RISK-BASED MANAGEMENT CONTROL IN THE PUBLIC SECTOR IN POLAND

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Abstract

This paper presents the New Public Management reforms in Poland, where a small group of enthusiasts at the Ministry of Finance is attempting to enforce dramatic changes in control systems across the public sector. The changes are both technical and cultural. The new system is called “management control” as opposed to “internal financial control”. The development of controls rests on risk assessment, a model adopted from the British HM Treasury Orange Book. The main sponsors of the new systems are internal auditors, a new professional group that is developing since 2001, originally in opposition to traditional control structures. The actor-network theory literature in management control systems suggests that the adoption of this innovation is contingent upon the sponsors ability to stimulate the translation process and to recruit allies who would support it. We document the developments of the reform to date and contribute two empirical studies: a survey of first reactions to the new system and a risk perception study. Both studies show that neither problematisation nor interessment can be taken for granted. However, the new system has been embedded in national public finance law, which means that at least formally, it will persist. We discuss the potential for future research in the context presented.

Key words: risk management, management control systems, public management

Kontrola zarządcza oparta na analizie ryzyka w polskim sektorze publicznym

Streszczenie

W artykule przedstawiono element reform z zakresu New Public Management w Polsce, gdzie gruntowne zmiany w systemach kontroli w sektorze publicznym są wprowadzane za sprawą grupy zwolenników innowacji w Ministerstwie Finansów. Zmiany dotyczą zarówno aspektów technicznych jak i kulturowych. Nowy system oparty jest na wzorcach brytyjskich, przede wszystkim na podręczniku brytyjskiego skarbu nazywanego Pomarańczową Księgą. Głównymi sponsorami nowego systemu są audytorzy wewnętrzni, tworzący nową grupę zawodową od 2001 roku, która zastępuje wcześniej istniejące struktury kontroli. Dorobek badań z zakresu teorii aktorów-sieci wskazuje, że przyjęcie innowacji uzależnione jest od uruchomienia przez sponsorów procesu translacji oraz od zdobycia sojuszników, którzy będą wspierali translację. W artykule przedstawiono rozwój reform oraz wyniki dwóch badań empirycznych pokazujących początkowe reakcje na nowy system kontroli oraz ocenę percepcji ryzyka wśród pracowników sektora publicznego. Wyniki badania wskazują, że zarówno problematyzacja jak i zainteresowanie reformami były ograniczone. Jednak nowy system został wpisany w przepisy prawa o finansach publicznych, co utrudnia jego zaniechanie i zwiększa szansę na kontynuację reform, choćby w sensie formalnym. W zakończeniu przedstawiono nowe możliwości badań w zakresie kontroli zarządczej.

Słowa kluczowe: zarządzanie ryzykiem, kontrola zarządcza, zarządzanie publiczne

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1. Introduction

The roles of the public sector vary across nations and change over time. Many countries of Western Europe underwent a gradual shift towards a managerial style of public management associated with an increased focus on the effectiveness and efficiency of the public sector (Bovaird, Loffler, 2003). The reforms gave rise to new challenges, in particular a need for horizontal coordination between public sector organisations and a requirement for methods to evaluate the achievement of public goals. A similar shift has been taking place in transition countries of Central and Eastern Europe, but with a considerable lag, which allows these countries to adopt management control systems by reference to other countries, where such systems are already in place (Czaputowicz, 2008). This paper presents the case of Poland and the attempts of the Polish government to introduce new, risk-based management control systems across the public sector. We contribute exploratory empirical studies of the new systems and suggest a spectrum of research opportunities which arise from the described setting.

A reform of the public sector control systems was one of the challenges associated with the accession of Poland to the European Union in 2004. Since the Polish public sector was to become a major beneficiary of EU structural funds, the European Commission requested that the distribution of these funds and the effects of their use be systematically controlled. Chapter 28 of the pre-accession negotiations specified that Poland would implement a decentralised control system based on Public Internal Financial Control, a framework developed by the European Court of Auditors. Then, the Minister of Finance decided to broaden the scope of the system to include all of the public sector. Since 2010 the new management control system has become compulsory for all public sector institutions (*The Public Finance Act*).

