

Crisis Management – The Case of Internal Security in Norway

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Contents

PREFACE	3
SUMMARY	4
SAMMENDRAG	5
INTRODUCTION	7
THE NORWEGIAN CONTEXT	9
The broad picture	9
The Internal Security Field	9
THEORETICAL APPROACH	11
Internal security.....	12
Citizens' assessments of crisis management.....	13
Civil servants and crisis management.....	16
Data and methodology.....	19
THE DEPENDENT VARIABLES – PREVENTION AND HANDLING OF CRISES	20
BIVARIATE AND MULTIVARIATE ANALYSES	22
Variations in citizens' perception of government crisis management capability.....	22
Bivariate analysis.....	22
Multivariate analysis	23
Variations in civil servants' perceptions of their crisis-management capability.....	26
Descriptive statistics.....	26
Multivariate analyses	27
DISCUSSION	29
CONCLUSION	32
REFERENCES	34
Appendix:.....	37
The survey of citizens:	37
The survey of civil servants:.....	38

Preface

This paper is written as part of the research project “Multi-level governance in the tension between functional and territorial specialization”, funded by the Norwegian Research Council. An earlier version of this paper was presented at the SOG-conference: “Governance Crisis in Comparative Perspective”, Korea University, Seoul, October 11-12, 2007. We wish to thank Arjen Boin, John A. Rohr, Paul G. Roness and Harald Sætren for valuable comments and Jostein Rysselvik for helping us with the statistical analysis.

Summary

This paper describe and explain citizens' and civil servants' perceptions of how able government bodies are to prevent and handle crises. The explanatory factors are trust, cultural, political, structural and demographic features. The empirical data base is two Norwegian surveys, one to the citizens and one to civil servants. The major findings are that citizens have a rather high general trust in government ability to handle and prevent crises and that there are no big differences between the general public and the government regarding their perception of crisis management. Political efficacy is the main explanatory variable among the citizens and policy area, perceived coordinative capability and mutual trust among the civil servants.

Sammendrag

Dette notatet beskriver og forklarer oppfatninger i befolkningen og blant ansatte i norske sentraladministrasjon om hvilken kompetanse myndighetene har til å forebygge og håndtere kriser og ulykker. Forklaringsfaktorene er tillit, kulturelle, politiske, strukturelle og demografiske faktorer. Det empiriske datagrunnlaget er to spørreundersøkelser som ble gjennomført i 2006-2007, den ene til et representativt utvalg av befolkningen og det andre til ansatte i norske departementer og direktorater. Studien viser at befolkningen i nokså stor grad mener at myndighetene er i stand til å håndtere og forebygge kriser og ulykker. Det er heller ingen stor forskjell mellom befolkningen og de offentlig ansatte når det gjelder deres oppfatninger om myndighetenes kompetanse på dette området. Politisk involvering er den viktigste forklaringsfaktoren blant befolkningen, mens politikkområde, opplevd samordningsevne og gjensidig tillit er viktigst blant de ansatte i sentraladministrasjonen.

Introduction

In this paper we will address how public executives perceive the capacity of the state apparatus to prevent and handle crises, accidents and catastrophes and how the same capacity is assessed by the general public¹. Capacity is related to factors like ability, competence, preparedness, organization and trust.

Today the world is perceived as increasingly insecure and dangerous for a number of reasons. The concerns raised by 9/11 and subsequent terrorist attacks have had important repercussions for public-sector reforms in many countries (Halligan and Adams 2004: 85-86, Kettl 2003). More and more countries are concerned about bio-security, crises, disasters - like tsunamis, or pandemics - like SARS or bird flu (Christensen and Painter 2004). This has led to a tightening-up of government. Crises make it easier to argue for reassertion of the centre and increased coordination (Christensen and Læg Reid 2007). The new threat of terrorism has underlined the importance of governments' avoiding contradictory outcomes and ensuring that information is shared between agencies and between administrative levels in multi-governance systems. This development also affects the relationship between citizens and government, including trust and legitimacy. Expectations among the general public about what security government can and should offer its citizens are changing, and trust between citizens and government has been undermined. Thus both intergovernmental relations and the relations between citizens and government face new challenges.

Organizations are the critical actors in risk management because they both process and handle risks and are also potential producers of risk. In the words of Short and Clarke (1992) they are simultaneously processors and neglecters of risk. Thus our analytical focus is on organizations and organizing. How organizations such as government agencies and ministries experience their own capacity to organize might be important for understanding how they handle risk (Hutter and Power 2005). When a crisis strikes, the political-administrative leadership will first try to define and interpret the crisis, and only then assess its capacity (Boin et al. 2005). Capacity assessment implies prioritizing resources, but also handling intra- and inter-organizational coordination and understanding the various technologies used in different public and private organizations.

Organizations have always been susceptible to uncertainty in the form of external shocks. But such shocks also reveal organizational weaknesses, since organizing for routine activities seldom prepares them for crisis. In recent years there has also been a growing recognition of organizations and processes of organizing as significant sources of risk.

¹ Concepts such as risk, crisis, accidents, disasters and catastrophes have different meaning and definitions (see Boin 2005, Perry and Quarantelli 2005). We will in this article not make a clear distinction between them but address the broad field of internal security and crises management more generally.

Man-made and manufactured risks have received more attention in the risk-management literature (Turner and Pidgeon 1997, Beck 1992) and the interdependency of the various levels of risk-processing suggests that regulatory regimes are embedded in organizations, which pre-define them (Morgan and Engwall 1999).

How organizations such as ministries and central agencies experience their own capacity and competence to prevent and manage risks and crises is important for understanding how they handle crises. But in a representative democracy it is also important to know how the general public assesses the government's ability to prevent and handle crises and accidents; that assessment, in turn, is dependent on how the government defines crises and accidents, what information is given, 'the generation of meaning', whether the leadership engages in blame-avoidance and on learning processes in government (Boin et al. 2005). If there is a big gap between what citizens expect the government to do, based on their assessment of ability, competence and former crises, and what government executives think that they are able to do, there might be a legitimacy problem.

We will address such problems by focusing on the case of Norway. Our main research goal is to describe and explain citizens' and civil servants' perceptions of how able government bodies are to prevent and handle crises and accidents. The empirical data base is two surveys. The first is a questionnaire given to a representative sample of the population about citizens' attitudes to government and governmental activities. The second is a questionnaire given to civil servants in all ministries and central agencies. The citizens were asked how they assessed the government's ability to prevent and handle various crises and accidents, and the government executives were asked how well prepared their organization was to prevent and handle various crises, accidents and catastrophes.

We start by giving a brief outline of the Norwegian context both generally and in this specific policy area. We then go on to present our theoretical approach to explaining citizens' and civil servants' perceptions of the ability of government to prevent and handle crises. For the citizens we will emphasize broad explanatory factors such as demographic features, trust and political factors. For the civil servants we will focus on structural, cultural and demographic features. In the third part of the paper we will present our empirical data. We will start by describing how the government's ability to prevent and handle various risks and crises is perceived by the general public and by government officials. In the next empirical section we will analyze variations in the perception of crisis management in the population and among civil servants. In the discussion and conclusion we will outline and interpret our main empirical findings and discuss some implications.

The Norwegian Context

The broad picture

Norway is a small, multiparty parliamentary state. In a comparative perspective, it has a strong democratic tradition and relatively strong collectivistic and egalitarian values, is consensus-oriented and has well-developed corporatist arrangements. The regime's performance, support for democracy and the level of trust in public institutions are generally higher than in most other countries (Norris 1999, Christensen and Læg Reid 2005), as is the general level of trust in society (Rothstein and Stolle 2003). Surveys of political support for the national government nearly always accord Norway a leading position (Listhaug 1998).

The public sector in Norway is large, due mainly to a large, universal welfare state, and there is a relatively high level of mutual trust among public-sector organizations. Privatization reforms have been reluctant, but some critical infrastructure such as telecommunication has been partly privatized. Norway is a unitary state with a combination of political and administrative decentralization. The central government in Norway is characterized by strong sector ministries and relatively weak supra-ministries with coordination responsibilities across ministerial areas (Christensen 2003). The relationships between parliament, ministers and agencies are based on the principle of ministerial responsibility, meaning that the minister is responsible to the parliament for all activities within his or her policy areas in the ministry as well as in subordinate bodies (Christensen and Læg Reid 2002). The principle of local self-government is also pretty strong. There are elected bodies at both local and regional level which are expected to make and implement their own local policy without too much interference from central government but also to implement policy decided at the central level. The delivery of the most important welfare services is delegated to the municipalities. Added to this, there are also government bodies at both local and regional level that are responsible for implementing central government policy; and these also have tasks related to crisis management and internal security.

