institutional field in an attempt to get greater recognition, becoming, in this case, passive adopters of innovations; and c) normative isomorphism stems from environmental pressure for transformation from stakeholders such as

public sector reforms pursued by the Japanese government. Nevertheless, as show in the literature, there is usually some distance between having and using managerial tools such as PMM. Argyris (1994) distinguished between exposed theory and theory in use, Burns and Scapens (2000) differentiated between ceremonial and instrumental change, while Moynihan (2009) established four different performance regimes: purposeful, passive, political and perverse. Some authors have also referred to the intentional or unintentional separation between external image and actual structures and procedures as 'decoupling' (Meyer and Rowan, 1977; Meyer and Scott, 1985). As Vakkuri (Vakkuri, 2010) argued norms create an ideal of 'transparent' and 'accountable' public organization, but leave managers to deal with the ambiguous task of putting reforms into practice. Arellano-Gault (2012) showed how agencies not only adopt the discourse of performance management but also adapt it to fit their own purposes. It is expected that, at least in some cases, the agencies discourses about PMM will differ from the PMM use. The existence of a mandatory framework for PMM may create some disclosure routines that not always led to PMM use (Yetano, forthcoming). Within a given context, such as the Japanese agencies we expect similar objective and reporting practices, while different willingness towards PMM and implementation efforts.

H₁: Japanese agencies objectives do not explain the level of performance management use.

H₂: Japanese agencies objectives explain the level of transparency.

H₃: Japanese agencies willingness to change explains performance management use.

H₄: Japanese agencies implementation effort explains performance management use.

PMM use is a form of organizational behavior. Employees have discretion about to what extent they engage in PMM, but it is not a free choice as employees are influenced by the social context and formal system in which they work (Moynihan and Pandey, 2010). The institutionalization of PMM is about both organizational culture and individual behavior and its success depends on the extent to with and organization's members accept the system as part of the organization's culture⁷ (Ohemeng, 2011). As reflected by Moynihan (Moynihan, 2009), culture can act as a buffer to block, welcome, or adapt performance reforms in ways consistent with organizational norms (see also Moynihan, 2005).

The significance of organizational factors has been extensively studied since the 1980s (Kwon and Zmud, 1987; Shields, 1995; Shields and Shields, 1998). Management literature indicates the importance of strong interpersonal leadership (Waldman and Yammarino, 1999). Abernethy et al (2010) found that top management with a strong leadership style will use the planning and control system as an interactive communication device to informally reveal their preferences to subordinates and to obtain input from subordinates. Cavalluzo and Ittner (2004) argued that organizational factors, such as top management commitment, top management support and implementation training interact to influence measurement system implementation and outcomes, often in a complex manner. The organizational culture favors or hinders the implementation of PMM and factors, such as staff motivation, leadership and empowerment, seem to differentiate.

H₅: Japanese agencies organizational culture increases performance management use.

H₆: Japanese agencies organizational barriers decreases performance management use

Japanese agencies cover a variety of sectors and services, which affect to the level of autonomy and the relationship with the citizens/clients. The effects of these contextual factors can also explain

politicians, financial institutions, scholars and multilateral organizations, as well as from specialized groups within a profession who try to define the conditions and method of work.

⁷ Flamholtz et al. (1985) defined organizational culture as "the set of values, beliefs and social norms which tend to be shared by its members and, in turn, influence their thoughts and actions" (p. 158).

the level of commitment towards PMM use. The first factor considered is the size of the agency. Several studies have considered either big or small entities have more capacity to change. The former is argued by those authors that consider that bigger entities have greater resources to implement reforms while the latter is affirmed by those authors that consider that smaller entities have greater capacity of maneuverability. The second factor will be the type of service. The third is the autonomy in terms of the budgetary independence. It is measured through percentage of the funds provided by government or by clients. We assume that those services more marketable are also those that have greater capacity of adoption of PMM.

H₇: Japanese agencies size influences performance management use.

H₈: Japanese agencies activity explains performance management use.

H₉: Japanese agencies autonomy explains performance management use

4. METHODOLOGY AND SAMPLE

We elaborate a survey about the implementation of PMM within the framework of the Agency Assessment System at the Japanese agencies. The questionnaire included questions about: performance information use, transparency, objectives, willingness to change, organizational culture, implementation effort and barriers. Additionally, we collect information about the type of agency, size (budget, total assets and number of employees) and the level dependence (% of budget provided by the ministry). The questionnaire was seen to 189 agencies, excluding the national hospital agency. We obtained 35 answers (response rate of 18.5%). The questionnaire was sent during December 2011 and January 2012.

We assessed the implementation and development of the PMM by grouping the answers to the questionnaire in the categories named above: performance information use, transparency, objectives, willingness to change, organizational culture, implementation effort and barriers (see Annex 1). The performance information use (max 95) is measured with 19 items, such as improvements in decisionmaking, productivity or customer satisfaction. The transparency dimension (max 23) included aspects related with the information disclosed internally and externally, with 0-1 questions, and the improvement in accountability, with 1 to 5 questions. In this dimension, questions from 1 to 5 were transformed to vary from 0 to 1. Additionally, we checked the web page of the agencies to confirm that the external information was available. The objectives dimension (max 75) was integrated by 15 elements, such as cost reduction, performance evaluation or comparison with other organizations. They were evaluated from 1 to 5. The willingness to change (max 65) was integrated by 17 questions that evaluated from 1 to 5 the opinion about need to compete or to improve outcome, the need to delegate authority or to implement performance evaluation. The organizational culture (max 70) was integrated by 13 items, from 1 to 5. They were about staff motivation, leadership and empowerment. The implementation effort (max 18) included elements such as the participants, the development of the mission, and delegation of authority. It included question 0-1 and question from 1 to 5. Questions from 1 to 5 were transformed to vary from 0 to 1. The barriers (max 65) included 13 elements evaluated from 1 to 5, such as employee resistance or lack of resources. Annex 1 contains the full description of the indexes construction.