The new control system is a major innovation, if not a revolution, associated with the modernisation of management methods in the public sector and an increased focus on effectiveness. Previously, the word "control" used to be associated with institutional control, carried out by dedicated organisations, e.g. the Supreme Audit Office or internal control departments. The new system is focused on functional control, which is carried out by operational managers across the organisation. Instead of the usual inspections and audits, managers are expected to assess risks and apply appropriate controls to assure the achievement of planned objectives and products. Whereas previously the object of control was to secure the financial interests of the state, now it includes effectiveness of the organisation in all of its activities, risk management and effective information flow. Moreover, bodies that supervise smaller units, such as local government, need to include all of the subordinate organisations within their management control system.

As a result of the reforms, Poland became a live experiment where researchers can observe the variety of responses to regulatory changes by a wide range of public sector organisations. The shift towards decentralised, risk-based management control can be of interest to students of change management and strategic choice, institutional theory, organisational culture and institutional logic, as well as psychological and linguistic theories. What makes the case particularly interesting is that the innovation is embedded in national law and therefore cannot be simply forgotten. The legislator prescribes only general principles which allow organisations to adapt the system to their contexts. Not surprisingly, early evidence documented in this paper shows that the adoption encountering various problems which are well documented by studies of the actor-network theory (Alcouffe, Berland, Levant, 2008). Each organisation is attempting to find its own method of dealing with the innovation, while balancing the thin line between potential benefits of the new system and the scarcity of resources for its implementation. Problems begin with the language: definitions of key concepts such as effectiveness or risk are not commonly accepted yet. The development of a common of understanding of what management control is takes time and effort. Then, managers who sponsor the new system need to convince other stakeholders of its usefulness to the organisation in its specific cultural and institutional context. Finally, more problems occur as the system is being designed and put into practice. We present two research studies that document major issues with the adoption of the innovation.

The purpose of this paper is to present research opportunities that arise from the revolution in management control in Poland and contribute two empirical studies that provide a foundation for future research. We begin by outlining the new system and setting it against the literature of public management and control. Then, we proceed to present a survey study of the first reactions to the system and the problems that arose in their adoption. Next, we report the results of a risk perception study, which proves that public sector officers in Poland assess the risk to their organisations at a relatively low level. In the last section, we discuss the implications of the studies and present research questions that arise from these first findings.

2. The new management control framework in Poland

The need for a new management control system in Poland arose from two sources: the accession to the EU and the transition towards a managerial style of public management. While the European Commission did request Public Internal Financial Control to be adopted before Poland would obtain access to European Union Structural Funds, it did not require that all of the Polish public sector adopt similar solutions. The decision of the Ministry of Finance, and then of the Parliament, to include this requirement in the Public Finance Act of 2009 seems to have been motivated by changing perceptions of the role of the public sector in Poland.[1] It was a major victory for the proponents of the new control framework, a group of internal auditors at the Ministry of Finance. They had attempted a softer approach, by requiring organisations to establish internal audit departments which were charged with analysing control systems and risk management systems. Audit departments were required by successive amendments to the public finance act in 2001 and 2005.

Changing social perceptions regarding the role of the state are a major driving force behind the evolution of the Polish public sector. Similar processes have been observed in other countries and reported in international scholarly literature (Hood, 2010; Schick, 2004). In Poland the evolution began with a lag, because reforms started only after the fall of communism. Although limited reforms of control systems were considered in the 1980's, the crisis of the regime made it impossible to introduce them effectively (Kuc, Kantorowicz, 2002). As Poland gradually integrated with the European Union, both the public officers and the wider public became aware of different models of public management being introduced in other countries. Moreover, the democratisation of the state gave rise to a need for legitimisation on the part of all public institutions. As a result, the public sector was put under pressure to prove its usefulness and to gain public trust (van de Walle, Bouckaert, 2003) so the new control framework appeared to actors beyond the internal audit departments to be one of the tools to achieve that goal .