The Internal Security Field

In Norway a main principle for crisis management is the *principle of responsibility*, which states that each ministry and government agency has responsibility for internal security within its own field. This means that public-sector organizations responsible for a sector or a policy area are also responsible for the safety, security and preparedness of that sector. Thus a mainstay in the field of civil security is the idea of internal self-regulation in the various public bodies and policy areas. The idea of the government is that flexibility and adaptability in the field of security can be guaranteed by making it an integral part of the various substantive policy fields. The reverse side of the coin, however, is that if everybody holds responsibility, nobody does. Accordingly, the central civil security field is quite complex and fragmented, entailing a risk of over-division of responsibility in security matters and ignorance of these aspects in the various policy

areas. What is more, internal security also has to compete for attention and resources with other important tasks.

Until the Ministry of Justice took over the main responsibility for coordinating Norwegian civil security in 1994 in order to increase the horizontal coordination in the field, there was no superior body in this field. However, even then, the overall responsibility assigned to the ministry was rather weak, both formally and in practice (Høydal 2007). Nevertheless, the Ministry of Justice does have some horizontal coordination tasks across ministerial areas, and its subordinate agency – The Directorate of Civil Protection and Emergency Planning – has authority delegated to it in this respect. There is also extensive civil-military cooperation with the Ministry of Defence and its subordinate agency the Norwegian National Security Authority. On the regional level the county governors (the prefects) have a central coordination role across sectors in the area of crisis management.

The principle of subsidiarity is also important for the government in the field of crisis management and internal security. This means that intervention at higher administrative levels must be seen as subsidiary to the obligations of units at lower levels and implies an emphasis on decentralization and diversity. Crises are supposed to be handled at the lowest possible level, because this level is deemed to be best informed about the crisis or problem. This gives local government important responsibilities. A dilemma here, however, is that when crises occur there is normally a simultaneous need for strong central leadership and a high degree of local discretion and autonomy to handle the crisis on the ground.

A third major principle is the *principle of similarity*, which implies that the organizational structures used in crisis situations should be as similar as possible to the regular normal structures. While this potentially contributes to standardization gains it also lacks the flexibility required to deal with a variety of situations. A fourth principle is the *principle of collaboration*, which implies cooperation between public-sector authorities and private-sector organizations in crisis situations. When accidents and crises occur civil society organizations are supposed to offer their resources. This represents a kind of public-private partnership and joined-up government feature.

Over the last decade Norway has avoided any major disasters or catastrophes and we will expect that this will affect the way citizens look at their government in this policy area, and also the way civil servants assess their own capability. Some accidents and crises of smaller scale and scope have, however, occurred during this period. The passenger ship *Sleipner*, which went down on the west coast in 1999 (15 people dead), is one example. Others are the *Rocknes* shipwreck in 2004 (18 people dead) and the train accident at *Åsta* in 2000 (19 dead). In addition catastrophes that have occurred outside Norway have also affected Norwegian citizens and the Norwegian authorities: for example, 84 Norwegians were killed in the *Tsunami* in South-East Asia in 2004. Deaths have also been caused by avalanches and as a result of epidemics caused by the *e.coli* (2006) and *giardia* (2005) bacteria. In addition, there have been natural disasters, such as the hurricane on the west coast in 1992 and the flooding in eastern Norway in 1995, both without any casualties, but with big material damage. Although they have not reached Norway, the SARS and bird flu epidemics have also had an effect on

Norwegian public discourse as well as on the authorities. Likewise the terrorist attacks in the US (9/11) and the bombings in Madrid (2004) and London (2005).

Some of these accidents have led to the reorganization of government crisis management organizations (Fjell 2007), while others have not. The government launched a reorganization of the central apparatus for internal security in 1999 by appointing a public commission to assess the vulnerability of Norwegian society. The commission's report was submitted to the Ministry of Justice in 2000 (NOU 2000:24). One of the commission's main proposals was to improve vertical and horizontal co-ordination in the security administration by establishing a new special ministry of internal security. These recommendations were not, however, approved by the government in the White Paper presented to parliament in 2002 (St.meld. no 17 (2001-2002)). Somewhat surprisingly, the process resulted in only minor changes in the security administration (Læg Reid and Serigstad 2006, Serigstad 2003).

Ultimately a hierarchical model of this kind proved to be too radical for the ministries involved, and the government favored an upgrading and strengthening of the agencies in the field. In contrast to the major dispute that took place over the organizational model, there was overall agreement about what the problems were in the field of internal security. Most of the bodies and actors involved acknowledged the problems of fragmentation, weak co-ordination and low priority assigned to internal security, but no agreement on a radical organizational solution was possible.

The process revealed a conflict over how to define internal security. Disagreement between the justice and defense sectors over how to define security and preparation for emergencies and about where to place responsibility for them became most pronounced during the governmental process and in the parliamentary reading. The compromise was to abandon the radical solution of creating a new ministry and to go some way towards strengthening the coordinating responsibility of the Ministry of Justice by merging two agencies into a new Directorate for Civil Protection and Emergency Planning and by having the National Security Authority report to the Ministry of Justice in civilian cases while continuing to be administratively subordinate to the Ministry of Defense. The solution chosen involved a lot of path-dependency, and it balanced horizontal coordinative features with a degree of fragmentation and increase in the autonomy of the main internal security agency.

Theoretical approach

Our theoretical approach will be two-fold: we will first present perspectives which may be helpful for understanding and explaining citizens' perception of the capability of the authorities both to prevent and to handle what can be termed "internal security". We will proceed by presenting an approach that will help us understand why civil servants perceive their own ability in the field as they do. First, however, we will briefly discuss the concept of "internal security" and explain how we have operationalized the concept as a dependent variable in our study.

Internal security

The concept of “internal security” is an ambiguous term, which has gained currency since 9/11 (Kettl 2004). Covering such concepts as “domestic security”, “civil defence”, “homeland security”, “societal security” “societal safety” and “civil emergencies”, it can be defined in broad or narrow terms. In narrow terms it can be taken to mean intentional or unintentional human activities involving "man-made" risks that affect the social and natural environment, including terrorist attacks. It can, however, also be extended to include unpredictable natural disasters like earthquakes, volcanic eruptions, floods, tsunamis and hurricanes (Smith 2006:2-6). In Norway the tendency is to regard internal security in broader terms and over the past ten years the term societal safety has gained currency as a general concept (Olsen, Kruke and Hovden 2007)². In this article we will distinguish between two dimensions of crisis management: *cause of crisis*: man-made or of natural origin, and *phases of crisis*. Most scholars distinguish between four phases of crises management: prevention, preparation, mitigation and aftermath (Boin et al. 2005). We will however only differentiate between prevention and handling of a crisis.

Table 1. *A typology of crisis and crisis management.*

		Cause of crisis	
		Man-made	Of natural origin
Phase of crisis	Prevention		
	Handling		

It is more or less impossible to prevent natural disasters and catastrophes, such as avalanches, earthquakes and hurricanes. But it is not impossible to prevent the crises that follow from them. It is also not always easy to separate natural causes from man-made causes of crises (Smith 2006:6). Often there might be a combination, such as accidents in the field of transportation. A central challenge in this policy field is to balance the need for increased prevention against the need for a stronger response and a strategy of resilience (Wildavsky 2003). Our dependent variables will reflect this distinction. There is also a wider democratic challenge related to strong or in some cases "draconian" prevention measures, as seen in the debate about stronger anti-terrorist laws in the US, the UK and Australia.

² In this article we will not pay a great attention to the difference between safety and security, but we are aware of the fact that they are rather specific and different concepts with fairly large and big research communities behind them.

Citizens' assessments of crisis management

In a representative democratic system it is very important that the way the authorities solve problems and handle tasks is accepted and trusted by the general public. This also applies to crisis management and internal security-tasks. The authorities need the acceptance, support and sometimes even the assistance from and help of citizens. In the security field, which by nature does not generally involve routine tasks, and which sometimes requires an immediate response from the authorities, it can be argued that it is *particularly* important that the authorities' approach to problem-solving is regarded as legitimate by the general public.

Legitimacy is difficult to measure. *One*, rather pragmatic way to do it, is to look at how citizens assess the capacity of the authorities to handle tasks in specific public areas/policy fields. The way citizens in Norway assess public-sector problem-solving has formed the subject of a lot of studies, at both the central (Christensen and Læg Reid 2005) and local levels (Rose and Pettersen 1999, TNS Gallup 2006). We thus know that public assessments vary significantly (Huseby 1995; Strømsnes 2003) and particularly with regard to broad welfare areas, specific groups of variables have been tested and found significant as explanatory factors. We will use these groups of variables as our starting point for formulating assumptions about the public assessments of the security field.

The most common group of variables used to explain variations in how citizens assess public-sector tasks and problem-solving are what in theoretical terms are named *demographic features*. One demographic variable often mentioned is education. The expectation is that the higher a person's level of education, the more he or she will trust the government – in our case to handle internal security (Bouckaert and Van de Walle 2001:12). The reason for this is the cognitive factor, meaning that well-educated people know quite a lot about the political-administrative system, can distinguish its various components and understand how public services are organized and function, which supposedly furthers trust. Counter-arguments are that knowledge produces a more critical attitude towards government or that normative attitudes are more important than the cognitive aspect produced by a higher level of education.

