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Core paper



Public Administration and Management Reforms in CEE: Main Trajectories and Results

Geert Bouckaert¹, Vitalis Nakrošis², Juraj Nemec³

Introduction

Public administration and management reforms in Western Europe, realised during the last few years, were based on relatively common problems. Two of them seem to be crucial according to most authors. First, there was the macro-economic problem of too large a proportion of government in GDP, of significant deficits and of a perceived lack of public-sector performance contributing to GDP. A second problem was a drop of trust and legitimacy in public institutions, including politicians (Pollitt and Bouckaert 2004; Coombes and Verheijen 1997).

In CEE countries, the starting positions were quite different, and the main objective was the creation/re-creation of democratic public-administration systems. Also, country strategies were different, heavily influenced by the perspective of becoming a possible member of the EU, or not. Building democracies, organising transitions and, in some cases, preparing pre-accession were shared objectives to be realised, but methods, tools, timing and concrete targets were only shared to a certain degree.

The common feature of CEE systems is that they change drastically. Political systems change, e.g. from dictatorships to democracies, and their elites are removed. Democratic checks and balances are established. State structures are reshuffled, e.g. toward more decentralisation. The economic system changes its nature, e.g. from state monopolies to market systems with private firms. Societal and social systems with NGOs, not-for-profit organisations and citizen action groups are established and are designed for people to participate actively in the public debate and to become stakeholders of their society and their communities (Peters 1996).

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To achieve planned changes, CEE countries had to choose their strategies. In focusing on the administration and the management of public systems, five scopes of reform are possible, from very narrow and limited to a very widespread and broad span of reform (Pollitt and Bouckaert 2004). Choosing one of these models has tremendous practical implications for the content of a reform programme, for the choice of the reform projects, for the sequence and timing of the reform portfolio. It also requires different tactical choices to be made. One of the issues is how many degrees of freedom there are to reform the public sector.

Just as in many other countries, mixed strategies have been chosen for public-sector reform in CEE countries, and these choices have changed over time. However, it seems that the span of reform has rather been broad than narrow. It also seems that tactics could have been more visible than strategy because of electoral cycles.

This brings us to the question of the trajectories to move ahead. Our article, heavily based in the joint NISPACEE research project⁴ tries to respond to some selected dimensions of the question of what the common and different trajectories and selected outcomes of public administration/management reforms are in the CEE region.

Reform trajectories: Commonalities and differences

Public-administration and management reforms in CEE are not realised as one uniform process, neither regarding their contents, nor their timeframes. In this part of our paper, we discuss patterns of reform trajectories.

Reform start and phases

All available information about reforming public administration in CEE indicates that the national patterns partly differ regarding the beginning and content of reforms, depending on local political, social and other environments. Two subgroups are fully visible:

- a) Countries in Central Europe, including the Baltic States
- b) Countries of the former Soviet Union (NIS region)

In Central Europe, the first democratisation phase, focusing on building new public-administration systems, which started in early 1990, is relatively similar in phasing and reform contents. It focused on replacing of old “socialist” structures

⁴ Network of Schools and Institutions of Administration in Central and Eastern Europe. The results of this research project were published in 2009 in the form of a book (*Public Management Reforms in CEE*).

with new democratic ones, for example the establishment of a real local self-government system, democratic elections, etc.

The second common aspect for this region is the EU pre-accession phase at the end of the nineties and the beginning of the 21st century (Romania was slightly later). Despite the fact that the public-administration system was not an explicit part of the *Acquis Communautaire*, several targets were set by the EU regarding administrative/management reforms in the public sector. Typical common tasks were: establishing the Civil Service; further decentralisation, especially creating regional self-governments; introducing e-government services and improving the system of financial controls in order to be able to utilise EU funds.

The “pre-accession” wave of reforms has many similarities, but also some content and time differences (the Civil Service system was established, for example, in Estonia in 1996, but in Slovakia, it only came in 2001). Comprehensive reform packages were introduced in several countries at more or less the same time. The Estonian Government introduced a “Concept for Public Administration Development”, adopted in 1999. The Czech Republic document “Concept of public administration reform” from 1999 included a complex reform package divided into two parts – (1) reform of regional public administration and (2) modernisation of the central state administration. After the general elections of 1998, the new Slovak government established the position of Government Appointee for Public Administration Reform and the main reform document, focusing especially on decentralisation, the “Strategy of decentralisation and public service reform”, which was published in 1999. The new separate regional development framework was introduced in 2000 in Lithuania. Latvia adopted the document “Public Administration Reform Strategy 2001–2006” and its implementation plan as its main reform policy. Similar reform activities were happening at the same time in Hungary, Lithuania, Poland, and in Romania with a delay of 2–3 years (due to a later start of the accession process).

The situation in other CEE countries cannot be reduced to one uniform pattern. The contents and timing of reforms is individual and depends on the country-specific internal and external environment. The limited local stability in Kyrgyzstan meant that basic administrative reforms in the country were initiated only in 2001. For the first time, Public Management Reforms as a government priority were articulated in the Comprehensive Development Framework up to 2010 (2001) and then reflected in the National Poverty Reduction Strategy (NPRS) (2003). Apart from those two strategic documents, the Public Management Strategy was developed in 2003, focusing on the basic mechanisms needed for the creation of a system of public administration. In Ukraine, some changes already began in the period 1991–1997, characterised by the chaotic reform of both the socio-economic sphere and the state machinery. Several decrees and regulations were prepared later on, but the increasing political instability limited

their success or even their chance to be implemented. In Kazakhstan, the main aims of the public-sector reform agenda were set within a long-term vision for Kazakhstan, announced by the President in 1997, and called “Kazakhstan 2030”. Reform strategies comprised several main goals, such as increasing the effectiveness of the government, implementing modern information technology, eliminating bureaucracy in government bodies and restricting state interventions in the economy. Compared to other countries, thanks to their relative political stability and wealth, some planned targets were also achieved. In Armenia, the reform efforts might be characterised by their long interruptions and sporadic nature. The first attempts at a legal framework for the civil service were articulated in 1994 – the concept of the Civil Service was re-developed by the Government in 1997 – but its implementation was again delayed in the light of the 1998 change in power. The final version of the Civil Service Law was enacted only in December 2001. Under such conditions during the first reform stage (1999–2003), only basic systems for managing the core government apparatus were established. The second reform stage (2003–2008) focuses on improving broader public services and still lacks complexity and comprehensiveness.

The specific case is Russia. According to Obolonskij (2009, 259–322), there were several attempts to reform Russia’s public administration and civil-service system. The first started as early as 1991, when the Civil Service Office (*Glavnoe upravlenije po podgotovke kadrov*) was established by the Presidential Decree and was also supported by French experts. This Office was abolished in late 1994; because of too limited success (combination of the influence of “old” cadres and French advice did not deliver much). The second phase is connected with the period 1997–1999, when President Jeltzin established the Committee for administrative reforms, which formulated the reform strategy. However, this document was never implemented because of major political changes. In the period 1999–2002, especially in its beginning, the public-administration reform was discussed and analysed many times, but only in 2002, some concrete steps happened. President Putin first presented the need for radical reform in the Parliament, and in November 2002, he approved the document “Federal Programme of the Civil Service Reform 2003–2005”. In spite of some implementation delays, the Civil Service Law was accepted by the Parliament in 2004, the Civil Service Office established in 2007 and most of the planned Presidential decrees were adopted. However, the real impact of these changes may only become visible in the future.

A simplified picture of what happened, and when, based on the cluster-analysis method is provided in Table 1.

Table 1
Country clusters: Reform contents and timing

Cluster	Main features	Examples of countries
1	First PA/PM reforms began in the early nineties and in the beginning, reforms were supported by many international donors to supplement limited local experience. From the mid-nineties on, the dominant goal was EU accession and the necessary administrative adjustments. After 2004, the speed of the reform more or less slowed down.	Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, Slovenia
2	Similar to 1, but with a delay of a few years.	Romania, Bulgaria
3	A stable and strong presidential system allows for relatively successful changes, especially after 2000.	Kazakhstan
4	The reform was systematically blocked or at least slowed down by "old cadres". Necessary legislation was adopted only recently, its impact cannot be assessed yet.	Russia
5	Too much local instability still harms the needed reforms today.	Armenia, Kyrgyzstan, Ukraine

Source: authors

Reform reasons and driving forces

Similar to the phasing and main contents, the purpose of the reforms and their driving forces are relatively similar in Central Europe, but in this case, we also find some important similarities in Eastern European states.

The first reform phase in Central Europe, at the beginning of the nineties, represented a clear attempt for democratisation, including the democratisation of public administration, fulfilling the need to establish standard administrative structures, which function in developed countries. This phase was dominantly supported, and also supervised, by SIGMA OECD experts and financed by the PHARE programme. Other international donors were also very active during this period, such as the World Bank, the International Monetary Fund and country specific "donors" – for example, Estonian public-management reform practices have been influenced by relevant solutions in Germany (the legal framework, in particular), the UK and the Nordic countries (individual management tools). Such help was necessary because of the shortage of human and financial resources, the lack of experience and the urgency for solutions.

However, compared to Eastern Europe (see below), the major decisions about the design and operation of public-administration systems in Central Europe have remained very much "home-grown", also thanks to the effective reform coordination activities of SIGMA, OECD. Whereas policy transfer was an important policy

tool in the 1990s, this has been gradually replaced by a more knowledgeable process of policy-learning in recent years.

As already described above, the second phase of reforming public-administration systems in Central Europe is very closely linked to the EU accession process. The role of other international organisations diminished, and only a few, dominantly sectoral or very specialised activities (e.g. the establishment of a cost-centre system in the Slovak public administration supported by German funds) were still supported by bodies such as the World Bank, the International Monetary Fund and country-specific partners.

The EU financially supported the reinforcement of institutional and administrative capacities under its PHARE programme and Transition Facility and, later, by structural allocations. The impact of the EU accession process on Central European public-administration/management reforms is obvious, important, but also limited. As the *Acquis Communautaire* did not include specific comprehensive chapters providing benchmarks for national reforms, and EU evaluations focused mainly on partial elements of administrative systems (establishment of the Civil Service, financial control, etc.), internal motivation for administrative reform remained the dominant factor of the reform contents. Thus, accession to the EU may have sped up certain developments, but it did not provide complex structurally innovative solutions.

After the accession, the EU pressure for changes almost disappeared, and reforming public administration became a more “voluntary” and nationally motivated process. The reaction to such new conditions was relatively different between new EU member states. Some of them continued to try to realise more complex reform plans (Latvia, Lithuania) and others significantly slowed down, and instead of the required complex reforms, only a few small changes occurred (Slovakia, Czechia). One of the reasons for such a particularity might be the fact that EU structural-fund allocations for 2007–2013 were made only for the purpose of improved administrative capacity and public-administration efficiency; thus complex reform measures were difficult to finance from external resources.

A simplified picture of the principal reform reasons and driving forces in Central Europe, based on the cluster-analysis method, is provided in Table 2.

The situation in most areas of Eastern Europe (Russia may be an important exception) shows that the majority of reform changes in this region were driven by international donor agencies. Compared to Central Europe, where local reform capacities were created step by step, and most funds were provided by the EU in a relatively coordinated form, in this region, little progress would be possible without external help. Many positive changes would not be possible without the use of international expertise and funds, as local capacities and financial resources were, and still are, very limited.

Table 2
Central Europe country clusters: Reforms, reasons and driving forces

Cluster	Main features	Countries
1	First PA/PM reforms represented the need for democratisation, a switch from the old system and a demonstration of the will to change. From the mid-nineties on, the most important reason and driving force for reform was EU accession. After the accession, there were few initiatives.	Czech Republic, Poland, Slovakia
2	First PA/PM reforms represented the need for democratisation, a switch from the old system and a demonstration of the will to change. From the mid-nineties on, the most important reason and driving force for reform was EU accession. After the accession, reforms continue.	Latvia, Lithuania, Hungary
3	First PA/PM reforms represented the need for democratisation, a switch from the old system and a demonstration of the will to change. From the mid-nineties on, the most important reason and driving force for reform was EU accession, but many or most changes would happen without EU pressure. After the accession, reforms continue, but to a limited degree.	Estonia
4	Reforms began mainly in relation to EU accession and are still connected to it.	Romania

Source: authors

However, several evaluations of foreign help highlight several negative features. For example, frequently there are too many donor agencies crowding an individual ministry. In such a situation, the application of “best global practice” is almost meaningless. Moreover, most projects are built upon the “client’s needs” identified for the government by external “experts”, rather than responding to the needs and demands of the present day.

Shakarashvili (2005, 13–14) adds to this:

Especially at the early phases of the post-Soviet reforms, these countries were strongly attracted by the idea of “westernisation” and were open to close collaboration with international (predominantly Western funded and Western influenced) organisations. Often, this collaboration resembled a teacher-pupil type of relationship, when governments would not object to following the recommendations of external partners without questioning their validity or appropriateness for the local context, whilst the Western agencies were not shy to reveal the ‘consultant knows it all’ attitude. The policy design recommendations were often based on the specific experience and knowledge of international experts in their own countries.

These problems are real and harmful. However, what would have happened without foreign help? Would countries have managed to reform their governance

systems better without external pressures and help – or would almost nothing happen? Foreign help is still necessary in most countries in Eastern Europe; however, if such a chance exists, more effective, more customised and coordinated approaches may deliver more, with less resources and pain.

Reform types

As already indicated at their beginning after 1989, or later in the CIS region, all reforms focused mainly on the establishment/re-establishment of basic democratic administrative values and structures. This period was also very much connected to capacity building, where the still necessary basic administrative changes were mixed with several public-management elements. The analysis of the Hungarian reform packages clearly indicates this situation, distinguishing between “classic” public-management reform measures and “CEE specific measures”, such as fine-tuning or legal-structural retrenchment of existing institutions, improving the bureaucratic workflow and control in administrative organisations, or measures to achieve EU conformity of certain institutions or policies. When comparing the relative proportion of these two classes, one may conclude that the share of public-management-type measures within the overall set of reform measures was very low at the beginning, but has been constantly rising significantly.

The Hungarian reform also identifies one important and almost common feature of reforming administrative systems, at least in Central Europe: the tradition of the “Rechtsstaat” culture characterised, in general, by the dominant role of law and legalism in the way the government thinks and acts. This culture significantly influenced the contents of many reform measures, when governments tried to treat problems by legal norms and not best practices. Pavel (2009) showed this fact when evaluating the development of the public-procurement law in the Czech Republic. Both the number of paragraphs and the number of pages increased with every new amendment of this law, independent of the fact that a value for money audit of public procurement is much more important, compared to the probity aspects of the process. Legislators tried to improve the quality of procurement by extra legal measures, but without any real impact on efficiency, effectiveness and economy. The Czech report also provides the evidence for this issue: “One of the answers to the question ‘What is the goal of the reorganisation?’ was: ‘The goal of the reorganisation is to reorganise.’” Also, the Romanian report signalled “over-legalisation”: both civil servants and citizens almost completely agree with the fact that the Romanian legal framework is too complicated.

The relationship between classic administrative changes and public-management changes, which changed over time, was also very different between the selected countries. To describe the situation we can use the Coombes and Verheijen

(1997) and Pollitt and Bouckaert (2004) classifications of reforms – these two classifications have the same base and can be simplified as follows:

1. Radical public-management type of reform;
2. Mixed type of reform;
3. Incremental reform.

If we exclude Eastern European countries, where reforms are still in their early phase and it would be very difficult and preliminary to try to label them, the situation in the remainder of the countries seems to be as outlined in Table 3.

Radical NPM approach or “Weberian” administration?

Estonia is the best example of a CEE country where NPM ideas have prevailed in various public-administration reform concepts and strategies originating in the second half of the 1990s, and a certain over-idealisation of the private sector (and free market) still prevails today. Massive privatisations have led to the selling-off of strategic enterprises such as the railways (in 2001, until its re-nationalisation in 2007) or crucial services such as emergency medical aid without much public discourse or market-testing. Because of this, Estonia also frequently serves as the benchmark for evaluating the appropriateness and suitability of NPM principles and tools for the transitional countries. Most authors are not very optimistic in this direction, for example:

“In Central and Eastern European (CEE) transition countries ... public administration has had to face special challenges because both the creation of a political democracy and the implementation of the principles of efficiency and effectiveness have become crucial tasks of modernisation at the same time” (Jenei and Szalai 2002, 368).

“NPM is particularly bad if pushed upon transition and developing countries because if it can make any sense, then it is only in an environment of a well-functioning democratic administrative tradition” (Drechsler 2005, 101).

“The greater the shortcomings in a country’s established management practices, the less suitable the [NPM] reforms” (Schick 1998, 124).

“Once a so-called Weberian administrative system is institutionalised, then it may make sense to consider how best to move from that system towards a more ‘modern’ system of PA” (Peters 2001, 176).

All the quotations above and other experience indicate that NPM as a reform ideology may not be the proper approach for reforms in transition countries, but many NPM-based policies and instruments should be implemented as soon as possible. For example, performance evaluation methods, especially benchmarking, may really help to improve transparency and accountability.

Table 3
Classification of reforms in Central Europe

Country	Reform type
Czech Republic	Dominantly incremental and legalistic reforms during the entire evaluated period. Few management reforms after 2000. The "Conception of public administration reform" from 1999, planned for complex changes, but only administrative measures were really implemented. New liberal government elected in 2006 tried to propose NPM changes, but had no real power to implement them.
Estonia	Estonian reforms seem to be the most radical and NPM-based. One of the main challenges in Estonia has been posed by the desire to jump straight into having modern management systems without previously establishing a solid base – the classical hierarchically structured public administration. The central aim in Estonian public administration has not been to build a solid ground for democracy, but to improve the efficiency of public institutions. Yet, as a consequence of the policies adopted by successive neo-liberal governments, the underlying theme behind government-reform initiatives has been reducing the role of the state. Such an anti-state attitude has contributed to the development of ideas based on the minimal state.
Hungary	Hungarian reforms can be characterised as the mixed model, starting from a dominantly incremental and legalistic reform approach at the beginning of the nineties, slowly changing to a mixed type with a radical NPM switch in the post-2006 period. Current NPM changes focus on two central elements – downsizing (including a radical decrease in civil-service employment – at the territorial and local levels, this was well into the two-digit range, in some cases possibly even achieving 30 to 50 per cent) and radical reforms of the human resource management system.
Latvia	Latvian reforms can also be characterised as the mixed model from the beginning to the current reform activities. Several NPM types of reform changes were implemented, especially in the later phases of reforming the public-administration system, but NPM never dominated the reform strategies.
Lithuania	The country report suggests that Lithuania appears to reach a second category (mixed model) of states called "modernisers" according to the classification by Pollitt and Bouckaert (2000). In the pre-accession period, Lithuanian public-management reform was characterised by ad-hoc and sectoral efforts. From about 1996 to 2004, public management reforms became driven primarily by Lithuania's accession to the EU. More intensive competition over NPM-type reforms began only in the post-accession period.
Poland	Poland is a typical representative of a prevailing legalistic approach to reforms and can be placed in the third group of reform countries (incremental changes). Poland is continuously reorganising its management systems in the public sector. New Public Management had a limited impact on the Polish administration by providing ideas and demands for recognising the need to modernise the Polish administration and, at the same time, to reduce its size.
Slovakia	Slovakia, from the point of view of the whole investigated period, represents a mixed ("modernisers") approach, but deeper analysis distinguishes three main phases. Prior to 2003, the reform was dominantly incremental and legalistic, with few NPM ideas realised. During the second election period of the liberal Prime Minister Dzurinda's government (2003–2006) radical NPM changes were realised, such as massive decentralisation and the introduction of performance-financing schemes. The new Prime Minister Fico's coalition, in power from 2006, returned to the idea of a powerful state dominating in the system of the delivery of public functions.
Romania	The information from the country report suggests that Romania lies somewhere between group two and three. Each government, after the 1989 revolution, has the reform of public administration on its agenda. Though the concept of public management has not always intertwined with the reform of public administration, some new managerial ideas such as the use of contractualisation, strategic management and planning, performance-measurement systems, reform networks, etc. were included in reform packages.

Source: authors

To take the full complexity into account, we also need to stress that NPM is one extreme, but a dominantly legalistic approach to the reform is the second (and also ineffective) extreme. Over-legalisation and over-regulation normally do not deliver efficiency, economy and effectiveness, as we already indicated in the example of public-procurement law. Under conditions of limited respect for the law, typical of most transition countries, we attempt to improve the performance of public administration by extra laws, norms and regulations which cannot work but simply create an extra burden for business and the citizen.

The conclusions are straightforward. Neither radical NPM nor simple legalism is the best option for public-administration reforms in transition countries. Some effective balance, customised for local conditions, should be suggested. In any case, the implementation of radical NPM reforms might become meaningful if the basic and reliable “Weberian” administration is not well established.

To what extent such a recommendation might really be implemented is unclear – the reality of political processes in this group of countries does not provide much space for effective policy-making and policy implementation (Dunn, Staronova and Pushkarev 2006). Short-term pure political decisions dominate; long-term policies are the exception.

Reform outcomes: Still much to do...

Public-administration and management reforms in the CEE region can be evaluated from many different angles, but it is necessary to accept that they delivered many important and necessary positive changes and improvements, compared to the situation at the beginning. In many cases and areas, effective practices were established, and the gap between the quality of administration in developed countries and in the region is becoming smaller and smaller. In the next section of the text, we highlight the most important developments in crucial public-management “sectors”.

Financial management

From a macroeconomic point of view, it is necessary to admit that all EU member countries significantly improved their financial discipline, in part thanks to the implementation of modern budgeting methods. Until the financial crisis at the end of 2008, very few countries had to cope with excessive deficits and large debt levels, beyond the Maastricht criteria (Hungary, Poland). Slovenia and Slovakia managed to join the Euro zone.

However, since the start of the financial crisis, the financial health of most CEE and former Soviet Union states has deteriorated markedly, reflecting the ongoing crisis as well as the packages of economic stimuli adopted in several countries.

Latvia, Hungary, Romania, Serbia, Belarus and Ukraine found it necessary to approach the International Monetary Fund for financial assistance.

Slovak (macro) public-financial-management reforms are (probably together with the Baltic States) the most progressive and radical. From 2005 on, Slovakia began with a full-accrual medium-term programme and performance budgeting at the national level, and from 2010 on, this method will also be applied at the municipal level. A switch to programme-performance budgeting is an ongoing process in the region, with its first steps being taken in the East (e.g. in Armenia or Kazakhstan). Such process is crucial because it helps link inputs to outputs, outcomes and results, and, if properly implemented (or with some time delay), it can significantly increase the “value for money” from public expenditure.

Several other public-financial-management tools began to be routinely used, especially in Central Europe – such as contracting, outsourcing, public procurement or even public-private-partnerships projects. As the Slovak report indicates, their results in delivering value for money are significantly different and depend on concrete local conditions and the environment. High levels of corruption are one important barrier to success. Cost-benefit analysis and impact analysis are more and more commonly practised, partially because of the requirements of the EU structural funds.

A relatively weak point is the efficiency of financial controls and auditing in CEE. As the Slovak report suggests, the probity – compliance – legalistic approaches dominate, and auditing value for money is still a limited practice. From all trajectories of financial-management reform (budget, accounting, audit), Lithuania made good progress in the area of financial and performance audit: it enriched financial and compliance audits with some performance audits carried out by the National Audit Office.

Decentralisation and fiscal decentralisation is a particularly common feature in the language of public-management reforms in the CEE region. However, its scale and reality differ significantly. The most radical changes of decentralisation can be found in Estonia and Slovakia. After 2000, decentralisation was the main motto of reforms in Slovakia. The opposite can be found in the East. For instance, Ukraine has not yet created “real” self-governments. In many, especially “Eastern” cases, decentralisation, and fiscal decentralisation, occurred mainly *de jure*, and not often *de facto*.

The most important changes of formal decentralisation are connected with the creation of regional and local self-governments and the transfer of competencies and resources to these levels. The impact of these changes is mixed, reflecting the opportunities and limitations of decentralisation as a reform tool as well as the need to tailor decentralisation to a particular reform environment. An improper allocation of responsibilities limits the chance for economics of scale and increases transaction costs. Too small government units suffer from a lack of competence

and financial resources. Therefore, “the administrative capacity of sub-national governments and the administrative and compliance costs of decentralisation must be taken into account when assigning expenditure among levels of government” (Allen and Tommasi 2001, 74).

All countries examined expressed (more or less “loudly” and concretely) the will to decrease the overall civil/public-service/public-sector size, Estonia being the most radical in this area. However, Estonia no longer has the smallest government in CEE (measured by government expenditure as a percentage of GDP): Slovakia’s government expenditure dropped by 19 per cent in the period 2000–2008 (see Table 4 below). This table also points to different dynamics in overall public costs of production (covering the compensation of employees and intermediate consumption in the public sector): these costs decreased in five CEE states (Estonia, Lithuania, Poland, Slovenia and especially Slovakia), but increased in four other CEE countries (Bulgaria, Latvia, Hungary and Romania) over the period 1996–2008.

In addition, most planned “reduction” targets were not achieved, partly because EU membership required the recruitment of new civil servants to deal with EU matters. Czechia, Poland, Slovakia and others formally declared a strategy of deployment several times. However, the total size of public employment (in number of persons) has stabilised or is even growing everywhere (relative figures are influenced by the fast economic growth).

“Downsizing” is also connected with privatisation, contracting and outsourcing and the creation of a real “public-private-civil sector mix”. The scale of such processes differs, with Estonia again being the most radical case. In this area, one should stress that most countries still overestimate – or even politicise – the ownership principle in the processes of the production of public services. Changes in governments are connected with a switch of attitudes (“left”-wing governments prefer public alternatives, liberal governments private solutions) – and as a consequence, reversed and costly organisational changes happen. The classic example is health care (Nemec and Lawson 2008) – at the same time Slovakia is reconsidering its pluralistic health-insurance system, and Poland is starting to work on its implementation (in both cases, the costs of change will be higher than any possible benefits). At the same time when Slovakia revises its liberal health-care reform, Czechia starts to implement it.

In less developed countries, downsizing is also a necessary reaction to a lack of public resources, caused by weak economic performance. With a lack of resources, privatisation does not help but simply limits the chance of many citizens to have the necessary access to core services, especially health care (Armenia).

Table 4
The dynamics of CEE government expenditure in the period 1996–2008,
as a percentage of GDP

State	Overall government expenditure (1)			Compensation of employees (2)			Intermediate consumption (3)			Public costs of production (2 + 3)		
	1996	2000	2008	1996	2000	2008	1996	2000	2008	1996	2000	2008
Bulgaria		42.6	37.4	7.0	10.0	9.0	5.9	8.5	7.5	12.9	18.5	16.5
Czech Republic	42.6	41.8	42.4	7.5	7.1	7.6	5.7	6.6	6.1	13.2	13.7	13.7
Estonia	39.6	36.5	40.9	11.3	10.9	11.5	10.4	8.3	7.2	21.7	19.2	18.7
Hungary	52.6	46.5	49.8	10.9	10.5	11.6	7.4	6.7	7.0	18.3	17.2	18.6
Latvia	36.9	37.3	39.5	10.9	10.8	12.0	7.3	6.9	7.2	18.2	17.7	19.2
Lithuania	37.4	39.1	37.2	10.7	12.1	10.8	8.8	7.3	5.7	19.5	19.4	16.5
Poland	51.0	41.1	43.1	10.5	10.1	9.8	6.7	6.0	6.2	17.2	16.1	16.0
Romania	34.7	38.5	38.5	6.7	7.9	10.2	6.2	9.4	6.5	12.9	17.3	16.7
Slovakia	53.7	50.9	34.9	9.5	8.8	6.6	9.7	6.8	3.8	19.2	15.6	10.4
Slovenia	44.5	46.7	43.6	11.3	11.3	10.8	6.7	6.6	6.1	18.0	17.9	16.9

Source: Eurostat 2009.

Civil service and human-resource management

The recent comparative study of the civil-service systems in CEE states found significant variation in the progress of civil-service reforms and their sustainability after EU membership (Meyer-Sahling 2009). It was possible to distinguish three groups of countries, varying in terms of the current fit with European standards of administration and in terms of the professionalisation trajectory (see Table 5 below).

Table 5
Fit with European principles: Comparison across countries

Current Fit & Post-accession pathways	High fit	Medium to high fit	Medium fit	Medium to low fit	Low fit
Constructive continuation of reform	Lithuania	Latvia Estonia			
Constructive reform reversal			Hungary Slovenia		
Destructive reform reversal				Slovakia Poland	Czech Republic

Source: Meyer-Sahling 2009.

On the one hand, the fit with European principles was found to be the highest in the three Baltic states (Lithuania, Latvia and Estonia), which constructively continued their civil service reforms (Meyer-Sahling 2009, 71). On the other hand, Slovakia, Poland and the Czech Republic share their relatively low fit with European principles of administration; they are the cases of destructive reform reversals (Meyer-Sahling 2009, 72).

According to the qualitative comparative analysis, low politicisation of the civil service in the Baltic states (compared to other new EU member states that joined the EU in 2004) explains the good ratings of their civil service in the 2009 SIGMA report. However, the good achievements of the Baltic states do not mean that their civil-service systems have become consolidated. Although until recently, Lithuania's civil-service reforms were marked by relative continuity and consistency, a new coalition government started politicising the higher civil service. This illustrates the vulnerability of the civil-service professionalisation even in more advanced states of CEE.

All the countries examined established some type of civil-service system; only the characteristics and timing are different, with Hungary being the first country to adopt a modern civil-service law in 1992. However, the SIGMA report shows that early achievements have not been sustained: from being the regional leader, Hunga-

ry turned into an average performer. It was recognised in the SIGMA report that the Hungarian case represents the greatest contradiction in the region (Meyer-Sahling 2009, 73). The Hungarian case revealed that in the absence of classical bureaucratic characteristics and in the presence of high politicisation, the willingness to experiment with modern NPM techniques has not produced the desired outcomes in the civil-service area.

Outside the new EU member states, progress in the civil service area has been even more limited. In the absence of the effective conditionality of EU membership, the civil-service reforms of the former Soviet republics (except the Baltic states) have been driven by the international donors and domestic political forces. Despite some efforts to modernise the civil-service systems, the professionalism of the public administration remains rather low and with frequent incidents of administrative corruption (with these countries at the bottom of the 2008 corruption-perception index). A weak democratic state, stemming from the ability of the post-communist political-administrative regime to retain its power, was found to be one of the main reasons for failed public-management reforms in this region.

Performance and quality management

Many CEE states introduced certain performance-management schemes. In the World Bank's report, together with Latvia, Lithuania has received the highest rating of performance management in Central and Eastern Europe (around level three), with "a planned, implemented and reviewed (in both cases) performance management system in place, even if not yet fully functional across all elements of the system" (World Bank 2006, 20). Other states of CEE (Hungary, the Czech Republic, Slovenia, Estonia and Poland) were not rated higher than level 1: although their performance-based approaches have been planned, they remained unimplemented. The design of certain political initiatives and their implementation (often influenced by the conditions of financial crises) largely explains cross-national variations in the performance-management area.