However, the transformation towards a new model of public management causes new problems to occur. International comparative research shows that the methods for defining and achieving public sector performance vary significantly across countries (Van de Walle, 2009). One major problem is the definition of effectiveness or performance itself (Van de Walle, Bouckaert, 2007). This is probably most vivid when one considers the variety of functions public institutions perform. For example, a local government unit deals not only with solving important local issues, such as developing public infrastructure or assuring sustainable growth, but also requires inhabitants to obtain documents, permissions, and sometimes punishes them with fines for misconduct. Public officers struggle between alternative, often contradictory dimensions of effectiveness: quality, following the law, timeliness and customer satisfaction.

1 The 2005 Public Finance Act already introduced a new form of institutional control called “internal audit” as opposed to “internal control”. That indirectly implied a need for risk-based control systems, because auditors followed international standards of risk-based audits and the scope of audits was broadened to include effectiveness audits.

It seems that the authors of the new management control framework at the Ministry of Finance were aware of these challenges to successful adoption of the new framework when they decided to allow organisations to adapt the system to their specific contexts and needs. They have made an effort to provide public officers with general guidance on management control systems through publications on the Ministry website, they organised conferences and meetings. They did not simply impose a ready-made, one-size-fit-all system, which could be expected given the Ministry's formalistic approach to other regulatory solutions. In 2004, the Ministry obtained funds from an UE Transition Facility programme No. 2004/016-829.01.08 which allowed it to train the first internal auditors in risk management and carry out pilot studies at five major public sector organisations including a ministry, a university and a hospital. At that time, the Ministry decided to follow the British model and translated the Orange Book *(HM Treasury, 2004)* and then develop its own guidelines on that basis. The choice of a foreign model, in particular an Anglo-Saxon one, seems to increase the chance of successful translation, because Polish culture welcomes innovations from “the West”, the cultural area to which Polish elites aspire.

The Orange Book describes a management control system which is based on the analysis and assessment of risk. The system is called risk management and is presented as a highly sophisticated management control system spanning the entire organisation. It needs to be set in the specific organisational context, including the wider economic, social and institutional environment. Each organisation needs to define its position within that context and then define its goals which may be affected by risk. At this point, the day-to-day risk management process takes over. Risks pertaining to all goals of the organisation need to be identified, and the identification process should be repeated systematically. Then, risks need to be assessed so that they can be compared against the organisation's risk appetite. Next, the organisation needs to make a decision regarding the appropriate reaction to each risk. The reaction may range from acceptance, through control, to risk transfer or termination of the risky activity. The process of risk management needs to be repeated periodically, monitored and evaluated in terms of its effectiveness.[2] It is meant to be an embedded, self-learning process, leading to a gradual improvement of the organisation's effectiveness.

Even though the choice of the normative model developed from a highly regarded foreign institution and embedding the requirement to adopt the new control framework in the public finance act are clear victories for the proponents of the innovation, significant challenges persist. Public sector organisations may still avoid the adoption of the new system by engaging in concealing strategies (Oliver, 1991). The Ministry cannot effectively impose the new framework on other

2 HM Treasury developed a separate document called the Risk Management Assessment Framework.

institutions or punish them for non-adoption. In fact, effectiveness audits have only recently began to be carried out by the Supreme Audit Office in Poland, so even the supreme control institution has not embraced the new framework yet. Other central institutions have resisted changes as well, notably other ministries. One note-worthy exception is the Polish National Bank which enthusiastically implemented a risk management system, but the central bank followed the standards of the banking industry rather than the public sector standards. Adoption is even more challenging at lower levels of the public sector, partly because of its complexity. For example, local government units enjoy a wide autonomy as do some government agencies, but traditional branches of the government, such as taxation, are centralised. Thus, the new framework can be quickly adopted in the centralised branches if the central body chooses to adopt, but the autonomous organisations cannot be forced to implement the system. Interestingly however, anecdotal evidence seems to indicate that it is the autonomous local governments, in particular well-resourced city councils, which are the most interested in adopting the innovation. Perhaps this is a result of the proximity to their constituents, who can exert pressure to increase effectiveness of the city councils.