Other demographic variables are relevant. One of these is gender. Studies have shown that women in general support the public sector more than men (Læg Reid 1993: 96, 115). The reason for this seems to be that women's core career base, some decades after entering the labour market on a broad basis, is the public sector. At the same time, growth in public expenditure has resulted in a higher tax burden for men, which may cause them to take a more negative attitude to public-sector institutions (Huseby 1995). One can therefore presuppose that women will trust the government more than men, and that this attitude will also apply to preventing and handling crises. In this group we will include a variable about the respondents' civil status. If people are married and/or have a family of their own they tend to be more integrated in society but probably also more dependent on the public sector. Our argument is that both these features will make them more generally supportive towards the authorities' approach to problem-solving, and specifically towards the prevention and handling of crises.

In our analysis we will include two variables referring to occupation. The first is linked to whether people are working, studying or living on various kinds of benefits. We will assume that people who are living on benefits or who are students are more dependent on the authorities for problem-solving and also on their ability to handle and prevent crises, and that therefore they will also have a more positive attitude towards them. The other variable here is linked to whether people are currently employed by the public sector. Some argue that it is possible to identify a “public-sector class”, which is generally more positively disposed towards public-sector institutions than those who work in the private sector (Lafferty and Knutsen 1984, Lafferty 1988, Rose and Pettersen 1999). Others say it remains unclear whether the division between the public and private sectors has become established as a dominant and permanent line of conflict in Norwegian political life (Valen et al. 1990). Nevertheless, we would expect perceived ability of public-sector crisis management institutions to be higher among people employed in the public sector than among those working in the private sector (Dunleavy 1989, Læg Reid 1993: 113).

Our last two demographic variables are age and place of residence. Generally, one would expect trust in government to increase with age; older people tend to be more collectively oriented, and whereas today’s younger generation has experienced a public sector that is either shrinking or blending in elements from the private sector, older people have experienced the build-up of the welfare state and will therefore tend to have more trust in government. We will assume that people living in cities will be more exposed to crises (or at least to the threat of crisis) than people living in more rural areas and will therefore be more dependent on the public sector's ability to handle them. In accordance with the arguments stated above, we will assume that this means that people living in cities will have a more positive attitude to the authorities’ abilities in this field than people living in more remote parts of the country.

In scrutinizing public-sector tasks and problem-solving one explanatory factor that has gained much attention recently is what can broadly be termed *trust*. Trust is one of the most widely used concepts in contemporary social science research (Prakash and Selle 2004). It is, however, a multi-faceted and a highly contested and controversial term. We will include in our analysis two aspects that have been theoretically linked to trust by other researchers: one connected to *general trust in society* (Putnam 1993, 2001) and the other more specifically related to *trust in the political and institutional system* (Rothstein 1998). To measure general trust we will construct a variable called *social trust*. This variable is a combination of the responses to the following two statements in our survey: “There are few people I can fully trust” and “If I am not careful other people will exploit me.” These two questions say something about the respondents’ confidence in people in general. We will assume that if people mistrust their fellow citizens, and thus, according to our definition, have a low degree of social trust they will be more sceptical about the ability of public-sector organizations to manage tasks (Rothstein 1998), this may also be true for internal security matters. On the other hand, lack of interpersonal trust may foster thoughts that collective public institutions could counter-balance this lack, and that *they* can be trusted also in security questions. For Putnam religious activity is an important creator of social trust (Putnam 2001). Also in Norway this variable has shown to have some effect on peoples’ participation in elections and

also on their assessment of the authorities (Strømsnes 2004). Putnam's argument is that people who attend religious meetings and services regularly are integrated in communities and this makes them more trustful towards society. We will assume that this is also so in Norway and that this sort of integration makes one more supportive towards the authorities. Strong religious integration can however foster scepticism towards a public sector that may be interpreted as threatening. The last variable we will include in this group - how respondents subjectively assess their own *position* in society - is in some ways connected to the former one. We will assume that people who regard themselves as holding a high rank in society will also be most integrated in society and therefore have the most positive attitudes to public task-solving – also in the particular field studied here.

Trust in the political, institutional system will be measured as a combination of the respondents' self-confidence – indicated by the extent to which they believe they can affect political decisions – and whether they see politicians as trustworthy. By combining the responses to seven statements in the survey we have constructed a variable which we call political efficacy (see appendix for specification). Our hypothesis will be that a high degree of political efficacy will mean a high level of confidence in the authorities' ability to prevent and handle internal security matters. Further we will include a variable which covers the respondents' attitudes towards civil rights in this particular field (see appendix for specification). The assumption is that people who are more oriented towards civil rights and civil liberties will have less positive attitudes towards the government's ability to handle and prevent risk. Their attitude may arise out of mistrust of the authorities' ability to prevent and handle crises, necessitating the introduction of extraordinary measures.

When citizens' assessment of the public sector is scrutinized one group of variables is normally always included – namely *political factors*, like party affiliation and how respondents rank themselves according to a left-right index. In stable regimes like the Norwegian one, these factors tend to have rather weak explanatory power (Christensen and Læg Reid 2005; Rose and Pettersen 1999). We will nonetheless include those variables in our analysis. When the survey was conducted the Centre-Left government which came into office in 2005 was one year into its term. We will assume that those who voted for the parties that formed this government will still have confidence in its ability to solve and handle problems in general and those concerning internal security in particular. The same argument applies to ranking the respondents on a right-left spectrum. Since, in Norwegian terms the government has a pronounced leftist orientation, we will assume that respondents who regard themselves as left-oriented will have a more positive attitude towards the ability of the authorities under this particular government. This assumption may, however, be contested citing the old wisdom that all leftists are sceptical towards established institutions and therefore will also have less confidence in the authorities' capability in general and in this field specifically.

Civil servants and crisis management

Inside the civil service other factors will be of importance for understanding and explaining civil servants' assessment of their own capacity to cope with tasks and solve problems. These include their jurisdiction, their knowledge of the field in question, their contact with other actors inside this field and their overview of the public sector more generally. Many of these factors are related to what can broadly be defined as formal structure. Where actors are structurally located is a reflection of vertical and horizontal specialization. Therefore coordination is also a keyword here. Coordination is a basic challenge and always a central issue in the work of the public sector and this applies to internal security and crisis management as well (Peters 2004). The experience of recent accidents and crises has shown that inadequate organization and failure to coordinate, both at lower operative levels and higher administrative levels, is a recurring problem, and several studies and reports have corroborated this finding (Kettl et al. 2004, NOU 2000:24, Wise 2002a). Thus, we will expect that coordinating capability will affect the perceived crisis management capability. In the fields of safety and security, tasks and responsibility tend to be spread among several sectors and levels and involve a large number of actors. As shown, in Norway the willingness to coordinate these fields better has been rather moderate.

Internal security work and crisis management is by nature a fragmented, complex and disjointed area (Kettl 2004). This field throws up governmental complexities and dilemmas along both vertical and horizontal axes (Wise and Nader 2002). Generally it is difficult to coordinate the work of the various agencies, and government agencies tend to resist being regulated by other agencies (Wilson 1989). In the field of crisis management this problem is aggravated by the critical tasks the agencies are required to handle. Crisis management is a complex and fragmented area of government, and a growing number of cases and problems do not fit into the traditionally functional structure of politics. In organizational theory such problems are classified as “wicked problems” (Dror 1986, Harmon and Mayer 1986). Coordination between these is further complicated by the vertical nature of policymaking. As a rule, modern politics are organized according to the principle of *purpose*, which makes them vertical in nature and characterized by strong functional sectors – pillars or silos – and weak coordinating mechanisms (Kettl 2003). This implies that vertical governmental coordination or coordination *within* specific sectors may be good. When it comes to horizontal coordination, however, these systems face considerable problems, as reflected in the drive for increased cross-sectoral coordinative efforts in the post-NPM reforms (Halligan 2007). One often runs into the problem of *negative coordination* (Mayntz and Sharpf 1975), whereby the wish to coordinate is greater than the willingness to be coordinated. In the case of internal security the traditional problems of organizational coordination are multiplied and the stakes associated with success or failure vastly raised (Kettl 2004:66).

The greatest difficulties of coordination in internal security and crisis management are not managerial ones. Fundamentally these issues are about politics, values and trust (Kettl 2004). Crisis management is a political activity and not just a technical exercise (Boin et al. 2005), and hence may potentially be the subject of turf wars and involve

interference and interaction with other political processes. Citizens expect full protection from all risks and look to their government to provide it. When problems occur they criticize public agencies and civil servants. Government officials can, however, not guarantee full protection to citizens. They can only do their very best. Another problem is that there is a trade-off between security and risk protection on the one hand and civil rights and civil liberties on the other hand, an issue that has been intensively debated in many countries when tougher terrorist laws were proposed.