Table 1: Use of PMM information.

(review the English of this sentences)	Mean	Median	Stand. dev	Strongly Disagree		_		Strongly Agree	Total Answer
				1	2	3	4	5	
1) PI is used for establishing the management objectives (1-5)	3.97	4	0.77		2.9	20.0	48.6	22.9	94.3
2) PI served to focus the emphasis of programs in priorities (1-5)	4.15	4	0.71		2.9	8.6	54.3	28.6	94.3
3) Middle managers have substituted traditional ex-ante controls for PI (1-5)	4.00	4	0.61			17.1	60.0	17.1	94.3
4) Middle managers make decisions using PMM (instead of previous traditional system) (1-5)	3.39	3	0.83	2.9	2.9	51.4	28.6	8.6	94.3
5) PI has produced improvements in the quality of decisions or decision-making capacity in the short term. (1-5)	3.48	3	0.71		2.9	51.4	31.4	8.6	94.3
6) PMM is used to achieve cost reductions (1-5)	3.42	3	0.87	2.9	5.7	42.9	34.3	8.6	94.3
7) PMM has improved the planning processes of concrete activities and programs (1-5)	4.03	4	0.68		2.9	11.4	60.0	20.0	94.3
8) PMM has improved the clarification the managerial responsibilities of the agency (1-5)	4.03	4	0.64			17.1	57.1	20.0	94.3
9) PMM has improved the level of employee focus on organizational goals(1-5)	4.00	4	0.71		2.9	14.3	57.1	20.0	94.3
10) PMM is used in the communications processes (1-5)	3.36	3	0.70		2.9	62.9	20.0	8.6	94.3
11) The staff's cooperation in implementation of target (1-5)	3.70	4	0.85		5.7	34.3	37.1	17.1	94.3
12) Performance is compared with other agencies. (1-5)	3.76	4	0.71		2.9	28.6	51.4	11.4	94.3
13) We compare our performance against similar programs or services offered by other agencies or private contractors (1-5)	2.79	3	0.99	2.9	28.6	40.0	17.1	2.9	91.4
14) PMM has been used to find opportunities outsourcing of business (1-5)	3.15	3	0.97	5.7	14.3	40.0	28.6	5.7	94.3
15) Productivity has improved (1-5)	3.09	3	1.13	5.7	8.6	51.4	14.3	11.4	91.4
16) Service quality has improved (1-5)		4	0.91		2.9	37.1	45.7	5.7	91.4
17) Customer satisfaction has improved (1-5)	3.36	3	0.93		2.9	51.4	28.6	8.6	91.4
18) The objectivity of personnel performance appraisals has improved (1-5)	3.09	3	1.01	8.6	11.4	42.9	25.7	5.7	94.3

5. ANALYSIS OF RESULTS

Table 1 shows the responses regarding the use of PMM information in managerial processes. The processes were PMM has been use more extensively are those related with planning and with focusing the organizational targets (2, 7, 8 and 9), where the more than 75% of the respondents agree or strongly agree with the propositions. It is also remarkable that that 77.1 % of the agencies agree with the statement "Middle managers have substituted traditional ex-ante controls for PI". By contrast, when it comes to aspects related with decision-making such as "PI has produced improvements in the quality of decisions or decision-making capacity in the short-term" and "Middle managers make decisions using PMM (instead of previous traditional system)" only 40% and 37.1%, respectively, agree or strongly agree. This confirms that there are different levels of PMM use in the agencies. It is also noticeable that only 28.6% agrees or strongly agrees that PMM is used in communications processes. The use of PMM as a benchmarking tool is internal 62.9% (12) of the cases do it, rather than external were only 20% (13) do it. Although in general terms, a few agencies tend to disagree with the statements about performance management use, we find many of them in a neutral position. The results suggest that Japanese agencies have PMM and that they use it to plan activities and set targets. However, it many cases it seems espoused theory/ceremonial implementation as communication and decision-making based on PMM is not so widespread.

Table 2 shows the level of disclosure of information, both internally and externally. Internally, most Japanese agencies made the documents available through intranet and they are presented in formal meetings. By contrast, there is a low level of diffusion of PMM information through informal meetings. This is consistent with the low use in communication processes (see Table 1). Externally, the information required is published in the web page, as confirmed by the web content analysis, but there is a low level of development of other means of communication, such as specific news-letters or mailing list of specific topics. Japanese agencies show a high level of transparency for formal compliance but low level of additional communications tools.