However, no CEE state has developed a fully-fledged performance-management approach comparable to the most advanced systems of performance management found in the US, the UK, Canada or Australia (Bouckaert and Halligan 2008). Also, the development of a modern performance-management systems does not automatically imply an improvement in the efficiency of public spending or the quality of public services. The in-depth assessment of the Lithuanian performance-management system found that the quality of performance information is poor and its use in the decision-making process is limited apart from external reporting (Nakrošis 2008, 92). According to the World Bank, (based on the assessment of the Slovak Republic, Romania and the Kyrgyz Republic) "instituting performance management in environments where the foundations of public administration have

not been established may be inconsequential, at best, or risky at worst in transition countries” (World Bank 2003, ix). A merit-based civil-service system and a well-functioning system of administrative procedures are the most important elements of these foundations.

Quality initiatives are frequent, but usually decentralised in the CEE region. Many public bodies decided to implement ISO or other quality-management systems (such as standards for public services, one-stop shops, citizens’ charters, an independent ombudsman, Common Assessment Framework) to improve the quality of internal processes and outputs. Also, CEE states vary significantly in terms of the scope of certain quality-management initiatives (see Table 6 below with regard to the number of registered users of the CAF).

Table 6

The number of registered users of the Common Assessment Framework
in the new EU member states

Country	Number of registered users of the CAF
Bulgaria	5
Czech Republic	58
Estonia	18
Hungary	118
Latvia	5
Lithuania	9
Poland	53
Romania	33
Slovakia	18
Slovenia	50

Source: www.eipa.nl

However, as some quality comparative activities indicate (e.g. the European Public Service Award), CEE countries still need to improve significantly and cope with the more intensive demand from citizens for quality public services, which will certainly increase with time.

Public trust in governments and macro-economic problems in CEE states

Public trust in government was one of the most important reform objectives in Western Europe (Bouckaert 2009). According to the recent Eurobarometer report, public trust in government in CEE states is below the EU 27 average in all states of Eastern European tradition, except Slovakia (where it is close to the EU 27 aver-

age). It is interesting that trust in government is well above the EU 27 average in all Nordic states, including Estonia (62 per cent compared to the average of 34 per cent), which was assigned to the Nordic tradition in some public-administration literature. The fact that the public has a low level of trust in CEE governments shows that public management reforms have not generated positive effects. Nevertheless, public trust in government still remains a challenge in Western European states, although they started from a higher baseline compared with CEE states.

Another driver of public management reforms in Western Europe was associated with macro-economic problems (large government, significant budgetary deficits, and perceived lack of public-sector performance). All CEE states have small governments as measured by government expenditure as a percentage of their GDP: all countries (except for Hungary) are below the EU 27 (according to the 2006 EUROSTAT data), and their social expenditure (in particular in the Baltic states) is rather low. It may seem that the rationale of NPM to downsize the government is less apparent in CEE compared to Western Europe. However, in some CEE states, performance-management systems (in Lithuania and Latvia) emerged from the impact of fiscal and economic crises, focusing the attention of policy-makers on the issues of efficient public spending (Verheijen and Dobrolyubova 2007, 214). Also, in the environment of a financial crisis, it became necessary to cut public spending in some CEE states (in particular Latvia, Romania, Hungary, Ukraine and other CEE states, which asked for emergency lending from the IMF). Therefore, the financial crisis presents a window of opportunity for public-management reforms in CEE states.

Conclusions and discussion

Public-management reforms in CEE countries have achieved a mix of successes and failures. However, the reform process proved to be more difficult and slower than expected at the outset of political and economic transition as well as EU accession. It was previously concluded that public-management reforms in Russia and other former Soviet Union states are constrained by the difficulties of transferring new-public-management ideas from the Western socio-economic context to the specific post-communist context (Peters 2008, 1).

It is worth discussing the political and governmental context of these reforms in CEE states. Although there is no common model of public-management reforms in CEE states, it is a similar reform context that was shared by these countries. This context matters because of the political nature of public-management reforms initiated by the governments in office.

It was argued in this article that the reform process in many CEE countries was dominated by short-term political interests, producing ups and downs in the government policy. This is in contrast to Western Europe, where the zig-zag or

action-reaction trajectories of public-management reforms were based on competing administrative doctrines (NPM followed by renewed hierarchy-type, market-type and network-type mechanisms) (Bouckaert 2009, 20).

Obviously, especially for countries that wanted to join, and ultimately joined the EU, there was a clear “to do” list, and a series of “acquis” to realise. There was economic and political pressure to prove progress, to speed up change, perhaps to take short cuts or to jump to “final” positions. Reforming the public sector sometimes was indispensable and impossible at the same time, and therefore highly problematic. Importing NPM techniques that needed to improve Weberian bureaucracies when these were not present, and simultaneously building classical checks and balances was a tough reality. Reforming in such a case sometimes was organising dysfunctions.

The political zig-zag of the reform process in CEE states could be explained by the status of their political systems and their governments. The post-communist political systems (especially in the former Soviet Union bar the Baltic states) have not been consolidated in the Western sense of democracy and market economy being “the only game in town” (Linz and Stepan 1996). It is not surprising that public administration is often abused by the ruling political and business elite as a means of obtaining rents from the population or the business community.

The new EU member states with more consolidated political systems often suffer from weak coalition governments. This is the source of government instability: it was estimated that the average office length of governments in Lithuania and Latvia was only about 16 months in the period of 1990–2008. The lack of government stability puts limits to the possibility of designing and implementing comprehensive reform strategies from the government centre (as is the case in most Western European countries).

If public-management reforms in the new EU member states were heavily influenced by the prospect of EU membership, it is no longer true in the post-accession period. Following their accession to the EU, the ex-ante control of the European Commission was replaced with much weaker instruments of ex-post control in the case of non-implementation or delayed implementation. It is possible that these factors reduced the willingness of the new EU member states to engage in coherent public-management reforms at the domestic level.

Overall, in the absence of external reform drivers, public-management reforms in the CEE region are likely to depend on the lengthy transformation of their political systems. However, this is conditional upon the politicians of the post-communist countries becoming more able and willing to reform the very foundations of their political systems and overcome their short-term political interests.

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Papers



Law, Social Norms and Welfare as Means of Public Administration: Case Study of Mahalla Institutions in Uzbekistan

Rustamjon Urinboyev¹

Abstract

Despite numerous challenges, since its independence, Uzbekistan, with the exception of the May 2005 Andijan events, has enjoyed extraordinary political stability and not recorded any considerable cases of interethnic or interfaith conflict, regime change or civil war, whereas neighboring Kyrgyzstan, labeled an “island of democracy” by the Western world, has experienced numerous conflicts and chaos, ranging from “color revolutions” to ethnic conflict. However, for understanding Uzbekistan’s ability to cope with internal and external challenges, little recourse is made to the post-independence discourse on public administration known as “mahalla reforms”. In spite of the significant existing body of literature on the mahalla, there has been little systematic scholarly investigation of the role of mahalla in maintaining political stability and security in Uzbekistan. Previous studies did not provide an account of how the law, social norms and welfare come to interplay in the mahalla system and how this influences the public administration developments in Uzbekistan. This paper begins to redress this lacuna by analyzing public-administration reforms in post-independence Uzbekistan, namely mahalla reforms, with an effort to show how political and social stability is established through mahalla, and to what extent those reforms have affected the position of individuals vis-à-vis the public-administration system. In undertaking this task, the paper employs three theoretical concepts: the theory of norms, the welfare-pentagon model and the theory of social control. In this paper, I argue that public-administration reforms since 1991 have transformed mahalla into a comprehensive system of social control; and therefore, mahalla can be places of democratic involvement or sites of authoritarianism in Uzbekistan.

Keywords: mahalla; public administration; norms; social control; welfare.

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1. Introduction

It was believed that the introduction of the Western-type political institutions of democratic government and market-oriented economy would promote democratic transformations and contribute to the formation of stable nation-states in post-Soviet Central Asia (Gleason 2001). As a newly-independent state with democracy claims, Uzbekistan has proclaimed the creation of a secular democratic society based on the ideals of democracy, free market, social justice and universal human rights² with an effort to capture the international community's attention and attract foreign direct investment. However, like other post-Soviet states, during the early years of independence, Uzbekistan faced the necessity of re-designing its economic and social policies. While struggling to develop market economy, Uzbekistan simultaneously strived to retain a Soviet-type generous social-welfare system, given the unstable political situation in Central Asia during the 1990s.³ Uzbekistan has emphasized "stability at any cost" as its main aim in this period, rather than asserting economic growth (Spechler 2000, 295). Given the fact that the former Soviet social-welfare system did provide extensive social-welfare benefits and health-care facilities, the general population of Uzbekistan likely expected the same treatment and facilities from the new Uzbek authorities. Likewise, the main concern of Uzbek authorities in the early years of independence was the prevention of dramatic output loss, strong social protection and modernization of economy through a strengthening of the industrial sector (Ruziev, Ghosh and Dow 2007). The newly-introduced Uzbek economic development model, which was based on a gradual reform strategy, clearly illustrated this tendency.⁴ In this respect, welfare strategies of the 1990s were, in every sense, a political stability and security project retooled by Uzbek policy-makers to "buy off" the sympathy and loyalty of the general population towards the state; social policy was an effective and legitimate device to extend the coercive power of the state nationwide.

Despite its relatively better performance in the 1990s, Uzbekistan is nowadays facing complex political, economic and social challenges. The level of political liberalizations and economic reform was not sufficient to promote the social welfare of the population, as evidenced by a sharp increase of economic inequality and unemployment in the society. The growing number of Uzbek labor migrants in Russia and Kazakhstan provides clear evidence of the weakening nature of economic and

2 See *The Constitution of the Republic of Uzbekistan*. arts. 7, 13, 14, 18.

3 The political situation was largely unstable in Central Asia in the 1990s, e.g. ethnic clashes between the Uzbeks and the Meskhetian Turks in 1989, the Osh riots (ethnic conflict between Uzbeks and Kyrgyzs) in 1990, civil war in neighboring Tajikistan in 1992–1997.

4 In his book *Uzbekistan on the Way of Deepening Economic Reforms*, Islam Karimov, President of Uzbekistan, describes five fundamental principles that form the basis of the Uzbek development model: (i) the precedence of economy over politics; (ii) the leading role of the state during the transition period; (iii) the promotion of the rule of law; (iv) the provision of strong social protection; (v) the gradual and evolutionary transition to a market-based economy.

social policies. The preservation of a Soviet-type generous social-welfare system appeared to be a fiscally unaffordable task, since the tax revenues were very little compared to the scope of the welfare programs promised by the government. The living standard of ordinary people gradually fell, and the number of people applying for social-welfare benefits grew accordingly. Resource-strapped Uzbekistan had to move away from the Soviet-type generous social policy to a means-tested system. This issue had far-reaching repercussions for the preservation of security and stability in the transition period.

In light of growing social discontent, the provision of security has become a buzzword on the Uzbek policy agenda. The presence of wide police and security forces throughout the country clearly illustrates this tendency. As described by Clarke (1999), Uzbekistan has been trying to maintain a secular state in one of the most religious Muslim countries of the former Soviet Union, while facing the direct threat of political Islam in Afghanistan and Iran. Radical Islam has been growing due to the lack of political liberalization and accumulated economic and social problems. Moreover, the geopolitical positioning of Uzbekistan as the center of the Eurasian “Heartland”⁵ and its vast energy resources have attracted international attention and intensified the influence of external powers, such as Russia, the United States, China, Iran and Turkey. All these factors can promote instability and pose immense security threats to Uzbekistan. The existence of a wide variety of internal sources of instability might contribute to the emergence of conflicts in the future. In addition, the growing influence of foreign states and non-state actors might have a negative impact on the security and stability in the country, given the fact that external actors pursue their own agendas and interests. At the same time, local groups and interests might be prone to taking an advantage from the opportunities provided by the presence of external actors. Deteriorating social conditions and a decline in living standards might create an atmosphere of rivalry between different ethnic and religious groups and increase the tensions between them.

Under these circumstances, Uzbekistan should have already fallen into the trap of revolutions, civil war or ethnic conflicts from below.⁶ Domestic and external forces are pulling Uzbekistan into various directions. We can observe the struggle between secular and religious forces on the one hand and democratic and non-democratic forces on the other. The interplay between these forces might have possibly produced three scenarios in Uzbekistan. The first scenario is building an Islamic state based on Shariya law, as the developments since the independence

5 British geographer and politician Sir Halford John Mackinder, one of the founders of geopolitics as a science, called Central Asia the “Heartland” of the world. According to Mackinder, the interests of practically all major world powers collide in Central Asia. He described Central Asia as the political center of the world and predicted whoever controlled it would wield enormous power.

6 For studies of regime change, see, for example, Perry Anderson. 1974. *Lineages of the Absolutist State*. London: Verso; Alexander Gerschenkron. 1962. *Economic Backwardness in Historical Perspective*. Cambridge: Harvard University Press; and Barrington Moore Jr. 1966. *Social Origins of Dictatorships and Democracy*. Boston: Beacon.

period have shown a growing radicalization of Islam within the society. The second possible scenario is strengthening democracy through building close ties with the Western world. The third scenario is strengthening authoritarianism, which means closer relations with Russia and China.

So far, none of the aforementioned scenarios have entirely occurred in Uzbekistan. Despite numerous challenges, since its independence, Uzbekistan, with the exception of the May 2005 Andijan events, has enjoyed extraordinary political stability and not recorded any considerable cases of interethnic or interfaith conflict, regime change or civil war, whereas neighboring Kyrgyzstan, labeled an “island of democracy” by the Western world, has experienced numerous conflicts and chaos, ranging from “color revolutions” to ethnic conflict. This issue triggered bitter debates within academic and policy communities. Ilkhamov (2007) claims that the Uzbek regime has succeeded in neutralizing internal and external challenges due to its ability to benefit from formal and informal, modern and traditional institutions and practices, the mixture of which constitutes a neopatrimonial authoritarianism.⁷ The findings of Melvin (2000) and Fane (1996) maintain that the Uzbek regime has succeeded in establishing political stability through authoritarian control, policies of repression and stifling the economic reform. Conversely, Spechler (2000, 295) asserts that Uzbek authorities guaranteed political stability through subsidizing employment, controlling prices on essential goods and services, privatizing the largest state-owned enterprises only gradually and partially and pursuing self-sufficiency in energy and food supplies. Erdem (2006) explains it by referring to the level of political salience of ethnic groups, namely Tajik minorities; she maintains that ethnicity does not have political significance in Uzbekistan.

There are elements of truth in each of the above-mentioned arguments. However, for understanding Uzbekistan’s ability to cope with internal and external challenges, little recourse is made to the post-independence discourse on public administration known as “mahalla reforms”.⁸ Since mahalla enjoy local legitimacy and informal social safety nets, Uzbek authorities looked at the mahalla as a means for political stability and security. Due to the complexity of internal and external challenges, Uzbekistan deployed traditional mahalla institutions to meet political and social instabilities. In this regard, there has been little systematic scholarly investigation in the role of mahalla in maintaining political stability and security in Uz-

7 Ilkhamov explains Uzbekistan’s neopatrimonial regime as a combination of the following mutually supportive factors: (1) hyper-centralization of the administrative system and exceptional control of power assumed by the President; (2) selective adoption of the market economy and the legal administrative system, enabling the ruling elites to legalize resource and capital acquisition; (3) selective use of the legal-administrative system to neutralize open and hidden opposition to the present regime.

8 Mahalla is a traditional community-based organization in Uzbekistan. It is an Arabic word meaning “local community” and alludes to a group of people residing in a specific territory. For simplicity, I use the word “mahalla” to denote both the singular and plural meanings.

bekistan.⁹ Previous studies have largely illustrated mahalla as instruments of abuse (coercion) and authoritarian control (Abramson 2000a; Human Rights Watch 2003; Kamp 2004; Kassymbekova 2003; Louw 2007; Noori 2006) or as social safety nets (Coudouel and Marnie 1999; Micklewright and Marnie 2005; Sievers 2002). However, those studies did not provide an account of how the law, social norms and welfare come to interplay in the mahalla system and how this influences the public-administration developments in Uzbekistan. This paper begins to redress this lacuna by analyzing public-administration reforms in post-independence Uzbekistan, namely mahalla reforms, with an effort to show how political and social stability is established through mahalla, and to what extent those reforms have affected the position of individuals vis-à-vis the public-administration system. In undertaking this task, the paper employs three theoretical concepts: the theory of norms, the welfare-pentagon model and the theory of social control. In this paper, I argue that public-administration reforms since 1991 have transformed mahalla into a comprehensive system of social control; and therefore, mahalla can be places of democratic involvement or sites of authoritarianism in Uzbekistan.

2. Public-administration reforms in the post-independence period: Mahalla reforms

Until the introduction of the Mahalla Law, mahalla mainly reinforced cooperative relations among the residents through social norms (hereinafter 'mahalla norms'). The introduction of the Mahalla Law led to the fusion of mahalla (social) norms with the law, since most informal functions of the mahalla had become formalized. As a result, mahalla, somewhat traditional informal institutions, have become partly formalized (through legislative codification and executive incorporation), and now partly operate on behalf of the state and partly community-driven as a local-level provider of social welfare and, increasingly, as the (state) mechanism of social control. Today Uzbek authorities claim that the mahalla reforms (the elevation of mahalla's social norms to law) have greatly facilitated citizens' self-government activities and provided mahalla with wider opportunities and autonomy. However, many Western scholars (For example Kamp 2004; Koroteyeva and Makarova 1998; Noori 2006; Sievers 2002) and human rights groups (Human Rights Watch 2003) maintain that mahalla reforms have a negative impact on the democratic developments in Uzbekistan. The central critique is based on the concern that mahalla, as a distributor of the state's social-welfare benefits, is the first place or instance where people encounter corrupted system in Uzbekistan (Human Rights Watch 2003; Kamp 2004; Koroteyeva and Makarova 1998; Micklewright and Marnie 2005). An-

⁹ Although Eric W. Sievers does not explicitly mention the impact of mahalla reforms on political stability in Uzbekistan, his study shows that mahalla, as a social-security network, ease the economic problems of their residents in the absence of a universal welfare state in post-independence Uzbekistan. See Sievers (2002), 91–158.

other critique is centered on the argument that the state's legal interventions have transformed mahalla into extensions of authoritarian control (Human Rights Watch 2003; Noori 2006). Apparently, the case of mahalla appears to be an interesting case for studying the effects of the transition from "order without law" (the term is from Ellickson 1991) to "law from order" (the term is from Cooter 1997). In this regard, the next section of the paper will be devoted to studying the effects of legal interventions on mahalla with an effort to understand how the state and mahalla interact with each other.

2.1 Legal intervention in mahalla

Constrained by scarce financial resources and increasing inequality levels, Uzbekistan tried to reform its public-administration system with the aim of creating favorable conditions for stable nation-building processes in the transition period. In the same vein, the Uzbek government has revised its legal system and institutions in an effort to expand its reach both nationally and locally. As David Abramson notes, "beginning in the late 1980s and intensifying in the 1990s, the Uzbek mahalla became the centerpiece of a state-sponsored campaign to transfer responsibilities for welfare and other social services onto local shoulders" (Abramson 2000b. *Constructing Corruption: Foreign Aid, Bureaucratization, and Uzbek Social Networks* as quoted in Sievers 2002, 144). For a brief period during the first stages of the nation-building process, there was a widespread assumption that Uzbekistan would be able to build democratic institutions and market-based economy by revitalizing its pre-Soviet historical institutions and popular traditions. Accordingly, pre-Soviet mahalla institutions presented themselves as feasible solutions for promoting economic efficiency, social order and political stability. Thus, mahalla have become the focal point of all state and non-state functions (Sievers 2002).

Although the deployment of mahalla structures for politico-administrative purposes dates back to the Soviet years (Human Rights Watch 2003; Kassymbekova 2003; Masaru 2006; Noori 2006), as I demonstrate later, post-independence public-administration reforms, namely mahalla reforms, have significantly differed from the technologies that were originally deployed by the Soviet authorities. While the Soviet legislation vaguely defined the legal status and functions of mahalla as local village councils,¹⁰ post-independence legislation largely strengthened the legal status of mahalla and defined them as citizens' self-government institution. Mahalla reforms have been implemented under the discourse of democracy and decentralization in the post-independence period. Obviously, the main rhetoric behind these reforms was to abandon the traditional communistic public-administration

10 According to Neema Noori (2006), the first legislation on the mahalla came in the 1920s; the main aim of this legislation was to use mahalla for the modernization of Uzbek social life. The second Soviet legislation on mahalla in 1932 was concerned with the devolving state-service delivery to mahalla; mahalla were tasked to support local government functions. However, both legislations did not clearly specify the status of mahalla in the public-administration system.

in which the public-administration system was centrally-planned. As citizen's local self-government institution, mahalla have been tasked to target social-welfare benefits, facilitate public administration and preserve political and social stability.

Today the term "mahalla" is commonly used in Uzbekistan to describe a neighborhood or local community which is mostly characterized by common traditions, language, religion and ethnic background. Everyone in Uzbekistan technically belongs to one mahalla (Sievers 2002). There are about 12,000 mahalla in Uzbekistan, and each mahalla might contain 150 to 1,500 households. On average, approximately 400 households reside in one mahalla (Micklewright and Marnie 2005, 431). The Mahalla Foundation, established in September 1992¹¹, coordinates the activities of all mahalla throughout Uzbekistan. Mahalla, in both the historical and modern perspectives, represents a "clearly defined socio-demographic, cultural and spiritual entity, as well as an administrative-territorial one, in which people are united by traditions, customs and human, business and legal relationships" (Bektemirov and Rahimov 2001, 477). Mahalla bonds people based on the principle of common residence in a certain neighborhood with an established border.¹² As Sievers (2002) noted, the most universal and remarkable aspect of mahalla is that no member of the mahalla is, for class, profession or religious reasons, excluded from community events and interactions. Mahalla is valued by most people as a social safety net embodying moral ideas of solidarity and mutual help (Louw 2007). Something analogous to mahalla might exist in other Eastern cultures, but what makes Uzbek mahalla unique is that it has received the legal status of a citizen's local self-government institute. As the primary self-government unit, mahalla exist throughout Uzbekistan today based on the principle of decentralization (Bektemirov and Rahimov 2001).

The Law on Mahalla (1993, 1999) defines mahalla as an "an independent activity of citizens, guaranteed by the Constitution and the Laws of the Republic of Uzbekistan, for the purpose of resolving issues of local importance according to their own interests and historical peculiarities, as well as to national traditions, spiritual values and local customs."¹³ Apparently, this definition implies that mahalla are non-governmental organizations, and they are not part of the system of public administration. Since mahalla is a new phenomenon to many Western scholars, the legal status of mahalla has been the object of intense discussions. The Mahalla Law defines mahalla as a non-governmental organization, but, at the same time, the Mahalla Law delegates some rights and obligations to mahalla which are reminiscent of

11 Presidential Decree of 12 September 1992 on the Creation of the Mahalla Foundation, Sharq So'zi, 13 September 1992.

12 See *Local Government Situation and Development Prospects in the Countries of Central Asia*. OSI/LGI Report (2002). Budapest.

13 Law on Mahalla, 1999, art.1.

the functions of governmental agencies.¹⁴ Uzbek authorities proclaimed mahalla to be civil-society institutions, whereas the Western scholars and human-rights groups regard mahalla as extensions of authoritarian control at the local level (Human Rights Watch 2003; Kamp 2004; Noori 2006). Hence the conventional definitions of civil society that have a Western origin are largely irrelevant and inapplicable in the context of Uzbekistan. While Western-oriented values and beliefs on civil society promote individual opportunities and freedoms, the local understanding of civil society in Uzbekistan is largely based on the notion of collectivism and reciprocal relationships.¹⁵ In this regard, mahalla represents the local understanding of civil society in Uzbekistan or, as Abramson (2001) put it, “a civil society based on collective identities and the reciprocal relationships necessary to get things done.” Mahalla also have informal information channels. In the absence of genuine and free mass media in Uzbekistan, mahalla, though informal, represent alternative sources of information. If some event happens that has nationwide importance, residents first get information from their informal mahalla channels, not from the formal mass media channels.

Mahalla are currently run by both formal (elected according to law) and informal leaders (informally chosen by residents). Prior to the legal intervention, mahalla were administered basically by three informal leaders, *oqsoqol* (whitebeard, informal leader of mahalla),¹⁶ *boylar* (wealthy residents in the community),¹⁷ and *dasturhonchi* (a woman leader). These informal leaders were basically responsible

14 Mahalla perform a wide range of state functions which were mainly implemented by specialized state agencies during the Soviet period. According to the Mahalla Law (1999), mahalla citizens' assemblies nominate the candidates for national and local elections; mahalla can give recommendations to residents on the organization of wedding ceremonies and other kinds of celebrations; mahalla can collect voluntary contributions from residents for the purpose of enhancing the well-being of mahalla; mahalla can demand of enterprises on its territory to provide an environmental report; mahalla facilitates the implementation of public policies; mahalla organizes the logistics of local visits of deputies of the parliament, regional, district and city councils; mahalla must report any illegal religious organization and assist state law-enforcement bodies; mahalla also facilitate the tax-collection process and the implementation of state-funded programs targeted to vulnerable issues, such as elderly care.

15 The mahalla has always been a place where rich and poor, ordinary people and functionaries, Uzbeks and other ethnic minorities, people with different religious background come together and discuss issues that are of mahalla significance.

16 Oqsoqol is usually an older male in a mahalla chosen by consensus from his generational group for his personal reputation, intelligence, honesty, personal influence and leadership skills. Although the Mahalla Law uses the terms “oqsoqol” and “rais” interchangeably, I prefer to use the term “oqsoqol” to refer to an informal leader of mahalla, whereas the term “rais” refers to formal leaders of mahalla which are elected according to the Mahalla Law.

17 In both historical and modern contexts, the wealthy have more prestige and authority within the community, due to their donations to most of the community projects, such as irrigation, asphalt-ing of roads, building of mosques, community assistance to poor and vulnerable residents, etc. In comparison to others, wealthy residents usually contribute more to mahalla projects. Given this factor, wealthy residents have an equally influential role in the decision-making process in mahalla.

for organizing wedding, circumcision and funeral ceremonies, they also mediated disputes between residents and organized *hashar*.¹⁸ However, after the adoption of the Mahalla Law in 1993 (and the subsequent revision of the Mahalla Law in 1999), the number of mahalla leadership has doubled. Under the Mahalla Law (1999), a chairman, *rais*, who is a salaried state employee, leads the mahalla through citizens' assembly/council¹⁹ together with a formal female leader of the mahalla women's committee. The citizens' assembly (*fuqarolar yigini*) is the supreme body of mahalla, which elects a chairman (*rais*), an executive secretary, an advisor and chairmen of the auditing and administrative committees of mahalla. Under the Constitution, the chairman (*rais*) of mahalla is elected for a term of 2.5 years.²⁰ Residents over the age of eighteen are entitled to attend the citizens' assembly. Citizens exercise their right to self-governance by participating in the activities of citizens' assemblies. The citizens' assembly has the power to represent the interests of residents and make decisions on behalf of mahalla, which are effective on the respective territory.²¹ In turn, the citizens' assembly approves the members of the assembly council (*kengash*), which includes the chairman of the citizens' assembly, various advisors, chairmen of assembly commissions and the executive secretary. The citizens' assembly council implements the decisions of the citizens' assembly and carries out daily self-government activities of mahalla between sessions.²²

The legal intervention has also empowered mahalla to implement the state's social-welfare legislation. In this sense, mahalla might look like parastatal organizations from the Western perspective, given the fact that they implement the state's social-welfare legislation. Social policy-makers in Uzbekistan found mahalla to be the most effective and credible mechanism to implement welfare programs, while the implementation of welfare legislation is mainly placed in the hands of specialized state agencies in the Western countries. For example, municipal social-welfare committees are responsible for the implementation of social-welfare programs in Sweden. Seemingly, social policy-makers in Uzbekistan assumed that mahalla-based targeting of welfare benefits (means testing) is fair and that the people who are in charge of means testing actually know what they are doing and care about getting the benefits to the people who need them. Although guidelines (1994; 2002) of the Ministry of Labour and Social Protection provide detailed instructions considering the indicators of living standards, the guidelines do not specify the circumstances

18 Hashar is a community project, such as the cleaning of streets, the asphaltting of roads, the construction of dwellings or mosques, the organization of wedding, funeral and circumcision feasts. During hashar, residents are expected to contribute to community projects with labor or monetary rewards.

19 Although the Mahalla Law stipulates that the mahalla rais is chosen by elections, this rule is rarely fulfilled in practice. In most cases, the local governor appoints the rais in an unstandardized way.

20 Article 105, *supra* note 7, Constitution of the Republic of Uzbekistan.

21 Articles 9, 10, Mahalla Law.

22 Article 10, Mahalla Law.

in which the benefit should be awarded. In this regard, based on their local knowledge and standards, mahalla target social assistance and child benefits to the most needy families in the community. The mahalla council (*kengash*) can make a decision without much regard for objective criteria about which residents are entitled to receive benefits (Sievers 2002, 142). Therefore, mahalla have much discretionary power over whom to grant cases, and welfare benefit can be awarded to any household which “has sound reasons for receiving it.” The final decision of the mahalla remains discretionary, and there is no appeal mechanism available (Micklewright and Marnie 2005).

2.2 The effects of legal intervention

American sociologist William Graham Sumner (1906) maintained that “the law must, regardless of the stage of societal development, reflect the mores of society in order to be an effective regulator of human behavior. As an instrument of social change, law can fulfill its proper role only if it conforms to the mores of a society.” John Locke (1961) also argued in his book *The Second Treatise of Civil Government* that the state enforcement of social norms is more certain and secure than private enforcement, because a written law provides a canonical formulation of the underlying obligation. By passing the Mahalla Law, the government assumed that this law will make mahalla an even more efficient and legitimate institution in providing public goods to its residents. At the same time, the government tried to integrate mahalla into the public-administration system with the aim of promoting social order in an ethnically diverse society. Consequently, the official rhetoric behind the mahalla reforms was to promote citizens’ involvement in policy-making through local governments. Following the reforms, mahalla have gained the legal status of a citizens’ self-government institution. Mahalla has been announced as a national democratic institute which can facilitate democratic transformations in Uzbekistan. The architects of the Mahalla Law implicitly assumed that the legal intervention does not affect local autonomy and traditional functions of mahalla (Sievers 2002). However, as the Human Rights Watch Report (2003) demonstrates, legal intervention has considerably reduced the autonomy of mahalla. Sievers (2002) argues that excessive legal intervention might lead to an erosion of the traditional functions of mahalla, such as social insurance and dispute resolution.