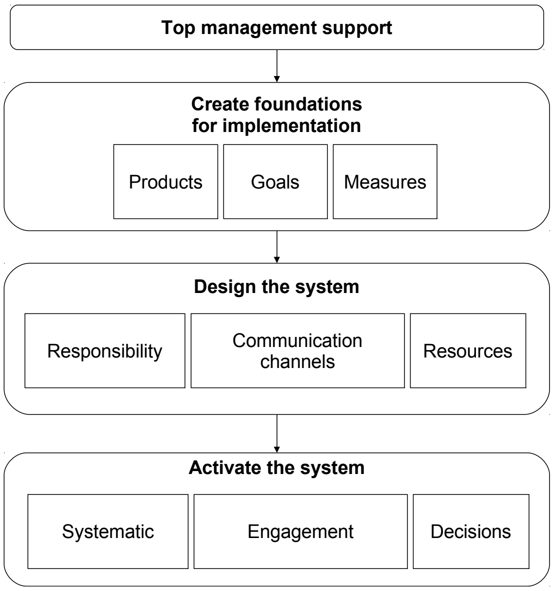
3. Adoption of risk management systems

From the inception of the new management control system, it was apparent that the first challenge in the adoption of the innovation is the creation of risk management systems, which were previously unknown in the Polish public sector. It was also clear that the implementation of risk management systems in the Polish environment requires modifications of the standard implementation model, with further adjustments for each specific organisation. An adapted version of the general implementation model found in ISO 31000 (Klimczak, 2009) is used as the conceptual basis for the two research studies described below. The model brings attention to the key success factors identified during implementation projects and interactions with public officials. According to previous research, the first challenge is to obtain full support of the top management (Kane, Patapan, 2006). A particularly efficient method seems to be the allocation of the oversight of the risk management process to a clearly identified senior officer. The second challenge is to create a foundation for the new system in the wider context of management control systems in the organisation. A major obstacle was identified at this point: the lack of product orientation in the public sector. The Polish law continues to support the traditional view of public sector entities as organisations performing certain tasks (“zadania”), rather than delivering products or achieving specific goals (“cele”).[3] However, the concept of risk management rests on the concept of securing

3 Local governments are among the few organisations for whom the law specifies goals, rather than tasks, but most of them continue to use the traditional approach.

the achievement of objectives, or goals. If objectives are not identified, their attainment cannot be assessed and risk management cannot bring effectiveness gains.

Figure 1. Implementation model.



Source: Klimczak (2009)

The third critical element of the implementation is to design the system and position it within the organisation's structure and culture. Major challenges that arise in this area are the allocation of decision privileges and accountability, creation of effective communication channels and allocation of resources to the new system. Anecdotal evidence suggests that many institutions centralise decision making in the area of modifying controls, which makes it impossible to deal with risk at the operational level. Other institutions decentralise decision making to risk owners, but tend not not to provide them with sufficient resources or procedures to obtain such resources. In many cases the communication of risk vertically to the risk owner encountered cultural and organisational barriers. Moreover, research findings suggest that senior managers may disregard the information provided by the new system if the system does not fit the characteristics of the organisation (Moynihan, Pandey, 2010). So far, anecdotal evidence indeed confirms that senior managers do not perceive risk as a major problem and they do not see the need for innovation in control systems.

Once the new system is launched, the success of the implementation rests on a systematic engagement of all involved parties throughout the process. In too many cases risk management turns out to be a one-off activity which concludes in the creation of a lengthy risk register, never to be used again. Typically no decisions regarding controls would be made and employees who are engaged in risk analysis would not receive any feedback. In one particular case, a large organisation created a risk register of hundreds of entries, in which all risks were assessed exactly at the tolerance level. Apparently, everyone wanted to perform the task of risk analysis, but no-one wanted to face the consequences of identifying an unacceptable risk in their area of responsibility, which would be a typical example of a compromise strategy (Oliver, 1991).

3. Empirical studies of Polish public sector officers

The purpose of empirical studies reported below is to provide exploratory evidence regarding risk management adoption in Polish public sector. The first study stems from the initial positivist approach, described in the preceding section. It documents the level of implementation and identifies problems associated with it at the early stage of the reforms. However, the results of that study inspired a specific research question concerning the motivations of actors: do public sector officers perceive risk as a significant issue to be managed? The second study shows that risk perception among public sector officers is in fact lower than in the private sector. A description of the studies and the results follows below.