Table 2: Transparency: diffusion of planning and reporting information

	Planning information			Financial Information			Non-financial information (PMM)		
	Intranet	32	91,43%	Intranet	29	82,86%	Intranet	28	80%
ernally	Formal meeting	35	100%	Formal meeting	35	100%	Formal meeting	34	97,14%
Intern	Informal meeting (such as brown bag)	19	54,29%	Informal meeting (such as brown bag)	15	42,86%	Informal meeting (such as brown bag)	16	45,71%
	Other	2	5,71%	Other	1	2,86%	Other	1	2,86%
	Annual plan (Print)	14	40%	Annual report (Print)	21	60%	Annual report (Print)	16	45,71%
ally	News-letters	7	20%	News-letters	11	31,43%	News-letters	12	34,29%
tern	Internet	33	94,29%	Internet	33	94,29%	Internet	30	85,71%
Ex	E-mail	1	2,86%	E-mail	1	2,86%	E-mail	3	8,57%
	Other	0	0%	Other	0	0%	Other	0	0%

 Table 3: Indexes

	Performance information use (max 95)	Transparency (max 23)	Objectives (max 75)	Willingness to change (max 65)	Organizational Culture (max 70)	Implementation effort (max 26)	Barriers (max 65)	Budget (million)	Total assets (millions)	Personnel
Agency 21	94.44%	69.57%	89.33%	72.31%	100.00%	62.31%	0.00%	137.757	456.077	967
Agency 34	88.89%	57.39%	77.33%	67.69%	85.71%	67.69%	73.85%	3.200	7.375	299
Agency 16	85.56%	50.43%	84.00%	84.62%	82.86%	79.23%	78.46%	4.000.000	41.574.700	2.410
Agency 9	84.44%	60.87%	86.67%	63.08%	80.00%	91.54%	70.77%	52.984	134.696	3.505
Agency 33	84.44%	24.35%	64.00%	87.69%	97.14%	62.31%	70.77%	30.167	58.208	333
Agency 3	83.33%	33.04%	81.33%	76.92%	74.29%	85.38%	23.08%	4.787	14.821	185
Agency 4	80.00%	58.26%	76.00%	67.69%	67.14%	60.00%	73.85%	41.365	76.316	616
Agency 6	78.89%	80.00%	80.00%	67.69%	74.29%	82.31%	61.54%	3.066	10.150	984
Agency 2	75.56%	52.17%	77.33%	69.23%	88.57%	90.77%	38.46%	25.145	104.972	952
Agency 26	75.56%	72.17%	76.00%	84.62%	84.29%	42.31%	41.54%	16.044	64.671	330
Agency 8	73.33%	60.87%	90.67%	75.38%	60.00%	44.62%	63.08%	65.060	1.266.860	1.224
Agency 18	73.33%	44.35%	50.67%	75.38%	70.00%	65.38%	90.77%	3.899	25.147	3.566
Agency 11	72.22%	46.09%	81.33%	75.38%	68.57%	49.23%	53.85%	2.846	13.842	60
Agency 24	72.22%	59.13%	76.00%	73.85%	78.57%	45.38%	67.69%	6.764	19.226	3.300
Agency 1	71.11%	59.13%	46.67%	63.08%	70.00%	60.77%	53.85%	6.064	45.127	1.584
Agency 28	71.11%	69.57%	93.33%	60.00%	82.86%	68.46%	40.00%	131.863	446.441	184
Agency 5	70.00%	78.26%	82.67%	84.62%	61.43%	33.08%	0.00%	23.583	63.418	1.164
Agency 20	70.00%	80.87%	89.33%	60.00%	71.43%	37.69%	67.69%	26.273	47.244	9.176
Agency 22	70.00%	58.26%	73.33%	61.54%	80.00%	70.00%	81.54%	12.987	76.483	462
Agency 12	67.78%	69.57%	96.00%	72.31%	52.86%	51.54%	47.69%	6.171	6.084	9.001
Agency 7	66.67%	57.39%	72.00%	76.92%	71.43%	39.23%	58.46%	9.100	69.143	2.100
Agency 19	66.67%	50.43%	96.00%	70.77%	71.43%	53.08%	72.31%	41.470	107.778	297
Agency 23	66.67%	60.00%	92.00%	70.77%	61.43%	55.38%	58.46%	33.943	60.865	1.722
Agency 27	66.67%	67.83%	100.00%	75.38%	64.29%	63.85%	36.92%	61.910	218.046	2.833
Agency 32	66.67%	82.61%	92.00%	84.62%	71.43%	35.38%	44.62%			343
Agency 15	64.44%	46.09%	64.00%	55.38%	70.00%	38.46%	43.08%	93.139	361.812	2.888
Agency 30	64.44%	54.78%	60.00%	64.62%	68.57%	53.85%	60.00%	7.141	32.299	1.702
Agency 10	63.33%	63.48%	86.67%	69.23%	68.57%	34.62%	75.38%	53.632	292.716	5.448
Agency 14	63.33%	100.00%	94.67%	67.69%	60.00%	59.23%	33.85%	49.194	239.524	2.123
Agency 31	62.22%	59.13%	72.00%	50.77%	4.29%	12.31%	46.15%	9.000		1.000
Agency 29	58.89%	40.00%	57.33%	70.77%	62.86%	39.23%	61.54%	38.000	100.090	1.991
Agency 35	58.89%	72.17%	94.67%	76.92%	58.57%	36.92%	76.92%	28.400	80.426	2.948
Agency 25	45.56%	40.87%	60.00%	47.69%	50.00%	41.54%	0.00%	32.198	46.559	202
Agency 13	0.00%	46.09%	69.33%	0.00%	0.00%	19.23%	55.38%	40.726	88.750	84
Agency 17	0.00%	72.17%	84.00%	70.77%	14.29%	66.15%	38.46%	2.300	5.028	414
Mean	67.33%	59.92%	79.04%	68.43%	66.49%	54.24%	53.14%			
Stand. Dev	19.35	15.29	13.65	15.11	21.85	19.00	22.71			
Minimum	.00	24.35	46.67	.00	.00	12.31	.00			
Maximum	94.44	100.00	100.00	87.69	100.00	91.54	90.77			