Social policy-makers in Uzbekistan trumpet mahalla as an effective institution to discern those who are most in need of social-welfare benefits. Micklewright and Marnie (2005) observed that mahalla, despite an absence of a formal set of rules, delivers benefits much more frequently to the less well-off than to the better-off. On the other hand, as the Human Rights Watch Report (2003) indicates, sometimes mahalla committees use their discretionary power to pressure independent Muslims and women to change their behavior or to give up social assistance. In this context, Kamp (2004) claims that many mahalla committees probably do not have much incentive to be fair or accurate in means testing, but rather would have the

incentive to prove that their relatives need benefits more than other people do.²³ Koroteyeva and Makarova (1998) also argue that mahalla-based welfare distribution elicits irritating and frequent suspicions of corruption.

The adoption of the Mahalla Law has drastically increased the responsibilities of mahalla. Most of mahalla's informal functions have become a formal responsibility of mahalla. Now the violation of mahalla decisions is punishable by law. The law created parallel power structures within mahalla. In fact, the activities of mahalla are heavily influenced by the district and city administrative government authorities (*hokimiyat*), and in turn, they (*hokimiyats*) are directly accountable to the central government (Human Rights Watch 2003, 7). Sievers (2002, 119) also claims that despite the existence of elections, the district/city government is the actual power broker. Although the chairman and members of the mahalla are elected by mahalla residents, as the Human Rights Watch Report shows, the head of the administrative government (*hokim*) either nominates the candidates for elections or the election results must be approved by the administrative government authorities. In this regard, the current administrative structure of mahalla is likely based on the interplay between formal and informal leadership. Informal leaders of mahalla assume the informal leadership role in tandem with the formal mahalla leadership. This parallel power structure can be regarded as a form of mahalla resistance to the state arrogation (Sievers 2002, 121).

In this context, a number of studies demonstrate that it is becoming an increasingly difficult task to separate social norms of mahalla from its legal responsibilities, or mahalla from the state (Human Rights Watch 2003; Kamp 2004; Kassymbekova 2003; Noori 2006; Sievers 2002). Mahalla, in spite of the legal intervention, are still largely informal institutions which embody the features of self-autonomy and local governance. The norm classification system by Hyden and Svensson (2008) is a useful tool to understand the current formal and informal structures of mahalla (See Table 1). Through an understanding of the essential and accidental attributes of norms, it is possible to describe and categorize various norms operating in mahalla. According to Hyden and Svensson (2008), norms have three essential attributes: norms are behavioral instructions/imperatives (1), they are socially reproduced (2), and they represent the individual's understanding of surrounding expectations regarding their own behavior (3). Accidental attributes of norms include aspects like the presence of sanctions, the origin of the norm, the context or arena in which the norm is socially reproduced, if the norm is system-oriented or value-oriented, the internal functions and purposes of the norm. Finding the essences will be crucial when defining the norms whereas understanding the accidents will help to classify norms.

23 Eric Posner (1996, 178) claims that the delegation of power to an organization raises two kinds of problems for the state: first, the group's interests do not precisely reflect the state's; second, the group helps only its members. In this regard, it is difficult to measure the legal certainty and predictability when the application of the law is combined with decentralized decision-making. Micklewright and Marnie (2005) observed that due to a lack of official data, it is very hard to estimate whether or not mahalla-based targeting can facilitate an efficient and equitable implementation of social-welfare programs.

Table 1
Operationalization of the norm-classification system in relation to the mahalla institution

NORM	Essential Attributes			Accidental Attributes				
TYPE	Imperative	Socially reproduced	Surrounding expectations	Sanctions	Origins	Arena	System orientation	Internal functions and purposes
Norm Type Legal	Decisions of mahalla are legally-binding for all residents.	Decisions of mahalla uniformly apply to all residents and in the entire territory of mahalla.	All residents of mahalla should abide by the decisions of mahalla.	Legal punishment	Parliament	Public authorities	Legal system	To facilitate citizens' self-government activities; to promote local development
Norm Type Social	Mahalla norms are binding for all residents.	Mahalla norms are uniformly applicable to all residents and in the entire territory of mahalla.	All residents of mahalla should conform to mahalla norms.	Gossip, exclusion, or even ostracism (non-legal punishment)	Communications, traditions, religion, folklore, moral values	Mahalla	Social system	To maintain solidarity, traditions, values and morals
Norm Type Economic	Mahalla must accurately target state's social welfare benefits to the most needy residents using their local knowledge and standards.	Decision-making over social welfare cases should be objective, just and reasonable.	Only the most needy and vulnerable residents should apply and get social-welfare benefits.	Inefficient and inequitable use of state resources and more poor people	Ministry of Labour and Social Protection	Public authorities	Formal economic system	To reduce poverty and preserve social order and stability
	Residents must contribute to mahalla either with work or cash for community activities and events.	Work and cash contribution rules apply to all residents and to all community activities and events.	All residents must help each other during community activities and events.	Exclusion from future community activities and events (non-legal punishment)	Communications, traditions, religion, folklore, moral values	Mahalla	Informal economic system	To stretch the livelihood risks within the community and to maximize the utility of residents

Norm Type	Bureaucratic	The elected chairman and members of the mahalla committee administer mahalla affairs through citizens' assembly	The chairman and members of mahalla should be elected by the residents of mahalla.	The chairman and members of mahalla should represent the rights and interests of residents before the government.	District or city administrative authorities can dismiss the chairman and members of mahalla.	Parliament	Public authorities	Public administration system	To promote local autonomy and decision-making
		The oqsoqol of mahalla and his assistants administer mahalla affairs through informal meetings of residents.	The oqsoqol of mahalla and his assistants should be informally elected by the respected elder residents for their personal reputation, wisdom, honesty, and leadership skills.	The oqsoqol of mahalla and his assistants should honestly and wisely lead the mahalla affairs, such as weddings, funerals, hashar, etc.	Residents of mahalla can dismiss the oqsoqol of mahalla and his assistants.	Communications, interactions, traditions, religion, folklore, moral values	Mahalla	Informal administration system	To efficiently and equitably organize daily life, community activities and events within mahalla

Source: Hyden and Svensson (2008), Norm classification system

3. Mahalla as the Welfare Pentagon

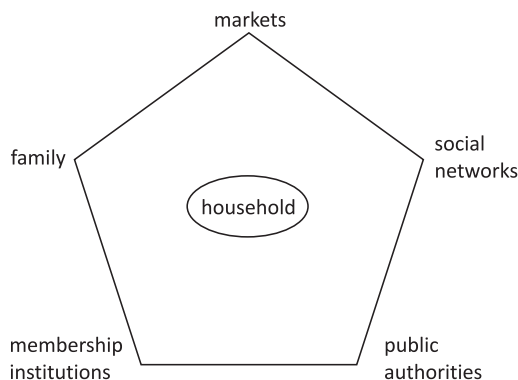
Since their inception, mahalla have been very successful in maximizing the utility of their residents. The role of mahalla has considerably grown after the collapse of the Soviet Union, since newly-independent Uzbekistan could not afford a Soviet-type welfare system. As Sievers (2002, 103) noted, “the economic significance of mahalla has shifted from being a vehicle through which to amass additional or disposable wealth to a vehicle for basic survival.” As a result of these dramatic changes, mahalla quickly assumed the functions of the welfare state and adapted to new economic conditions, thereby developing their survival mechanisms. Similarly, Seiple (2005, 251) describes mahalla as the place where group members look out for each other, collectively parenting their children, connecting friends and family to jobs, distributing funds to those in need and submitting to the judgment of elders. In this regard, mahalla replaced the state as the primary provider of social guarantees, and they provide extensive social services for community residents; mahalla provide both monetary and non-monetary (cash benefits and benefits-in-kind) types of welfare.

The welfare provision role of mahalla can be better explained by reference to the “Welfare Pentagon” model, which was developed by de Neubourg (2002). According to de Neubourg (2002), the Welfare Pentagon represents the five core institutions that households may use to meet their current and future needs in a given society: family, markets, social networks, membership institutions and public authorities (see Figure 1). Despite the historical and geographical differences, these institutions can be found in diverse appearances in all societies around the world. The access of households to the institutions and assets of the Welfare Pentagon varies across countries and over time. Public authorities (and partly the market), through various social-policy arrangements, are the most important players in the welfare provision in the West (especially in Nordic countries), while markets, family, membership institutions and social networks appear to be the largest sources of welfare in developing/non-industrial countries. Households use the institutions of the Welfare Pentagon in their survival strategy to generate income and to smooth consumption. Labor markets, product markets and capital markets enable households to trade and exchange in order to secure resources to satisfy their basic needs at a given time. Families, social networks and membership institutions²⁴ tackle the livelihood risks through various mechanisms of solidarity. Public authorities, as the fifth corner of the Welfare Pentagon, can provide welfare to households by means of various welfare-state arrangements (pensions, child benefits, maternity benefits, social assistance, unemployment insurance and other forms of insurance), but also

24 Membership institutions are unions, mutual insurance companies, religious organizations, co-operatives or neighborhood associations, etc. In the case of mahalla, mosque and hashar (mutual assistance activity) can be regarded as membership institutions.

indirectly by enforcing contracts through the judicial system, introducing legislation aimed at correcting market inequalities and many other public policies.

Figure 1
The Welfare Pentagon



Source: de Neubourg (2002)

Post-Soviet mahalla include all five core institutions of the Welfare Pentagon: all five institutions contribute to the well-being of mahalla residents. Mahalla, by enforcing its social norms, stretch the livelihood risks within the community and catalyze these institutions to produce welfare. Social safety nets of mahalla are multidimensional. Mahalla can fulfill the functions of markets, provide public goods, implement state-welfare legislation and serve as a social network and membership institution. Most mahalla possess such public spaces as teahouses, markets, mosques, grocery stores and barbershops. Mahalla, especially in rural areas, have developed informal labor, product and capital markets. Most foreign businesses of Uzbekistan are carried out by a local mahalla-based group of traders and entrepreneurs. Most agricultural products are exported to Russia through these groups.²⁵ Mahalla fulfill the function of a labor-recruitment agency by providing people with seasonal jobs. Informal channels of mahalla are so extensive and comprehensive that residents can quickly get information about available job opportunities. Mahalla-based entrepreneurs, traders and brokers very often provide their co-residents with temporary jobs, especially during summer and autumn periods. Mahalla is also a place where people get information about possible job opportunities in Russia and Kazakhstan. Therefore, most Uzbeks succeed in finding a job in Russia

²⁵ Groups of traders are especially active in the Ferghana valley. These groups mainly buy agricultural products, such as cucumbers, grapes, peaches, apples, etc. from mahalla residents for relatively higher prices and export them to Russia. The local population calls these groups “*rossiychilar*” (group of traders that export Uzbek agricultural products to Russia).

and Kazakhstan due to their mahalla networks. Women derive income by sewing clothes for residents of mahalla. Residents of mahalla also exchange various goods and products among each other. In this regard, mahalla, serving as local markets, provide a large number of job opportunities and facilitate the income-generating strategy of their residents.

Family, social networks, mosque and *hashar* (as a membership institution) are important sources of welfare in Uzbek mahalla whereas these institutions have a relatively limited role in most Western countries. Mahalla residents often rely on their families, social networks, mosque and hashar to meet their livelihood needs. Few weddings, emergency medical operations, university matriculations, house constructions or funeral ceremonies occur in the life of the typical mahalla resident without some community financial support (Sievers 2002, 129). According to mahalla norms, residents should make some financial contribution to wedding expenses when they attend wedding feasts. Such a type of community assistance considerably lessens the burden of weddings on families.

Over the centuries, mahalla developed tradition of mutual assistance, '*hashar*' which can be regarded as a well-established social norm. Under the absence of any legal mechanisms, mahalla residents cooperate with each other by providing labor for the construction of houses, for the preparation of the logistics of wedding and funeral ceremonies and many other informal services that are necessary for human livelihood. After the adoption of the Mahalla Law, the hashar tradition has become a legal obligation. The formal chairman and members make use of *hashar* to encourage residents to maintain the cleanliness of streets and gutters and to improve the appearance of their mahalla on the eve of national celebrations and state holidays (ibid.). Residents gain more by engaging in mahalla activities, since the collective action lowers the transaction costs. In this sense, Posner (1996) claims that an actor will choose cooperation over independent action only if the value of the benefits exceeds the cost of cooperation. Mahalla norms encourage cooperation and solidarity and discourage uncooperative behavior. Residents who defect from mahalla norms may face non-legal sanctions, such as exclusion and ostracism. These factors seem to explain why mahalla are so successful in providing alternative sources of welfare.

Moreover, mahalla lower the transaction costs for their residents by rendering non-compensated services to the elderly and sick, mediating domestic-violence and divorce cases and resolving various disputes between residents. Mahalla also pressure more wealthy residents to share some of their wealth with the wider community (Bektemirov and Rahimov 2001). As described by Sievers (2002, 102), on the eve of national holidays, mahalla residents collectively clean public spaces, cook

national desserts for distribution to all mahalla residents and often provide small presents to poorer residents.²⁶

After gaining independence, mahalla were empowered to allocate social-welfare benefits to the most needy in the community. These benefits are fully financed by the government. Through a means-testing method, mahalla provide welfare benefits to the least well-off residents. Even though the amount of the benefit is very small, it plays a crucial role in the survival strategy of people, especially in rural areas. In this regard, mahalla include the fifth element of the Welfare Pentagon – public authorities.

As was shown above, mahalla play an essential role in the survival strategy of their residents by providing both formal and informal social safety nets. Mahalla have become an integral part of Uzbek society, since they represent all five core institutions of the Welfare Pentagon. Similarly, mahalla has assumed the basic functions of the welfare state, which resembles the Western welfare states. One may wonder if mahalla can be called the “fourth type of welfare state regime.”²⁷ In this context, mahalla can be regarded as a “hybrid institution” that represents both formal and informal elements of the Welfare Pentagon. Given the effect of welfare on social control, one may guess how influential mahalla are in promoting social order and political stability and why the Uzbek government is so keen to intervene. Since mahalla serve as informal labor, product and capital markets, since mahalla provide welfare for residents through family, social networks, mosque and *hashar* (membership institution), and since mahalla distribute the state’s welfare benefits, mahalla can be regarded as both formal and informal mechanisms of social control that create stable conditions for a smooth functioning of the political system in Uzbekistan.

4. Mahalla as a system of social control

Today most Uzbeks get their sense of identity through their mahalla. Mahalla play an enormous role in fostering the cultural attitude of their residents. As Sievers (2002) observed, most Uzbeks reject the possibility of excluding themselves from a mahalla. There are a lot of Uzbek sayings regarding the importance of mahalla in people’s lives. Vago (2009, 19) claims that in a small, traditional and homogeneous society, behavioral conformity is ensured by social norms which are supported by traditions. Social control in such a society is mainly established through informal

26 Navruz is one of the Uzbek national holidays that mobilize people to clean mahalla, to cook desserts and to take care of poorer residents.

27 Danish sociologist Gøsta Esping-Andersen describes three types of welfare state regimes (liberal, conservative and social democratic). However, Esping-Andersen’s typology only describes the Western world of welfare capitalism whereas the welfare systems of the developing world are mostly based on informal welfare arrangements. In this regard, I dare to call mahalla the fourth type of welfare-state regime. See Esping-Andersen (1990).

control mechanisms, such as gossip, ridicule or humiliation. In this regard, mahalla norms regulate and touch upon even the strictly private spheres of residents' lives, ranging from dressing styles to marital relations. The failure to comply with mahalla norms might lead to non-legal sanctions, and therefore, every resident tries to conform to norms established within the mahalla. The threat of exclusion deters residents from violating mahalla norms, and therefore, social control in mahalla is dependent on individuals' self-sanctioning.²⁸

Gossip is one of the strongest non-legal sanctions in mahalla. Gossip is an instrument to use social influence to guide individual actions, especially in densely populated areas. Since most mahalla residents are highly concerned about the public opinion, they always try to avoid people's gossip. In that sense, gossip is also one of the strongest non-legal mechanisms that maintain cooperative behavior among the residents. According to mahalla norms, every mahalla member is expected to publicly mark births, male circumcision, weddings and deaths with some kind of celebration. Despite the high costs, every member of mahalla tries to conform to this norm. Residents who fail to mark any of those celebrations would be excluded from future mahalla celebrations. Social norms greatly contribute to social solidarity and order within mahalla. In this regard, Posner (2002) asserts that people, despite the high costs, give signals to each other in order to show that they belong to the good type and they are cooperative partners. Signaling is the expression of conformity to social norms. Good types care more about future payoffs that are lost if the cooperation fails.

Mahalla norms even control the family issues of residents. According to mahalla norms, the youngest son inherits the family home, and older sons are supposed to move out of the house. But, in turn, the youngest son must take care of his parents when they grow old. Seemingly, norms somehow establish an informal contract between children and parents. Mahalla will keep a close eye on the enforcement of this informal contract. In cases of defection, deviants face non-legal sanctions of mahalla, such as gossip, exclusion or even ostracism. Deviants are regarded as uncooperative partners in the community. From a social-policy perspective, mahalla might look like very attractive institutions given their capacity to cater for old people, whereas the elderly care is the ultimate responsibility of government in many Western countries.

28 Although non-conformity does not lead to any legal sanctions, every resident tries to conform to the established rules of mahalla, because mahalla can impose non-legal sanctions on deviants. The mahalla system enables people to access various welfare pentagon institutions, but at the same time, it limits individual autonomy and privacy. In this sense, Posner argues that, "wherever interaction is continual, dense and valuable to participants, distinctive patterns of behavior emerge. When deviations from these patterns provoke non-legal sanctions, we say that the patterns are social norms. Social norms both create options and suppress them." See Posner (2002).

Posner (1996) pointed out that when dispute arises between the members of a solidary group, norms and non-legal sanctions generally resolve disputes by allocating risks and specifying means of resolution. Mahalla, in this sense, mediate the conflictual relations between residents by using their norms and non-legal mechanisms of dispute resolution. In most cases, the informal leader (*oqsoqol*) of mahalla mediates the disputes between neighbors, adjudicates domestic violence and divorce cases. After the Mahalla Law, the formal leader of the mahalla committee (a legally elected leader) now also has the authority to address these issues. As described by Sievers (2002), since mahalla residents are usually involved in lifelong contact, the costs of court proceedings outweigh the benefits. Mahalla's informal dispute-resolution system is effective in the sense that it does not use adversarial methods while the legal mechanisms are lacking in this regard. Mahalla norms also condemn those residents who use legal means of dispute resolution. Residents who turn to courts are regarded as uncooperative partners. Therefore, mahalla residents rarely turn to courts and law enforcement agencies for the resolution of their disputes.

Mahalla norms regarding the relationship between spouses and bride and mother-in-law also cause concern. Mahalla norms promote the patriarchal relations in the family by encouraging a submissive role for women in the family. Mahalla norms also strictly regulate the power relations between mother-in-law and daughter-in-law. Mahalla norms establish that the daughter-in-law should obey her mother-in-law. Consequently, many human rights NGOs and feminist movements are highly critical of the domestic-violence cases within mahalla. Particularly, mahalla norms place women in an unfavorable position (Human Rights Watch 2003). Given the fact that mahalla norms favor patriarchal relations, the state's legal intervention is necessary, especially in cases of domestic violence. To address these problems, the public authorities intervened into mahalla by establishing a women's committee in each mahalla, but this strategy turned out to be ineffective due to the lack of support from social forces. Similarly, Hyden (2008, 149) claims that legal norms have to compete with norms already existing in society. Mahalla norms are sometimes more powerful than the legal norms.

Therborn (2002, 871) claims that institutions should be regarded as delimited complexes of norms which include constitutive norms of conduct, norms of distribution and regulative norms of contribution/execution. The norms of an institution may be formal or informal, explicit or implicit. These institutional norms are enforced by the systems of sanctions. Likewise, mahalla impose a wide range of non-legal sanctions on those residents who fail to conform to the norms of mahalla. Under mahalla norms, each resident is expected to contribute work and services during *hashar*, wedding and funeral ceremonies. The free-riding problem almost does not exist in this case, since the transaction costs of information is very low due to heavy social interactions and integration in mahalla.

The adoption of the Mahalla Law has also increased the scope of mahalla's social control activity. Mahalla now can also use legal sanctions to influence the behavior of their residents. In this respect, mahalla can effectively control the behavior of their residents through social norms, law and welfare. The presence of both legal and non-legal sanctions enables mahalla to suppress anti-social behavior and promote pro-social behavior. The cost of anti-social behavior is very high in the mahalla system, due to the fact that deviants may not be able to access the welfare-pentagon institutions of mahalla. Given the fact that they represent heavily integrated communities, mahalla can be regarded as a comprehensive system of social control, where the formal (governmental) and informal (societal) mechanisms of social control come to interplay. In this regard, Robert Ellickson's (1991) concept on "elements of a comprehensive system of social control" is relevant for explaining the social-control element of mahalla. Ellickson (1991) distinguishes five controllers that may be sources of both rules of behavior and sanctions that support those rules. The five controllers consist of – the actor himself, the person acted upon, social forces, non-governmental organizations and the government. These five controllers impose the following five sanctions to enforce the rules of behavior – self-sanctions, personal self-help, vicarious self-help, organization enforcement and state enforcement. Table 2 summarizes how social control labor is distributed within various controllers in mahalla.

Table 2

Mahalla as a System of Social Control. Source: Ellickson (1991, 131)

No.	Controller	Rules	Sanction	Combined system
1	Resident	Personal ethics	Self-sanction	Self-control
2	Family	Contracts (informal)	Personal self-help	Promise-enforced contracts
3	Informal leader (oqsoqol) and residents of mahalla	Social norms	Vicarious self-help	Informal control
4	Formal leader of mahalla (rais)	Organization rules (Mahalla law and social norms)	Organization enforcement	Organization control
5	Government (through law-enforcement bodies)	Mahalla law	State enforcement	Legal system

5. Conclusion

The state's legal intervention has greatly expanded the scope of the social control function of mahalla. At a quick glance, mahalla appear to be universal institutions, since they can provide public goods, reduce crime rates, offer alternative dispute resolutions, act as agents against the radical Islamists and preserve Uzbek cultural values. As the study showed, the public-administration reforms transformed mahalla into "hybrid" institutions, as they are now charged with enforcing both the law and social norms. Mahalla has become a place where initial interaction between the individual and the government occurs. Today public authorities in Uzbekistan claim that mahalla reforms have greatly improved the self-governance activities of citizens. As they further claim, the mahalla represents the National Democratic Institute, since it operates independently and is not a part of the local government system. However, these claims represent the mythological impact of legal interventions on mahalla. As the findings of this paper indicated, the principle of self-governance of mahalla is rarely fulfilled in practice. Conversely, legal interventions have transformed mahalla into a system of social control. In this regard, the state's legal intervention into mahalla can be seen as an attempt of Uzbek authorities to harness the social control power of mahalla for meeting political instabilities in the transition period.

Despite the state's legal interventions, mahalla retained their informal role and structures, as the presence of the parallel power structure shows. Informal economic activities are still widespread in mahalla. The state's legal interventions failed to mirror the actual functions and purposes of mahalla norms. Mahalla ultimately rely on social norms to preserve their solidarity, traditions, values and morals whereas the law mainly strives to use mahalla as a social control mechanism by integrating them into the system of public administration. As Posner (1996, 135) pointed out, the interaction between law and non-legal sanctions occurs not in a uniform and predictable way, but in a rather complex and unforeseen way. Every legal obligation provides a room for abuse. The effect of legal intervention depends on such characteristics as the political and economic system of the country. Due to the strength of social norms within mahalla, the outcome of the legal intervention became unpredictable, since the local knowledge, standards, traditions and values had influenced the application process. Given the fact that Uzbekistan has recently emerged from the central planning, the legal intervention provided expanded opportunities for corruption and authoritarianism. These are the real effects of legal interventions on mahalla. Unfortunately, legal interventions have limited the autonomy of mahalla, thereby making them extensions of authoritarian control.

As the study demonstrated, debates within Western academic and policy communities mainly see mahalla as an instrument of abuse or extension of authoritarian control by referring to its social control function. However, these debates are centered on only one side of the coin; they are predominantly based on Western val-

ues and largely ignore local conditions and social norms of Uzbek society, which are realized in the mahalla system. As Starr (2005) noted, democracy cannot be built in Central Asia in the absence of key reforms, particularly at the local level. Consequently, people obey laws that reproduce social norms and are prone to disobeying laws that are not compatible with social norms (Cooter 1996). Mahalla, owing to their norm enforcing capacity and welfare provision function, can potentially promote the law-obedient cultural attitude in the society. Accordingly, this study suggests that any attempt at democratization of Uzbekistan should be aware of the fact that mahalla are plastic institutions: they can either facilitate democratic reforms or impede their implementation. In this regard, mahalla can be places of democratic involvement or sites of authoritarianism. It is the public administration system that determines the final outcome.

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Alcohol Abuse and Dependency in Ukraine: The Policy Challenge of a “Wicked” Problem

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Abstract

Excessive consumption of alcohol and consumption leading to addiction is a major public-health concern in Ukraine. This paper examines the current state of alcohol policy in Ukraine at multiple scales (national and local). This is done through an analysis of i) primary documentation (e.g. legislation and related government initiatives); ii) academic literature on alcohol policy; iii) health studies and statistical analyses of alcohol consumption; and iv) “grey literature” on alcohol policy. It is found that Ukraine’s national alcohol policies at present are primarily focused on economic instruments (e.g. excise taxation) and to a lesser extent place limits on advertising and funding by the alcohol industry. Local government policies have in many places attempted to place restrictions on when and where alcohol may be purchased – with varying success. It is argued that a multifaceted approach is required to tackle alcohol abuse – one that combines strong regulation and feasible implementation with broader-scale initiatives surrounding education, changing cultural norms, health-care reform and economic development.

Introduction

There are significant social and economic costs associated with the problematic use of alcohol such as fatalities and injury (e.g. through such factors as motor-vehicle collisions, suicide, violence and various health effects), lost labour productivity and familial breakdown. Despite such potentially detrimental societal, economic and health-related consequences, alcohol is rarely classified as an illegal substance in

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most nations³ – instead there are various efforts to combat excessive consumption in order to prevent, reduce and address the harms caused by alcohol. In this manner, different levels of government, non-governmental organisations, academia and the industry itself variously pursue such efforts as prevention, research, taxation, regulation and responsible advertising. Alcohol-related policies, particularly sumptuary laws enacted by governments, are contentious because of the line they tread between the regulation of a potentially detrimental substance and excessive intrusion by governments into the private affairs of its citizens. This raises questions such as: to what extent should governments intervene; how should such interventions be structured; what policy tools should be leveraged (e.g. supply-side versus demand-side interventions); and, given social-cultural and political contexts, which policy tools will be most effective and feasible? Together, this is a growing area of policy intervention and a particularly problematic one, given its normative and value-laden applications. Policy responses to alcohol abuse present a “wicked” policy challenge, where the problem is defined differently by various stakeholders; there are ingrained normative and cultural assumptions and practices embedded in the issue, and there are multiple, complex intervening variables such as economic development and institutional capacity.

With these considerations in mind, this paper explores the present policy responses to the consumption of alcohol in Ukraine. Excessive consumption of alcohol and consumption leading to addiction is a major public-health concern in Ukraine – one with both social and economic consequences. It is a major burden on the country and presents an impediment to future development. Akin to other countries in Eastern Europe, consumption of alcohol in Ukraine is characterised by high alcohol intake amongst the population, overwhelming youth drinking and hazardous drinking behaviour (Popova et al. 2007). The culture of excessive drinking is leading to a public-health crisis where alcohol-related deaths contribute to 40 % and 20 % of all deaths among men and woman respectively (Levchuk 2009, 2; Krasovsky 2009). Alcohol is also the leading cause of premature death in 30 % of all males. In these ways, Ukraine is suffering the fate of Russia, where alcohol is one of the leading causes of death. Furthermore, the levels of youth drinking in Ukraine are among the highest in the world. It is estimated that 40 % of Ukrainian youths between 14 and 18 regularly consume alcohol (WHO 2004). The numbers of hazardous drinking are also staggering at an estimated 17 % of the adult population (*ibid.*).

Though these statistics give some indication of the scale of the problem, national data on the extent of alcohol consumption and its related effects are quite poor. For example, blood-alcohol levels are often not measured post mortem or reported in official documentation. This kind of unsound data collection leads

3 The exception to this is prohibition through sumptuary law in certain Islamic states – e.g. Saudi Arabia and Qatar.

to a colossal downplay of the number of alcohol-related deaths in the country. Further, data limitations hamper the development of a nuanced understanding of the problem such as demographic characteristics and regional differentiations. For these reasons, alcohol consumption in Ukraine is a highly under-researched area, and there are very few studies on the success and/or failure of alcohol policy in the country. Certain features of Ukrainian alcohol consumption make policy responses particularly difficult. For example, Ukraine has the highest per capita consumption of unrecorded alcohol amongst Eastern European countries (at 10.51 %) (Popova et al. 2007). The underground private provision and production of alcohol hampers the effectiveness of supply- and demand-side policies to a great extent. Home distillation and homebrewing is particularly difficult to address in rural areas where such production is prominent, thereby rendering efforts at price controls and sales limits ineffective.

Given the scale of the problem of excessive alcohol consumption (as gleaned through the limited and underreported statistics that are available) and its related public-health and other consequences, public-sector intervention of some type is necessary. Since Ukraine's Independence in 1991, government responses have largely failed to curb excessive alcohol consumption across the whole of the population. However, the issue of alcohol policy is becoming increasingly salient, and alcohol abuse was featured as a major public-health concern in the last presidential elections in 2010. For example, Volodymyr Yanukovich, as the head of the Party of Regions, ran for office with a promise to "wage war on alcohol".

This study explores current policy responses to excessive alcohol consumption in Ukraine and proposes a framework for policy options into the future. This is both a politically charged and timely area of research. The aim of this research is twofold: i) to examine the current policies that have been adopted by the government (employing a multi-scalar approach both at the national and local levels) to combat excessive alcohol consumption; and ii) to examine future policy alternatives. The time frame for this study focuses on Ukraine post Independence – from 1991 onwards. A comprehensive literature review on this subject has found that there is very little research on alcohol policy in Ukraine. The evaluation of current policy responses and possible future options are based on a review of: i) primary documentation of legislation and related government initiatives; ii) academic literature on alcohol policy; iii) health studies and statistical analyses of alcohol consumption; and iv) "grey literature" on alcohol policy. The review of "grey literature" is based on research and analysis of Ukrainian media with a focus on local-government initiatives in order to shed light on efforts beyond the national level. This is vital in order to bring to light local policies, which have not been researched in academic literature, yet are prevalent in public debate. This also allows for a differentiation of policy responses at various scales.