3.1. First reactions to the new reforms

The first study of risk management in the Polish public sector is designed as a survey directed at all public sector institutions. The survey, along with a cover letter was sent by mail to 3,800 organisations in September and October 2008. The cover letter requested that a person charged with risk management or the internal auditor fill in the survey. The survey is one page long and contains 10 questions regarding risk management, plus 4 questions regarding the organisation itself. Only two questions are open-ended, while the other ones require the respondents to mark their answers on Lickert scales, and in one case to mark yes or no. Responses could be sent by mail, e-mail, fax or the survey could be filled out online. The response rate was low, with only 117 surveys returned. With that in mind, over a hundred responses is a relatively good outcome, considering that risk management was at a very early stage at the time of the survey. Nevertheless, the sample is not representative and results should be viewed as preliminary indicators of underlying phenomena.

The response counts for questions regarding the level of implementation are presented in table 1. Just over a third of respondents rated their risk management implementation at a positive level. On the other hand, two-thirds expected effectiveness gains from implementing the system. Respondents were also asked whether risk is already being assessed by internal audit, which can facilitate the implementation. Again, a third of responses were positive.

Table 1. The degree of risk management implementation and future plans

How do you assess the level of risk management implementation in your organisation at present?					
Response	None	Limited	Partial	Advanced	Full
Frequency	48	34	27	6	1
To what degree would the introduction of risk management procedures increase the effectiveness of your organisation?					
Response	Would not increase	Would increase a little bit	Would increase	Would increase substantially	Would increase dramatically
Frequency	15	30	43	21	6
How often is risk assessment performed during internal audits?					
Response	Never	In selected cases only	In about a half of cases	Usually	To a wide degree
Frequency	40	29	14	20	8
Note: Table presents response counts for N=117.					

Source: Author's calculations.

Table 2. Problems with risk management implementation

Which of the following problems are in your opinion the greatest obstacles in implementing risk management in your organisation?						
	1 – not a problem	2	3	4	5 – the greatest problem	Mean score
Overburdening of persons responsible for RM	5	13	21	38	34	3.75
Lack of employee motivation	9	9	30	40	27	3.58
Insufficient support of the top management	28	27	28	25	7	2.62
Insufficient knowledge by persons involved in RM	14	19	30	35	17	3.19
Insufficient IT resources	23	25	36	20	10	2.73
Note: Table presents response counts for N=117 and mean score values.						

Source: Author's calculations

The main objective of the survey is to identify common problems with the implementation of risk management systems. The level of implementation was expected to be low at the time of the survey, and to change in the future as a result of government policy if the policy addressed the problems correctly. Respondents identified problems with human resources as the prime problem: overburdening of employees who perform risk management functions on top of their usual activities and lack of motivation on the part of employees whose participation in the process is required (Table 2). Somewhat less stress was put on the lack of specialised knowledge on the part of employees charged with risk management. Insufficient IT resources and lack of top management support obtained the lowest ratings.

Respondents were also asked to answer an open-ended question regarding the problems. The largest number of comments focused on the lack of motivation on the part of other employees and their lack of knowledge and understanding as to what risk management is and of what it can help the organisation achieve. Another problem mentioned here was the lack of top management support, as one respondent put it: *the top management knows we need risk management procedures but they put it off till "later"* (apostrophes used by the respondent). One respondent, employed at local government, complained of the council, rather than the management, not being responsive to requests for additional resources needed for risk management to function.

To obtain a different perspective on the problems with risk management implementation we asked respondents what advice they would offer other institutions. A few respondents underlined the need for risk management to be set on the foundation of good management, after issues of organisational structure and information flow have been resolved. Some respondents raised the issue of a clear allocation of responsibility and the need for high quality, understandable and clear procedures. One respondent wrote that a project team needs to be established, and it should include at least one member from the top management, so that other employees respect their effort to implement the risk management system and more employees actively engage in the process.