Table 3 includes the punctuation that each agency have achieved in the seven indexes developed, as well as, some contextual variables (budget, total assets and personnel). The highest mean is achieved in the objectives established for the implementation of PMM. This index also shows the lower standard deviation. Thus, we can confirm that the discourses about the purposes of the implementation tend to coincide. The results of the performance information use index (see also Table 1) and transparency index (see also Table 2) suggest either that the implementation does not achieve the same results or that the efforts in the implementation have been different. The performance use index shows a great variation, with two agencies with zero punctuation. Transparency mean is lower, although, all the agencies have punctuated in this index. The differences seem to come from the organizational culture and implementation efforts, that also show an important variability among agencies. It is also noticeable that the willingness to change achieved greater mean than the effort made or than having an organizational culture that is prone to the introduction of PMM.

In order to understand what factors promoted the use of PMM and to go deeper in the variations of the indexes, univariate analysis has been used. The objective was to test the influence of the following factors on PMM use and transparency: the willingness to change, the organizational culture, the implementation effort and the barriers. Additionally, we have tested several explanatory variables related with the size (total assets, budget and number of employees) and type of agency (dependence and whether it was or not university). The influence of the type of agency and the dependence was tested using the Mann-Whitney test (see Table 3), whereas the influence of the indexes and of the size variables was tested using Pearson correlations (see Table 4). The Mann-Whitney analysis (Table 3) shows that the impact is not related to the type of agency (university vs non-university). By contrast, the transparency is significantly higher in those agencies that are not Universities. Performance use and transparency differ with regards to the budgetary independence. They show a greater mean when there is independence.

Table 3: Mann-Whitney

H_0	Sig (5%)	Decision	Mean University	Mean no University
Performance impact is equally distributed between University categories	0.218	Accept	68.68	65.04
Transparency is equally distributed between University categories	0.025	Reject	55.69	67.09
H_0	Sig (10%)	Decision	Mean Dependent	Mean Independent
Performance impact is equally distributed between Dependence categories	0.035	Reject	64.77	70.74
Transparency is equally distributed between Dependence categories	0.089	Reject	56.35	64.70

The correlations (Table 4) show that there exist a relationship between the PMM use and the willingness to change, the organizational culture, the implementation and the size in terms of assets. The transparency is related to the objectives and the implementation, but is not related to the willingness of change or the organizational culture. All these relationships are positive. Nevertheless, in order to ascertain the direction of these relationships, and to confirm the propositions of the theoretical framework, regression analyses have been carried out.

Table 4: Correlations

		Objectives	Willingnes s to change	Organiz. Culture	Implement ation	Barriers	Log Budget	Log Assets	Personnel
Performance	Pearson Corr	0.236	0,593***	0,824***	0,419**	0.062	-0,324	0,398**	0.080
impact	Sig. (bilateral)	0.172	0,000	0,000	0,012	0.724	0,061	0,020	0.649
	N	35	35	35	35	35	34	34	35
Transparency	Pearson Corr	0.569***	-0,085	0,195	0,391**	-0.184	0,261	-0,029	
	Sig. (bilateral)	0.000	0,627	0,262	0,020	0.291	0,137	0,872	
	N	35	35	35	35	35	34	34	

*** P <0,01; ** P <0,05; * P <0,1

In the regression analysis we have included indexes created, and the contextual variables that have shown a significant relation through the Mann-Whitney or the correlation analysis (Dependence and logarithm of assets for performance for PMM use and dependence and University for transparency). As we have 35 cases, the maximum recommended independent variables are 7. It should be highlighted that the soundness of the adjustment does not improve including only those variables that showed a relationship in the correlations and Mann-Whitney. The results can be seen in Table 5.

Table 5: Regression Analyses

PMM Us	se	Transpa	rency	y
	Model 1			Model 2
(Constant)	7,760	(Constant)		29,585
Objectives	,014	Objectives		0,523**
Willingness to change	0,346**	Willingness to change		-0,331
Organizational Culture	0,574***	Organizational Culture		0,112
Implementation	-0,022	Implementation		0,090
Barriers	-0,213**	Barriers		0,022
Dependence	-8,257*	Dependence		1,692
Log Assets	0,402	University		-4,107
R	,778		\mathbb{R}^2	0,426

*** P <0,01; ** P <0,05; * P <0,1

The model developed for PMM use confirms that performance management use depends on the willingness to change (H_3) , the organizational culture (H_5) , the barriers to the implementation (H_6) and is higher when there is budgetary independence (H_9) . Being the organizational culture the most important aspect due to the coefficient. This model also confirms that the objectives do not explain the use done of PMM (H_1) . Surprisingly, the implementation effort does not explain the PMM use $(not\ H_4)$. The size or the type of agency does not also influence the use $(not\ H_7\ or\ H_8)$. Transparency is only explained by the objectives established by the organization, which confirms our hypothesis (H_2) . It signaled that the agencies tend to provide information both internally and externally with independence of the effort made in the implementation or the organizational culture.

6. DISCUSSION AND CONCLUSIONS

Both the agency reforms and PMM represent an international trend towards management by results. Many countries, among them Japan, have introduced these reforms with various results (Van Dooren and Van de Walle, 2008; Pollitt and Bouckaert, 2011; Verhoest, et al., 2012). We expected to have different levels of adoption or adaptation (Arellano-Gault, 2012), but we have also confirm that there is a distance among the formal established objectives and the objectives pursued, what has been called in the framework of institutional theory decoupling, but have been also named as ceremonial vs instrumental, or theory in use vs espoused theory. Nevertheless, the use of PMM seems to benefit agencies, thus it became necessary identify the reasons of the divergence: are they related with the implementation effort or are they related with the predisposition to change? Or is rather a mixture of them?