This paper first presents a theoretical framework outlining the different ways that policy responses to alcohol abuse and dependency can be structured. It then briefly describes the scope of the problem in Ukraine before going on to present an overview of present Ukrainian policies to combat alcohol consumption at the national and local scales. Our conclusion finds that present policy responses are largely concentrated on economic and judicial measures and that there is a major scope for future policy action in the educational, health-related and cultural realms.

1. Theoretical framework: The structure of alcohol policies

The targeting of behavioural change in individuals or populations is the most common strategy for the prevention of alcohol-related problems (WHO 2002, 21). However, alcohol dependencies and abuse are “wicked” policy problems due to the nature of their complexity and interdependencies with variables such as economic and socio-cultural specificities. While alcohol dependency and abuse is exhibited through individual behaviour, individually targeted policies alone may be inadequate to address the complexity of the problem and intervening variables. Because of this, it has been widely recognised that behavioural changes related to alcohol dependency and abuse require a multifaceted approach (McQueen 2007, 165). The table below outlines the main areas where alcohol policies may be enacted (economic, judicial, educational, health-related and cultural) and the corresponding ways in which they can be structured. This overarching framework provides a model for applied discussion in our case studies.

Table 1
Alcohol-policies model

Policy Area	Policy structure
Economic	Supply/Demand
Judicial	Positive/Negative
Educational	Collective/Individual
Health-related	Proactive/Reactive
Cultural	Generic/Contingent

A major distinction in the way that policies are structured is whether they are directed at either the producer (supply) or the consumer (demand). Economic instruments may be structured either as taxation, levies or subsidies to producers (supply) or consumers (demand) of alcohol. Similarly, judicial instruments can be focused on penalising supply (producers) versus demand (consumers), and educational instruments can focus on behavioural changes aimed at either the alcohol industry (supply) or individuals (demand). There is evidence that supply-

side policies are more effective than those that focus on demand (Babor et al. 2003; Babor 2002; Edwards 2001). Supply-side policies usually target the whole of the population, which also includes groups of high-risk drinkers (Institute of Alcohol Studies 2005, 1).

The positive or negative distinction illustrates whether the policy instrument is forwarded in either an affirmative or a penalising manner. A negatively oriented policy is structured so as to penalise unwanted behaviour – for example through taxation on alcohol products (economic instrument) or fines for drinking and driving (judicial instrument). Conversely a positively oriented economic policy rewards wanted behaviour, though this can be more difficult to isolate and structure as a policy response. The administration of private-sector automobile insurance is an example of both a positive and negative policy structure; those with a good driving record, including no infractions for drunk driving, will pay less in insurance than those who have such infractions, who might be denied altogether.

The different ways in which a policy may be structured, as described in the table above, are often linked. For example, negatively oriented policies that focus on penalising behaviour tend to do so by isolating the actions of individuals or subpopulations. Hence, they are often linked to individually oriented policies rather than those that may be aimed at the population at large (collective). Individually applied policies may be considered more strategic and targeted in terms of how they direct resources and actions to certain individuals. There is evidence that individual interventions (particularly aimed at hazardous drinkers) can strongly impact alcohol problems at a population level (Edwards et al. 1994). Health-related and judicial policies tend to be focused on individual interventions, such as alcohol-administering programmes for dependant alcoholics. Individual interventions require sensitivity to individual rights in the way that specific subpopulations or individuals are targeted. In contrast to this approach, broad-based taxation, legislative or educational policies targeting a population are an example of collective policy structure. Bruun et al. present a strong argument for population-based alcohol policies in their seminal work *Alcohol Control Policies in Public Health Perspective* (1975). Their approach, titled Alcohol Control Policy (ACP), advocates for supply-side interventions (e.g. price and product controls) where the goal is to tackle the population, as a whole, seeing it as one "statistical community" (Tigerstedt 1999, 6). The ACP promotes indirect control of the public and the individual (ibid., 7).

The proactive/reactive distinction relates to the timing of policy interventions – whether they be focused on the preventive (*ex-ante*) or reactive (*ex-post*) engagement of certain activities. Applied to educational instruments, preventive policies are aimed at a population at risk of alcohol abuse and dependency while a reactive educational policy is focused on a population that is already affected by these issues. Information on the nature of drinking in a given population plays a critical role in the adoption of such policy responses – e.g., who consumes alcohol and of

what type. Further, in reactive policy interventions, it is important that there be a viable definition of “alcohol abuse”. One tool for this is the International Classification of Alcohol Intoxication, which is defined as any alcohol-induced state depending on the degree of severity. A related approach is one that focuses on emerging drinking patterns. The drinking-patterns approach “reflects an attempt to specify, first, the relationship between particular ways of drinking and particular forms of alcohol-related harm and the implications of these relationships for policy options and strategies” (Rehm et al. 1996; Rehm et al. 1997; Tigerstedt 1999, 15). This approach supports community prevention programmes that combine both supply- and demand-side policies, with a focus on targeted subpopulations (Stafström et al. 2006; Holder 1997).

The final policy distinction lay in whether the policy be applied in a generic or a contingent manner. Both reactive and individually-structured policies are examples of contingency applied; in the former, this is related to the timing of the policy intervention while in the latter, it is related to the targeting of certain characteristics.

The table above (Table 1) has presented the various ways in which policies can be structured in a universalising manner. In practice, each policy tool requires sensitivities to historical, economic, cultural and institutional contexts. For example, in economies where there is a large shadow sector, many economic instruments will lose their effectiveness. Similarly, in states where corruption is rife, judicial instruments will be weak and enforcement lax. One area that has been little discussed here is the role of cultural policies. These can take many forms, from efforts at changing workplace attitudes towards drinking to political champions of responsible drinking. The impacts of culturally oriented policies can be very difficult to quantify. However, where drinking is a culturally ingrained activity, it is undoubtedly an important area for policy.

The most common policy measures considered good practice internationally are those that focus on: taxation; increases in the age limit for legal purchase of alcohol; state monopoly of alcohol sales; limiting the sale of alcohol by hours and places; drinking and driving punishments; and state interventions for alcoholics (Edwards et al. 1994). Implementation of such policies requires a complementary focus on both demand- and supply-side interventions – with attention paid to the cultural and institutional fabric of a country. The public-policy challenge is to choose an approach which minimises alcohol-related harm and is feasible in a given institutional setting.

2. Scope of the problem of alcohol abuse

Alcohol abuse and dependency in Ukraine are part of a “wicked”, structural problem upon which policy responses over the years have had little impact. There are

long-standing socio-cultural practices that have contributed to this issue as well as historical, economic and institutional factors. Two major issues that outline the scope of alcohol dependency and abuse in Ukraine are the health consequences/impacts on the population, particularly as exhibited through high mortality rates, as well as the nature and frequency of drinking.

Ukraine is presently experiencing a demographic decline similar to that of other post-Soviet states, such as Russia, for which alcohol consumption is considered to be one of the key factors behind the high death rate. While Ukraine's birth rate is low, akin to other countries in the West, the death rate is significantly higher than in other Western countries; in 2005, the death rate was 16.6 %, while the birth rate was 9.9 % (State Statistics Committee of Ukraine 2011). Nataliia Levchuk's study on alcohol and mortality rightly suggests that the demographic crises in Ukraine can be attributed to a number of factors – i.e. the "spread of unhealthy lifestyle practices (including heavy alcohol drinking), the weakness and ineffectiveness of the health-care system, as well as poor standards of living and psycho-social stress" (Levchuk 2009, 4). The hypothesis that alcohol abuse further influences high-death rates holds strongly in relation to the demographic crises not only in Ukraine, but also in Russia and Belarus. This is in contrast to the situation in the Caucasus and Central Asia, where post-Soviet pressures are similar, yet the drinking culture is far less pronounced.

The high death rate and alcohol consumption are also a consequence of social and economic distress. Firstly, there have been drastic changes in society after the fall of the Soviet Union. After Independence, Ukraine witnessed a myriad of economic, political and social problems, which have contributed to high death rates. After the perestroika and the fall of the USSR, Ukraine has seen a decrease in industrial and agricultural activity. Many communities across Ukraine have been particularly impacted by a decline in the farming and industrial sectors – leading to high unemployment rates in many areas. Secondly, Ukrainian adults drink heavily from an early age and consume high amounts of spirits. Such drinking habits contribute to poor health of the population and are a serious health-care cost for Ukraine. Drinking is an additional burden in light of poor lifestyle choices of Ukrainians – heavy smoking, drug abuse, high fat diets and lack of healthy exercise (Cockerham et al. 2006). As a separate factor, alcohol abuse heavily influences high rates of sickness and death from liver cirrhosis, pancreatitis and numerous forms of cancer. High levels of alcohol consumption (approximately 36–42 grams of pure alcohol a day) also contribute to overall poor health. Drinking may increase the risk of heart disease and heart-related illnesses, such as high blood pressure, cardiomyopathy, stroke, arrhythmia (Anderson 1995; Virganskaya 1991).

Drinking has a large cultural presence in Ukraine and, akin to Russia and Belarus, has two distinct tendencies. The first is *horilka*-related (Ukrainian term for the Russian *vodka*), including *samohon* (home-distilled *horilka*) and other high-

percentage alcohol popular in Ukraine. The second is related to beer and low-percentage alcohol. Both drinking patterns are connected to one another and representative of different areas of alcohol abuse. An explanation of the nature of drinking in Ukraine is important for an understanding of the policy problem and – linked to this – the appropriate areas for policy response.

In 2009, Ukraine was ranked third in the world, after Russia and the United States, in the consumption of spirits. The annual consumption of *horilka*, in terms of 100 % alcohol per person per year, reached 18 litres in Russia and 13 litres in Ukraine (Minko 2001). In countries with similar levels of ethanol consumption, the death rates are significantly lower than in Ukraine or Russia. On more careful inspection, the issue lies in the type of alcohol. The strength of alcohol determines the culture of its consumption. In addition, this data does not account for the shadow sector. A recent study by Khalturina has pointed out that one of the key factors behind unusually high death rates in Ukraine and Russia have been caused by a “*horilka*-related culture” of alcohol consumption (Khalturina 2008). Consumption of alcohol with a high ethanol content is related to certain patterns of drinking – high levels of alcoholism and high levels of intoxication. Studies show that if Ukrainians were to drink the same amount of ethanol per year, yet in the form of beer or wine, the death rate would significantly go down (Khalturina and Korotaev 2006). A good indicator of the severity of *horilka*-drinking in Ukraine is found in the largest individual-level study of alcohol and mortality conducted in Russia. There is evidence pointing towards a strong relationship “between frequency of drinking and of binge drinking and all-cause mortality in men and women” (Nicholson et al. 2005, 815). The methodology of this study has resonance in the Ukrainian case because it questioned respondents on “the frequency of drinking *horilka* or other strong spirits” and “the frequency of drinking more than 0.5 litre (half bottle) of *horilka* or strong spirits in one evening” (ibid., 813). This study indicates that binge drinking is not the key issue. Rather, hazardous drinking of strong alcohol as a whole puts the individual’s health at risk.

Consumption of beer is a separate issue. High rates of alcohol consumption by youth are a major issue in Ukraine. According to a UNICEF-backed study by the Yaromenko Institute of Sociological Studies, 91 % of children at the age of 15 have tried alcohol (ESPAD 2004). Underage drinkers have enormous access to alcohol and are very rarely refused the sale of alcohol, particularly beer and low-alcoholic drinks. Harmful alcohol consumption among youth is often related to drinking beer and low-alcoholic products, and the beer industry is continuously targeting the youth population. The Ukrainian beer market is the largest in the Commonwealth of Independent States (CIS) and is expected to grow (Ukraine’s Chamber of Commerce 2008).

There is abundant evidence that high consumption of alcohol by all age groups is taking a toll on Ukraine. The following section outlines the national and local initiatives that have been adopted to date.

3. Ukrainian alcohol policy

Alcohol consumption and policy responses to alcohol abuse have a long history on Ukrainian territory. Local-government initiatives date back to the 19th century, when organisations or brotherhoods of sobriety opened up across Ukraine in order to discourage people from drinking. Organisations active in the 19th century, such as “Prosvita” (Education), “Russka Pravda” (Russian Truth) and “Vidrodzhennia” (Renaissance) have joined the anti-drinking movement by promoting sobriety and supporting anti-alcohol campaigns. The two biggest Ukrainian Churches – the Orthodox Church and the Greek Catholic Church – have also played an important role in the fight against alcohol abuse historically. Men were always the most common abusers of alcohol. Throughout the centuries, priests were known to organise sobriety ceremonies where men swore off drinking, and so-called “sobriety weddings”, where men were engaged to sobriety. In many Western regions of Ukraine, it was common during the wedding ceremony for the groom to swear on the bible not to drink. There have been particular efforts to address excessive drinking in the villages. In the 19th century, Joseph Vitoshensky, a renowned anti-drinking activist in the Ternopil region in Western Ukraine, built his house across from the village “korchma” (pub) and personally watched over the local residents. He was also the organiser of a school for choir singers and conductors, adding to the dynamism of his local area and presenting an alternative to *drinking*, as an activity.

During the Soviet Era, a major moment in the history of policy responses towards alcohol consumption came in the final days of the USSR with Gorbachev’s anti-alcohol campaign. His campaign focused on supply-side initiatives limiting the sale and production of alcohol as well as symbolically important initiatives such as alcohol-free government receptions. In the Soviet period, alcohol abuse was seen as a public-health issue. One of the first major Soviet-based studies was accomplished in 1978 by Russian sociologist B. Urlans. His study pointed out the difference in life expectancy between men and women as correlated to levels of alcohol consumption (Urlans 1978). The Gorbachev campaigns between 1984 and 1987 marked the sign of alcohol becoming a growing national concern. However, the campaign was hampered by enforcement and *horilka*-making migrated en masse to the black sector. In countries where home-distilled products have long been a tradition, people had little difficulty supplying themselves with alcohol.

Often, the Soviet anti-alcohol campaign between 1984 and 1987 is quoted as a success, pointing to a significant decrease in alcohol-related death in men and women. There are studies which indicate a decrease in alcohol consumption by 27 %

(Nemtsov 2002). In turn, this caused a decrease in death rates in men by 12 % and in women by 7 % (ibid.). There is also the view that death rates sharply escalated after the end of the campaign (Leon et al. 2007). Such studies should be considered with scepticism. The data available from that period is largely derived from state records, and the aforementioned studies may be more propaganda pieces than independent empirical analyses. In addition, such studies did not usually take into account the black market. As for the claim that the death rate sharply grew after the end of Gorbachev's campaign, there may be other explanations. For example, the final years of the Soviet Union were marked by severe economic downturn, which was hard-hitting on many communities and individuals across the republics.

Regardless of the success or failure of Gorbachev's anti-alcohol efforts, these reforms marked an important shift in the way alcohol is viewed; it had finally become a national issue and a public-health problem, and this marked a change in attitude towards individual behaviour. Drinking ceased being solely an individual concern, but rather was reconceived as an issue requiring public action. The political landscape influences the overall policy environment in the country and the quantity and quality of alcohol legislation. Ukraine is still going through post-communist transition, and the legacy of the Soviet Union cannot be easily overturned (Kubicek 2009, 325). During the almost two decades since Independence, Ukraine's economic progress still fails to facilitate social development (Round et al. 2008, 171) and address issues of public health. In addition, constant political instability has acted as an impediment to comprehensive social reforms. Ukraine's political instability since Independence has worsened in the face of persistent economic difficulties. Since 1991, Ukraine has gone through several deep economic crises and, most recently, was hit hard by the global financial meltdown leading to the stagnation of many industries and widespread unemployment. Ukraine's turbulent social, political and economic climate has been a major barrier to the adoption of comprehensive alcohol-policy responses.

3.1 National initiatives

The national legislation on alcohol can be divided into three distinct periods: pre-Orange revolution (1991–2004); that of the Yushchenko government (2005–2010); and that of the Yanukovich government (2010). These tentative periods are also related to specific changes in Ukraine's society and politics – the transformation from a Soviet Republic through the Orange Revolution into the current state of affairs. A number of legislative acts have been enacted to target alcohol consumption since Independence, the most important pieces of which are laws, bylaws and decrees by the Ukrainian Parliament, the Cabinet of Ministers of Ukraine, the Ministry of Health and the President. Since 1991, national legislation has primarily reflected concerns about the physical availability of alcohol, taxation, alcohol prices, alcohol advertising, operation of motor vehicles, and alcohol consumption by minors (Brand et al. 2007).

One of the first laws aimed at curbing alcohol consumption during the Kuchma government (1994–2005) tackled advertising. The 1996 Law of Ukraine "On Advertising" is still an important pillar of alcohol legislation and the foundation for several amendments. Since its inception, this law has been a cause for controversy. Article 5 of the Law of Ukraine "On Advertising" stipulates that advertising in television, radio programmes, materials in other media, entertainment and other events, created and conducted with the participation of sponsors, are not allowed to use any promotional information about the sponsor and/or its products except the name or the name and trademark, etc. However, part four of Article 22 allows sponsoring television, radio, theatre productions, concerts and sport activities with use of marks for goods and services and other intellectual property rights. As a result, vodka is a common sponsor of sporting events.

An important amendment to the 1996 Law of Ukraine "On Advertising" was introduced in 2008 (the Law of Ukraine "On Introducing Amendments to Some Laws of Ukraine Related to Advertising"). The importance of this amendment lies in the banning of alcohol advertising on TV from 6 am to 11 pm. It also introduced several other incremental changes, such as a ban of alcohol advertising on metro carts and on the front and back pages of newspapers. This legislation also introduced warning labels on alcohol products – e.g. "High levels of alcohol consumption damages your health". This message is required to be no less than 15 % of the total space (amount) of advertising. This policy was heavily contested and took almost twenty years since Independence to be introduced. The most recent amendment to this law was made by the Yanukovich government in 2010 – the Law of Ukraine "On Introducing Amendments to the Law of Ukraine 'On Advertising' Concerning Advertising of Tobacco Produce and Alcoholic Drinks". On 1 January 2010, according to certain clauses of this law, advertising of alcohol and tobacco products was banned in printed media. The law prohibits all advertising in the printed media of alcoholic products with the exception of specialised publications.

Since Independence, the government of Ukraine has used tax increases as the main mechanism of alcohol policy. After the 2010 Presidential election, Yanukovich and the ruling Party of Regions announced a "war on alcohol" (Korrespondent 2010) and, on 1 July 2010, increased the excise tax on alcohol products (Law of Ukraine "On Amending the Law of Ukraine 'On Excise Duty' Regarding Ethyl Alcohol and Spirits, Produced by Distillation of Grape Juice"). This legislation was the last of the numerous amendments to the 1995 Law of Ukraine "On Excise Duty for Alcoholic Beverages and Tobacco Products". The amendment initiated a phased increase of the excise tax on alcohol products – first in October 2010, then in February and May 2011. Due to the increase of excise tax, a bottle of *horilka*, which costs 20 *hryvna*, will cost 23 *hryvna* in the fall, 26 in the winter, and up to 28 *hryvna* in the spring. Overall, the increase in price is not significant and does not address the consumption of home-distilled products.

Interestingly, increases in the excise tax on alcohol (similar to that of tobacco) have not been proposed on an anti-alcohol rationale. On the contrary, the Yanukovich government claimed that the 2010 excise increase has been administered in order to bring more profit into the state budget – over 9 billion *hryvna* per year (approximately 800 million USD). The rationale might be primarily financial, yet it puts the necessary pressure on the alcohol industry. An important change has been accomplished with respect to beer. According to the 2010 Law of Ukraine “On Amending the Law of Ukraine ‘On Excise Duty’ Regarding Beer”, the excise tax on beer products grew by 0.14 *hryvna* to 0.74 *hryvna* per litre. Other tax pressures have also entered the legislation. For example, there has also been a tax hike on special water use by 7.2 times.

Another important piece of legislation post-Orange Revolution was the 2008 introduction of a minimum price on alcohol produce – the Cabinet of Ministers’ Decree “On Introducing a Minimum Price for Single and Whole Sale of Separate Kinds of Alcoholic Drinks Produced Nationally”. Wine, for example, can be sold at a minimum 12 *hryvna* per 0.7 litres in all kinds of containers. The price per 1 litre of 100 % ethanol depends on the type of alcohol. *Horilka* and *horilka*-related produce is set at 68.05 *hryvna* wholesale and 89.8 single price. Five-star cognac, for example, costs 120.8 *hryvna* and 166.7 *hryvna* respectively.

Further, the 2010 Law of Ukraine “About Amendments to Pieces of Legislation of Ukraine on Limiting the Consumption and Sale of Beer and Low-Alcoholic Drinks” bans alcohol consumption in all public places. The law also gives village, town and city councils the right to limit the consumption and sale of beer (with the exception of plastic containers), alcohol and low-alcoholic drinks. It also introduced the obligation of the seller to ID buyers in order to witness their legal drinking age. While this presents a sound attempt to curb youth drinking, the state does not have the policing power to successfully enforce this law and people continue to drink in public places.

In 2009, the Ministry of Health introduced a Decree “On Finalising the Instructions to Determine the Level of Alcoholic, Narcotic or Drug Intoxication in Drivers While Operating a Motor Vehicle”. This was the first piece of legislation to introduce a national policy to determine if a driver is under alcoholic intoxication. This legislation is a major shift forward in terms of alcohol policy. Unfortunately, the corruption level among Ukraine’s police force is staggering, making this law difficult to implement.

There is a growing number of prominent politicians advocating comprehensive reforms. For example, Mykola Tomenko, a prominent figure in Ukrainian business and politics, Natalia Koroleva and Evgeniy Suslov were the leading authors of the 2007 Law of Ukraine “On Amending Some Laws of Ukraine on State Regulation of Production and Turnover of Ethyl Alcohol, Cognac and Fruit Spirits, Alcoholic Drinks and Tobacco Products”. This rise in excise tax during the Or-

ange coalition government was the only serious anti-alcohol legislation. Mykola Tomenko remains an outspoken advocate for alcohol-related legislation aimed at curbing alcohol abuse, with particular emphasis on youth drinking. Importantly, this law placed low-alcohol products and beer in the category of alcoholic produce (Korespondent 2007). This action by Ukraine's Parliament is a major step forward towards battling youth drinking by putting much needed pressure on low-alcoholic drinks. Since 2010, Mykola Tomenko has been lobbying for a new amendment to the 1996 Law of Ukraine "On Advertising". He proposes a ban on direct advertising on radio and television of alcoholic drinks and beer until 24 pm and a prohibition on alcohol sponsorship of television, radio, theatre productions, concerts, sports and other activities.

There are very limited health-policy measures to address alcohol dependency and abuse in Ukraine at present. Hospitalised care focuses on detoxification and harm reduction, but there is little support for longer-term measures aimed at treatment and prevention such as dedicated alcohol treatment programmes.

Overall, the national response to the issue of alcohol policy has been fourfold: i) there has been an emphasis placed on economic instruments (e.g. excise taxes); ii) there has been some legislation aimed at limiting alcohol advertising (aimed at impacting the demand for alcohol); iii) there has been some devolvement of responsibilities to local decision-making; and finally, iv) drunk driving has been made a criminal offense (a judicial, punitive policy measure). Overall, these policies have had little impact on rates of alcohol consumption, dependency and abuse either because they are inadequate or poorly enforced. For example, the vast majority of national legislation has focused on the implementation of excise taxes on alcohol products. However, alcohol is an inelastic good, and the tax increments have had either little effect on demand or moved supply into the shadow sector.

3.2 Local government initiatives

Both Ukraine's Constitution and the 1997 Law "On Local Self-Government in Ukraine" place policy agency in the hands of local-government actors. As such, regional and local government initiatives form an important part of Ukrainian alcohol policy. However, there is very limited data on the implementation and outcomes of local policies to date. In Ukraine, alcohol abuse has distinct geographic characteristics. Evidence from a 2005 epidemiological study by Webb et al. finds that the most significant alcohol risk factors (as measured by frequency and type of alcohol consumption) were for men and women living in the Southeastern region of Ukraine. Further, the highest rates of alcohol consumption were found among men who were middle-aged, fathers and unemployed (ibid.). The majority of local policies focus on the sale of alcohol – e.g., cutting alcohol licensing, limiting working hours of entertainment venues (e.g. bars and clubs) and limiting working hours of places of retail. However, enforcement of such initiatives is very difficult.

As an example of the regulation of supply, the city council in Ivano-Frankivsk, in Western Ukraine, is one among many towns and villages which have started to prohibit the sale of alcoholic products at night – between the hours of 11 pm and 8 am. In Ivano-Frankivsk, the draft decision on the ordering and selling of alcoholic and low-alcoholic beverages was approved in the summer of 2010. If retailers ignore this decision to continue selling alcohol outside of the designated hours, they will have their alcohol-sale licences revoked. As another example, in 2010, the Lviv city council voted in a law limiting the sale of alcohol in kiosks. The goal of this regulation was to curb youth drinking by forbidding the sale of alcoholic drinks next to schools and universities. The Lviv regional wing of Ukraine's Antimonopoly Committee asked the City Council to cancel this regulation, which they subsequently have done (Zaxid 2010). This incident provides an example of the power wielded by the alcohol industry and local vendors.

One village in the Ternopil oblast has adopted a policy of public shaming as a deterrent. Severe drunkenness and theft are punished by community work. The village head instituted this punitive measure. Abusers must cut grass, plant flowers, fix fences and clean the road, offering a very public form of punishment in a village of its size.

Some local efforts have focused on raising public awareness through engagement. In 2009, in the Western Ukrainian city of Rivne, the City Council, together with different NGOs, organised an anti-beer rally at the main square (NEWSRU 2009). Within this initiative, participants were asked to travel across the city using public transport, asking people to fill out questionnaires and give out leaflets with information on alcohol-related harm. The organisers came from a variety of organisations, including the leading anti-alcohol NGO "Sober Ukraine", the Orthodox Rivne Youth Movement and others. This eclectic mix of organisers is an important example of organisations with different backgrounds, aims and beliefs coming together to raise awareness about drinking and offers a promising sign of cooperation between government and civil society. On the downside, the aforementioned NGOs are among several Ukrainian anti-alcohol organisations that take a very one-sided stance. For the most part, they promote total sobriety and demonise alcohol use. Such prohibitionist views might be unattractive to the public, as well as unfeasible in a country where alcohol has cultural relevance. The non-profit group Alcoholics Anonymous also operates in every oblast in Ukraine as well as the autonomous region of Crimea. There are forty-four local groups of Alcoholics Anonymous across Ukraine.

Overall, some local initiatives have attempted to limit supply or consumption, with varying success. The enforcement of such measures has proven difficult, and the alcohol-lobbying and bar industries are strong. Individually focused policies at the local level have focused on reactive, punitive measures.

4. Conclusions: Strategies for Ukraine

As has been shown in our review of national and local alcohol-policy initiatives, present alcohol policy responses remain limited. National initiatives are focused on economic and, to a lesser extent, judicial instruments. The excise taxation on alcohol products is an effort at curbing the demand for alcohol. However, alcohol is an inelastic good, and the excise tax does not increase the price of alcohol substantially. Judicial instruments focus on fines for drinking and driving, which may result in jail time in severe cases. Some national legislation has introduced limits on alcohol advertising. Such initiatives can be very difficult to implement because of the strength of the alcohol industry and its importance as a backer of cultural and sports events. Local policy initiatives have tended to target supply by imposing limits on the sale and distribution of alcohol. However, enforcement remains problematic. There have also been some efforts at the local level to engage with civil society in raising public awareness about the consequences of alcohol abuse.

Curbing excessive alcohol consumption in Ukraine is a challenging task. Drinking is deeply culturally engrained. Issues such as weak institutional capacity, limited budgetary resources and corruption are major impediments to an effective alcohol-policy strategy. It is further challenging when top politicians themselves suffer from alcoholism or express the opinion that alcohol is a justifiable part of national culture. Further, state health-care presently has little capacity to deal with individuals in the high-risk category. The social stigma associated with alcoholism presents an additional difficulty, where drinking problems are considered a private issue. In this manner, the state may be viewed as intrusive in the private affairs of individuals. Years of corrupt and unsound governance since Independence have seriously diminished peoples' trust towards the state. A sizable shadow sector for alcohol production further complicates the adoption of viable alcohol policies. These factors present significant obstacles to the adoption of alcohol policy in Ukraine.

Our review of policy responses to alcohol abuse and dependency suggest there are many areas for future policy reform and implementation. Present economic and judicial initiatives could be expanded to more effectively focus on placing limits on the availability and retail of alcohol (especially to minors) as well as limits on alcohol advertising and marketing. Importantly, revenues from alcohol sales on either the supply or demand side could be targeted to alcohol policy initiatives. Further, there are three key areas of alcohol policy that are presently underutilised: educational, health-related and cultural policies. Educational initiatives could focus on prevention, awareness and coping strategies for those impacted by alcohol dependency and abuse. Health-related initiatives play a key role in any alcohol-policy strategy, both in terms of prevention and treatment. Presently, Ukraine has no national long-term alcohol strategy, and the Ministry of Health (MOH) does not have a separate body or leading ministerial position dealing with alcohol addictions. The MOH has central control of health programmes and strategies across regional governments

within the country. Because of its centralised organisational and management structure, the MOH could become a powerful actor in providing national guidance in this policy area. Ideally, revenues from the taxation of alcohol could be used to fund MOH-led and/or collaborative research projects and initiatives with the non-governmental sector. Finally, responses to alcohol abuse must recognise drinking as a cultural activity. There are many policies that could be adopted to address the cultural norms and practices, particularly towards underage drinking, drinking in the workplace and in public and binge drinking. Here, symbolic policies also play an important role, as do political and cultural “champions” to raise the profile of alcohol abuse as an important national issue.

This study has found that there is a research gap on the extent and impacts of alcohol abuse in Ukraine. There is very poor monitoring and data collection on alcohol consumption and related effects (Hundorova 2001; Brainerd and Cutler 2005). The data that is available does not account for the shadow sector of alcohol production. Resources towards an epidemiological research programme on this topic will be pivotal to an understanding of alcohol-related harm and the impact of prevention activities. Finally, in Ukraine, a major contributor to alcoholism is a lack of employment and opportunity, particularly in rural areas. Consequently, policy responses need to consider broader issues such as economic development and labour-market attachment. As has been stated, alcohol dependency and abuse is a “wicked” policy problem with multiple confounding variables. Informed policy responses will require a more in-depth understanding of the issue in order to concentrate policy strategies. Since Ukraine’s Independence in 2001, several important alcohol policy strategies have been adopted. However, there remains an urgent need for policy action as well as better data collection and analysis. Our review of alcohol policies particularly highlights the present underutilisation of educational, health-related and cultural policy elements.