3.2. Risk perception of public sector officers

After the exploratory survey study provided evidence of low motivation and lack of support for risk management, a natural next question to ask was why public sector managers do not feel the need to implement this system. One potential reason is that the perception of risk in their organisations is low, perhaps lower than in the private sector, which is suggested by extant research (Bellante, Link, 1981; Roszkowski, Grable, 2009). However, previous research did not document risk perception relating to the participants' work environment. Since risk perception is context-specific (Hanoch, Johnson,, Wilke, 2006), we designed a study where the risk perception measure is derived from subjective probabilities assigned by participants to short scenarios of potential risks associated with their organisations. Note that an alternative solutions would be to ask participants to choose between alternative decisions of which one is more risky than the other (Macko, Tyszka, 2009), but that approach would lead us to measure the propensity for risk taking, rather than the subjective judgements of the probability at which risks may occur.

The sample consists of 104 respondents (71 women and 33 men), recruited from among students of five different executive programmes taught at Kozminski University. One half of the respondents are public sector employees while the other half worked in the private sector at the time of the study. Respondents were handed sheets with 24 risk scenarios associated with their organisation (Appendix 1). Over 20 minutes they were asked to rank their subjective probability of each risk by making a mark on a 10 cm scale from 0 (impossible) to 100% (certain). This design requires more work in data coding (each rating needs to be measured with a ruler) but reduces the impact of the scale design on the responses collected (French, Sutton, Kinmonth,, Marteau, 2006). Risk perception is measured for each participant as the sum of the probabilities assigned by the participant to all scenarios. Observed scores can range from 0 to 1500.

The analysis of collected data shows that public sector employees perception of risks relating to their organisations is lower than in the private sector. The mean risk perception score among public sector employees is 483, while among private sector employees it is 803. The t-test value for the mean is 4.6466, which allows the null hypothesis of equal means to be rejected at 1% confidence level. The results hold regardless of gender groups. Next, we performed factor analysis to identify the scenarios which had the greatest impact on risk perception scores. We identified four principal components that fulfilled the Kaiser criterion (with eigenvalues from 1.22 to 9.88), of which the first component explains 40% of the sample variance. Each factor was assigned a label that best summarised scenarios contained in it, although the label should be treated only as a generalisation (table 4). Then, a t-test for the equality of means between the public and private sector groups was computed for scenarios included in each factor. As in the full dataset, the null hypothesis is rejected for every factor. It seems that the greatest difference in risk perception is associated with risks arising in the external environment of the organisation and with human actions.

Table 4. Factor analysis of risk perception scores

Factor	Description	Eigenvalue	Share of variance	Scenarios inncluded	t-value
External risks	Risk factors beyond the control of the organisation	9.8809	41.1704	3, 5, 8, 9, 10, 17, 23, 24	5.3724***
Human risks	Risks caused by employee and client actions	2.1078	8.7825	2, 11, 12, 14, 15, 16, 17	4.6251***
IT risks	Errors and crashes of IT systems	1.3662	5.6925	2, 4	2.1683**
Financial risks	Risks causing direct financial losses	1.2215	5.0896	7, 18, 19, 20, 21, 22	2.4359**

*Note: Equality of means t-test statistics are reported between groups of public and private sector employees. Significance levels are ** for 5% and *** for 1%.*

Source: Author's calculations

4. Discussion and conclusion

The two studies described above portrait the new, risk-based management control system as a major innovation. While the sponsors of the system at the Ministry of Finance are convinced that it can be a vehicle for change, public sector officers who are required to implement the new system do not seem to be concerned with risk. In light of extant research in management control systems one can predict that organisations will present a range of institutional responses to the innovation (Oliver, 1991). On the one end of the spectrum are passive conformists, who may adopt the new system and fulfil the requirements but never use it for management purposes. Other organisations may use the new system to preserve the status quo by creating a formal model of management control aligned with the status quo (Almqvist, Catasús,, Skoog, 2011). On the other end of the spectrum are organisations, in particular the powerful central government agencies and ministries, which actively defy the new regulations or attempt to modify the regulation by exerting pressure on the Ministry of Finance. The contingency approach can be used to find the determinants of response choice.