We will in our empirical analysis of the variation in the civil servants' perceptions of the ability to prevent and handle crises apply three sets of organizational or institutional features. According to an *instrumental-structural perspective*, decision-making processes in public organizations are either the result of strong hierarchical steering or of negotiations among political and administrative leaders (March and Olsen 1983). In addition, the formal structure of public organizations will channel and influence the models of thought and the actual decision-making behaviour of civil servants (Egeberg 2003, Simon 1957). A major precondition for such effects is that leaders score high on rational calculation (Dahl and Lindblom 1953), meaning that they must have relatively clear intentions and goals, choose structures that correspond with these goals and have insight into the potential effects of the structures chosen.

We focus on the importance of six structural variables for understanding the variation in perceived crises management capability among civil servants: administrative level, policy area, position, tasks, perceived coordination capability and management tools. Administrative level means whether civil servants are situated in ministries or agencies. Our expectation here is that civil servants in the ministries, because they have a higher structural position with a wider perspective, will perceive crisis management capability more positively than agency employees. A modifying element here might be that both agencies and ministries are involved but have different tasks and that civil servants in agencies are closer to crisis management and therefore have more insight into it. The relevance of policy area is measured by drawing a distinction between ministries and agencies more directly involved in crisis management in different sectors. We would expect civil servants in agencies and ministries with a specific crisis management responsibility to perceive their authorities' ability to prevent and handle crises as greater than people not belonging to such policy areas.

Furthermore, the basis of our expectations is that diversity in structural position, seeing crisis management from different points of departure, and tasks having different knowledge bases, networks and activities will create variety in the assessment of crisis management. Our general assumption is that civil servants in leadership positions will generally give a more positive evaluation of their own organization's ability to handle and prevent crises than people without leadership responsibilities. Crisis management in central agencies is primarily attended to by people in leadership positions. Leaders are primarily meant to attend to or to be responsible for handling and preventing crises and they will therefore see them from a top hierarchical-coordinative perspective. In addition we would expect civil servants whose main tasks involve staff, regulation, control and auditing or coordination to have a more positive attitude to crisis management than civil servants with other tasks, because their daily work involves tasks that bring them more into contact with crisis prevention and handling.

Two more structural variables are used. Perceived coordination capability measures and whether civil servants see their own organizational unit as scoring high on coordination capacity or not. We would expect employees seeing such capability also to score higher on perceived preparedness to prevent and handle crises. The last variable is the use of diverse management tools, whether hard or soft, since extensive use of these tools may indicate a positive attitude towards renewal and therefore a perception of crisis management as part of modernization.

The second perspective used in the analysis is the *cultural-institutional* one (Selznick 1957). Such a perspective views the development of a public organization as based on historical traditions, path-dependency and informal norms and values (Krasner 1988, March 1994). Actors will think and act according to a logic of appropriateness, not one of consequence. The logic of appropriateness is a central feature of the cultural perspective. What is appropriate for a civil servant to do is defined by the institution to which he or she belongs and internalized through socialization (March and Olsen 1989). Common identities and a high level of mutual trust are central characteristics and make it possible to coordinate many activities in ways that make them mutually consistent. A high level of mutual trust tends to enhance appropriate behaviour and vice versa. In civil service systems with strong vertical sector relations, such as Norway, civil servants know what they are supposed to do and how to act and this creates and maintains trust relations within the different sectors, but it may also constrain trust and coordination among sectors (Fimreite et al. 2007). One would expect there to be a tension between a more traditional sectoral culture concerning crisis management and a new more holistic and collaborative one.

Thus we would expect administrative culture and context to make a difference for perceived crisis management capacity. People with a high level of mutual trust between ministries and central agencies will generally be expected to make a more positive evaluation of these organizations' ability to handle and prevent crises. The same will be the case for people with a high level of identification with their own organization or with the central government in general. Another general expectation is that civil servants working in a policy area with a high level of conflict may be less likely to perceive crisis management positively, and that civil servants working in policy areas characterized by high political saliency will score higher on perceived preparedness to prevent and handle crises.

Third, we need to be sensitive to the variety of *demographic variables*. Demography can be seen as part of an instrumental perspective, if we attend to the competence that the civil servants bring with them, the systematic recruitment and promotion of civil servants and their location in the organizational structure. But it may also be connected to the cultural perspective if we attend more to professional norms and values. Here, however, we will use it more as a separate perspective, primarily to explain variety in the perception of crisis management. The focus will be more on where civil servants come from and the social background they bring with them into the ministries and central agencies regarding norms, values and competence, than where they are located in the organizational structure or the administrative culture.

The general reasoning here is that civil servants, through their socio-economic background or their individual careers have acquired certain norms and values that are

relevant in their jobs. The more specific questions will be whether such differences in background systematically lead to variations in their perception of crisis management. Will civil servants who are older and have a longer tenure experience the various coordinative efforts differently to their younger, less experienced colleagues? Will there be gender differences, with women taking a more positive attitude to the authorities' ability to prevent and handle crises? And will educational background help to explain the variation?

Data and methodology

The empirical data in this paper are based on two surveys, both conducted in 2006, one of the general public and one of civil servants. All civil servants with at least one year tenure, from executive officers to top civil servants in Norwegian ministries, and every third civil servant in the central agencies were included. The response rate in the ministries was 67 percent. 1,846 responded in the 17 ministries, ranging from 57 in the Ministry of Oil and Energy to 284 in the Ministry of Foreign Affairs. 1,516 persons in 49 central agencies answered and the response rate was 59 percent. On average there were 31 respondents from each agency, ranging from 112 in the biggest agency to 1 in the smallest. The survey of the general public was based on a representative sample of Norwegian citizens between 18 and 79 years old. The questionnaire was sent by mail to 2,700 individuals and 1368 responded. The response rate was 50 percent³.

We take a broad empirical approach to the question of crisis management. The general public was asked the following questions: "What trust do you have in the Norwegian authorities' ability to prevent various types of accidents and crises?" and "How competent do you think the Norwegian authorities are to handle various types of accidents and crises?" For both questions we listed three types of accidents and crises: a) Natural accidents such as avalanches, flooding and storms; b) Air, railways, roads and shipping accidents; c) Infections related to food, drinking water or epidemics such as bird flu or *e.coli*. For the first question the respondents were asked to rank their trust from 1 (*very high trust*) to 5 (*very little trust*). For the second question the options were ranked from 1 (*very competent*) to 5 (*very incompetent*).

The civil servants were asked to answer the following questions: "How well prepared are the public authorities in your field of work to prevent and handle crises, accidents and disasters? (For example avalanches, storms, plane crashes, railway and shipping accidents, epidemics and terrorist attacks). We asked the respondents to rank their answers from 1 (*very well prepared*) to 5 (*very badly prepared*).

³ There is some under-representation of younger men in the survey. The data is from the survey on 'Citizens attitude to public authorities and public activities 2006', conducted by The Norwegian Social Science Data Service (NSD) and funded by the Norwegian Research Council. The data were collected by TNS Gallup and organized for research purpose by NSD. None of these institutions are responsible for the analyses or interpretations of the data that is done in this paper.

The dependent variables – prevention and handling of crises

Table 2 reveals three main findings about how citizens assess the government's ability to handle crises. First, the general level of satisfaction is pretty high. In general, more people score high than low on trust and competence in the government when it comes to crisis management. Second, citizens have more confidence in the government's ability to handle crises than to prevent them. This is especially the case when it comes to natural disasters, but it also applies to some extent to transport accidents. Third, there are some variations between different types of accidents and crises. The government scores highest on trust and competence among citizens when it comes to handling transport crises and accidents. The citizens' assessment of the government as incompetent is highest when it comes to dealing with epidemics. This is not surprising, because the survey was conducted around the time that the *giardia* and *e.coli* epidemics took place. Regarding crisis prevention, the citizens were most sceptical about the government's ability to prevent crises arising from natural disasters. Crises following from flooding, storms and avalanches are not easy to prevent, in the view of a majority of citizens.

Table 2. Citizens' assessment of the government's ability to prevent and handle various types of crisis. 2006. Percentage.

	Type of crisis		
	Natural disaster	Transport accident	Epidemics
<u>Trust in government's ability to prevent crises:</u>			
Very high trust	3	6	6
High trust	28	46	39
Neither high nor low trust	40	32	33
Low trust	21	13	16
Very low trust	8	3	6
<u>How competent the government is to handle crises:</u>			
Very competent	7	9	7
Competent	50	60	39
Neither competent or incompetent	35	26	38
Incompetent	7	5	12
Very incompetent	2	1	4

'Don't know' is excluded (about 3 %).