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Revealing the Concept of Knowledge Management in Public Administration and e-Government Policy in Latvia

Dace Aizstrauta¹

An increasing number of organisations understand that information and knowledge is their most important resource; unfortunately it remains a passive property if the organisations do not engage in the management of this valuable resource. Public-administration institutions create and work with an immense amount of information every day; a big part of this knowledge is embedded in the bureaucracy and the civil servants, so the need to manage this knowledge in an effective way is an important task for public administration. Although elements of knowledge management can be found in almost every public administration, the careful management of information and knowledge, i.e. the creation, sharing and application of knowledge, in an effective way is crucial especially during the crisis when many public administrators lose their positions and agencies are being restructured, united or liquidated, as is done in Latvia.

The technical basis for managing knowledge relies upon an appropriate technological infrastructure, applications for knowledge transfer, databases to manage the changes effectively, etc. But although information technology plays an important role in knowledge-management systems, there also has to be a clear policy, understanding and involvement of civil service to reach an effective knowledge-management system. Therefore this paper analyses the policy-planning documents in the field of the development of public administration, civil service and e-government in Latvia from the knowledge-management perspective. An approach that combines three knowledge-management dimensions with three phases allows categorising all tasks of the policy-planning documents and evaluates their distribution among these dimensions and phases – to what extent do the policy-planning documents in the field of the development of public administration, civil service and e-government development correspond to the knowledge-management framework?

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The central conclusion is that policy-planning documents are aimed mainly at the creation of knowledge in the process dimension. The tendency is similar in all three analysed documents despite the differences of the contexts they have been elaborated in. The article raises questions about the validation of such knowledge, the role of IT systems and the need for an analytical framework for evaluating policies from the knowledge-management perspective.

The paper outlines a wider study of knowledge management in public administration in Latvia and a further empirical analysis and exploration of the existing elements of knowledge-management systems in public administration.

1. Introduction

Quality issues in public administration are on the agendas of many countries, especially those experiencing financial hardship. This is also the case of public administration in Latvia. Functional, structural and financial reforms have applied to almost every institution. At the same time, the society and politicians require even more results.

Meanwhile the broader context of reforms raises questions regarding knowledge management in public administration – do the different actions form a structure that complies with the knowledge-management characteristics? However, it should be noted at the very beginning of this article that no political decisions have been made towards the implementation of knowledge management in the public administration of Latvia. Therefore the paper will explore the planned activities from the knowledge-management perspective, instead of seeking for clear commitments towards knowledge management.

The research question addressed in this article is: to what extent do the policy-planning documents in the field of the development of public administration, civil service and e-government development correspond to the knowledge-management framework? The paper will map the policy documents according to the dimensions and phases of knowledge management described further in more detail. The aim of the research is to evaluate the content of these policy-planning documents from the perspective of knowledge management.

The next section will outline the theoretical basis of knowledge and its management, thus also defining the analytical framework used in later sections. The third section introduces the policy-planning papers of e-government, civil service and public-administration development that will be analysed. The analysis will include only these documents at the policy level and will not evaluate the implementation nor will it evaluate the results achieved. Finally sections four and five contain conclusions and recommendations.

2. Knowledge and its management

In a broader sense, the emergence of knowledge management can be linked to the transition from the industrial age (mass-production economy) to the knowledge age. The knowledge age can be characterised by the knowledge society, the knowledge economy, knowledge-based organisations and knowledge workers. (Halim Ali 2001) Similar to other management perspectives, this also was first spread in private-sector organisations and management research and is now also being studied among public-administration researchers.

Today knowledge is generally seen as one of the most, if not the most, important asset in organisations that should be carefully managed (Willem and Buelens 2007). Thus, effective knowledge management is considered key to the success of contemporary organisations (Becerra-Fernandes and Sabherwal 2001).

Research on knowledge management spans the disciplines of economics, information systems, organisational behaviour and theory, psychology, strategic management and sociology. And the variety of approaches and the scope of questions have resulted in many different definitions and classifications of knowledge. Instead of looking for a single best definition, the researchers sometimes use dichotomies to explain the nature of knowledge – private vs. public, component vs. architectural, hard vs. soft knowledge, explicit vs. tacit (Lang 2001). The latter is used very often by those (usually from the information-systems field) who seek for tools and techniques to promote the conversion of tacit into explicit knowledge (this process is referred to as externalisation). Organisation theorists concentrate not only on processes of sharing and transferring knowledge (for example Willem and Buelens 2007), but also on the impact of the organisational structure on knowledge management (for example Claver-Cortes et al. 2007, Willem and Buelens 2007), and vice versa – the impact of knowledge-management practices on organisational performance and even organisational structure (for example, Zack et al. 2009, Birkinshaw et al. 2002) thus addressing knowledge as a contingency variable.

Certainly the variety of definitions of knowledge also impacts the approaches towards knowledge management. An overview of the definitions (to be more precise, they could be called perspectives) and their implications for knowledge management can be seen in Table 1.

From the perspectives covered in this table, this article concentrates on knowledge as a process, namely the process of applying expertise in and by public administration. This perspective corresponds best to the level of analysis – because it allows facing the knowledge management in public administration on the level that deals with the main processes in public administration – the policy-planning level.

Table 1
Knowledge perspectives and their implications (Alavi and Leidner 2001)

Perspectives		Implications for Knowledge Management (KM)
Knowledge vis-à-vis data and information	Data are facts, raw numbers. Information is processed/interpreted data. Knowledge is personalized information.	KM focuses on exposing individuals to potentially useful information and facilitating assimilation of information.
State of mind	Knowledge is the state of knowing and understanding.	KM involves enhancing individuals' learning and understanding through the provision of information.
Object	Knowledge is an object to be stored and manipulated.	The key KM issue is building and managing knowledge stocks.
Process	Knowledge is a process of applying expertise.	The KM focus is on knowledge flows and the process of creation, sharing and distributing knowledge.
Access to information	Knowledge is a condition of access to information.	The KM focus is on the organized access to and the retrieval of content.
Capability	Knowledge is the potential to influence action.	KM is about building core competencies and understanding strategic know-how.

At the same time, it should be mentioned that there is nothing new to knowledge management (OECD 2003). Organisations have always used knowledge-management practices (in various disguises) to make decisions and to produce goods and services, though not in a deliberate and systematic manner (Cong and Pandya 2003). Knowledge was created, shared and disseminated through surveys, paper-based information systems, seminars, etc. However, these activities were carried out without realising that it was knowledge that was being managed all along (Misra et al. 2003).

2.1 Knowledge management in public administration

The debate about the suitability of knowledge management for public administration might have its roots in the differences between public and private organisations. OECD draws attention to the fact that the incentives to manage knowledge better and management strengths and weaknesses of government organisations are different from those of private companies to (OECD 2003).

Knowledge is an essential resource of the government and the performance of the government rests significantly on the acquisition and use of this precious resource (Misra et al. 2003). Willem and Buelens point out that most public-sector organisations have knowledge as their core product, provide knowledge to the pub-

lic as their main activity or mainly have knowledge workers, that is, experts developing or providing knowledge (Willem and Buelens 2007). Public-administration institutions indeed work with an immense amount of information that is being used or created every day; there is also an immense amount of knowledge (tacit and explicit) embedded in the bureaucracy and civil servants, so the need to manage knowledge in an effective way is important.

But what is the knowledge of public administration? There are a number of sources of knowledge in government, for example (a) ministers, (b) legislators, (c) civil servants, (d) documents – files, agendas, records of proceedings, minutes, government orders, notifications –, (e) laws, rules and regulations, (f) archives, (g) embedded in physical systems and (h) citizens and non-citizens (say, tourists). These sources are not only widely dispersed but also exhibit a great variety in content (Misra 2007).

Therefore also in public administration, the concept of knowledge management is not exactly new. Here are some examples of existing institutional settings in public administration that help us to acquire, process and take advantage of knowledge:

- The legislative process is a prime example. In the process, existing knowledge is combined with political decision-making resulting in new “rules” for society;
- Evaluations of implementation processes are valuable sources of knowledge although not always generally available;
- Systems of supervision, for instance in case-oriented work or social work, are a powerful knowledge management tool within single organisations (Friis 2002).

Knowledge management regarding the public sphere also has a variety of manifestations and analytical levels that emerge from the benefits that the management of knowledge brings. Depending on the scope of the benefits, one should also narrow or widen the analytical perspective. Based on literature review, the author offers to divide the research into three analytical levels for the knowledge management in the public sector. Examples of units of analysis can be seen in Table 2.

This paper will refer to the second level and especially will address the interaction and reflection of the three dimensions (explained in the following section) of knowledge management in public-administration development-policy papers in Latvia.

Table 2

Determination of the level of analysis for knowledge management
in public administration with examples

	Level of analysis	Example of the definition	Example of the object of research
1.	The impact (and tools) of knowledge management in public administration to the society, its well-being (Society)	Leveraging of knowledge for attaining objectives of productivity and competitiveness of a national economy (Misra 2007).	<i>Social capital, competitiveness</i>
2.	The impact (and tools) of knowledge management on the public administration, its performance on the whole (Public administration)	Leveraging knowledge for improving internal processes, for formulating sound government policies and programmes and for efficient public service delivery for increased productivity (Misra 2007).	<i>E-government, public services, principal-agent problem, decision-making process, bureaucracy</i>
3.	The impact (and tools) of organisational knowledge management (Single organisation)	Broad collection of organisational practices related to generating, capturing, disseminating know-how and promoting knowledge-sharing within an organisation, and with the outside world (OECD 2003).	<i>Communication in institutions, certain information systems, knowledge workers</i>

2.2 Three dimensions of knowledge management

To be able to evaluate and compare different policies in a structured research, the author will use the dimensions used by Bhatt who states that knowledge management shapes the interaction pattern between technologies, techniques and people (Bhatt 2001). Also Misra et al. (2003) affirm that knowledge management is based on three domains that need to be managed, namely people (values and behaviours), process (internal structures) and technology (as an enabler), or the three dimensions of knowledge management, as Misra calls them, comparing it with a three-legged stool – if one leg is broken, the stool falls down (Misra 2007). Of course, there are other possible dimensions too, for example, the legal framework or the culture. But the three aforementioned dimensions fit the purpose of this paper and offer a focused view on knowledge management. Besides, legal aspects might be viewed as falling under the process dimension and cultural aspects under the people dimension, so nothing remains unnoticed.

Further the author will give a short insight into these three dimensions. First, **people** will at all times act as either enablers of, or barriers to, effective knowledge-management practices. Barriers need to be identified and removed. Existing enablers also need to be enhanced and additional ones created. This is often where the greatest knowledge-management challenges lie (Cong and Pandya 2003).

Second, a special role in the debates about knowledge management is devoted to the information and communication *technology* (ICT). There are several reasons for it. First, new developments in computing and information technology have enabled the retention and transfer of information in organisations on a larger scale than was once possible (Argote et al. 2003b). This brings us to the connection between knowledge management and e-government initiatives. As Misra et al. (2003) put it, the highly “aware citizen” of this era will not only demand accountability and transparency as a matter of right but will also start questioning the very basics of the established norms of the government. Second, the increasing pressure to develop added value from the huge investments in public-administration IT infrastructure and increasing experience with advanced ITs that makes the technical infrastructure (mainly the network technologies) for knowledge sharing available to organisations (Friis 2002) makes the discussions more attractive not only for academics but also for professionals.

At the same time, overemphasising the role of IT in knowledge management has been viewed as a threat and criticised with good reason. For example, Haynes concludes that much practice of knowledge management is rooted in links to classical business process and the use of information technology to control work processes. A classical and technological approach to knowledge management defines it as a centring on a knowledge repository, usually an IT-based product, where knowledge can be controlled and redistributed to those who need it. He infers that a myth has been created that such systems must be IT-based (Haynes 2005). It is mainly because technology – though an effective tool for knowledge management – does not guarantee real outcomes in terms of improved administrative actions and services. Friis states that seldom is information combined into patterns across sectors or agencies and rarely are these patterns analysed with the purpose of obtaining systematic knowledge. The electronic systems have been by and large electronic reproductions of existing institutional patterns and relations, so it is no wonder that few dramatic institutional changes have occurred in the process of implementing e-government (Friis 2002).

And of course when looking at the management of any organisation, one cannot disregard the *processes* within the organisation. People and/or technologies operate within processes in an organisation. Processes need to be analysed; they can be created, amended or terminated in an organisation.

3. Method

The policy-planning system in Latvia defines the organisation of policy-planning documents, so they all have a rather similar structure and predefined sections. Among the descriptions of the situation and desired results, the policy-planning documents have to state clear directions of action and tasks to reach the goals. These

tasks are the unit of analysis in this paper. The research excludes declarative determinations; instead it focuses only on tasks that (usually among the final parts of the document) have these characteristics:

- Set deadline;
- Responsible/involved institution.

These are the tasks that are later on included in the strategies and action plans of institutions, the tasks whose implementation is under the control of the State Chancellery and tasks on whose implementation the institutions give reports.

The shortcomings of that kind of limitation, is of course the possibility to neglect some valuable thoughts introduced in those documents. Policy-planning documents are themselves the result of knowledge management and could be analysed to evaluate the results of knowledge management. Nevertheless, this paper concentrates only on mapping the overall picture of the planned policies.

As was previously stated, knowledge in different forms is the core product of public administration; therefore we can refer to every task as a part of knowledge-management phases whether, for example, it aims to develop legal acts and regulations (e.g. knowledge creation), develop instructions for implementing the regulations or provide training (e.g. knowledge-sharing) or to improve, amend or implement existing regulations (e.g. knowledge application).

The chosen policies are all mid-term documents, developed by the responsible ministries with the participation of other agencies according to the system of legal drafting. The e-Government Development Programme 2005–2009 was developed by the Secretariat of Special Assignments Minister for Electronic Government Affairs that has now been liquidated in 2009; its functions have been overtaken by the Ministry of Regional Development and Local Government. The two remaining documents have been developed by the State Chancellery.

The paper will analyse the following three documents:

1) e-Government Development Programme 2005–2009²

The programme has not been implemented yet and has ceased to work. A new programme has not been elaborated, and it is a document that reveals the e-Government policy, therefore it will be used for the analysis. The overall objectives of Latvia's e-Government programme are to implement information technology and optimise public administration processes, thus:

2 A more detailed view on e-government development in Latvia can be found on the ePractice.eu portal in the Factsheet of Latvia. The portal is created by the European Commission and offers a new service for the professional community of eGovernment, eInclusion and eHealth practitioners. The ePractice, eGovernment and eInclusion Factsheets aim to provide an overall picture of the situation and progress of eGovernment and eInclusion in 34 European countries – <http://www.epractice.eu/en/factsheets>.

- Improving the quality and accessibility of state-government services and decreasing the administrative and financial burden for citizens and businesses;
- Developing a more efficient and cheaper government – improvement of administration effectiveness and reduction of costs;
- Developing a more open and democratic government – increase of society participation in the work of state administration (European Commission 2007–2009).

According to the aforementioned criteria, there were 49 tasks altogether included in this analysis.

2) Public administration policy development guidelines 2008–2013³

The aim of the policy is judicial, effective and qualitative public administration that ensures that public services comply with the needs of society. The sub-goals of the policy are:

- Future oriented strategic policy planning, balanced according to available resources;
- Accessible, high quality public services that correspond to the needs of society and business;
- The compliance with the law in the work of public administration, guarantees of human rights and effective respect of rights;
- Professional, competent, motivated civil service;
- Provision of ways of participation for civil society, thus bringing to weighted, useful and fortified decisions.

According to the aforementioned criteria, there were 65 tasks altogether included in this analysis.

3) Action plan for the optimization of the public administration and the civil service

The final document to be discussed is the Action plan for the optimization of the public administration and the civil service. It has been developed in 2009, as a result of the economical crisis and therefore marks the framework of public-administration reforms in the public administration during the financial hardship.

The main aim of the policy is small, professional and society-oriented public administration that works for the public benefit.

The documents were chosen deliberately – they correspond to the three dimensions of knowledge management. According to the aforementioned criteria,

3 The full name of the document is “Public Administration Policy Development Guidelines 2008–2013. Better Governance: the Quality and Effectiveness of Administration”.

there were 141 tasks altogether included in this analysis, but after the categorisation (including grouping) of them, 110 were used for further analysis (see Table 3 for explanations).

The logic underlying the analysis of these documents is based on three dimensions described in section 2.2 as well as three phases of knowledge management, thus framing an integrative knowledge-management framework covering different actions and directions of knowledge. Namely, knowledge management leads to certain outcomes (Argote et al. 2003a) that comprise the main activities and aims concerning the knowledge that is being managed like creation, sharing, retention, application of knowledge etc. They are usually reached in a consecutive manner, so knowledge-management outcomes can be referred to as phases of knowledge management, and there are different approaches concerning the definition and distinction of these phases (see for example Rubenstein-Montano et al. 2001 for an overview of these frameworks). This paper will use a threefold division that offers an exhaustive but not too detailed view at chosen policies (see Figure 1).

Figure 1
Knowledge management dimensions and phases framing
the analytical knowledge management framework

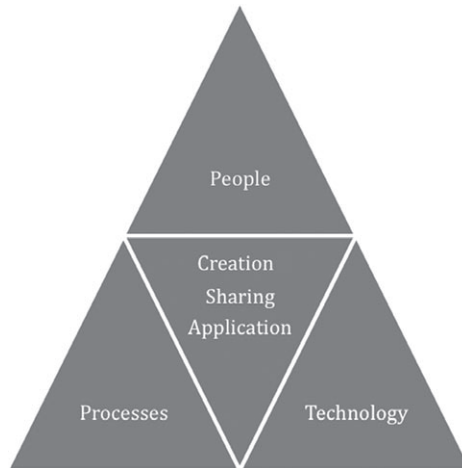


Figure 1 shows the three dimensions at the outer triangles of the pyramid and the three phases of knowledge management in the middle.

Knowledge *creation* refers to the ability to develop novel and useful ideas and solutions (Bhatt 2001). For the purposes of this article, it can be characterised by developing new legal acts that invent new procedures, elaborating conceptions that raise new problems and new solutions, organising research projects, elaboration of new services, procedures, etc.

Knowledge *sharing* (or diffusion, Birkinshaw and Sheenan 2002) refers to the process through which one unit is affected by the experience of another (Willem and Buelens 2007). During the analysis, it was characterised by education activities within public administration, development of methodological materials, etc.

Knowledge *application* means employing it (Bhatt 2001). Activities such as the development of instructions, procedures, implementing policies, amending legal acts according to the analysis, etc. were categorised here.

4. Results

The tasks planned in the policy documents were categorised according to the three knowledge-management dimensions and knowledge-management phases in each of them. The results are numerical and allow making judgements only about the proportions and distribution of the planned activities not the implementation of them or the grounds, usefulness, effectiveness or expenses of these tasks. The results are summarised in Table 3:

Table 3
Summary of the results

	People			Processes			Technology		
	Creation	Sharing	Application	Creation	Sharing	Application	Creation	Sharing	Application
e-Government Development Programme 2005–2009 (eGovDP)	2	1	0	3**	0	2	8***	3	3
Public administration policy development guidelines 2008–2013* (PAPDG)	7	8	2	18	6	9	6	3	2
Action plan for the optimization of the public administration and the civil service (AP)	5	0	0	14	4	3	0	1	0
Total (110)	14	9	2	35	10	14	14	7	5

* 4 tasks were not categorised, as 3 of them were connected with the European funding and did not specify exact activities, and one did not directly concern public administration issues

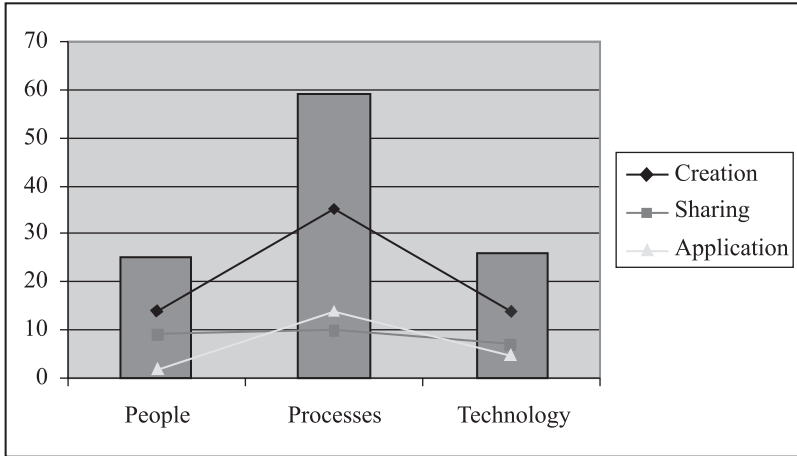
** includes the development of 7 public services with the help of IT

*** includes the development of 18 e-services and 5 information systems

There are different approaches to the phases of knowledge management, but in any case, it is perceived as a sequence of certain actions, and therefore the tasks of the public-administration institutions should cover all three phases according to the framework proposed in the previous sections. However, the results show that the distribution among them is not so even – altogether in all three documents,

there are approximately twice as much knowledge-creation activities as knowledge-sharing or application (see Figure 2). The majority of them fall into the process dimension.

Figure 2
The distribution of phases among the knowledge-management dimensions



There are only two tasks concerning the application of knowledge in the people dimension and five in the technology dimension. A similar trend can be observed with the tasks concerning the creation of knowledge. The distribution of tasks connected with sharing knowledge is distributed rather equally among the dimensions.

Both further diagrams show the distribution of the tasks within the three knowledge-management phases and the three dimensions.

Figure 3 shows that all three documents analysed in this paper are more oriented towards the creation of knowledge than towards the sharing or application of it. That, according to Sotirakou and Zeppou (2004) entails the risk of knowledge becoming a passive property without being managed.

The comparison of the distribution of tasks among the dimensions of knowledge management shows a higher concentration on processes than technology or people (Figure 4). On the one hand, it is not surprising as public administration primarily deals with the procedural activities of the public sphere, but people are those who actually implement the procedures, and technology might be a powerful tool to enhance the effectiveness of these procedures.

Here the trends differ among the documents. The “e-Government Development Programme” has more technology-oriented tasks, but it corresponds to the aim of the policy – to implement information technology and optimise public-ad-

ministration processes. At the same time, it is also crucial to provide public servants and the society with the necessary training and information.

Figure 3
The distribution of tasks among the knowledge management phases

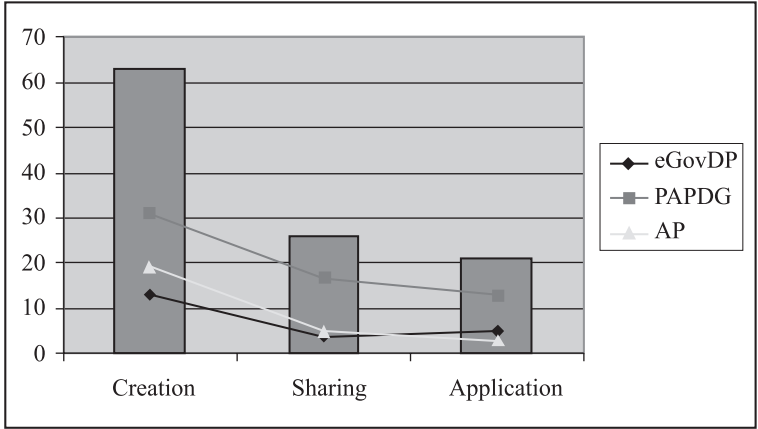
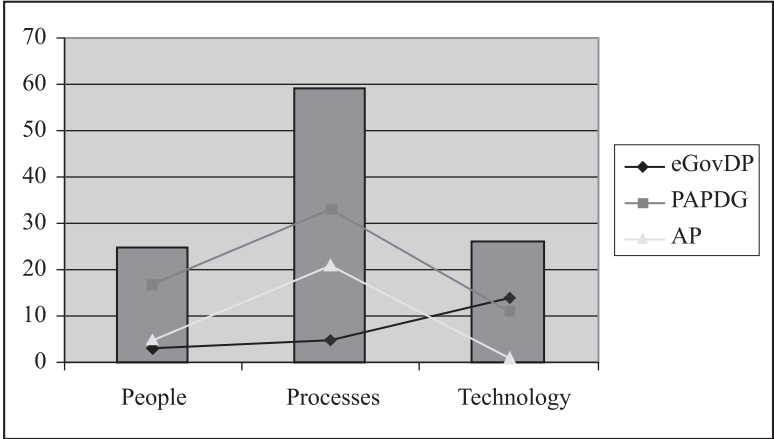


Figure 4
The distribution of tasks among the knowledge-management dimensions



Knowing the context of the “Action Plan for the Optimization of the Public Administration and the Civil Service”, one might expect to see more technology-oriented tasks, as it aims to optimise the public administration. But probably the decision-makers seek for faster solutions as the changes in the people or technology dimension may demand more time and resources that are not available during the economical hardship.

5. Discussion

The article gives insight into the issues of knowledge management in the public sector. By comparing the tasks in policy-planning documents of public administration, e-Government and civil service, the author draws several conclusions.

First, the tasks planned in the policy-planning documents in the field of public administration, public service and e-Government are aimed mainly at the creation of knowledge in the process dimension – creating new regulations, writing concept papers, creating procedures, etc. One might argue that it is in the nature of policy-planning documents to deal with processes and the creation of knowledge, leaving other management phases to the stages of implementation and evaluation. But as policy process is usually seen as a cycle, the policy planning portrays the results of the previous cycle and should therefore also include tasks aimed at the application and sharing of knowledge.

Second, special attention should be drawn towards the sharing of knowledge that according to Birkinshaw and Sheehan (2002) provides the validation of knowledge. Without appropriate sharing, there is no feedback. But feedback is essential for improving the existing knowledge as well as essential in the process of knowledge creation. Again, it is also true that special issues on sharing the knowledge are even more important on the organisational level (Willem and Buelens 2007); nevertheless if the policy level neglects knowledge-sharing then much responsibility is left for individual organisations.

The next issue of interest is the technology domain and e-Government policy. Friis points to a problem of effectiveness of information systems. He says that we have built e-government information systems that are electronic “clones” of the analogue systems, and in the process, we have institutionalised the information focus on behalf of the knowledge focus (Friis 2002). This poses a threat to effective public administration and can also be partly seen in the empirical results of this article. The e-Government Development Programme from the knowledge-management perspective focuses mostly on the creation of knowledge in the technological dimension, not on the sharing and application within the people or processes dimension. Concentrating on the creation of technologies without extensive analysis of processes leads to electronic “clones” that do not provide all the advantages usually associated with technologies. Inventing knowledge management principles and ideas would help to succeed with e-government strategies.

It should be mentioned that all these conclusions could not be considered problems of the policies or public administration, rather these conclusions might be regarded as risks that may (or may not) endanger the desired results. That corresponds to the conclusions made by Halim Ali that public administration will be required to transform and improve its own internal operations in keeping with the changing attributes of the knowledge age (Halim Ali 2001).

It should also be stressed that the papers were not developed all at the same time. The e-Government Development Programme 2005–2009 was already approved in 2005, not only before the economical crisis, but also before the time of fast upward economical development had started. In contrast, the Action plan for the optimization of the public administration and the civil service is part of the crisis-elimination activities. Therefore it can be indirectly observed that from the knowledge-management perspective according to the dimensions and processes, these policies do not differ, although the economical context differs a lot.

The main conclusions and the need for a comprehensive approach could be summarised within a citation of Haynes, who said that the answer to knowledge management in the public sector lies not in a standardised approach to the management technology, but in a partnership between managers, professionals and service users that is built on a sharing of knowledge and its use and creation. (Haynes 2005)

Thus the answer to the initial question – to what extent do the policy-planning documents in the field of the development of public administration, civil service and e-government development correspond to the knowledge-management framework – is not unambiguous. The policy-planning documents tend to focus on the process dimension and the creation of knowledge, and there is no balance among them. But this paper considers only the “nature” of these documents, not their implications.

Finally, the limitations of the research method used here show a clear necessity for analytical tools, methods and approaches for the evaluation of knowledge management on the level of public administration. There are several approaches for the evaluation of organisational knowledge management (see, for example, OECD 2003) and also of the impact of knowledge management on the society level, the innovations etc. (see, for example World Bank Knowledge for Development Program), but there are no tools that would help the policy planners and decision-makers to evaluate the situation from the knowledge-management perspective. Mapping other documents in a similar manner including also deeper analysis of the content and implementation of the policies could be the next steps to the development of such an analytical approach.

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Climate Change and its Impacts on Older Adults' Health in Kazakhstan

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Abstract

There has been growing concern over climate change and its impacts on many aspects of human society, particularly on health. Climate change may affect health in a wide range of forms: increased floods and droughts, increased frequency and intensity of heat waves, changes in the distribution of vector-borne diseases and effects on the risk of disasters and malnutrition (Haines et al. 2006b). So far, little is known about climate change and its impacts on older adults' health in Central Asia, particularly in Kazakhstan, where a downturn of life expectancy has been prevalent. The objective of this paper is to examine the impacts of climate change on older adults' health in Kazakhstan. Based on the literature review and empirical evidence, this study concludes that climate change largely affects older adults' health in Kazakhstan. This study emphasizes that older adults are becoming increasingly aware of the climate-change risks and its impacts on human health. Older adults are matured human capital of any society and can be utilized to address the climate-related health consequences in the twenty-first century. It is hoped that the findings of this study will have enormous policy implications.

Keywords: Climate change; health; Kazakhstan; older adults.

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Introduction and Setting the Context

It is widely recognized in the scientific community that Earth's climate system has evidently changed since the pre-industrial era and will continue to change in the coming centuries at rates projected to be unprecedented in recent human history (Adger et al. 2003; Costello et al. 2009; Epstein and Mills 2005; WHO 2003; Zhang, Bi and Hiller 2008). The 2001 Intergovernmental Panel on Climate Change (IPCC) observed that humans had been contributing to this change in a range of sectors such as power generation, transport, built environment and agriculture and land use to the increasing concentrations of greenhouse gases (GHG) in the atmosphere (Haines 2008; McMichael et al. 2008). As an effect, Epstein (2007) argues that weather has become more extreme, and biological systems on all continents and in the oceans are responding to the warming. Therefore, climate change becomes a global concern among the scientific community as well as policy-makers. Its impacts on the ecosystem and human health were highlighted on World Health Day 2008 with the theme entitled "protecting health from climate change" (Wirawan 2010). Climate change is one of the most pressing environmental challenges facing humanity with strong relevance to food security, health, natural ecosystems, freshwater supply, secure shelter and social relations. On average, 1 out of 19 in a developing country will be hit by a climate disaster, compared to 1 out of 1,500 in an OECD country (Mohammed 2008). In 1988, for example, Hurricane Mitch dropped six feet of rain on Central America in three days. In its wake, it left malaria, dengue fever, cholera, and leptospirosis soaring (Epstein and Mills 2005). In 2000, rain and three cyclones inundated Mozambique for six weeks, and the cases of malaria rose five-fold (Epstein 2005). In 2003, a summer heat wave in Europe killed tens of thousands of people, 14,802 deaths in a 20-day period alone in France (Kovats and Hajat 2008), also wilted crops, set forests ablaze, and melted 10 % of the Alpine glacial mass (Epstein 2005). Kovats and Akhtar (2008) and Patil and Deepa (2007) opine that some of the health effects may intensify if the increase in very extreme weather continues. As a result, extreme weather events not only have a profound impact on public health, as shocks may also ripple through global economies, particularly in developing countries. For example, Hurricane Mitch killed more than 11,000 people and caused damage exceeding 5 billion US dollars (Epstein 1999). Research shows that more subtle, gradual climatic changes also can damage human health (Campbell-Lendrum et al. 2009; Cockerham et al. 2006; Haines 2008; Jay and Marmot 2009). During the past two decades, the prevalence of asthma in the United States has quadrupled, in part because of climate-related factors. For Caribbean islanders, respiratory irritants come in dust clouds that emanate from Africa's expanding deserts and then sweep across the Atlantic by trade winds accelerated by the widening pressure gradients over warming oceans (Epstein 2005). The 2009 dust storm in Sydney also caused many health problems for children, pregnant women and older adults (ABC News 2009). All these have contributed serious challenges

to human habitability, making human populations the most vulnerable across the world. As a consequence, Kazakhstan, a Central Asian country, is not out of it and suffers from adverse effects of climate change.