For answering these questions, this paper focused the attention on the Japanese agencies which were given the managerial autonomy and the power to implement PMM, but that were also required to do it. It represent, on the one hand, the opportunity as there is a decentralization of power, but on the other, it has the connotations of a mandatory requirement. The affected institution may tend to comply with the minimal acceptable standard that will be to fulfill the reporting requirement, but no to use PMM in the managerial processes which is where PMM is expected to produce benefits. The analysis of the web has shown that agencies published most of the information required. The objectives signaled by the agencies that differ from the results show that the discourses about PMM have penetrated the agencies. They see important PMM at least at formal level.

The information about the uses of PMM has shown that agencies tend to introduce PMM as a planning tool in an attempt to focus the targets of the organization. This is consistent with the division of functions carried out and the responsibilities given to the head of the agency that is in charge of translating ministerial objectives into annual plans. Concentrate the power of the agency in a CEO had had a positive influence in the implementation of PMM at top level. There is also use of PMM for internal benchmarking not so much for external. With is consistent with a public sector culture based on a clear distinction between the private and public sector where notions of competitiveness tend to find more difficulties.

Lower use of PMM is found in decision-making and communications process, which suggest that in some cases PMM is a managerial model used at the top but not at all levels of the organization. This is not surprising as the embedment of PMM use at all level is the most difficult step. The transparency analysis also showed this limitation when analyzing the type of information diffused internally and the means used. It has been argued that PMM should produce a change in organizational behavior, depending the success on the acceptance PMM as part of the organizational culture (Ohemeng, 2011).

We distinguished three elements that may affect the implementation. Firstly, the willingness of the agency: does it aim a purposeful, passive, a political or a perverse PMM regime (see Moynihan, 2009)? Rather than distinguishing the four types why identify if the agencies were purposeful (willingness to change) and this was confirmed as an element that affected PMM use. Given the context of the study, some Japanese agencies may be following passive rather than political or perverse, as they have defined objectives that follow the formal PMM discourses. Secondly, we focused on the organizational culture, on the importance of leadership, top management commitment and empowerment. This has result the most important aspect and avoids a rapid implementation as it requires previous reforms in the delegation of capacity of management and prevents the success when the top management is not supportive. In the Japanese environment, the permanent elite civil service up to the vice-ministerial level with only a few political appointments at the top facilitates the

presence of compromised leaders. And the possibility of the appointment of executives from private or public sector based on "right person in the right place" can also facilitate to create the environment for a PMM culture. Thirdly, although, the implementation effort is correlated with the PMM use, it has not shown a causal relation in the regression. It suggests that without the proper willingness and organizational culture a strong implementation effort may create more resistance than acceptance. It also seems that when the environment is prone to PMM use the implementation does not need so many resources. This is consistent with the negative effect that the barriers have in PMM use.

The contextual factors have shown that size does not matter but that dependence does. This is consistent with the idea that those agencies that produce marketable services then to move more easily towards PMM techniques. We have not find differences regarding the type of agencies. Nevertheless, one of our limitations has been that due to the numbers of cases and the wide range of services provides, we have only distinguished between universities and no universities. So, future studies should further study the possible differences, for example, depending on the ministry that holds the final responsibility.

We quoted Schedler (2003) because he argued that reforms are killed not so much by their concepts as by their deficient implementation. We showed that rather than a matter of implementation is a matter of preparation (organizational adaptive cultures), willingness and type of service provided, as the contact with the citizen seems to produce a positive effect towards PMM. In Japan, agencies will be able to change through contracting a CEO prone to use PMM that will create the willingness and through promoting a PMM culture, which requires at least an effort in employee training and involvement in PMM.

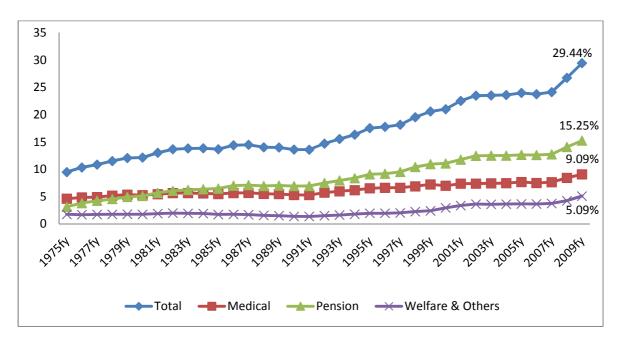
References

- Abernethy, M. A., Bouwens, J., & van Lent, L. (2010). Leadership and control system design. *Management Accounting Research*, 21(1), 2-16.
- Ammons, D. N., & Rivenbark, W. C. (2008). Factors influencing the use of performance data to improve municipal services: Evidence from the North Carolina Benchmarking Project. *Public Administration Review*, 68(2), 304-318.
- Arellano-Gault, D. (2012). The Evaluation of Performance in the Mexican Federal Government: A Study of the Monitoring Agencies' Modernization Process. *Public Administration Review*, 72(1), 135-142.
- Argyris, C. (1994). Initiating Change that Perseveres. *Journal of Public Administration Research and Theory*, *4*(3), 343-356.
- Asako, K., Ito, T., & Sakamoto, K. (1991). The rise and fall of deficit in Japan, 1965–1990. *Journal of the Japanese and International Economies*, 5(4), 451-472.
- Bouckaert, G., & Peters, B. G. (2002). Performance Measurement and Management: The Achilles' Heel in Administrative Modernization. *Public Performance & Management Review*, 25(4), 359-362.
- Burns, J., & Scapens, R. W. (2000). Conceptualizing management accounting change: an institutional framework. *Management Accounting Research*, 11(1), 3-25.
- Cavalluzzo, K. S., & Ittner, C. D. (2004). Implementing performance measurement innovations: evidence from government. *Accounting, Organizations and Society*, 29(3-4), 243-267.