Generally there is a high positive inter-correlation between citizens' assessment of different types of accidents and crises and their evaluation of preventing and handling crises, i.e. there is a cumulative pattern. The average correlation is .54 (Pearson's r , sig.: 0.01). This means that if citizens' responses generate high scores for one type of crisis they will do so for the other two types as well; in addition, a high level of confidence in the government's ability to prevent crises seems to go hand in hand with confidence in its ability to handle them. Thus there is a tight coupling between perceptions of different types of crisis and of prevention and reaction.

Table 3 shows that civil servants generally report that they are well prepared to prevent and handle crises, accidents and disasters within their own field of work. Two thirds of the civil servants in the ministries and agencies who expressed an opinion on this issue said they were either well or very well prepared. One third of our respondents, however, answered 'don't know' or 'not relevant'. This relatively high score indicates that many civil servants work with tasks or in agencies that are not closely related to crises, internal security or accidents.

Table 3. Perceptions among civil servants and citizens in general of how well prepared government authorities are to prevent and handle crises.

	How well prepared civil servants in ministries and central agencies are to prevent and handle crises in their own field of work	How citizens assess the government's ability to prevent and handle crises
Very well prepared	16	4
Well prepared	52	47
Neither well nor badly prepared	24	38
Badly prepared	7	10
Very badly prepared	2	1

The indicator for the citizens is constructed by adding up the values for the six variables used in Table 2 and dividing the total by the number of variables. The values were then recoded into 5 categories representing the scales on the original variables. The responses of the civil servants who said 'don't know/not relevant' were excluded (about 33 %).

The questions posed to the civil servants and to the general public are not identical, and this makes comparison between the two populations difficult. We have, however, constructed an index based on the different questions to the citizens that makes it possible to give a rough comparison with the profile of the civil servants in the ministries and central agencies. The main impression is that the citizens are more sceptical about the preparedness of government bodies than the civil servants are. While 68 percent of the civil servants said they were well prepared to prevent and handle crises, only 51 percent of the citizens agreed with this. There is, however, not a great difference between the citizens and the public officials. In both groups only a small

minority said the government bodies were badly prepared. There is a need for comparison with other countries to reveal if Norway is a deviant case in this matter.

Bivariate and multivariate analyses

This section focuses on how the scores for the various independent variables, i.e. our indicators of demographic and political cultural features among the citizens and structural, cultural and demographic features among the civil servants, correlate with their perceptions of crisis prevention and handling. We first examine the bivariate relations between each set of independent and dependent variables and then do a multivariate analysis of the relative importance of various independent variables for the ability to prepare for and handle crises.⁴ We start by focusing on the citizens.

Variations in citizens' perception of government crisis management capability

Bivariate analysis

Among the *demographic variables* we have included in our analysis four – gender, place of residence, occupational sector (public-private) and education – make no significant difference to the respondents' assessment of the authorities' ability in this field. Occupational status makes a significant difference when it comes to perceptions about how the government is able to prevent and handle crises. People on benefits or disabled citizens are most critical, while students are most positive; people in the work force come in between. Civil status also tends to affect the citizens' perceptions: Those who are unmarried are most satisfied, while those who are divorced and widowed are most sceptical. Age also correlates with the perceptions: younger citizens respond more positively than older people do.

Generally there is a strong relationship between the variables we have included under the label *trust* and how citizens report on the government's ability to handle and prevent crises. Political efficacy, social trust and religiousness correlate strongly with all the dependent variables included in our analysis. Generally people who classify themselves in lower social positions are more sceptical than people from higher social positions. Attitudes towards civil rights have no significant correlation here.

Political factors such as political party affiliation and left-right political orientation also make a difference. Right-oriented citizens are more sceptical towards the authorities' abilities here than people categorizing themselves as left-oriented. If we look at party affiliation we find that people voting for either the big right-wing Progress Party or the small left-wing Red party are most sceptical.

4 For a description of how the independent variables are constructed, see Appendix.

Table 4. Variation between different groups of citizens' assessment of the government's ability to prevent and handle crises. Significant or non-significant correlation/differences.

	Prevention of crises	Handling of crises	Prevention and handling of crises
<u>Demographic features:</u>			
Gender	-	-	-
Age	**	-	**
Civil status	*	*	*
Place of residence	-	-	-
Occupational status	**	**	**
Occupational sector	-	-	-
Education	-	-	-
<u>Trust</u>			
Civil rights attitude	-	-	-
Political efficacy	**	**	**
Social trust	**	**	**
Religiousness	**	**	**
Social class	*	-	*
<u>Political factors</u>			
Left-right orientation	**	**	**
Political party affiliation	**	**	*

-.: Not significant; **: significance at .01 level; *: significance at .05 level

In the analysis summarized in this table, ANOVA has been used for independent variables at the nominal level and Pearson's r for independent variables at the ordinal level. Reported levels of significance are the significance of F from ANOVA and the 2-tailed significance of the correlation coefficient for Pearson's r.

Multivariate analysis

We now turn to the question of the relative explanatory power of the different independent variables for citizens' attitude to the government's ability to prevent and handle crises. We conducted a stepwise OLS regression analysis, using the same model for each dependent variable. Gender, place of residence, occupational sector and education were all non-significant in the bivariate analysis and were not included in the regression models. Three variables which were originally shown to be significant in the bivariate analysis – civil status, occupational status social class – displayed no stable significance in any of the three regression models. In the final analysis presented in Table 5 these variables were therefore excluded.⁵

The multivariate analyses confirm the main pattern revealed in the bivariate analysis. The general public does not vary much in its perception of the government's ability to

⁵ One variable without any significance in the bivariate analysis – civil rights attitude – did turn out to be significant in all three regression models and was therefore included again. The party affiliation variable is recoded as a dummy variable for the regression analysis. Voting for one of the three parties in government (the Social Democrats, the Socialist Left or the Centre Party) is coded as 0, while voting for all other parties is coded as 1.

prevent and handle crises. As shown in Table 5 more or less the same variables affect variation in both attitudes. The single most important variable is political efficacy. People with high political efficacy assess the authorities' ability to prevent and handle crises as high.⁶ Social trust also contributes significantly to explaining variations in confidence in government ability to prevent and handle crises: People with a high level of social trust tend to assess the government's ability to prevent and handle crises as high. Political factors are important, too. Left-right political orientation makes a significant difference in attitudes to crisis management. People categorizing themselves as right-leaning are more sceptical about the authorities' ability to handle crises than people who categorized themselves as left-oriented.

Table 5. Summary of regression equations by demographic and political-cultural features affecting citizens' perceptions of the government's ability to prevent and handle crises. Beta coefficients. Linear regression.

	Prevention of crises	Handling of crises	Prevention and handling of crises
<u>Demographic features:</u>			
Age	.13**	.09**	.11**
<u>Trust:</u>			
Civil rights attitude	.08*	.09**	.08**
Political efficacy	-.19**	-.21**	-.21**
Social trust	-.06*	-.12**	-.10**
Religiousness	.08*	.06*	.07*
<u>Political factors:</u>			
Left-right orientation	.05	.08*	.07*
Opposition position	.09*	.04	.07*
Adjusted R2	.08	.10	.10

** : Significant on .01-level; * : Significant on .05-level

Party affiliation is also significant here. People voting for one of the three governing parties are more confident about the authorities' ability to prevent crises.⁷ Age is also an important explanatory variable. Older people express the most scepticism towards the authorities in this field. Religiousness also has some explanatory power in all three models. People who are active in a religious context have more trust in the authorities' ability both to prevent and handle crises. In contrast to the bivariate analysis we now see a significant effect of attitudes towards civil rights in the regression models. People who value such rights the most tend to have less confidence in the authorities' abilities in this

⁶ The way our two dependent variables are coded –very high trust is 1 and very low trust is 5 – may cause some coefficients to be somewhat counterintuitive: high political efficacy and high social trust will both correlate negatively with high confidence in the authorities' crisis-management ability. High religious activity is coded as 1, the same goes for positive attitudes towards civil rights and left-orientation. This should be borne in mind when reading the tables.

⁷ The correlation between the variable Left-right-orientation and Opposition vs position is .45.

field. It is the interaction between this variable and political efficacy and right-left-orientation that cause the significant effect of the civil rights attitudes here.

The multivariate analysis reveals, as we assumed in the theoretical section, that variables categorized under the broad term trust are important for explaining variations in the public's perceptions about the authorities' ability to prevent and handle crises. People with high political efficacy – which can be interpreted as high trust in political institutions – also, as assumed, have a high level of trust in the authorities' ability to prevent and handle crises. This corresponds with other research in and on Scandinavian countries. Bo Rothstein's (1998) argument about the universal welfare state's ability to create general trust also seems to be relevant for the field of internal security. But social trust is also important. Both of the aspects highlighted by Putnam in his discussion of trust – confidence in fellow citizens (1993) and religious activity (2001) – explain, as we assumed, positive assessments of the ability to handle and prevent crises.