The climate of Kazakhstan is continental. There is growing concern over the consequences of increased emissions of CO₂ and other GHGs due to anthropogenic activities and associated climate change in Kazakhstan (Doroshin 2008; Pilifosova, Eserkepova and Dolgih 1997). The GHG inventory in Kazakhstan shows that the 2005 GHG emissions with a direct greenhouse effect amounted to 240.7 million tons of CO₂ equivalent (Perelet 2007; Perelet 2008). Trend and correlation analysis for the period from 1879 to 2000 at 16 climate stations in the Tien Shan mountains (Kazakhstan/Kyrgyzstan) showed a temperature increase, which has become pronounced since the 1950s (Bolch 2007). The trend coefficient was about 0.8K/100a for the period 1900 to 2000 and about 2.0K/100a on average for the second half of the last century (Bolch 2007). The increase was about two times higher than the global average in Northern Tien Shan from 1950 to 2000, where it was mainly due to a rise of temperature (Bolch 2005; Bolch 2007). One of the anticipated outcomes of global warming is a projected increase in glacial melt, leading to increased flows in some river systems for a few decades, followed by a reduction in flow as the glaciers disappear (Glantz 2005). In Kazakhstan, as in other parts in Central Asia, glaciers and ice-rich permafrost serve as water towers, providing a continuous supply of fresh water to the lowlands and thereby allowing economic activity to take place (Harrison 2005a). In the Northern Tien Shan range in Kazakhstan, glacier retreat affects the nature of the natural hazards in the populated valleys and the lowland piedmont zone. Harrison (2005b) illustrates that the glacier recession has at least two major consequences on human health and the environment. First, the retreat of glaciers has uncovered a huge amount of unconsolidated glacial debris now choking main and tributary valleys. During periods of heavy rain, these are remobilized and form destructive debris flows that travel rapidly down valley into the Southern suburbs of Almaty. Second, and even more importantly, glacier retreat has led to the development of glacial lakes dammed by unstable moraines. These lakes drain catastrophically, and the subsequent debris flows pose a significant natural hazard to Almaty city. One of the most powerful debris flows to affect the Northern valleys of the Tien Shan occurred in July 1973 in the Malaya Almatinka valley (Harrison 2005b). This deposited four million cubic meters of debris into the large dam and storage reservoir above Almaty (Harrison 2005a). As a result, Kazakhstan needs to urgently address climate-change effects.

Older adults are among the groups most at risk due to decreased mobility, changes in physiology and more limited access to resources. These may limit the adaptive capacity of elderly people and other vulnerable groups. Filiberto et al. (2009) indicate that vulnerable populations will face adaptive challenges to their new environments, with potentially far-reaching implications for health as well as for societal strategies to cope with climate-change effects on both the population

and policy perspective. In recent times, Kazakhstan has experienced unprecedented hot waves in the summer and deep cold spells in the winter, leaving hundreds in serious health trauma. Of them, children and the elderly suffer the most in the event of human-induced natural whims (for details, see Crichton et al. 2011).

The key objective of this paper is to examine the potential impacts of climate change on the older adults' health in Kazakhstan. In doing so, this study reviews a comprehensive global landscape of the association between climate change and human health with a particular emphasis on Kazakhstan and its older population. In recent years, there has been a lack of critical understanding among scientific communities, policy-makers and stakeholders about the extent to which climate change may affect our lives and livelihoods. As of yet, very little is known as to the people's perception about climate change and its consequences on health. In this context, there is also a lack of evidence-based study in the literature and methodological challenges too in researching this issue (Xun et al. 2010). This study will contribute to fill out the deplorable research gap now existing in this growing field of scientific inquiry.

This article is divided into five sections. The first section proceeds by introducing the context in which the older adults' health in Kazakhstan is perceived to be affected by climate change. In the following two sections, the conceptual framework of the study will be presented, and data collection strategy and methods will be discussed. Next, an association between climate change and older adults' health in Kazakhstan is addressed from a multifaceted perspective, and the results of the study are reported. The final section concludes the paper and highlights policy implications indicating the limitations of the study and issues for future research.

Conceptual framework

There is growing evidence that climate change will have enormous implications for human health (Ahsan 2009; Haines et al. 2006a; Haines et al. 2006b; Kalkstein and Smoyer 1993; Louis and Hess 2008; Patz et al. 2005; Shuman 2010; WHO 2003; Woodward et al. 1998). The Lancet and University College of the London Institute for Global Health Commission recognized that rapid changes of weather patterns with increased numbers of extreme weather events are impacting the health of the vulnerable population (Costello et al. 2009; Grasso et al. 2010; Rahman 2008). A 2002 World Health Organization (WHO) report estimated that climate change was considered to be responsible for approximately 2.4 % of worldwide diarrhea and 6 % of malaria in some middle-income and 7 % of dengue fever in some industrialized countries in 2000 (WHO 2003). Globally, the mortality rate attributable to climate change that had already occurred was estimated at 154,000 (0.3 %) deaths per year, and the annual attributable burden was 5.5 million (0.4 %) disability-adjusted life years, with the greatest proportion burden in sub-Saharan Africa and South Asia

(Louis and Hess 2008; WHO 2002). There are some widely cited examples suggesting that climate change has already resulted in the introduction of infectious diseases into previously unaffected geographical areas. One such example is the spread of malaria into highland regions of East Africa, where this disease previously did not exist (Shuman 2010). The retreat of glaciers in the mountain regions creates environmental hazards, which affect millions of lives across the world (Harrison 2005a). These events clearly demonstrate that climatic changes pose serious health risks in the poorest countries such as undernutrition, inadequate and unsafe water, poor-quality nutrients, incidents of weeds, insects and diseases and the burning of low-quality fuels for household use – all of which exhibit significant climate sensitivity (Rosenzweig et al. 2001; WHO 2007; WHO 2002). Table 1 gives a glimpse on examples of vector-borne diseases likely to be sensitive to climate change.

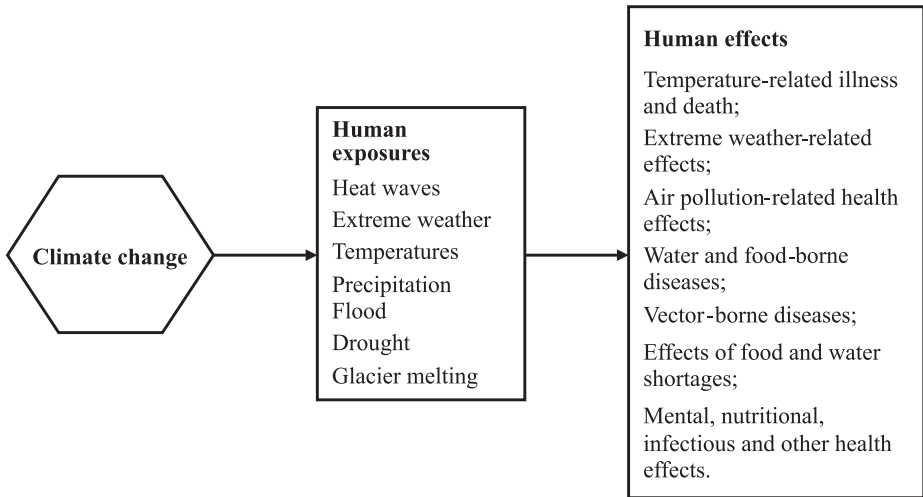
Table 1
Vector-borne diseases likely to be sensitive to climate change

Vector	Major diseases
Mosquitoes	Malaria, filariasis, dengue fever, yellow fever and West Nile fever
Sandflies	Leishmaniasis
Triatomines	Chagas disease
Ixodes ticks	Lyme disease and tick-borne encephalitis
Tsetse flies	African trypanosomiasis
Blackflies	Onchocerciasis
Snails (intermediate host)	Schistosomiasis

Source: Haines et al. 2006b, 590.

The changes in global climate have both direct and indirect impacts on human health. The direct effects include injury and illness due to the more frequent heat waves, floods and droughts expected as a result of higher temperatures, extremes of rainfall and thermal expansions of oceans (Haines et al. 2006a; Woodward et al. 1998). For example, populations that have experienced flooding suffer sustained increases in common mental disorders (Ahern et al. 2005). According to the UN IPCC: “Many millions more people are projected to be flooded every year due to sea-level rise by the 2080s” (IPCC 2007). Indirect effects are mediated via the influence of climate change on biological systems such as disease-carrying vectors or productive agro-ecosystems or other aspects of the physical environment (for example, photochemical oxidants) (Woodward et al. 1998). But the actual health impacts are largely dependent on local environmental conditions and socioeconomic circumstances (IPCC 2001). A conceptual framework used for the analysis of the impact of climate change on health is presented in Figure 1.

Figure 1
Pathways by which climate change affects human health.



Source: Partially modified from WHO 2003, 11.

Data and methods

Data for this study have been collected by employing both primary and secondary sources. As regards secondary sources, this paper, following Webster and Watson (2002), emphasizes literature review. To this end, three sources have been explored and analyzed: first, published research in the forms of academic journals, books, newspaper articles related to climate change and health, particularly focusing on older adults' health; second, reports and policy documents that have been published by numerous agencies such as the international development organizations and the Government of Kazakhstan (GoK) on climate change and older adults' health; and third, websites of various public and non-government organizations in Kazakhstan as well as international and regional development organizations that provide information to make people aware of potential challenges that emanate from climate change as it impacts on the health of older adults.

Primary data were collected to substantiate the secondary data and mainly derived from month-long interviews conducted in May 2010. By administering a semi-structured questionnaire, the first of the present authors, supported by two bilingual (Russian and English) research assistants, interviewed a total of 60 people, who were carefully chosen from five micro-districts in Almaty city: Bostandykskiy, Medeuskiy, Auezovskiy, Turksibskiy and Almalinskiy (see Table 2 for the characteristics of the respondents). Two specific criteria were considered for the selection of

the respondents: age not below 40 years and continuously living in Kazakhstan for 10 years or more. The importance of these criteria is two-fold in the context of this research: first, it is widely recognized that various ageing-related diseases gradually appear after one attains the age of 40 years; second, it is assumed that if a person continuously lives in a place for 10 years or more, they may gain considerable knowledge and understanding about the country's climate and could also be able to notice if any change occurs.

Variables used in the analysis

Variables considered in the study have been classified into three categories: (i) demographic; (ii) socioeconomic; and (iii) awareness (climate change and health). The covariates are briefly discussed below:

Demographic variables

Two demographical variables are examined in the analysis. These are:

- (1) The age of the respondents at the time of the interview (in completed years). The respondents have been classified into two groups on the basis of their age, i.e. below 50 years (40–49 age cohort) and 50 years and above (50+ age cohort). It is understood that the age of the respondents is an important factor to understand climatic change and its impacts on health.
- (2) Gender is another demographic variable considered in the study. An emphasis is placed on this variable because gender has been found to be important in climate change research (UN 2008).

Socioeconomic variables

The following two socioeconomic variables are considered in the analysis:

- (1) Education: In this study, education is defined as the dichotomy of secondary and tertiary levels of education. Primary education has not been taken into consideration because Kazakhstan's 1995 constitution provides mandatory secondary school education for its citizens. It has been increasingly recognized in recent studies (e.g. Kagawa and Selby 2009; Leal Filho et al. 2007) that education can play a key role in supporting efforts towards addressing climate change.
- (2) Monthly income of the respondents: It is directly correlated to health care and adaptation to climate change. Moser and Satterthwaite (2008) emphasize the importance of this issue. In this study, after reviewing the average monthly salary of sectors in Kazakhstan, such as agriculture, fishing, mining, transport and communications, real estate and public agencies (see Arinova 2009), the respondents were classified into two income groups: <40,000 Tenge³ and >40,000 Tenge.

3 Tenge is the name of the currency of Kazakhstan. 1 USD = 147.50 Tenge as of 26 September 2010.

Awareness variables

Studies (e.g. Anderson 2009; Boykoff and Goodman 2009; Sampei and Aoyagi-Usui 2009) show that awareness of the climate-change phenomenon leads to significant behavior change amongst individuals, groups and corporate managers. In particular, the awareness of health effects of climate change has significantly impacted individuals taking up the cause to lead climate change campaigns to counter its onslaught (Halady and Rao 2010). Three variables relating to awareness are examined; these are:

- (1) Change in the environment of the living place. In order to understand whether or not the respondents were aware of any environmental change, they were asked, during the survey, the following question; “Do you see any changes in the environment of your living place due to climate changes’ impact?” Three types of answers were recorded (yes, no and do not know). In case of positive answers, the respondents were then asked to pick three major changes they consider important from a given five choices, which were coded as follows: factor 1: hot waves in summer, factor 2: deep cold spells in winter, factor 3: season appears early or late, factor 4: prevalence of mosquitoes and other insects, and factor 5: others. These factors have been mentioned in several studies (e.g. Filiberto et al. 2009; Moser and Satterthwaite 2008) as major environmental impacts of climate change.
- (2) Impact on health. Available evidence suggests that climate change has a serious health impact, particularly on older people (Haq, Whitelegg and Kohler 2008; Kovats and Akhtar 2008). As a result, in this study, respondents were asked to answer the following question; “Do you see any impact of these changes on your health?” They were given three choices: yes, no and do not know. Those who said “yes” were additionally asked to name three major impacts from a given five choices: impact 1: high blood pressure, impact 2: cardiovascular disease, impact 3: respiratory problem, impact 4: skin disease, and impact 5: others.
- (3) Governmental action. National governments across the world are increasingly engaged in official communication with the United Nations Framework Convention on Climate Change (UNFCCC) and other initiatives, which require an assessment of vulnerability and adaptation capacity (Cimato and Mullan 2010; Jumbe et al. 2008). In order to understand whether or not the respondents were aware of the adaptive measures taken by GoK, they were asked the following question; “Do you know what adaptive measures have been adopted by GoK relating to climate-change effects?” In addition, they were also asked to make their suggestions/opinions as to how climate change effects could be reduced in Kazakhstan.

Climate change and older adults' health: Results and discussion

Public health research suggests that there are a number of environmental threats that disproportionately compromise the health of the older population (Filiberto et al. 2009). Several recent studies indicate that older persons suffer from adverse health effects due to increased heating and cooling, susceptibility to disease, disruptions in the usual supply of food and water and therefore a reduced ability to provide nutritional means for their families (Filiberto et al. 2009; Grundy 2006; Haq, Whitelegg and Kohler 2008; Shuman 2010). This section examines the association between climate change and its impacts on older adults' health from a variety of perspectives.

Results suggest that a large number of respondents are aware of the association between climate change and its health impacts (see Table 2). It shows that most of the respondents are aware of how climate change affects the Earth and also its impact on health. Table 3 clearly demonstrates that older people are more aware of climate-change effects and its impact on their health than relatively younger ones.

Education and climatic effects awareness

The data presented in Table 5 further shows that older adults with a secondary degree are remarkably more aware of the possible effects of climatic change than the tertiary-degree holders. There are differences in the identification of the three major climate-change effects between the groups. Results show that the respondents with secondary education identified deep cold spells in winter, seasons that appear early/late and others as the three dominant effects. The cohort with tertiary education identified hot waves, seasons which appear early/late and the prevalence of mosquitoes and other insects as the three most important effects. On the other hand, like the older adults, relatively younger adults (40–49 years) with a secondary degree are also more aware of the possible effects of climatic change than the tertiary-degree holders (see Table 4). As to the identification of the three major climate-change effects, the younger adults follow the older adults, and the difference in the identification of major effects between secondary and tertiary graduates remains the same as with the older adults. It means that both age groups are generally aware of the effects of climate change. Regarding the impacts on health, older adults with a secondary degree recorded skin disease, cardiovascular disease and respiratory problem as the three major health impacts, while the same cohort with a tertiary-degree noted blood pressure, respiratory problem and cardiovascular disease as the three major health impacts due to climate change effects (see Table 5). This situation is not greatly different between the younger and older adults.

Table 2
 Respondents' profile and the state of knowledge on climate change
 and its health impacts

Characteristics	Number	Percent
Age group		
40–49 years	24	40.0
50 + years	36	60.0
Gender		
Male	37	61.7
Female	23	38.3
Education		
Up to Secondary	35	59.3
Tertiary	24	40.7
Income		
<40,000 Tenge	18	37.5
40,000+ Tenge	30	62.5
Years lived in Kazakhstan		
<40 Years	16	26.7
40+ Years	44	73.3
Awareness about climate change		
Yes	49	81.7
No	11	18.3
Effects due to climate change:		
Hot wave in summer	34	56.7
Deep cold spells in winter	20	33.3
Seasons appear early/late	42	70.0
Prevalence of mosquitoes and other insects	17	28.3
Other than above	12	20.0
Impact on health		
Yes	42	76.4
No	13	23.6
Types of impact*:		
High blood pressure	34	57.0
Cardiovascular disease	24	40.0
Respiratory problem	30	50.0
Skin disease	9	15.0
Other than above	7	12.0

*Multiple responses

Source: Field research.

Regarding the effects of climate change and its health impacts, it reveals that the respondents of both age groups are generally aware of it. The respondents with secondary education were found to be relatively more aware than the tertiary-degree holders. This is because the possible effects on population health of severe environmental degradation and pollution are of considerable concern in Kazakhstan (Kulzhanov and Rechel 2007). The basin of the shrinking Aral Sea is heavily salinated since its feeder rivers are siphoned off in irrigation schemes, and the remaining water is polluted from factories and agriculture. The situation is further aggravated

Table 3
Awareness of effects of climate change and health impacts

	Effects of climate change					Impact on health				
	Hot waves	Cold spells	Seasons appear late/early	Prevalence of mosquitoes and insects	Others	Blood pressure	Cardiovascular disease	Respiratory problem	Skin disease	others
Age cohorts										
40–49 Years	38.2	45.0	38.1	29.4	25.0	23.5	25.0	50.0	33.3	42.9
50+ Years	61.8	55.0	61.9	70.6	75.0	76.5	75.0	50.0	66.7	57.1

Source: Field research.

due to various forms of contamination of the limited supply of fresh water in Kazakhstan (Kulzhanov and Rechel 2007). Kazakhstan has a number of natural breeding grounds for epidemic diseases, including the plague (Comrie 2007), rabbit fever, haemorrhagic fever, tick-borne encephalitis and anthrax (Kulzhanov and Rechel 2007). The decrease in life expectancy in Kazakhstan in the 1990s was largely due to an increase in mortality from cardiovascular diseases (Cockerham et al. 2004). A 2007 WHO report shows the age-standard death rate from ischemic heart disease for males increased from 405 per 100,000 male population in 1989 to 611 in 1996, declining again to 525 in 2005 (compared to 118 in the EU in 2004) (Kulzhanov and Rechel 2007). The study by McKee and Chenet (2002) found that, among other things, poor investigation and treatment of hypertension are major contributing factors in the increase of cardiovascular disease in Kazakhstan. This contextual background made the respondents, irrespective of their level of education, largely associated with the effects of climate change and related health conditions.

Income and years of living in Kazakhstan and awareness of climate change and health effects

The association between income and years of living in Kazakhstan and the desired effects of climate change and its impact on health conformed to the expected relationship. It is, therefore, revealed that the people of the high-income group and those living in Kazakhstan for a long period are more aware of climate change and health effects than those respondents with relatively low income and living there for fewer years (see Tables 4 and 5).

Gender, climate change and health effects

The data show that the Kazakh women are more informed than men regarding climate change and health effects (see Tables 4 and 5). This is possibly due to the effect of the higher life expectancy of females compared to males. According to a 2008 UN database, in Kazakhstan, life expectancy for females and males were 71.2 and 59.0 years respectively (UN 2009). Females' higher life expectancy made them more aware than males of the effects of climate change and its consequences on health.

Governmental action, vulnerability and adaptive capacity to climate change

On the basis of the opinions/comments from interviews of the respondents, this study assessed the association between governmental action and vulnerability and adaptive capacity to climate change in Kazakhstan and found a somewhat mixed relationship. A large number of respondents (56%) expressed their unawareness of any governmental initiatives relating to vulnerability and adaptation. However, those who reported their awareness also voiced their dissatisfaction with GoK for its slow implementation of relevant policies and blamed the public-sector corruption

Table 4
Awareness among younger-age cohort (40–49 years)
about climate-change effects and health impacts

Characteristics	Effects of climate change					Impact on health				
	Hot waves	Cold spells	Seasons appear late / early	Prevalence of mosquitoes and insects	Others	Blood pressure	Cardiovascular disease	Respiratory problem	Skin disease	Others
Gender										
Male	61.5	44.4	56.3	80.0	66.7	62.5	33.3	53.3	66.7	33.3
Female	38.5	55.6	43.8	20.0	33.3	37.5	66.7	46.7	33.3	66.7
Education										
Up to	61.5	33.3	56.3	40.0	66.7	75.0	66.7	46.7	33.3	33.3
Secondary	38.5	66.7	43.8	60.0	33.3	25.0	33.3	53.3	66.7	66.7
Tertiary										
Income										
<40,000 Tenge	36.4	28.6	38.5	20.0	–	50.0	40.0	41.7	50.0	–
>40,000 Tenge	63.6	71.4	61.5	80.0	–	50.0	60.0	58.3	50.0	–
Years lived in Kazakhstan										
<40 years	30.8	33.3	25.0	–	33.3	37.5	33.3	33.3	–	–
40+ years	69.2	66.7	75.0	–	66.7	62.5	66.7	66.7	–	–

Source: Field research.

Table 5
Awareness among older-age cohort (50 years or more)
about climate-change effects and health impacts

Characteristics	Effects of climate change					Impact on health				
	Hot waves	Cold spells	Seasons appear late / early	Prevalence of mosquitoes and insects	Others	Blood pressure	Cardiovascular disease	Respiratory problem	Skin disease	Others
Gender										
Male	23.8	18.2	30.8	16.7	44.3	19.2	11.1	20.0	16.7	25.0
Female	76.2	81.8	69.2	83.3	55.6	80.8	88.9	80.0	83.3	75.0
Education										
Up to Secondary	61.9	70.0	64.0	58.3	75.0	68.0	72.2	71.4	83.3	33.3
Tertiary	38.5	30.0	36.0	41.7	25.0	32.0	27.8	28.6	16.7	66.7
Income										
<40,000 Tenge	25.0	28.6	40.0	33.3	40.0	29.4	20.0	45.5	40.0	-
>40,000 Tenge	75.0	71.4	60.0	66.7	60.0	70.6	80.0	54.5	60.0	-
Years lived in Kazakhstan										
<40 years	4.8	27.3	26.9	16.7	22.2	19.2	16.7	26.7	16.7	25.0
40+ years	95.2	72.7	75.1	83.3	77.8	80.8	83.3	73.3	83.3	75.0

Source: Field research.

for this. Corruption in Kazakhstan, as in other Central Asian countries, is rampant (Gleason 1995; Knox 2008). As a result, Kazakhstan consistently scored poorly on the Global Corruption Perceptions Index (CPI) published by Transparency International. The 2009 Global CPI has ranked Kazakhstan 120th among 180 countries surveyed, with an index value of 2.7 (Transparency International 2009). Analyzing the respondents' opinions, it reveals that most of them were unhappy with the inadequate health-care facilities for older adults. Kazakhstan suffers from a dismal performance in the health sector. The main problem with the health-care system since its independence has been very low government funding. For example, in 1998 only 40 % of the requested funds were released by the Ministry of Finance (Piotrowska 2008). In addition, wages in the health-care sector remain low. After a 20 % salary increase in 2004, health-care workers enjoy only about half of the national average wage (Piotrowska 2008). Nevertheless, it is estimated that about 50 % to 60 % of the facilities' expenditures accounted for salaries, while less than 20 % was spent on the actual health care of patients (Piotrowska 2008). This portrays that the health-care system suffers from low investment; hence the poor quality of care.

Health is one of the GoK's priority sectors and has been included in the country's comprehensive strategic policy "Kazakhstan 2030". The policy has identified seven priorities for the country's development (UN 2010): (1) national security, (2) domestic stability and social cohesion, (3) economic growth, (4) health, education and welfare for the citizens of Kazakhstan, (5) energy resources, (6) infrastructure, transport and communications and (7) a professional state. As a consequence, in order to improve the health-care system, the GoK initiated a 5-year long (2005 to 2010) health-care reform and development program, which is currently under implementation. The key objectives outlined in the program are (GoK 2005): the creation of an efficient system of medical care with due consideration of principles of joint responsibility for health protection between an individual and the State with emphasis on primary medical care, the adoption of international principles of medical-care administration, the improvement of maternal and child health care, the improvement of the medical and demographic situation, the decrease of the social-disease morbidity rate and the improvement of the social status and image of medical doctors and technicians. Admittedly, the realization of the objectives still largely remains elusive.

Is the GoK prepared to combat the climate change effects? Kazakhstan has taken an active role in the resolution of global environmental problems from the inception of its independence, including the international process of climate-change prevention. Since 1995, Kazakhstan has been a party to the UNFCCC and ratified the Kyoto Protocol and adopted several legal and institutional mechanisms to combat climate change (ADB 2009; UNDP 2008). Analyzing the 2008 National Human Development Report in Kazakhstan, it is unclear whether GoK has undertaken adequate initiatives to fight against climate change, particularly in the context of human health (UNDP 2008). The lack of governmental action perhaps stems from

the fact that the 2009 “Germanwatch” Global Climate Risk Index (CRI) has ranked Kazakhstan 144th among 148 countries researched, with an index value of 122.33 (Harmeling 2008), making it one of the least affected countries. According to the information provided by “Germanwatch” on Kazakhstan and the resulting evaluation, there is clearly one inconsistency in the interpretation and expression of the evidence-based data. This has happened because the 2009 CRI was calculated on the figures from 2007 on indicators such as number of deaths, number of deaths per 100,000 inhabitants, sum of losses in US dollars in purchasing-power parities and losses in proportion to gross domestic product (Harmeling 2008). There is a possibility that the picture one gets on Kazakhstan from the 2009 CRI is no longer a very accurate portrayal of the reality, as that study was based on just four criteria where the country was least affected. In this study, several determinants have been analyzed other than the above four, and this inclusion and these analyses have helped to arrive at a better representation of the existing situation of climate change and its impacts on older adults’ health in Kazakhstan. Whatever the disparity that exists between this study and the 2009 CRI, thus, it makes way for an understanding of the backgrounds of each study and the determinants that dominated them.

Based on the discussions, the results confirm the expected effects of climate change on the older adults’ health in Kazakhstan. The results suggest that the older adults of the higher-level income group, who have lived in Kazakhstan for a longer period of time, and females are highly associated with the effects of climate change and related health consequences. Arguably, education is found to be negatively correlated with awareness of climate-change risks as well as older adults’ health impacts. This may be attributed to the fact that only a tiny portion of people possesses tertiary education. The results further suggest the inadequate government initiatives to fight against climate change.

Conclusions

The objective of this paper has been to examine the impacts of climate change on older adults’ health in Kazakhstan. Available evidence substantiates that climate change largely affects older adults’ health. Kazakhstan’s poor environmental condition, which is highly sensitive to climate change, largely contributes to exposure to such threats as extreme weathers, temperature raise, drought, and glacier melting. All these have damaging effects – death, exposure to diseases, mental-health problem, forced evacuation and relocation – on older adults’ health and thus limit their adaptive capacity to climate change. The results of the study have shown that older adults were mostly aware of climate-change effects and its possible consequences on health as compared to younger adults. Higher climate-change awareness was observed among females and the higher-income group and those who have lived in Kazakhstan for a longer time. The effect of education on climate-change awareness was found to be less evident and more in-depth study is needed to specify the link.

The study also reveals that older people, those who are more aware about climate change, are more likely to have knowledge on health consequences as a result of climate-change effects and have reported significantly higher responses. The results further report on the inadequacy of the governmental measures for climate-change adaptation to interventions, and thus lessening health impacts.

The results of the study have several policy implications. First, in order to achieve one of the articulated “Kazakhstan 2030” policy goals (i.e., health, education and welfare for the citizens of Kazakhstan), GoK has planned to reform the development of health care. Therefore, adequate governmental actions are needed to bolster the smooth implementation of the policy. Second, for taking special health care to older adults, more elderly-friendly sanatoriums need to be established across the country. Third, adequate government investment is a pre-requisite to improve the quality of care. This greatly depends on the government's political will whether or not to modernize its age-old health-care facility. Fourth, various policy programs are needed to inform and educate citizens, preferably the older adults, about the effects of climate change on health and to familiarize them with the adaptation techniques. This will be an enormous task, which necessitates public-private partnerships for its cost-effective and cost-efficient implementation.

There are several limitations to this study. First, the field study of this research was conducted only in five micro-districts in the Almaty region among 16 *oblasts* (regions) in Kazakhstan; therefore, the empirical results presented here are not representative but indicative in nature. Second, the respondents were asked subjective questions to understand their awareness of the effects of climate change and its impact on health without knowing whether or not the respondents had been suffering from the climatic diseases; more accurate and objective answers would have been recorded if the survey was conducted only among those people who had been affected by climatic health trauma. Third, the sample size of the study was relatively small, and of those who were surveyed, the number of older adults was even fewer. This consequently constricted diverse answers, opinions and suggestions from more elderly respondents.

Three key areas which warrant further research have been identified: (1) the attribution of glacier-melting-related disasters to climate change: because no such well-known study on global attribution is yet planned; (2) regional analysis: as the understanding of the human impact on climate change in the Central Asian region is very limited, but it is also significant to steer adaptation interventions; and (3) an estimate of short-term and long-term economic losses due to adverse health conditions both at regional and global levels.

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Public-Private Partnerships During the Credit Crunch: The Case of Russia

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Abstract

One of the mechanisms that allow governments to increase quality and efficiency in procuring infrastructure services that do not lead to an expansion of public debt and also prove its sustainability in public infrastructure delivery is the concept of public-private partnership (PPP).