Since the reform affects a wide variety of public sector organisations, this setting can be used to carry out in-depth research into the adoption process using non-deterministic theories which can explain the dynamics of the adoption process (Baxter, Chua, 2003). Previous studies have shown that different responses can occur even within a single public sector organisation, when it is large enough (Hyvonen, Jarvinen, Pellinen,, Rahko, 2009). For example, actor-network theory can be used as a conceptual framework to analyse the adoption process. The advantage of that approach is that it models the adoption process as a network of multiple activities taken by various actors located across the organisation and in its environment (Alcouffe et al., 2008). Responses to our survey definitely point to interactions between actors as a significant element of the adoption process. Problems of support by senior management or local legislature, as well as lack of motivation on the part of line managers have all been mentioned. The Polish case can also be seen as an example of the role of boundary objects (Briers, Chua, 2001), in this case the British and EU models of management control which are used by the proponents of the reforms.

Another promising research approach is to examine the new system in relation to existing control practices, methods and systems, or as one element of the organisation's control mix (Abernethy, Wai Fong Chua, 1996). At present, Polish public sector organisations are characterised by top-down decision making, delegation of specific tasks and limited feedback from line managers or other stakeholders. While this decreases the likelihood of the new management control system becoming a significant element in organisational decision-making, the organisations where this will happen can provide unique research data. One particular issue which may be of interest is the evolution of the internal audit profession, which has recently been created but has the ambition of becoming an agent for change in the public sector through effectiveness audits and consulting. It attempts to distance itself from the incumbent internal control bodies, which are associated with formal, institutional control. In some organisations the two departments exist in parallel, in others internal control is transferred to a larger department (e.g. administrative), while in some organisations internal control departments are removed once internal audit is established.

The problem can also be approached from the perspective of individual actors or groups of actors, which increases the observed variety of characteristics and responses. We began this line of research with the risk perception study. While we show that public sector officials are in general characterised by lower risk perception, the same research method can be used to determine differences in risk perception among officials. Management accounting research describes other individual and job characteristics that may have an impact on the effects of control systems: outcome controllability, ambiguity and uncertainty or perceived fairness of the system. Considerable progress in this area has been made by studies of performance evaluation systems and their effects on performance (Hartmann, Slapničar, 2011; Lau, Sholihin, 2005; Sven, 2001).

The experiment with management control systems in Poland offers a range of research opportunities for researchers in the fields of management accounting and public management. We provide initial evidence on the diffusion of this innovation, which indicates that the system is at an initial stage of diffusion. However, the determination and apparent strength of the system's proponents at the Ministry of Finance, who managed to include this system in the Public Finance Act, lead us to believe that it will not be abandoned. Researchers can observe as the system is translated and adapted to various organisations and organisational units and use that data to answer fundamental questions pertaining to the adoption of management control innovations.

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Appendix 1. Scenarios used in the risk perception study

No.	Scenario
1	Loss caused by a deterioration of reputation and loss of business partners
2	IT system errors leading to loss of data and problems with delivering services to clients
3	Deterioration of liquidity leading to the inability to fulfil financial obligations in time
4	IT system errors which make it difficult for clients to use the systems
5	New regulation introduced by the state which change the conditions of existing contracts
6	Disputes with business partners which lead to increase in costs
7	A significant increase in the amount of credit payments, resulting from changes in interest rates, which results in financial distress
8	Natural disasters and accidents which cause a need for obtaining additional loans
9	Financial losses caused by currency rate movements
10	Problems in performing activities caused by ineffective implementation of IT technologies
11	Failure to achieve organisational objectives caused by improper selection of personnel to the task team
12	Leak of confidential information caused by improper storage of documents
13	Failure to satisfy user needs caused by inappropriate use of IT technologies
14	High personnel turnover caused by ineffective mechanisms of recruitment, training, evaluation and motivating employees
15	Unethical behaviour of an employee leading to a decrease in the organisation's effectiveness
16	Wrong decision of the management caused by failure to engage line employees in the decision-making process
17	Financial losses caused by deterioration in the economic situation
18	Payment of contract fines cussed by failure to deliver on time
19	Losses caused by disadvantageous ruling of a court
20	Loss on an investment, caused by the bankruptcy of a subcontractor
21	Errors in tax statements, leading to financial losses
22	Increase in costs caused by new environmental regulation
23	Problems in obtaining loans caused by a deterioration in the economic situation
24	A default of a business partner caused by new national regulation