One variable categorized under the broad label trust is civil rights attitudes. As we expected, people who value civil rights highly give the lowest assessment of the authorities' ability. Their scepticism may be due to the fear that the authorities may easily infringe civil rights when adopting crisis-prevention and management measures (Kettl 2004). Political factors were also shown to be important, maybe more so than we expected. Our assumption that left-oriented respondents tend to assess prevention and handling of crises in this field more positively than right-oriented respondents do gains some support. This is somewhat in contrast to the conventional wisdom that leftists are more system-sceptical than others. Our other political variable – namely whether the respondents voted for one of the three parties forming the Centre-Left government that took office in 2005 – may account for this. As already mentioned, this government has a pronounced leftist orientation. What we see here may therefore be the result of more of general confidence in the ability of the new government than specific confidence in government ability in this field. The effect of the variable opposition vs position supports such an interpretation.

The demographic features we included in our analysis are somewhat less important than we assumed. Just one variable from this group has a significant affect on the assessments, and that is age. Moreover, this variable has the opposite effect of what we assumed. Older people are more sceptical about the authorities' crisis-management ability than younger people are. Our theoretical argument was connected to old peoples' general trust in the authorities. What we see here may therefore be the consequence of something else: older people's greater fear and uncertainty about unknown situations that they cannot control.

Variations in civil servants' perceptions of their crisis-management capability

Descriptive statistics

If we focus on *structural features* there are great differences among civil servants in their assessments of how well prepared they are to handle and prevent crises in their own field of work. Officials working in ministries and agencies with special responsibility for internal security and crisis management, such as the Ministry of Justice, the Ministry of Defence, the Directorate for Civil Protection and Emergency Planning, the National Security Authority and the Food Safety Authority, have much greater confidence in governmental ability to handle and prevent crises than civil servants working in other ministries and agencies. So proximity seems to foster positive attitudes.

Table 6. Variations in civil servants' perceptions of how well prepared they are to prevent and handle crises, according to structural, cultural and demographic features. Significance.

	Significance
<u>Structural features:</u>	
Administrative level (ministry/agency)	-
Policy area (internal security/other areas)	**
Position (administrative leader or not)	**
Tasks	
-regulation, control, auditing	-
-coordination	-
-staff	**
Perceived coordination capability	**
Management tools	**
<u>Cultural features:</u>	
Identification with own department	**
Identification with own ministry/agency	**
Mutual trust between ministry and agency	**
Level of conflict in own policy area	**
Political salience in own policy field	-
<u>Demographic features:</u>	
GenderAge	*
Education	*
Tenure	**
	-

-: Not Significant; ** Significant at .01 level; *: Significant at .05 level.

In the analysis summarized in this table, ANOVA has been used for independent variables at the nominal level and Pearson's r for independent variables at the ordinal level. Reported levels of significance are the significance of F from ANOVA and the 2-tailed significance of the correlation coefficient for Pearson's r .

In addition, people in administrative leadership positions have more positive attitudes than other officials. The same is the case for civil servants who are satisfied with the coordination capability in their own field and those who work mainly on staff tasks. Adoption of modern management tools also tends to increase satisfaction with crisis management capability. Civil servants who report that they use modern management tools score higher in their assessment of crisis-management capability. There are, however, no significant differences between ministries and agencies, or between officials with regulation control and auditing or coordination as their main tasks compared to other civil servants.

There are also significant variations involving various *cultural features*. Civil servants who identify strongly with their own department or agency have more confidence in crisis-management capability than people whose identification with their department or agency is low. A high level of mutual trust between ministries and agencies, and a low level of conflict in own policy area also tend to enhance assessments of crisis-management capability. However, the level of public debate concerning own policy area does not correlate with assessments of crisis-management capacity.

The demographic features reveal some differences between professions. Civil servants educated in military academies, physicians and veterinarians have the most positive attitudes while civil servants educated in the humanities are most sceptical. Men also tend to be more positive than women. In contrast to the general public the oldest civil servants score highest in their assessments of crisis-management capability. There is no significant effect of tenure.

Multivariate analyses

We now turn to the question of the relative explanatory power of the various independent variables for civil servants' views of their own ability to prevent and handle crises. We conducted a stepwise OLS regression analysis. All variables with significance in the bivariate analysis were originally included in the model. Level of conflict in own policy area, age and education, however, showed no stable significance in the regression model. In the final analysis, presented in Table 7, those variables were therefore excluded. Identification with own department and own agency was integrated into an additive index in the regression analyses⁸.

The results from the multivariate analyses show first, that we are able to explain a fair amount of the variation in the civil servants' assessments of crisis-management capability. This is especially the case compared to the citizens. Second, policy area makes a significant difference. Civil servants working in agencies with special responsibility for internal security and crisis management are significantly more satisfied with their own crisis management capability than those working in other agencies. This might illustrate

⁸ The regression model includes an additive index measuring the level of identification with the administrative unit or the department/agency as a whole. The index is constructed as the average score across the two items on

their five point ordinal response scale. High values on the index correspond to low identification. Position is included in the model as a single dummy with a value of 1 for "Assistant Director General and above".

the problem of practicing the principle of responsibility. Giving responsibility for crisis management to each and every agency within their own policy area is likely to produce pretty low crisis-management capability. Agencies specializing in crisis management and internal security tasks report significantly higher crisis- management capability than other agencies.

Table 7. Summary of regression equations by structural, cultural and demographic features affecting civil servants' perceptions of the government's ability to prevent and handle crises. Beta coefficients. Linear regression.

	Ability to prevent and handle crises
<u>Structural features:</u>	
Policy area (internal security/other areas)	.19**
Position	-.04
Staff tasks	.07**
Perceived coordination capability	.18**
Use of management tools	.05*
<u>Cultural features:</u>	
Mutual trust	.19**
Identification own department/own agency	.06*
<u>Demographic features:</u>	
Gender	-.05*
<i>Adjusted R2</i>	.17

** : Significant at .01-level; * : Significant at .05-level

We also see a clear effect of another structural variable, coordination capability. Civil servants scoring high on coordination capability report a higher level of perceived crisis-management capability than those who report problems of coordination. Having personnel work as a main task and use of management tools also seem to produce an effect, but it is much weaker. The same is the case for civil servants reporting that modern management tools, such as knowledge-based management, team-based management, value-based management, ethical guidelines, service declarations and benchmarking are important in their own field of work. The effect of leadership position is not significant in the final model but is significant if we exclude personnel tasks from the model.

Third, there are also effects of cultural variables. In particular, a high level of mutual trust between ministries and central agencies tends to enhance perceptions of crisis-management capability. There is an effect of identification with own agency or department but this is weaker. Fourth, there is also a significant effect of one demographic variable, gender. Men tend to score higher on their assessments of crisis-management capability than women.

Generally our assumptions are supported for policy area, staff tasks, perceived coordination and use of management tools. There is particularly strong support for the

effect of policy area and coordination capability. By contrast, other structural features, such as position or having regulation or coordination as main tasks have little explanatory power. Regarding the cultural variables our assumptions about identification with own department or agency and mutual trust are supported. There is especially strong support for the importance of mutual trust between ministries and agencies. But level of conflict or political salience in own policy area does not have the effect that we assumed. When it comes to demographic variables gender makes a difference, while age, education and tenure do not.

Discussion

We have first shown that citizens have a rather high level of trust in the government's ability to prevent and handle crises. Variations in their trust in government do not change much between prevention and handling of crises, and the profiles of the different types of crisis are pretty similar. This indicates that citizens' trust in government when it comes to internal security and crisis management is pretty generalized. If they have trust along one dimension and one area they also have trust along other dimensions and areas. This confirms the distinction Easton (1965) makes between diffuse and specific support, meaning that people either have a general attitude of trust or distrust towards the political-administrative system as such, including its basic institutions and actors, or else focus their attitudes in a more differentiated manner on specific institutions and actors. Our main results indicate that diffuse support or generalized trust in the Norwegian system is rather high. This is also in line with the findings of a broad empirical analysis of the crucial factors explaining citizens' attitudes to public service delivery in Norway (Christensen and Læg Reid 2005).

Second, given this main result, there are also perceptions showing that specific features and contexts of this policy area lead to differentiated reactions from citizens (Table 8). People are generally most positive when it comes to the government's ability to handle man-made crises and transport accidents and most sceptical regarding the prevention of natural disasters, such as avalanches, flooding and storms. This is in many ways a natural reaction and perception of risk. If one believes in modern technology, as many people do, it is easier to imagine the government coping with man-made crises than with natural disasters, which will normally be seen as unpredictable and difficult to handle. Important here is that climate change and the increased number of media reports of natural disasters are likely to raise people's level of fear.

Table 8. Citizens perceptions of different phases and causes of crises.