Almost two years after the financial crisis, the market is still characterized by difficulties in securing debt financing, government resistance to bearing new financial commitments and high cost of capital. So, are PPPs a challenge or a way for the government to deal with the financial crisis we faced in 2008? The financial crisis has affected the private sector's confidence to step in PPPs and also the government's assurance in assessing the value for money that PPP can bring.

The paper is based on data collected through different information sources with the aim to analyze the current financial-crisis impact on the PPP market and its key participants and synthesize countries' experience in procuring PPP under the credit crunch in order to choose relevant instruments to support existing PPP projects.

The main question this paper addresses is identifying those instruments which are available for governments and the private sector to secure PPP implementation nowadays in the PPP market in Russia. St. Petersburg, being the most active region in Russia in PPP implementation, will serve as a good example of a city with a developing PPP market, and that will be the basis for the current analysis of the impact of the financial crisis on the PPPs.

The paper discusses a variety of ways the government can choose to deal with PPP projects under the current financial crisis, depending on the project stage, i.e.

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pipeline stage, designing stage, tendering stage or implementation stage. The analysis provided will contribute to the design of a PPP policy for decision-makers in procuring PPP projects today.

Keywords: public-private partnerships (PPPs); financial crisis; government support; project restructuring; refinancing; value for money.

Introduction

Infrastructure is a top-priority agenda item today for all governments in the world. Infrastructure investment needs account for up to \$40 trillion globally within the next twenty years [Airoldi, Marco, Lamberto Biscarini, Vito Saracino 2010]. On the one hand, public funding cannot keep pace with the growth in spending on infrastructure, and on the other, governments do not always have access to the innovations and best-management practices of the private sector which lead to an increase in efficiency of infrastructure procurement along with a quality increase. The importance of infrastructure development is proven by the findings of the World Bank, which estimate that “a 1 % increase in infrastructure stock is associated with a 1 % increase in GDP” (Lawson and Dragusanu 2008, 3). Thus infrastructure is responsible for economic growth from one perspective; from another perspective, its development is stimulated by economic growth. As governments face such problems as budget constraints, poor quality delivery of public infrastructure-based services and the inability to procure large infrastructure projects effectively, more and more authors and policy-makers raise the question of alternative delivery methods (see, for example, Flynn 1994; Mustafa 1999; Flyvbjerg, Bruzelius and Rothengatter 2003; Chan et al. 2004, Hodge and Greve, 2005]. Today there is an overall understanding that without private-sector involvement in public-infrastructure creation, governments would not be able to meet the challenge of the existing infrastructure gap. Public-Private Partnerships (PPP) became an efficient method for governments to attract private financing of public infrastructure along with private-sector innovations and management.

In fact, PPP is not a new tool available for governments today to deliver public infrastructure. It has been known since the 16th century, when the first concession was introduced for a canal in France (Ribault 2001). Since then, PPP has widely spread around the world, and a variety of PPP models evolved.

The concept of PPP assumes a risk-sharing relationship based on a shared aspiration between the public sector and one or more partners from the private and/or voluntary sectors to deliver a publicly agreed outcome and/or public service (Grimsey and Lewis 2004). In other words, PPP “represents a long-term mutually beneficial agreement between a government body and the private sector, delivered through a special purpose vehicle (hereafter abbreviated as SPV), with an aim to

create public infrastructure facilities and/or deliver public infrastructure-based services, under which:

- (i) there is a use of public and private resources;
- (ii) risks, obligations, rights and benefits are shared between public and private sectors, and;
- (iii) the government body settles output specifications for the project outcome” (Reznichenko 2010, 28).

Since PPP is based on private financing of public infrastructure incorporating a risk-sharing relationship between government and the private sector, the impact of the current financial crisis is significant for PPP implementation around the world.

Most papers dealing with the impact of the financial crisis on PPP implementation today tend to discuss the overall impact of the crisis, not devoting enough attention to the consequences of the crisis for each PPP participant, and they mostly tend to provide an overview of government actions towards PPP support taking as examples such countries as the United Kingdom, Australia and Canada, which proved themselves to be the most successful and have a long history of PPP use (see, for example, Burger, Tyson, Karpowicz and Coelho 2009; Hall 2009; Sanger and Crawley 2009; Traupel 2009). The current paper uses the theoretical framework developed by the mentioned papers as a basis for a deeper research of the financial-crisis impact on the key PPP actors and the main instruments that can be used to improve the current situation on the PPP market in Russia. Eastern European countries came to consider the PPP concept relatively late, and analyzing their PPP market in the context of the financial crisis can help the policy-makers of a developing PPP market to be wiser in facing the decrease of financial markets’ liquidity. Since most PPPs are represented in the transport sector, and it is a sector of the economy that was affected the most by the current credit crunch in respect to PPPs and the first area of PPP implementation in countries inexperienced with PPPs, the current paper concentrates its attention mostly to the transport sector.

The main two questions this paper states are to assess the financial-crisis impact on the PPP market in Russia and to identify those instruments which are available for governments and the private sector today to secure PPP implementation, particularly in the PPP market in Russia. The motivation to set up these two questions for the research is linked to considering whether the financial-crisis impact was a reason for PPP projects’ failures in Russia or whether it was linked to the legal and macroeconomic framework and thus was expected. In order to answer this question, the paper was organized as follows: Section 1 discusses the advantages of PPPs for the government and how the impact of the financial crisis can be seen; Section 2 provides an analysis of the the impact of the financial crisis on each PPP actor and discusses possible solutions to meet the difficulties that the credit crunch

has brought to PPP implementation; and Section 3 suggests an overview of the PPP market in Russia, analyzes the first PPP projects and the financial-crisis impact on them and discusses the possibility to apply the solutions found in Section 2.

1. Research context: background considerations

In order to assess the impact of the financial crisis on the use of PPP by the government, it is important to understand the benefits of PPP implementation for public-infrastructure creation/rehabilitation, which can be delivered to society. The advantage of PPP-mechanism use in comparison with public procurement can be shown through a value-for-money (VFM) analysis of the project. VFM is a basis for the government to make a decision which method to use for project procurement.

The government takes into consideration the efficiency of PPP use for project implementation regarding benefits for society. PPP may help the government in a situation when public budgets are in deficits, but it should not be misused to create hidden debts. That is why it is so important to understand how the financial crisis has affected the efficiency of PPP use for the government and society in general. Then how to measure the efficiency of PPP projects from the public point of view? The efficiency of PPP use for the procurement of infrastructure projects can be considered though 3 different aspects, i.e.:

- a) financial – then we are talking of financial efficiency from the use of PPP for project realization (i.e. the use of the PPP mechanism allows the government to create a facility at a lower cost in comparison with public procurement and thus to achieve VFM). According to several studies, the average cost overrun in projects procured conventionally varies between 14.8% and 73 %, whereas under PPP, cost overruns lay between 1 % and 22 % (Allen Consulting Group 2007; National Audit Office 2003; Mott MacDonald 2002);
- b) time saving (projects are usually procured in time under PPP whereas under public procurement, time overruns are an ordinary situation; see, for example, National Audit Office 2003; Mott MacDonald 2002).
- c) availability – meaning that more infrastructure facilities become available for use.

In practice, the most popular measurement of PPP efficiency among public authorities became the calculation of financial efficiency for the project since this way suggests the most visible and evidential proof for taxpayers. Public Sector Comparator (PSC) is used for the assessment whether PPP can bring VFM to the government. PSC represents a benchmark of the costs the government faces when realizing a project realization in the framework of conventional procurement (OECD 2008). Thus, a comparison between PSC and bids of the private sector shows the VFM of the project for the government (see further Partnerships Victoria 2001; Yescombe 2007). Thus the VFM for the government in cases of PPP use for

project realization depends directly on a bid of the private sector. To understand the financial-crisis impact, we should answer the question of how the private sector forms its bid. The cost of a project for the government suggested by the private sector consists of a net present value of a payment stream requested by the last party of the project's realization. Net present value (NPV) of payments calculated by the private sector depends on the cost of the project and internal rate of return (IRR) on equity which investors would like to receive. The financial crisis has impacted the size of project costs and also the requested return on equity. Thus the impact of the financial crisis can be shown though an examination of the change in private-sector behavior in respect of PPP projects.

Another consideration is devoted to PPP success factors which can result in a more severe impact on the financial crisis. Investments in infrastructure are usually large-scale, requiring large initial investments and characterized by long payback periods (Pethe and Ghodke 2002). Thus, the success of PPP implementation depends on a favorable investment climate, a stable macroeconomic framework and a supportive political environment (Akintoye, Beck and Hardcastle 2003; Irwin 2007; Delmon 2009). To be able to distinguish those instruments that can be efficiently used against the impact of the financial crisis on PPPs, section 2 of the paper will analyze successful PPP countries.

2. Financial-crisis impact on PPPs in infrastructure

The current situation on the market is characterized by difficulties in securing debt financing, government resistance in bearing new financial commitments and high costs of financing. According to the World Bank, the period from July 2008 to March 2009 was characterized by a decline of 15 % in investments and 30 % in the number of infrastructure projects with private participation compared with the levels in the same period in the previous years (Izagurrie 2009). According to the same data source, the transport sector turned out to be the most affected one with 40 projects, estimated at US\$ 11.8 billion, reaching closure between July 2008 and March 2009, which represents a 50 % decline in investment commitments and a drop of 40 % in the number of projects compared with the same period last year.

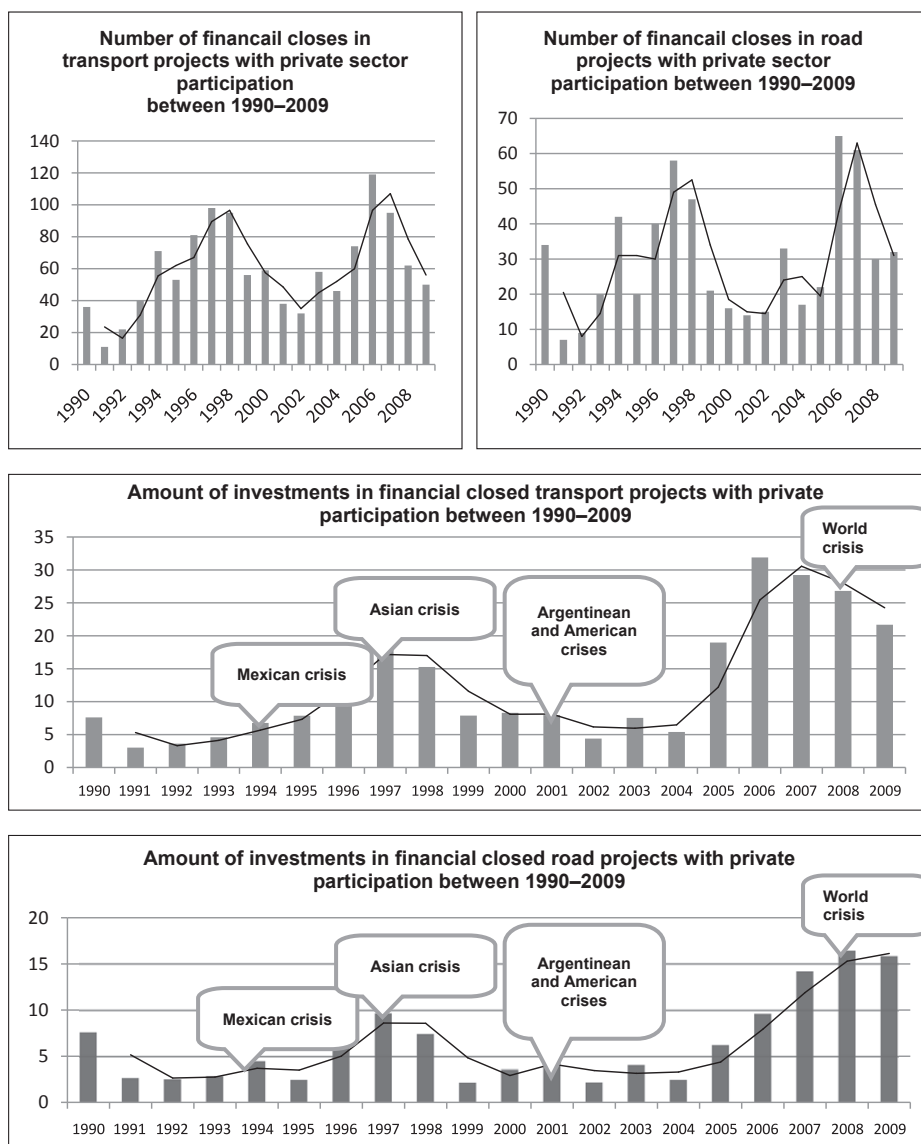
So, do PPPs constitute a challenge or a way for the government to deal with the financial crisis we are facing nowadays? The financial turmoil has affected the private sector's confidence to step in PPPs and also the government assurance in assessing the value for money (VFM) that PPP schemes can bring. Looking back at a history which outlines several financial crises that economies have experienced in the past, we can speculate on its consequences (Figure 1). Most PPPs are based on strong debt leverage (up to 90 % of the project's total funding requirements), which is why the impact of the crisis on the projects' procurement is so high. National lending markets in developing countries are recovering very slowly, and they

cannot meet the challenge to provide a capital for PPP projects; also there is the necessity for the government to support the market in the early beginning of the lending-market squeeze.

In the 1990s, a growing number of developing countries opted for implementing private-participation schemes in roads, and by the mid-1990s, the private activity attained peak levels with 50 to 60 projects reaching financial closure every year and annual investment commitments between US\$ 10 billion and US\$ 12 billion. After that, private activity in roads as well as in the other infrastructure sectors declined substantially as a result of the economic crises that affected many developing countries and the overall pessimism surrounding private infrastructure in developing countries (Harris 2003). However, private participation in roads revived within two years, returning to peak levels by 2006.

The greatest danger each financial crisis brings to the economy is the decrease of the possibility for the private sector to access the capital resources which are essential for any project implementation and economy growth. Another danger of a financial crisis consists in its effect on the lending market. Governments which belong to developing PPP markets usually rely on a bank sector due to their inability to attract institutional investors. As shown in a figure above, not every crisis leads to a decrease of the number of projects with private-sector participation along with the drop in investment obligations. As international experience shows, the effect of crises on PPP projects differs, and the strength of the impact depends on the nature of the economy sector where the project occurs. Generally local crises have a minimal effect on the participation of the private sector in PPP projects in the world. For example, the Mexican crisis of 1994 did not result in decreasing the investment activity of the private sector in other countries and thus did not change worldwide investment tendencies. The reason of the crisis was, first of all, an unbalanced public policy which resulted in peso devaluation and withdrawal of capital from the country. The Asian crisis, which also belong to currency crises, touched several parts of the world and thus had effects on the number of projects procured through PPP. It also caused a worldwide downturn in investment volume of financially closed projects with private-sector participation. The Argentinean crisis, being local, would not have caused such a slump in private-sector participation in the projects if it had not coincided with the American crisis of 2001, when the stock market of high-tech companies collapsed, which resulted in a downturn for other traditional industries. Thereby local and regional economic crises affected private-sector capital participation in PPP projects, but their effect was not significant in comparison with the world crisis of 2008. The world crisis shrank the world capital market, which had put all investment projects in stiff competitive conditions in the contest for financial resources. The world crisis differed from other crises due to the reason of its roots. The main reason of the current crisis is a collapse of the mortgage market, i.e. there was a slump in the credit market which immediately resulted in a liquidity decrease of the world financial markets.

Figure 1
Procurement of infrastructure projects with private-sector participation
in the world in 1990–2009



Source: designed by the author on the basis of the database of the World Bank of infrastructure projects with private participation, available at http://ppi.worldbank.org/explore/ppi_exploreSector.aspx?sectorID=3.

Road PPP projects were the most vulnerable during the Mexican, Asian and Argentinean crises, which is shown in Figure 1. However, there is an interesting fact – after the world financial crisis of 2008, the investment amount of financially closed road projects with private participation has dropped in 2009, but their number increased. This may be explained by the willingness of most governments to step into the projects to ensure their procurement in a difficult economic period when the cost of capital for the private sector rises significantly. A well-developed road network is an indispensable condition for economy development exactly because projects on its creation are of highest priority for the government. The other explanation can be that the government made a decision to reduce the size of the road projects in respect of capital expenditure with the aim to increase the chances of projects to be procured. Road projects are sensitive to the financial crisis, which is explained by the direct link between their successes and the commercial power of the project, which depends on toll collection (ensuring returns on equity for investors). That is why the commercial power of a toll road project decreases rapidly with the appearance of a financial crisis. At the same time, it should be noted that the effect of crises on transport PPP projects varies due to the different effects of crises on the use of PPP in different subsectors of economy (for example, airports, railways, etc.).

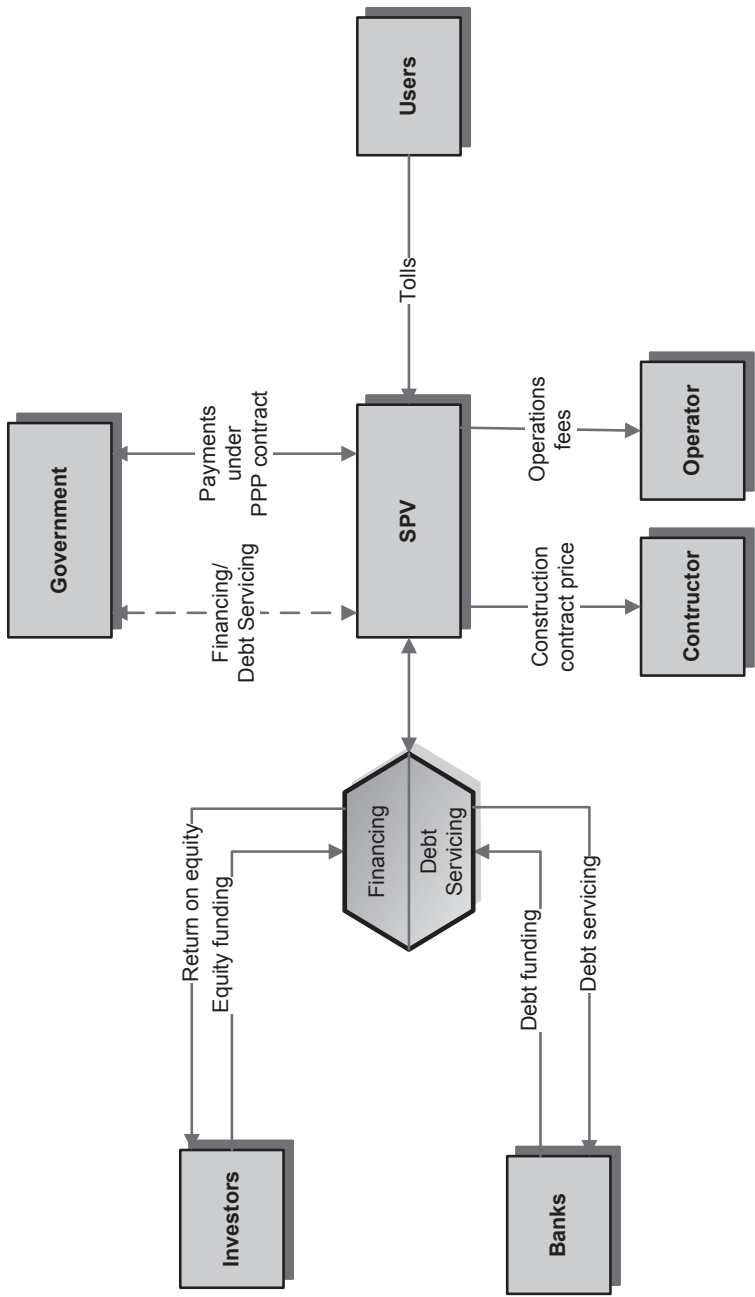
The analysis carried out by Clive Harris and Kumar Pratap in 2008 showed that a macroeconomic shock increases the likelihood of project cancellation to 3.7%. The percentage of cancelled projects grows in developing and transition countries due to a synergy effect of several reasons, i.e. macroeconomic shock, financial-market immaturity, poor legislation and government skills to respond to the difficulties arising along the PPP road, etc. The same conclusion will be relevant to emerging PPP markets. So in today's environment, PPP is a challenge, and there is the need for actions to be made to secure the benefits that PPP can bring. Now it is time to re-examine the benefits the PPP mechanism can bring for delivering infrastructure in developing and developed countries.

There are more techniques available nowadays for governments to control the markets. At the same time, turning to public-infrastructure facilities, especially roads, not many new methods of procurement exist. PPP is a good mechanism to provide public-infrastructure services with a better VFM, and at the same time, it can be an attractive activity for the private sector during an economic downturn.

To respond to the challenges that a financial crisis brings to ensuring the value for money in PPP projects, it is important to look at its influence on every participant of the PPP deal (Figure 2).

Looking at a typical PPP deal, the greatest impact of the financial crisis on PPPs is in the construction stage, where capital expenditure was mostly covered by private debt financing with a limited input of private equity. As a result of the credit crunch, which is now deeply rooted and affecting the wider economy, liquidity

Figure 2
Cash flows under PPP



Source: Based on Yescombe 2002; Delmon 2009; Akintoye, Beck and Hardcastle 2003.

problems and the amounts of credits that lenders are ready to inject in a project are making the closure of PPP deals more challenging than ever, although a slight recovery has been noticed by some participants of the PPP market in recent months.

The financial crisis has affected every participant involved in a PPP, i.e.:

- the government;
- banks;
- investors;
- end users.

Due to the financial crisis, access to capital markets became limited along with a falling demand for infrastructure services. Investors are affected on both sides; on the side of financing sources with an increasing cost of capital, revenue generation is also expected to be lower. Now debt financing is difficult to secure, which is why the cost of financing became higher. Commercial bank lending is still quite limited. There are limited opportunities of national commercial banks in providing lending in developing countries; moreover due to the high volatility of the exchange rate, international lending is also quite expensive. Investors are requested to provide more equity for a project to make it more feasible for debt bank financing.

There is a kind of contamination spreading from the bank sector to the project company (SPV) trying to contract with public authorities and therefore impacting the public-sector procurement entities. The mechanism could be described as follows:

- Today the financial crisis limits the public budget and its ability to bear new commitments arising with PPP project implementation. All over the world, countries have to tighten their expenditures and at the same time find ways to support the national economy.
- Banks have faced liquidity problems which lead them to be more selective in projects for funding and raise the cost of capital. Thus they will be reluctant to finance PPP projects with a high volume risk (linked to toll-road concessions). Banks have a very mixed view on the long-term sustainability of project finance, which is a reason for the return of club transactions as the solution with banks sharing risks (EPEC 2009). Tenors of debt financing became shorter, which led to the need of refinancing projects where banks will request to step-up in margins.
- Investors will be requested to increase equity in the project due to the limitation of the debt market which can lead to the need of additional equity investors for the project realization. Due to a power increase of the banks in setting up conditions for project financing, equity IRR of sponsors will decrease. Due to this fact, they will push the government to pay more during the operation stage, which raises the question of affordability of the project for the government.

- As for end users, they are experiencing a decline in their purchasing power. That is why introducing a toll system, for instance in those countries where roads used to be free, can be met with negative reactions and can cause an even higher fall of demand.

Outlining the general impact of the credit crunch on each of the PPP project participants, we can look deeper into the specifics of this influence and propose the ways out.

The banks put the risks related to the project to be funded under closer scrutiny. Their greatest risk adversity leads them to select only projects dealing with a lower technical risk (meaning that technical innovation will not be favored anymore) and with little volume risk (which explains the decline of their appetite in toll-road projects, for instance, and their focus on projects which are “availability-driven”).

Although the debt will be raised on a non-recourse basis, banks will make sure that the members of the SPV will be able to present strong financial credentials (large cash-rich companies will therefore be advantaged, compared to small companies with an under-sized balance sheet). The main impact will be a lower degree of competition between the bidders, as many companies will either disappear from the PPP market or will be more selective of the projects they tender for, due to the high level of sunk costs related to the tender stage. This evolution can be mitigated if public authorities are ready to reimburse some proportion of the tender costs that unsuccessful bidders have to incur till the preferred bidder stage, especially in the lengthy procurement processes (competitive dialogue).

The banks will have to go through more stringent internal credit-committee approvals, meaning that the funding terms at call for final tender (CFT) will not be known with great certainty till the Financial Close (FC). Banks will require flexible terms between CFT and FC, meaning that margins (but also covenants) included within the final tenders may be amended if the market conditions deteriorate. Bidders are reluctant to provide public authorities with a price certainty whereas this is not backed up by lenders on the funding terms. As authorities want to select preferred bidders on the basis of price certainty only, there is a clear issue here. Bidders may be tempted to include a buffer if authorities are prescriptive on price certainty, but this does not bring any VFM.

The holds (i.e. the quantum of money a single bank is ready to bring to a project) have been shrinking since the beginning of the credit crunch, meaning that sponsors have to attract more lenders to their club deals if they still want to demonstrate to the authorities a strong financial robustness of their submission. Given the potential defection of some banks at a late stage of the procurement, all bidders need to secure more funds than strictly required by the project (in order to ensure that there will not be any funding gap during the preferred bidder stage): this could

be an issue for very large projects, especially at a time where lenders are reluctant to provide bidders with exclusivity, but it is a key area as otherwise, this would give to marginal financiers an exorbitant power of negotiation in the club deal to increase their margins, making the funding of the projects (and therefore the unitary charge) much more expensive, as obviously the “initial” members of the club deal will align on the latest ones.

As a matter of fact, there is a common interest between bidders and procurement authorities to try to counterbalance the power of lenders, for instance by implementing *a funding competition at the preferred bidder stage*: this would avoid having to select a preferred bidder on the basis of a price which is not known with certainty and will put the banks’ conditions under competitive pressure. Obviously, the value for money of such a funding competition will be proportionate with the debt funding requirements, depending on the amount of capital expenditures to be financed (funding competitions therefore are not appropriate for small projects or projects with low gearings).

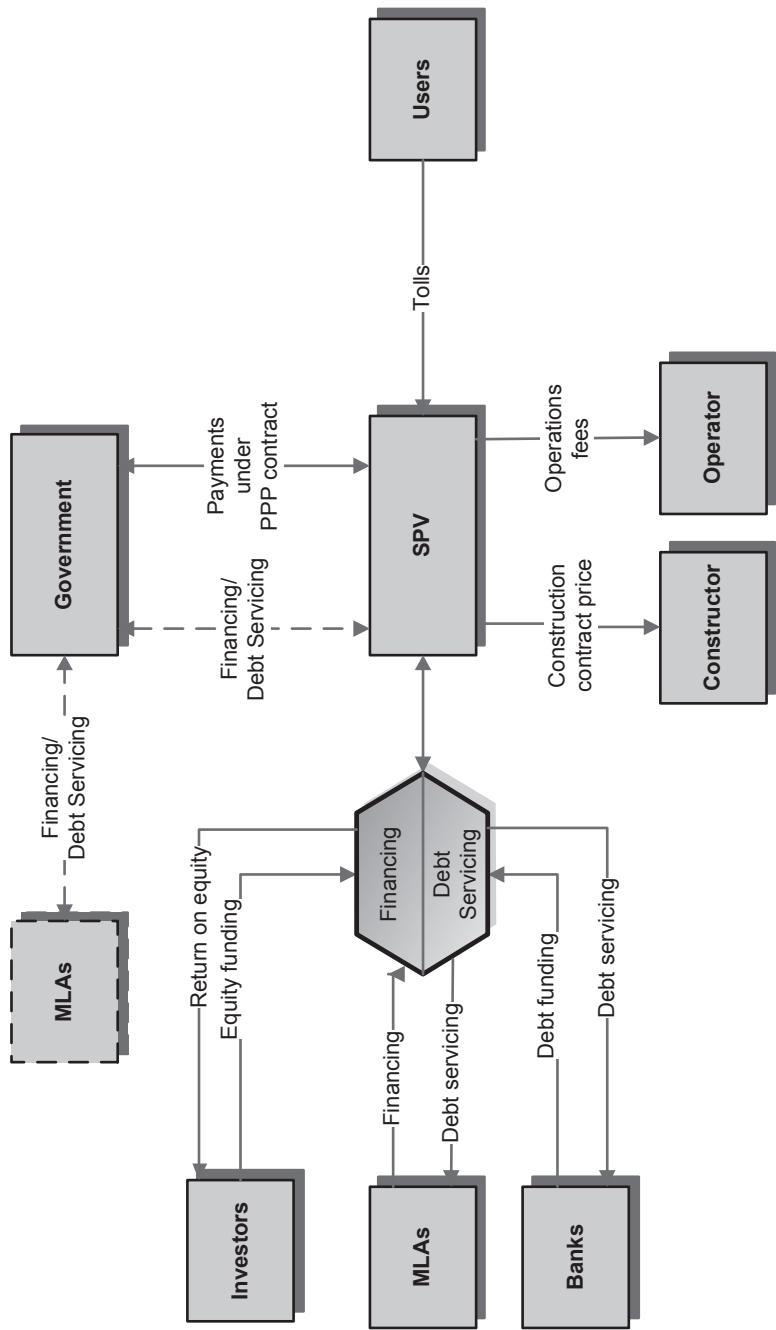
Authorities may also want to bring into the game some *multilateral agencies or the EIB* earlier on in the process in order to decrease the recourse to commercial banks and to diminish the power of the marginal funders (this is definitely VFM, as the margins and the funding fees charged by these MLAs/EIB are significantly lower than the ones proposed by commercial banks) (see Figure 3).

Multilateral organizations (such as the World Bank, IFC, EBRD, etc.) offer financing for countries to continue PPP procurement, but request that more conditions be met in order to be eligible for financing. In the United Kingdom, for instance, the government took the decision to provide lending directly to PPP entities rescuing US\$ 18.2 billion of public investment in procurement in different sectors, including transport, waste treatment, schools and others. Those government loans are considered to have an interest rate which should be repaid by the private sector in the future.

MLAs tend to have two windows, i.e. a public one and a private one. In case of using the public window, MLAs lend to sovereign entities or, in some case, sub-sovereign ones; in case of the private window, lending goes to privately owned entities. Attracting MLAs and using their potential can be a good way to support PPP development where PPP projects are on their way and secure VFM. What is confusing about those organizations is that some MLAs have the same name for both, for instance EBRD is both public and private, the World Bank Group is different, providing sovereign financing and financing that is public-based; and IFC is private. MLAs are taking a more active role now in securing PPP implementation during the financial crunch.

As commercial banks are still reluctant to provide funds over a long maturity, and given the fact that the bond market has not recovered for the PPP schemes since the collapse of the credit enhancers’ bank subsidiaries (like FSA), there is usually a

Figure 3
Structuring financing under PPP (Road example)



Source: Based on Yescombe 2002; Delmon 2009; Akintoye, Beck and Hardcastle 2003.

clear mismatch between the duration of the contracts (typically between 25 and 30 years) and the debt tenors. This mismatch leaves the SPV consortia with a refinancing risk:

- Will there be a credit crunch at the time when refinancing shall occur?
- What will be the terms and conditions by that time?
- How will the SPV be compensated if the margins have further increased?