- DiMaggio, P., & Powell, W. (1991). The iron cage revisites: Institutional Isomorphism. In W. W. Powell & P. DiMaggio (Eds.), *The New Institutionalism in Organisational Analysis* (pp. 1-38). London: The University of Chicago Press.
- DiMaggio, P. J., & Powell, W. (1983). The Iron Cage Revisited Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, 48(2), 147-160.
- Flamholtz, E. G., Das, T. K., & Tsui, A. S. (1985). Toward an integrative framework of organizational control. *Accounting, Organizations and Society, 10*(1), 35-50.
- Grizzle, G. A. (2002). Performance Measurement and Dysfunction: The Dark Side of Quantifying Work. *Public Performance & Management Review*, 25(4), 363-369.
- Hatry, H. P. (2002). Performance Measurement: Fashions and Fallacies. *Public Performance & Management Review*, 25(4), 352-358.
- James, O., Moseley, A., Petrovsky, N., & Boyne, G. (2012). United Kingdom. In K. Verhoest, S. Van Thield, G. Bouckaert & P. Laegreid (Eds.), *Government Agencies. Practices and Lesson from 30 countries*. Hampshire, England: palgrave macmillan.
- Kelly, J. M. (2002). Why We Should Take Performance Measurement on Faith (Facts Being Hard to Come by and Not Terribly Important). *Public Performance & Management Review*, 25(4), 375-380.
- Kwon, T. H., & Zmud, R. W. (1987). Unifying the fragmented models of information systems implementation. In R. J. Boland & R. Hirschiem (Eds.), *Critical issues in information systems research* (pp. 227-251): John Wiley & Sons.
- Lapsley, I., & Wright, E. (2004). The diffusion of management accounting innovations in the public sector: a research agenda. *Management Accounting Research*, 15(3), 355-374.
- Meyer, J. W., & Rowan, B. (1977). Institutionalized Organizations: Formal Structure as Myth and Ceremony. *The American Journal of Sociology*, 83(2), 340-363.
- Meyer, J. W., & Scott, W. R. (1985). Organizational Environments, Ritual and Rationality. *Administrative Science Quarterly*, 30, 295-296.
- Ministry of Internal Affairs and Communications, M. I. C. (2013). The outline of Incorporated Administrative Agency. In MIC (Eds.)
- Moynihan, D. P. (2005). Goal-Based Learning and the Future of Performance Management. *Public Administration Review*, 65(2), 203-216.
- Moynihan, D. P. (2009). Through A Glass, Darkly: Understanding the Effects of Performance Regimes. *Public Performance & Management Review*, 32(4), 592-603.
- Moynihan, D. P., & Pandey, S. K. (2010). The Big Question for Performance Management: Why Do Managers Use Performance Information? *Journal of Public Administration Research and Theory*, 20(4), 849-866.
- Moynihan, D. P., Pandey, S. K., & Wright, B. E. (2011). Setting the Table: How Transformational Leadership Fosters Performance Information Use. *Journal of Public Administration Research and Theory*.
- Muramatsu, M., & Krauss, E. S. (1996). Japan: The paradox of Success. In J. P. Olsen & G. Peters (Eds.), Lessons from Experience. Experiental Learning in Administrative Reforms in Eight Democracies. Oslo, Norway: Scandinavian University Press.
- Ohemeng, F. L. K. (2011). Institutionalizing the Performance Management System in Public Organizations in Ghana Chasing a Mirage? *Public Performance & Management Review*, 34(4), 467488.
- Osumi, S. (1999). Nyu Pabulic Manejiment [New Public Management]: Nihon Hyoron -sha Inc.
- Pina, V., Torres, L., & Yetano, A. (2009). Accrual accounting in EU local governments: One method, several approaches. *European Accounting Review*, 18(4), 765–807.
- Poister, T. H., & Streib, G. D. (1999). Strategic Management in the Public Sector: Concepts, Models, and Processes. *Public Productivity & Management Review*, 22(3), 308-325.