		Cause of crisis	
		Man-made	Natural based
Phase of crises	Prevention	Medium score (transportation, infection)	Low score (natural disasters)
	Handling	High score (transportation)	Medium score (nature, epidemics)

Citizens have more confidence in government authorities' ability to handle crises than to prevent them and more confidence in crisis-management in the area of transport than in the area of epidemics. Again this seems plausible for two reasons. Crisis prevention will cost a lot of money and it is not easy to have enough resources to maintain an overall high level of prevention, particularly not when certain kinds of disasters happen seldom. But crisis prevention can also save a lot of money (see Wildavsky 2003). Handling crises that have already occurred is another matter, because that is more specific and it is therefore easier to focus resources and efforts. When citizens differentiate between sectors, they are obviously influenced by their experience that transport accidents happen quite rarely, while their specific experience with infectious diseases in Norway will colour their perceptions as will media coverage of scandals like mad cow disease and foot-and-mouth disease.

Third, there are no big differences between the general public and the government authorities regarding their perceptions of crisis management. Only a small minority, both in the general public and among the civil servants, say that the government is very badly prepared. Civil servants seem to assess themselves more positively than citizens do. Again, this may reflect both a high level of trust in government among citizens in Norway, but also a competent civil service. Awareness of security issues also seems to have grown over the past decade, and both citizens and government officials are now less 'innocent' about what the potential dangers facing a modern society are.

Fourth, when it comes to variations among citizens, political efficacy is the main explanatory factor. People who have less trust in political institutions are much more sceptical than those who have greater trust. Generally, variables linked to the label trust and political factors are more important than demographic factors in explaining variations in citizens' assessments here, but age also makes a difference. We can sum up the results from the regression analysis by saying that older people, people with low political efficacy, people with low social trust, people who are politically right-oriented, people who pay a lot of attention to civil rights and people who engage in little religious activity, who assess civil rights highly and who vote for the opposition parties are most sceptical about the crisis-management capability of the government authorities.

This is a rather mixed bag of explanatory variables, but with some systematic features. One is that social integration and social resources seem to foster general trust and also confidence in governmental ability to handle crises. People displaying such characteristics obviously feel less insecure and vulnerable, because they belong to social groups and have greater social competence and more insight into the importance of

collectivity when it comes to crisis management. Another is that citizens who are right-leaning generally seem to be more sceptical about the public sector in general and to its crisis-management capacity more specifically. Without having actually asked them, one can imagine these citizens would prefer private actors to play a more central role in crisis management and will see individual responsibility as part of the equation. The third element is a concern for civil rights; something that one can imagine covers the whole political spectrum. These people will probably react strongly to excessive preventive measures, because they see them as being at odds with democratic values and individual rights.

There are some notable contrasts between our expectations and our main findings, even though the main picture of the importance of trust variables is confirmed. Three demographic variables are worth mentioning. Education as a variable has a tendency to be important in many studies of people's attitudes, but not in this study. This may be due to a generally rather high educational level and less distinct differences, or simply to the fact that internal security is something most people know rather little about, however well-educated they are. Gender yields the opposite finding to the one we expected, which may mean that the proximity of women to the public sector is of less importance than the probable fact that men are more oriented to the technical aspect of internal security, while women attend more to the softer policy factors. Interestingly enough, and in contrast to what we expected, young people have more trust in the government's ability to prepare for and handle crises, which may be explained by the fact that young people are more exposed to and focused on the dangers facing a modern society. A final deviation that should be mentioned, from the trust category, is that social class has no effect on attitudes here, which may reflect a low level of class consciousness in an egalitarian society.

Fifth, among the civil servants structural variables related to specialization and coordination have strong explanatory power, as expected. Civil servants working in regular agencies and ministries espousing the principle of responsibility for internal security and crisis management in own area and who experience big coordination problems give the lowest assessment of crisis-management capability. In contrast, civil servants in specialized agencies with particular responsibility for internal security and crisis management and who report good coordination believe they are most capable when it comes to crisis management. This shows that attention, related to formal structure and tasks, is important. Having internal security as one's main institutional focus is an advantage when it comes to both attention and resources, but it also increases knowledge about the preventive potential and handling ability. While actors with a lot of other tasks to attend to, and where internal security tasks are only one kind of task among many others, will perceive more problems. Generally speaking the existence of coordination problems indicates a fragmented structural context, which is problematic for internal security questions.

In addition, the administrative culture must be taken into consideration. Mutual trust between ministries and subordinate agencies tends to enhance crisis management capability. This is what Bardach (1998) labels "smart practice," where the crucial point is not so much structural reorganization and new coordinative structures, but softer

cultural measures where different public organizations find pragmatic ways to collaborate based on a common cultural understanding.

Overall, in addition to the most important independent variables of policy area, perceived coordination capability and mutual trust, there is also a group of factors with weaker but significant effects. Civil servants working on staff tasks, using diverse management tools, identifying strongly with their own agency and who are male, score relatively higher on their perceptions of crisis-management capability. Staff tasks often offer opportunities both for a closer relationship with the leadership and more insight into their concerns, and also decrease people's focus on daily case-work, which may increase positive perceptions of perceived capacity for handling internal security. Civil servants using diverse new management tools will probably be more preoccupied with the challenges of crisis management.

If we compare our expectations with our findings, there are some interesting discrepancies. Even though many of the structural variables strongly confirmed the expected results, administrative level, position and some tasks did not. We expected that civil servants in ministries would be more prepared to prevent and handle crises than those in the agencies, but this turned out not to be the case. This may indicate that hierarchical overview is not more important than the proximity agency employees feel towards crisis management. That could also be partly the reason why administrative leaders do not score higher than employees lower down the hierarchy. And one reason why people working with staff tasks score higher than civil servants working with coordination could be that coordinative tasks may be both more difficult and more rewarding, so what is important is whether one feels that coordinative capacity is good, as shown in another variable. Of the cultural variables, the two variables concerning level of conflict and political salience do not show the expected results. But this may also be because it is not conflicts or saliency as such that are important, but rather whether these features are coupled to policy areas that have potential internal security challenges. None of the demographic variables show the expected results, and again men score higher than women on perceptions of preparedness.

Conclusion

For a small country that has not experienced many man-made or natural disasters, Norway has been rather preoccupied with internal security questions and reforms of crisis management. There seem to be some major reasons for this. One is that in a globalized world disasters and crises occurring elsewhere feel closer and insecurity thus increases, in other words, people feel that crises have something to do with them, whether Norwegians are involved or not. This is certainly the case for terrorist attacks and epidemics like SARS and bird flu, and even more so when Norwegians are directly involved, like in the tsunami disaster, which prompts an immediate response from the government. Domestic crises, like the *e.coli* bacteria epidemic, where children were the most vulnerable, also have a profound effect and prompt both immediate action and longer-term structural adjustments.

Very typical for the way Norway handles internal security concerns is that, even though commissions are assigned to work on the problems, the government uses a lot of resources and media coverage is intensive, the results of these processes are rather limited. This may indicate that path-dependency and sectoral concerns are relatively more important than really doing something in a new and coordinative way about crisis management. Crisis management obviously has difficulty staying high on the political agenda in a country like Norway where crises are less frequent than in countries with bigger populations, a greater likelihood of natural disasters, a greater terrorist threat, more ethnic, religious and other types of conflicts, etc.

Our main finding from our survey of citizens' and civil servants' perceptions of crisis management is that preparedness is generally perceived to be on a high level while civil servants give it a more positive assessment than citizens do. Nevertheless, the difference between the two assessments is rather small, which may be a reflection of a homogeneous and safe society. There is no big gap between citizens and civil servants when it comes to assessment of the government's crisis management ability. This indicates that there is not a significant legitimacy problem in this policy area, which has to be seen in relation to the fact that Norway has not faced a major disaster or catastrophe over the last decades. The main factors affecting citizens' crisis-management perceptions are to be found in several trust variables. Political efficacy, social trust and religiousness are all related to some kind of social capital and integration, which makes people feel more secure and have more confidence in the authorities' ability to handle crises. This seems to show that this policy area is somewhat special, because it is more closely tied than others to social resources and integration. With regard to the civil servants, the main finding seems to be that structural variables are important for explaining variations in perceptions, but this applies less to hierarchical ones and more to policy area and coordination capability. This may indicate that this policy area is so special that it requires special attention and a separate kind of organization. As among citizens mutual trust as a cultural variable is also important.