The only way to deal with this issue would be to sculpt the unitary charge (UC) to take account of the profile of the debt servicing costs (i.e. having a higher UC over the first years of the PPP contract and a decrease thereafter). However, authorities are reluctant to have such discrepancies in their annual budgets and prefer having “flat UC”, to be subject to indexation only. In order to keep bidders from including contingencies in their tender, authorities may have to be ready to *take some refinancing risk* (for instance accepting that a collapse of the credit market leads to a revision of the unitary charge).

As far as refinancing is concerned, there is the view among the public sector that the credit markets will revert to more normal conditions in the coming years, meaning that contractors could make substantial windfall gains during refinancing on the PPP/PFI closed today, once the completion risk will be over. Though this view is purely speculative, the UK Treasury for instance has recently changed the rules driving the refinancing-gain-sharing mechanism between the private sector and the authorities: the public sector may have the lead in the decision of refinancing (i.e. could force the contractor to refinance the debt) and/or will have the greatest share in the refinancing gains (i.e. 70 % instead of 50 %).

The fact is that the hurdle rates required by equity investors in the SPVs have increased, in line with the market risk premium. The combination of higher equity returns sought by sponsors and the sweep mechanism required by the banks contributes to a higher unitary charge for the public sector.

In a nutshell, it can be seen that the new exorbitant power of negotiation of the lenders is threatening, on the one hand, the deliverability of the project (will the closing take place within the expected time schedule?) and, on the other hand, its affordability (as the unitary charges are likely to soar, given the new term conditions described above).

There is, therefore, a strong interest for the public authorities (to some extent shared with the private sector) to try to counter-balance this new power brought to lenders by the current illiquidity of the credit market. One of the solutions was found in the UK PPP market, where the government had set up in the HM Treasury an Infrastructure Finance Unit aimed to support PPP project procurement by lending SPVs on commercial terms (HM Treasury, NAO 2010). This solution allowed the government to benefit from private-sector involvement in infrastructure proj-

ects during its whole life cycle and to ensure the transfer of the risks which guaranteed the quality of the provided services.

One of the main questions to answer is whether bidders should remain responsible for the funding of the projects, or, in other terms, is the private sector in a better position to finance the capital expenditures of a project? Could it be envisaged to procure new public assets on the basis of *DBO contracts (instead of DBFO)*, where the public sector is responsible for the funding, and the private sector's contractor remains in charge of the management of the construction and the operation of the project.

Such an approach could have many advantages:

- This will make the project cheaper overall, as the private sector will not inject any equity and the loans raised by the public sector to finance the capital expenditures would be disconnected from the risks related to the project (i.e. the loan margins will be assessed on the basis of the solvability of the procuring entity, not on the basis of the SPV's solvability – the lower risk associated with a public borrower will keep the margins at a lower level);
- This will make the closing a lot easier, as the negotiations and bid evaluation will only focus on contractual closing (not financial one);
- This will increase the competition among bidders as more participants will submit tenders, given the low barrier to enter into the project.

However, there are some pitfalls:

- Public authorities will not benefit anymore from the due diligence undertaken by the lenders to ensure the project's robustness and reliance on a technical point of view;
- No lender would step in to rescue the project in case of difficulties;
- The authorities will retain ownership of the assets once completed (this could lead them having to consolidate those assets/debt on their balance sheet);
- Authorities will have to make sure that contractors are still at risk during both the construction and operating periods in requiring performance bonds at a level they are comfortable with, whilst kept commensurate. At any rate, this would require a different risk matrix allocation than the one contemplated for a DBFO.

As an alternative, public authorities may consider to provide to the private sector an “*underpinning*” of some prescribed proportion of the senior debt. This partial de-risking of the position committed by the lenders entails the public sector providing a limited guarantee of repayment of the outstanding senior debt. There ought to be a reduction in the margin component of the interest rate for the underpinned senior debt, giving an overall lower cost of finance.

This guarantee can be achieved, for instance, by means of a shortfall payment obligation in case of termination, whereby the authority agrees to pay to the lenders the amount of the underpinned outstanding senior debt at the date of termination under the termination provisions in the project agreement.

Lastly, there is a model currently under the scrutiny of the financial community and already experienced in Australia: the “*supported debt model*” (SDM), which may allow combining the benefits of having the private sector taking the risk during both construction and operation with the public sector’s comparative advantage in securing cheaper funds.

In this model, the private sector is responsible for 100 % of the funding during the construction, but only for 30 % of the senior debt during the operating period. Once the completion risk is over (meaning that the public sector will provide 70 % of first-ranking debt funding at the time the construction is completed) the private sector is responsible for the financing during operation stage.

Upon completion of the construction phase, the project risk will have reduced significantly, and therefore some proportion of the senior debt could then be considered to be notionally “risk free” and benefits from a risk-free borrowing rate (the notionally risk-free proportion of the debt could be assessed as the minimum proportion of the debt that could be recovered following a contractor default and assuming the contractor had severely underperformed for a number of years before the termination of the contract).

Furthermore, this approach is in line with the reluctance of commercial banks to provide funds on a long-term basis (with the SDM, banks only provide mini-perms over the construction period and 30 % of the debt-funded requirement over the long term).

Thus all tools aimed at mitigating the negative impact of the financial crisis described above deal with the different problems that exist in the market, i.e.:

1. Funding competition – helps the government to force competition on a tender stage;
2. Sharing refinancing risk through mini-perms by sculpting debt servicing in the unitary charge – works as a solution of a short tenor of loans;
3. Choosing the DBO model instead of DBFO – by taking out a financing function from the private sector but benefiting from management and technologic innovations introduced by it;
4. Use of MLA lending – can help to benefit from lower debt margins during the credit crunch;
5. Up-front payments – can be used to decrease the cost financing through public provision of a portion of CAPEX requested for the project;

6. Public sector guarantees funding – works as a tool for an overall lower cost of financing for the private sector;
7. Public-sector lending – solving a problem of limited access for the private sector on capital markets, at the same time ensures risk transfer to the private sector which is so important in respect of VFM achievement.

The choice of the tool should be carefully considered and assessed by the government since each implies its own disadvantages.

3. PPP projects in Russia in times of financial crisis

The Russian government has an ambitious target, announcing plans for investing US\$ 1 trillion by 2020 to rehabilitate and build infrastructure facilities, where one third of this sum should be attracted by the private sector. It is the second largest investment program in the world after China. The Russian government made it clear that infrastructure development should be achieved through PPP procurement, attracting private investments.

The first legislation acts on PPPs were introduced in Russia in 2005. It became a starting point of PPP market creation in Russia. Significant progress on the way of establishing the PPP market in Russia was achieved due to the creation of the Investment Fund of the Russian Federation and the adoption of the concession law in 2005. The mentioned steps were of great importance for both Russian and international investors to get interested in participating in projects along with the government as a partner.

In 2008, Russia has spent 4.7 % of GDP on infrastructure creation; this figure has dropped to 2.8 % of GDP in 2009 (Sberbank 2010). The Russian Federation has put infrastructure development as a first priority on its agenda understanding that it affects competitiveness and creates a giant challenge for government effectiveness.

The Ministry of Finance of the Russian Federation has made a suggestion to decrease spending on roads to US\$ 6.6 billion per year, while the Ministry of Economic Development insists on leaving it on the level of US\$ 6.7 billion per year, which does not make a big difference. Thus, transport-infrastructure financing will be decreased by 66 % in 2011 and by 70 % in 2012. Besides this, the Ministry of Finance is going to decrease road financing by 2.4 times for the years 2010–2012. Those government actions are considered to be temporary ones as a reaction to the current crisis, but their impact on the economic development of the country can be significant. At the same time, the Russian government put big hopes on the PPP mechanism that can be seen as one of the ways to deal with the current financial crisis.

Russia is one of the PPP developing countries which choose the traditional route in implementing the new procurement method of PPP by applying it first to

Table 1
PPP project overview in St. Petersburg, Russia

Project	Project Description	Total investments	Launching of the project	Contract Type	Current state
The South-West Wastewater Treatment Plant, St. Petersburg	creation of wastewater treatment plant to serve a population of 700,000	US\$ 164 million	2003	12-yr BLT	in operation. City of St. Petersburg and its water company Vodokanal (40%); SPV Nordvod (Vodokanal (41%), Nefco (18%), Skanska Infrastructure Development (13.6%), NCC AB (13.6%), YIT Rakenus Oy (13.6%)
Western High Speed Diameter, St. Petersburg	46.6 km toll road with 8 traffic lanes	212.7 billion roubles	2006	30-yr DBFO (Design-Built-Finance-Operate)	Private bidders: Nevskij Meridian (Strabag, Bouygues, Hochtief, Egis Projects, Mostotryad-19); Vinci; Sankt-Peterburgskaya Skorostnaya Magistral (Bechtel, Enka, Intertoll). The concessionaire has been chosen – Nevskij Meridian. Project was postponed, and WHSD was divided into 3 sections. 2 sections of the road were constructed by the government. New tender was announced in 2011 for construction and capital maintenance of the Central section of WHSD. Bid submission will be in June 2011.
Orlovsky Tunnel, St. Petersburg	Construction of a new road tunnel under the Neva River	47.74 billion roubles	2007	BTO (Built-Transfer-Operate)	Vinci company was awarded in 2010, financial close has not been reached yet.
Reconstruction of Pulkovo Airport, St. Petersburg	Develop, reconstruct and operate Pulkovo international Airport. Present capacity is 6 million passengers per day; upgrade to 17 million passengers per day.	40 billion roubles	2009	30-yr BOOT (Built-Own-Operate-Transfer)	The winning consortium Fraport along with VTB bank and Copelouz Group was announced on 25 June 2009. The PPP agreement was signed in November 2009, financial close was reached in 2010.
Sea passenger terminal "Sea front", St. Petersburg		29 billion roubles	2005	N/A	ZAO "Terra Nova" and SPV "Sea front" had procured a project.

Light Rail "Nadzemny Express", St. Petersburg	Design, construction, financing and operation of rapid light rail in St. Petersburg. The planned length of the line is 29.9 km with 16 stations, and 2 pedestrian bridges.	68.2 billion roubles	2007 (re- scheduled)	30-yr BOOT (Built-Own- Operate- Transfer)	Line was relocated 3 times. Under preparation for a tender now.
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Source: Based on the Public Works Financing database 2008; data from www.whsd.ru, www.nadex.ru, <http://www.ortovtunnel.ru/>, <http://www.rosbalt.ru/2009/06/25/650132.html>; Committee on Investment and Strategic Projects of St. Petersburg <http://www.st-petersburg.ru/investments/projects/industry/wasteproject/>; Private-Public Partnerships in Strategic Plans Realization: Practice and Recommendations, The International Centre for Social and Economic Research, Leontief Centre, 2005.

the transport sector using Greenfield PPP models. St. Petersburg has become the first city in Russia to launch one of the biggest programs of PPP project procurement in the world, which amounts to hundreds of millions of US dollars (for example, toll-road Western High Speed Diameter in St. Petersburg, Light rail “Nadzemny Express”, the Orlovsky Tunnel and others), making them the first PPPs following the new practice for the government to use the new procurement method for public infrastructure-service delivery (see Table 1).

The first PPP project in Russia was launched in 2003, long before introducing PPP legislation. It was a project concerning the creation of a wastewater treatment plant in St. Petersburg City – the South-West Wastewater Treatment Plant. The project was agreed upon by the Russian, Finnish and Swedish governments all the way back in 1986, but due to a lack of public financing, the project was stopped. It was resurrected as a PPP in 2002 and formally procured as a 12-year BLT (Build-Lease-Transfer) contract. The project was an exception in respect of the PPP mechanism use for structuring the deal. But there is doubt whether the project has brought efficiency for the St. Petersburg government, which still paid for the Vodokanal project realization.

Only in 2005, has the Russian government turned back to the idea of PPP as a very promising tool of public infrastructure delivery that can provide a greater VFM for the public sector. Since then, the government has begun to develop the legal environment for PPP in the country and select projects for PPP implementation. And only five years later, in 2010, the first three PPP projects in the transport sector reached financial close, which are the road Moscow–St. Petersburg, 15–58 km, Moscow–Minsk M1 (Odintsovo bypass) and the Pulkovo Airport. These three financial closes have brought Russia to a different level of PPP market maturity. These projects have taken years before reaching financial close. So what is the reason it took so long for the government to close the deals? Is this linked to the impact of the financial crisis or due to the other pitfalls usual for PPP developing markets? Have they proved to bring efficiency for the government?

Let us analyse this first, using the example of the Western High Speed Diameter (WHSD) project, since it was the first one, and see what the problems were and whether the financial crisis was responsible for its failure.

As was mentioned earlier in the paper, the key success factors for PPP implantation are the legal framework, political support and the macroeconomic environment. We will use these factors to see their impact on the WHSD project structuring under PPP.

The first problem which arose for the WHSD project was connected to the imperfection of the legal PPP framework that did not accept the grantor to be represented by two participants, as was requested by the project since it was necessary to have the Federal government (represented by Ministry of Transport) and the City government (i.e. the City of St. Petersburg). Another issue was connected with

Article 11 of the concession law, which sets unrealistic deadlines (i.e. 60 days) for the registration of plots of land which are necessary for the closure of the concession agreement. In practice, a compulsory purchase of land can take from 2.5 to 3 years, and bearing in mind the grantor issue in the WHSD project, it required even more time. These were some of the examples of legal problems the WHSD project had met. It was a first test for the PPP legal framework, which had shown its pitfalls and created difficulties for the first PPP projects in Russia.

The other constraints for project implementation were linked to the macro-economic and financial framework. The project was huge in respect of requested investments, almost \$ 2 billion. For a country with no experience in procuring PPPs, without readiness of the domestic financing market, high currency risk and high overall project risk, the WHSD project realization was a challenge that was unachievable. The only fragment in place for successful PPP implantation in Russia at that time was political will.

These were the reasons why the WHSD project took so much time and money to design as a PPP deal. So did the financial crisis play a significant role in the project failure? No. Even knowing that before the financial crisis, the WHSD project had overcome all difficulties described above, the legal framework in Russia was redesigned and new PPP acts were introduced, the domestic financial market began to evolve; had the financial crisis not occurred, the situation for the project would not have changed. The domestic financial market matured and showed an interest in financing PPP projects, but the tenors and capital size it can suggest are still limited. Even in 2008, the WHSD project was only acceptable for financing by strong foreign banks. The problem with accepting foreign banks' loans was connected to an exchange risk which significantly raises the financing costs. And thus, the financial crisis was not the main reason for the project not being procured. No revenues in the WHSD project were in a foreign currency; thus even with a non-existence of the 2008 financial crisis, the situation would remain the same.

The other project mentioned in Table 1 has experienced similar problems. Thus Russia has experienced problems associated with the imperfection of the concession law, macroeconomic instability which led to rising costs for PPP project design; delays; and risks of inefficient sharing.

In 2010, the situation of the PPP market in Russia changed dramatically. 33 regions of Russia has introduced their own legislation on PPPs, main public bodies for PPP procurement were established, the Russian development bank "Vnesheconombank" was introduced, the domestic capital market introduced its appetite for PPP projects showing existing excessive liquidity.

The financial crisis has worked as a trigger for the Russian government to look at PPP implementation more seriously. Three major financial crises in Russia have proved it, where two of them were "quick-win" solutions (see Table 2).

Table 2
Three financially closed projects in Russia in 2010

	Sources of financing				
billion, USD	Public budget	Investment fund of Russian Federation	Private-sector capital	Total	Government sources
Pulkovo Airport	–	–	1.5	1.5	Partial guarantees
Moscow–St. Petersburg road, 15–58 km	0.77	–	1.23	2	38.3%
Moscow–Minsk M1 (Odintsovo bypass)	–	0.37	0.49	0.86	42.8%

Source: based on Sberbank 2010; Infrastructure Journal 2011

Only one financial close was based on project financing, namely the Pulkovo Airport. The real challenge of PPP projects is that they can be paid only through general taxation or via pay mechanism. Thus the financial structure of the project can say a lot about its effectiveness in respect of project costs for the government and society. Table 2 showed the great amount of capital contributed to the road projects by the government, which raises the question of the projects' affordability and their ability to ensure VFM for the government.

The success and ability of the Pulkovo project to reach financial close on the basis of project finance is partially linked to the predictability of cash-flow generation by the project and the existence of revenues in foreign currency that blocks the exchange risk.

In two project out of three (except the Pulkovo Airport), the government guarantees the redemption of the debt of the private sector (see Table 3).

Table 3
Three major closes: key facts

	Pulkovo Airport	Moscow–St Petersburg road, 15–58 km	Moscow–Minsk M1 (Odintsovo bypass)
PPP model	BOOT	BTO	BTO
Payment mechanism	No payments	minimum revenue guarantee	minimum revenue guarantee

Government support	Reconstruction of two runways Partial guarantees for banks	Grant from Investment Fund of Russian Federation Government guarantees (loan) Minimum revenue guarantee	Government guarantees on corporate infrastructure bonds
Demand risk on private sector	Yes	Above level of minimum-revenue guarantee	Above level of minimum-revenue guarantee
Impact on public budget / fiscal risks	Low risk	High risk	High risk

Source: based on Infrastructure Journal 2011.

In two road projects, the government did not succeed to ensure competition on a tender. During prequalification on the Moscow–St. Petersburg road, 15–58 km and Moscow–Minsk only 2 bidders were presented, and only one bidder was prequalified in both projects. Thus, at the beginning, there were no preconditions created for PPP projects to be efficient for the government. In comparison, 7 bidders were introduced on a PQ stage in the Pulkovo Airport project, and 3 of them submitted their bids. As a result, the road projects mentioned above did not ensure the conditions which are essential for a capital-expenditure decrease in comparison with the conventional procurement.

It is important to highlight the positive effect of the participation in the projects of foreign experienced private companies such as Alpine Bau, Vinci and Fraport, which has brought new technologies and better management. Nevertheless rescheduling the construction start due to protests from the population and social organizations (road Moscow–St. Petersburg, 15–58 km) and organizational problems (road Moscow–Minsk) significantly decreased the positive effect of foreign companies' attraction.

Speaking generally of the efficiency of the PPP mechanism in Russia so far, it can be noted that the following problems exist:

- Length of reconciliation procedures and not well established business process on all government levels;
- High entry barriers which decrease competition for the projects;
- Inflexibility of federal legal PPP framework;
- Inefficient risks allocation;
- Mismatch between tenors of debt and contract duration. Despite the fact that there is a paradoxical situation in Russia – banks experienced excessive liquid-

ity and competing for the bankable PPP projects, which there are several of –, tenors of debt financing is still limited to a maximum of 15 years.

The government came to understand that PPP success requires scaling down projects, preparing them better on the feasibility study stage and taking a more balanced approach to risk-sharing.

St. Petersburg is a leading region in Russia in developing and implementing PPPs today as the activity of a regional government stays close to the success in PPP project implementation with a possibility to reach financial close for several projects before 2013, i.e.

- Western High Speed Diameter;
- Orlovsky Tunnel;
- Yanino waste processing plant;
- Project New Izhora (creation of kindergartens).

This can be possible due to the well-structured business process and the experience of public bodies that has introduced its own regional legislation on PPPs and created a PPP unit under the Committee for Investments and Strategic Projects of the St. Petersburg government responsible for PPP project selection, preparation and procurement.

The financial crisis of 2008 sharpened all inefficiency in the legal and macro-economic framework for PPP procurement in Russia. Thus in the first year of the financial crisis, the Russian government tried to address the problems on the way of PPP realization that were highlighted by the credit crunch.

Due to the impact of the financial crisis, PPPs in Russia have experienced some difficulties in finding long-tenor financing, accepting the higher cost of capital and an increase in the exchange-rate burden. Moreover the local financial market was not able to meet the needs of PPP projects due to its immaturity along with the credit squeeze caused by the crisis.

Under the current financial crisis, the Russian government had several ways to deal with PPP projects depending on the phase they were in, i.e.:

- pipeline stage (has initiated the project on cultural-center creation);
- designing stage (several PPP projects in healthcare and water treatment);
- tendering stage (Yanino waste processing project, WHSD, Orlovsky);
- implementation stage (The South-West Wastewater Treatment Plant, Sea passenger terminal “Sea Front”, Pulkovo Airport).

With those PPP projects which are at their pipeline stage, the government can still make a decision whether to go to traditional procurement or back to the PPP scheme. These projects should be evaluated once again to ensure the value for money the projects should bring as well as regarding their bankability. The govern-

ment can choose the route of slowing down the tendering process and take time for making further calculations and preparation and also provide the necessary time for investors to work on their bidding proposals. Choosing this strategy, the government can buy time and wait until the situation on the market is more transparent and stable for PPP project implementation.

Procuring a toll road under a PPP, it is important for the government to take under consideration its attitude towards the toll rate. Toll revenues cannot be enough to cover debt repayments, so the government can use a combination of payment strategies discussed earlier in the paper. The project is not viable for the private sector based only on traffic revenues. It might be necessary for the government to provide some form of support during the operational stage or to consider extra revenue sources from non-core activities to make the project bankable.

Dealing with PPP projects which are at the tendering stage, one of the possible answers is to restructure a PPP deal. Choosing a way of restructuring the project, the government should consider the following aspects:

- timing (i.e. spreading investments);
- costs;
- government support;
- revenue stream;
- risk allocation.

Choosing one of the following steps can help the government and the private partner to ensure VFM in the PPP project and to procure the project itself in the current situation on the financial market.

Developing PPP markets with no experience in procuring PPPs and having projects at a pipeline or tendering stage should consider at least one PPP project realization in order to show the market its ability and willingness to take on such projects, since it serves as a signal for the market and potential investors to take participation in PPPs into consideration. It can help to speed up PPP implementation when the economy recovers, and the market will be ready to deal with PPPs.

The gravest difficulty that the credit crunch has brought about is the limitation of access to long-term private debt financing. In this case, a PPP project can be implemented with short-term debt financing combining it with refinancing, where, if the latter is unavailable, the government will buy the debt.

Thus there are the following actions to be taken to make PPP implementation feasible under the financial-squeeze economy experiences:

- increasing government participation in the project;
- developing a legal framework, since PPP contracts are implicit and that is why they are more risky;
- increasing transparency in public investments/commitments planning;

- designing new risk-distribution mechanisms.

More specifically, the Russian government can and should consider using the following tools to support PPP implementation:

1. Funding competition – can be of help for those large-scale projects initiated by the government a long time ago that should be finally closed since a non-realization will worsen the investment image of the country and will decrease the attractiveness of such projects for foreign investors. Otherwise, new PPP projects (around 20 evolved) have proved the government to know how to select sizable and thus bankable projects for the Russian financial market. Russian banks are waiting for the projects;
2. Sharing refinancing risk though mini-perms by sculpting debt servicing in the unitary charge – it is of great importance for the Russian PPP market due to 2 reasons: first, there is a mismatch between Russian banks' tenors and contract duration; second, investors consider the refinancing risk high, which is why it is important for the government to share this risks so that the PPP project can be successful;
3. Choosing the DBO model instead of DBFO – the Russian government is reluctant to move in this direction although in some cases we can see that it can be an effective way (remembering the Moscow–St. Petersburg road, 15–58 km that was almost fully financed from public sources);
4. Using MLA lending – looking at all benefits of this financing, it associates due diligence with a long project procedure and sets specific requirements for public authorities which they are not ready to follow (regions of Russia are still reluctant);
5. Up-front payments can be used to decrease the cost of financing although public provision of a portion of CAPEX is requested for the project – it is widely used in Russia since it usually works as a precondition for the private sector to step in (some sort of a guarantee for foreign investors of public intentions towards the project).

The current financial crisis has squeezed government resources for project preparation. It has limited the opportunities for developing counties to achieve success in implementing the first PPPs due to a lack of possibilities to use the help of consulting agencies experienced in this area. For instance, the same problem faces the Committee for Strategic Investments in St. Petersburg. At the same time, losing the help of constant strategic advisers, different foreign and national consultant agencies are ready to help for the government for free with their first steps of PPP preparation in order to have more chances to have a contract later. The financial squeeze has created a tough time for consultant agencies also because of a falling demand for the services they provide, thus they are looking for potential partners

in order to have future perspectives when the economy recovers, which in a sense helps the government to continue working under PPP, seeking new ways of PPP procurement. The most serious problem is financing and the price of the capital available for PPPs.

One characteristic of the Russian banking system is a domination of state-owned banks. Private lending banks are still relatively small and cannot be serious players on the PPP market. There are few Russian banks that might play a significant role in helping establish PPP practice in the country, namely Gazprombank, Russian development bank Vnesheconombank, VTB bank and Sberbank. As the year 2010 has shown, these banks began to play an active role in PPP project financing. Smaller banks try to make syndication packages with the main bank players in order to be part of the financing of PPP projects today, as well.

The PPP projects launched earlier in countries with little experience in PPPs do not lose the interest of potential investors, even if the tendering process is postponed. There is a tendency now for current bidders to look for new private members to step into the consortium in order to increase the chances to procure PPP projects during the financial crunch.

Conclusion

From a policy perspective, infrastructure development is still on the priority list for each level of government. The government still has several ways to procure as requested for economic growth and nation-prosperity facilities, among which PPPs hold an important role. Due to the credit crunch, the affordability of PPP projects for the government raises doubts now.

Under the current circumstances, there are too many directions in the economy where government support is requested. In order to support the economy and to not let the economy downturn worsen, governments all over the world introduce rescue packages which are orientated towards the bank sector, which plays a significant role in countries' development. The main idea of providing those packages is to maintain debt financing for the private sector which results in economic growth. It is a challenging task for a government to achieve, since introducing such actions does not guarantee a willingness of bank institution to provide debt to the private sector, which results in investments of real economy. That is why under the right conditions, PPP can be another way to put government money into economic development, which can help to meet government targets in infrastructure development, support the private sector and financial-institution activity, and also creates job placements.

Another impact of the financial crisis on the possibility of the PPP developing markets to procure such projects is the reduction of the lending market size, both on the national level and worldwide. Usually, developing and emerging countries

are eager to use foreign capital for PPP project implementation, due to long-term capital limitations on their local market. Thus, the market situation now affects the volatility of the national currencies in developing countries, increasing the exchange-rate risk and thereby increasing the cost of capital and, eventually, a project. Banks are more limited in capital lending and therefore change the pricing policy for the projects' funding.

Due to the financial crisis, again, loan tenors became shorter, which creates a barrier for PPP implementation.

The impact of the financial crisis on the PPP sector in countries with little PPP experience is greater compared to experienced ones, and thus implementing PPP projects will be more difficult to proceed and secure. Most infrastructure projects in PPP developing markets are found to be at their tendering stage, which makes compliance of these projects more difficult to achieve.

The main reason for such a revival is the willingness of governments to provide support to attract the private sector, such as through capital grants, availability payments and guarantees (e.g. minimum-revenue guarantees). Nevertheless, governments should be aware of the potential risks (e.g. contingency liability) of such support.

The current financial crisis has shown that only now, the need has come up for PPP developing markets to change the tradition of applying the PPP mechanism to huge transport projects, which requires attracting investments in the amount of billions of US\$. This tendency should be changed. Countries with no or little experience and knowledge capacity in PPPs should start applying the PPP route to relatively small projects (from the CAPEX point of view). The first PPP projects should be relatively simple in order for governments to approve public-business process for PPP implementation. Other sectors, apart from the transport sector, can be considered for first PPP approbation depending on a country's internal sector organization.

As shown in the paper, the government can use different tools to support PPP project implementation within the current unstable financial environment, i.e. the organization of funding competitions at a preferred bidder stage, using MLAs for raising capital for the project, providing government loans, sharing refinancing risk with SPV, introducing the "Supported Debt Model", moving to DBO contracts. There are some other ways of restructuring PPP projects that should be considered by the government depending on a PPP project's stage (pipeline stage, designing stage, tendering stage, implementation stage) as well as timing (i.e. spreading investments), costs, government support, revenue stream and risk allocation.

Another issue the financial crisis highlighted is that there is the necessity to reevaluate the role of government in PPPs and the benefits this way of procurement can bring compared with the traditional one in the changed environment.

It is very important for governments to appropriately manage their PPP projects which are at the tendering stage now, using one of the ways of restructuring the project, i.e. spreading investments over time, costs, government support, revenue stream, risk allocation. Decisions that the governments will take now on their existing PPP projects will affect the future of the countries' PPP market and its ability to attract investors.

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The title should be a brief phrase adequately describing the content of the paper.

Abstract

An abstract is a summary of the information in a document. The abstract should not exceed 250 words. It should be designed to clearly define the contents of the paper. The abstract should: (i) state the principal objectives and scope of the research; (ii) describe the methodology employed; (iii) summarise results and findings; and (iv) state the principal conclusions. References to literature, bibliographic information, figures or tables should not be included in the abstract.

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The introduction should supply sufficient background information on the topic and also provide the rationale for the present study. Suggested guidelines are as follows: (i) the introduction should first clearly present the nature and scope of the problem that was researched; (ii) it should provide an overview of the pertinent literature used; (iii) it should state the research methodology employed and, if necessary, the reasons for using a particular method.

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Acknowledgements

Assistance received from any individual who contributed significantly to the work or to the interpretation of the work and/or outside financial assistance, such as grants, contracts or fellowships, must be acknowledged.

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Navigation: Example of the Standard Components of an Empirical Policy Analysis Paper

Presentation of the Issue

What is the problem that requires action?

Scope of the Problem

What is the history and current context of the issue? How did it become an issue?

Who is affected and how severely?

Consultations

What are the views or positions of groups who will be significantly affected? What are the concerns of other ministries/agencies who will be affected?

Options for Consideration

What three or four distinct options should be considered? What are their implications? What are their advantages and disadvantages?

Additional Issues:

Consistency with the government's priorities; the effectiveness of available options in addressing the issue; the economic cost-benefit; the effects on taxpayers; the impact on the private sector; environmental impacts; the fiscal impact on the government; the disproportionate impact on various groups or regions; the complexity and timing of implementation; public perception; and constraints raised by legal, trade, or jurisdictional issues.

Recommendation(s)

What is the proposed course of action? Why was it chosen over other possibilities?

Implementation Issues

What are the financial impacts of the proposed course of action? What are the implications for government operations? Will the proposal require regulatory or legislative changes? What is the proposed means of evaluation?

Communications Analysis

What is the current public environment? What are the key issues of contention, and how can they be addressed? What is the position of key stakeholders, both inside and outside the government, on the proposal, and what communication vehicles should be used for each? How does the proposal relate to government reform priorities? What is the objective of communication on this issue? What is the key message?



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