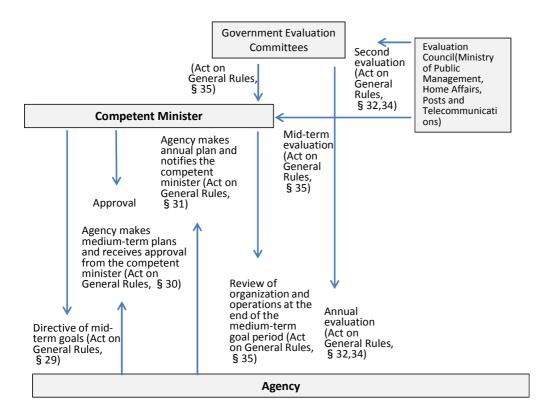
- Pollitt, C., & Bouckaert, G. (2000). *Public management reform: a comparative analysis* (2nd ed.). Oxford: Oxford University Press.
- Pollitt, C., & Bouckaert, G. (2011). Public Management Reform: A Comparative analysis: New Public Management, Governance and the Neo-Weberian State. Oxford: Oxford University Press.
- Ribeiro, J. A., & Scapens, R. W. (2006). Institutional theories in management accounting change: contributions, issues and paths for development. *Qualitative Research in Accounting and Management*, 3(2), 94-111.
- Sanger, M. B. (2008). From Measurement to Management: Breaking through the Barriers to State and Local Performance. *Public Administration Review*, 68, 70-85.
- Scott, W. R. (2008). Approaching adulthood: the maturing of institutional theory. *Theory and Society*, *37*(5), 427-442.
- Schedler, K. (2003). Local and regional public management reforms in Switzerland. *Public Administration*, 81(2), 325-344.
- Shields, J. F., & Shields, M. D. (1998). Antecedents of participative budgeting. *Accounting, Organizations and Society*, 23(1), 49-76.
- Shields, M. D. (1995). An empirical analysis of firms' implementation experiences with activity-based costing. *Journal of Management Accounting Research*, 7, 148-148.
- Streib, G. D., & Poister, T. H. (1999). Assessing the validity, legitimacy and functionality of performance measurement systems in municipal governments. *American Review of Public Administration*, 29(2), 107-123.
- Vakkuri, J. (2010). Struggling with ambiguity: public managers as users of NPM-oriented management instruments. *Public Administration*, 88(4), 999-1024.
- Van Dooren, W. (2008). Nothing New Under the Sun? Change and Continuity in the Twentieth-Century Performance Movement. In W. Van Dooren & S. Van de Walle (Eds.), *Performance Information in the Public Sector. How it is Used.* Hampshire: Palgrave Macmillan.
- Van Dooren, W. (2011). Better Performance Management. Some Single- and Double-Loop Strategies. *Public Performance & Management Review*, 34(3), 420-433.
- Van Dooren, W., & Van de Walle, S. (Eds.). (2008). *Performance Information in the Public Sector. How it is Used*. Hampshire: Palgrave Macmillan.
- Van Thield, S. (2012). Comparing agencies across countries. In K. Verhoest, S. Van Thield, G. Bouckaert & P. Laegreid (Eds.), *Government Agencies. Practices and Lessons from 30 Countries*. Hampshire, England: Palgrave Macmillan.
- Van Thield, S., Verhoest, K., Bouckaert, G., & Laegreid, P. (2012). Lesson and Recommendations for the Practice of Agencification. In K. Verhoest, S. Van Thield, G. Bouckaert & P. Laegreid (Eds.), *Government Agencies. Practices and Lessons from 30 Countries*. Hampshire, England: Palgrave Macmillan.
- Verhoest, K., Van Thield, S., Bouckaert, G., & Laegreid, P. (2012). *Government Agencies. Practices and Lessons from 30 Countries*. Hampshire, England: Palgrave Macmillan.
- Waldman, D. A., & Yammarino, F. J. (1999). CEO Charismatic Leadership: Levels-of-Management and Levels-of-Analysis Effects. *The Academy of Management Review*, 24(2), 266-285.
- Yamamoto, K. (2001). Seihukaikei no Kaikaku (Reforming Public Sector Accounting): Chuokeizai sha inc.

Figure 1: Evolution of expenditure in welfare by function



Source: National Institute of Population and Social Security Research (http://www.ipss.go.jp/ssj-db/ssj-db-top.html, last access in December 2012)

Figure 2: Structure of Planning and Evaluation (Japan)



Source: National Institute of Population and Social Security Research (http://www.ipss.go.jp/ssj-db/ssj-db-top.html, last access in December 2012) (translated by the authors)

Performance information use⁸

- 1) PI is used for establishing the management objectives (1-5)
- 2) PI served to focus the emphasis of programs in priorities (1-5)
- 3) Middle managers have substituted traditional ex-ante controls for PI (1-5)
- 4) Middle managers make decisions using PMM (instead of previous traditional system) (1-5)
- 5) PI has produced improvements in the quality of decisions or decision-making capacity in the short term. (1-5)
- 6) PMM is used to achieve cost reductions (1-5)
- 7) PMM has improved the planning processes of concrete activities and programs (1-5)
- 8) PMM has improved the clarification the managerial responsibilities of the agency (1-5)
- 9) PMM has improved the level of employee focus on organizational goals(1-5)
- 10) PMM is used in the communications processes (1-5)
- 11) Staff cooperates in implementation of target (1-5)
- 12) Performance is compared among departments. (1-5)
- 13) We compare our performance against similar programs or services offered by other agencies or private contractors (1-5)
- 14)PMM has been used to find opportunities outsourcing of business (1-5)
- 15) Productivity has improved (1-5)
- 16) Service quality has improved (1-5)
- 17) Customer satisfaction has improved (1-5)
- 18)Improvements of the objectivity of personnel performance appraisals has improved (1-5)

Transparency

Internal diffusion of PMM information

- 1-3) Intranet (Planning Information ; Financial Information ; Non-financial Information) (1-0 ; 1-0 ;1-0)
- 3-6) Formal meetings (Planning Information; Financial Information; Non-financial Information) (1-0; 1-0;1-0)
- 7-9) Informal meetings (Planning Information ; Financial

Information; Non-financial Information) (1-0; 1-0;1-0)

External difussion of PMM information (cross-check with web content)

 $10\mbox{-}12) \ Annual \ reports \ (Planning \ Information \ ; \ Financial$

Information; Non-financial Information) (1-0; 1-0;1-0)

13-15) News-letter (Planning Information; Financial

Information; Non-financial Information) (1-0; 1-0;1-0)

16-18) Intranet (Planning Information; Financial Information; Non-financial Information) (1-0; 1-0;1-0)

19-21) E-mail (Planning Information; Financial Information; Non-financial Information) (1-0; 1-0;1-0)

- 22) Accountability to ministry has improved
- 23) Accountability to the public has improved

Objective index

1) Share a vision of the organization (1-5)

⁸ Questions 1-5 represent 1- strongly disagree and 5- strongly agree and questions 1-0 represent Yes or No.

- 2) Alignment of the organization to its mission (1-5)
- 3) Clear definition of the agency priorities (1-5)
- 4) Introduce mid-term planning (1-5)
- 5) Monitor the progress of the mid-term plans (1-5)
- 6) Elaborate annual plans (1-5)
- 7) Monitor the progress of annual plan (1-5)
- 8) Improve the budgetary allocations (1-5)
- 9) Cost reduction (1-5)
- 10) Performance evaluation of divisions (1-5)
- 11) Performance evaluation of programs and projects (1-5)
- 12) Comparison of performance with other organizations (1-5)
- 13) Introduce human Resource planning (1-5)
- 14) Assessment of the employee performance (1-5)
- 15) Establishment of rewards (1-5)

Willigness change

- 1) It was difficult to measure the quality of the services (1-Strongly disagree and 5-Strongly agree)
- 2) It was difficult to set targets for each indicator (1-5)
- 3) It was difficult elaborate reporting information on time (1-5)
- 4) It was difficult to update the performance indicators (1-5)
- 5) It was difficult to do comparative analysis (1-5)
- 6) It is necessary to improve performance evaluation (1-5)
- 7) Agency should use management control systems (1-5)
- 8) It is necessary to respond to changes in the user needs (1-5)
- 9) It is necessary to compete with the private organization (1-5)
- 10) High pressure for cost reductions (1-5)
- 11) It is necessary to improve the outcome of the agency (1-5)
- 12) It is necessary to accumulate higher expertise and the experience (1-5)

Organizational culture

- 1) The divisions are supportive and collaborative with their employees (1-5)
- 2) The staff's motivation is high (1-5)
- 3) The staff feels confident at their office (1-5)
- 4) Everyone has ownership of his or her job(1-5)
- 5) The staff can demand support from other division if necessary (1-5)
- 6) The staff helps each other beyond their responsibility.
- 7) The staff is supportive to the PMM approach.(1-5)
- 8) Executive managers show a positive reaction to change. (1-5)
- 9) Executive managers exert a strong leadership to guide the changes taking place in the organization (1-5).
- 10) Executive managers support implementation of management control systems (1-5).
- 11) Middle managers show a positive reaction to change.
- 12) The middle managers support implementation of management control systems (1-5).
- 13) New project proposal are consulted with the front line employees (1-5).
- 14) Staff has the power and the budget to perform their ability (1-5).

Implementation effort

- An initial analysis of the agency strengths, weakness, opportunities and threats was done before to implement AAS (1-0)
- 2) The mission of the agency was formulated according with PMM
- 3) The Ministry participated in the development of the mission (1-0)
- 4) Senior managers participated in the development of the mission (1-0)
- 5) Middle managers participated in the development of the mission (1-0)
- 6) Front- line employees participated in the development of the mission (1-0)
- 7) The implementation of the PMM (in the context of AAS) is considered a priority for managerial improvement (1-0)
- 8) Members of the implementation team: Specialized department (1-0)
- 9) Members of the implementation team: Human resources department (1-0)
- 10) Members of the implementation team: Corporate planning department (1-0)
- 11) Members of the implementation team: General affairs department (1-0)
- 12) Members of the implementation team: Finance department (1-0)
- 13) External assistance from the Ministry was used (1-0)
- 14) External assistance from a Consulting firm was used (1-0)
- 15)External assistance from a Research institute was used (1-0)
- 16) We implement, additionally, A cost accounting system was also implemented (1-0)
- 17)Performance measures were focused on what is important, rather than the availability of data (1-0)

- 18) Departments has the authority to implement the PMM (1-0)
- 19) Employees were informed about how PMM was going to affect their work (1-0)
- 20) Training in strategic planning was done (1-0)
- 21) Training in setting performance goals was done (1-0)
- 22) Training in developing performance measures was done (1-0)
- 23) Training in PMM decision-making was done (1-0)
- 24) Training in strategic management was done (1-0)
- 25) The agency had specific budgetary resources monetary for the implementation (1-0)
- 26) The agency had specific budgetary resources: personnel time for the implementation (1-0)

Barriers

- 1) Employee resistance to the change (1-5).
- 2) The absence of an implementation schedule (1-5).
- 3) Lack of resources (1-5).
- 4) Lack of agreement in the organization mission and vision between different stakeholders (1-5).
- 5) Lack of employee skills, abilities and knowledge (1-5).
- Inadequate support/ commitment from top management (1-5).
- 7) Inadequate support from the ministry (1-5).
- 8) Lack of communication between different organizational levels (1-5).
- 9) Lack of communication between different department
- 10) Incompatibility with organization culture (1-5).
- 11) Incompatibility with other organization systems (1-5).
- 12) Complexity of PMM (1-5).
- 13) Insufficient time to properly implement the project (1-5).