References

- Bardach, E. (1998). *Getting Agencies to work Together. The Practice and Theory of Management Craftmanship*. Washington D.C.: Brookings Institution.
- Beck, U. (1992). *Risk Society: Towards a New Modernity*. London: Sage Publications.
- Bennett, L.L. and S.E. Bennett (1990). *Living with Leviathan: Americans coming to terms with big government*. Lawrence: University of Kansas Press.
- Boin, A. (2005). "From crisis to disasters: Towards an integrated perspective". In R.W. Perry and E.L. Quarantelli, eds.). *What is a disaster?* International Research Committee on Disasters.
- Boin, A., P. T.Hart, E. Stern and B. Sundelius (2005). *The Politics of Crisis Management: Public Leadership under Pressure*. Cambridge: Cambridge University Press.
- Bouckaert, G. and S. Van de Walle (2001). *Government performance and trust in government*. Paper , EGPA Conference, Vaasa, Finland.
- Christensen, T. (2003). "Narratives of Governance in Norway: Elaborating the Strong State". *Public Administration*, 81(1):163-190.
- Christensen, T. and P. Læg Reid (2002). *Reformer og lederskap (Reforms and leadership)*. Oslo: Universitetsforlaget.
- Christensen, T. and P. Læg Reid (2005). "Trust in government. The relative importance of service satisfaction, political factors, and demography". *Public Performance & Management Review*, 28 (4): 487-511.
- Christensen, T. and P. Læg Reid (2007). "NPM and Beyond: The Second Generation of Reforms". *Public Administration Review*, Nov./Dec. (forthcoming).
- Christensen, T. and M. Painter (2004). "The Politics of SARS - Rational Responses or Ambiguity, Symbols and Chaos?" *Policy and Society* 2004;23(2):18-48.
- Dahl, R.A. and C.E. Lindblom (1953). *Politics, Economics, and Welfare*. New York: Harper & Row.
- Dror, Y. (1986). *Policy making under adversity*. New Brunswick: Transaction Publishers.
- Dunleavy, P. (1989). "The political implications of sector cleavages and the growth of state employment". *Political Studies*, 38: 364-383.
- Easton, D. (1965). *A System analyses of political life*. New York: Wiley
- Egeberg, M. (2003). How bureaucratic structure matters. In J. Pierre and B.G. Peters (eds.), *Handbook of Public Administration*. London: Sage.
- Fimreite, A.L., Y. Flo, P. Selle and T. Tranvik (2007). "Når sektorbåndene slites. Utfordringer for den norske velferdsmodellen" (When sector relations erode. Challenges for the Norwegian welfare model). *Tidsskrift for Samfunnsforskning*, 48 (2): 165-196.
- Fjell, L. J. (2007). *Mission impossible? En studie av Utenriksdepartementets håndtering av Tsunami-katastrofen* (Mission Impossible? A Study of the Handling of the Tsunami Catastrophe by the Ministry of Foreign Affairs). Master's Thesis. Department of Administration and Organization Theory, University of Bergen.
- Halligan, J. (2007). Reform Design and Performance in Australia and New Zealand. In T.Christensen and P.Læg Reid (eds.), *Transcending New Public Management*. Aldershot: Ashgate.
- Halligan, J. and J. Adams (2004). "Security, capacity and post-market reforms: Public management change in 2003". *Australia Journal of Public Administration*, 63(1): 85-93.
- Harmond, M.M. and R.T.Mayer (1986). *Organization Theory of Public Administration*. Glenview, IL: Scott, Foresman and Co.
- Huseby, B.M. (1995). Attitudes towards the size of government. In O. Borre & E. Scarbrough (eds.), *The scope of government*. Oxford: Oxford University Press.

- Hutter, B. and M. Power, eds. (2005). *Organizations' Encounters with Risk*. Cambridge: Cambridge University Press.
- Høydal, H. (2007). *Tilsyn på tvers. En studie av samordning for samfunnsikkerhet i norsk sentralforvaltning* (Auditing crosswise. A study of coordination for internal security in the Norwegian Central government) Master's thesis. Bergen: Department of Administration and Organization Theory.
- Kettl, D.F. (2003). "Contingent Coordination: Practical and Theoretical Puzzles for Homeland Security". *American Review for Public Administration*, 33 (September): 253-277.
- Kettl, D.F. (2004). *System Under Stress. Homeland Security and American Politics*. Washington D.C.: CQ Press.
- Kettl, D.F. et al. (2004). *The Department of Homeland Security's First Year. A Report Card*. Washington D.C.: The Century Foundation Press.
- Krasner, S. (1988). "Sovereignty: An institutional perspective". *Comparative Political Studies*, 21: 66- 94.
- Lafferty, W. (1988). Offentlig sektorklasse". I støpeskjeen mellom de privat og kollektive verdier. (Reshaping the "public sector class" between public and private values). In H. Borgen and O. Langeland (eds.), *Offentlig eller privat* (Public or Private). Oslo: Fafo.
- Lafferty, W. and O. Knutsen (1984) "Leftist and rightist ideology in a social democratic state: An analysis of Norway in the midst of conservative resurgence". *British Journal of Political Science*, 14 (3): 345-367.
- Listhaug, O. (1998). "Confidence in political institutions: Norway 1982-1996". Paper presented to the research seminar at the Centre of Nordic Policy Studies, University of Aberdeen.
- Læg Reid, P. (1993) "Opinion of offentlig sektor. (Public opinion and the public sector). In P. Læg Reid and J.P. Olsen (eds.), *Organisering av offentlig sektor*. Oslo: Tano.
- Læg Reid, P. and S. Serigstad (2006). "Framing the field of homeland security". *Journal of Management Studies*, 43 (6): 1395-1413.
- March, J.G. (1994). *A Primer of Decision-Making*. New York: The Free Press.
- March, J.G. and J.P. Olsen (1983). "Organizing Political life. What administrative reorganization tells us about government". *American Political Science Review*, 77 (2): 281-296.
- March, J.G. and J.P. Olsen (1989). *Rediscovering Institutions*. New York: The Free Press.
- Martinussen, W. (1988). *Solidaritetsens grenser* (The limits of solidarity). Oslo: Universitetsforlaget.
- Mayntz, R. and Sharpf, F. (1975). *Policymaking in the German Federal Bureaucracy*. Amsterdam: Elsevier.
- Morgan, G. and L. Engwall (1999). "Regulation and organizations: an introduction". In G. Morgan and L. Engwall (eds.) *Regulation and Organizations. International Perspectives*. London: Routledge
- Norris, P. (1999), "Conclusion: The growth of critical citizens and its consequences". In P. Norris (ed.), *Critical citizens: Global support for democratic governance*. Oxford: Oxford University Press.
- NOU 2000:24. *Et sårbart samfunn*. (A Vulnerable Society). Oslo: Ministry of Justice.
- Olsen, O.E., B.I. Kruke and J. Hovden (2007). "Societal Safety: Concept, Borders and Dilemmas". *Journal of Contingencies and Crisis Management*, 15 (2): 69-79.
- Perry, R.W. and E.L. Quarantelli, eds. (2005). *What is a disaster?* International Research Committee on Disasters. Philadelphia: Xlibris.
- Peters, B.G. (2004). "Are We Safer Today? Organizational Responses to Terrorism". Unpublished paper. Pittsburgh: University of Pittsburgh.
- Prakash, S and P. Selle (2004). *Investigating Social Capital: Comparative Perspective on Civil Society, Participation and Governance*. New Dehli: Sage Publications.
- Putnam, R. (1993). *Making Democracy Work. Civil Tradition in Modern Italy*. Princeton: Princeton University Press.
- Putnam, R (2001). *Bowling Alone. The Collapse and Revival of American Community*. New York: Simon and Schuster.

- Rose, L.E. and P.A. Pettersen (1999), The legitimacy of local government – What makes a difference? In K. Hoggart and T.N. Clark (eds.), *Citizen responsive government*. Research in Urban Policy, vol. 8. Amsterdam: JAI Press.
- Rothstein, B (1998), *Just Institutions Matters. The Moral and Political Logic of the Universal Welfare State*. Cambridge: Cambridge University Press
- Rothstein, B. and D. Stolle (2003). "Introduction: Social capital in Scandinavia". *Scandinavian Political Studies*, 26 (1): 1-26.
- Selznick, P. (1957). *Leadership in Administration*. New York: Harper & Row.
- Serigstad, S. (2003). 'Eit sårbart samfunn. Ein studie av omorganiseringa av den sentrale tryggleiks- og beredskapsforvaltninga i Noreg i perioden 1999-2002.' (A vulnerable society. A study of the reorganization of the central administration for internal security in Norway 1999-2002) Bergen: Rokkan Centre Report 16, 2003.
- Short, J.F. and L. Clarke, eds. (1992). *Organizations, Uncertainties, and Risk*. Boulder: Westview Press.
- Simon, H. (1957). *Administrative Behavior*. New York: The Free Press.
- Smith, D. (2006): Crisis Management – Practice in Search of a Paradigm in D. Smith and D. Elliott (eds): *Crisis Management. Systems and structures for prevention and recovery*. London/NewYork:Routledge.
- Stortingsmelding nr.17 (2001-2002) Samfunnsikkerhet. Veien til et mindre sårbart samfunn.
- Strømsnes, K. (2003). *Folkets Makt. Medborgerskap, demokrati, deltakelse (Peoples Power: Citizenship, democracy, participation)*. Oslo: Gyldendal Akademisk
- Strømsnes, K (2004). Kirkegang og medlemskap i religiøse organisasjoner: Den brede vei til sosial kapital (Church attendance and membership in religious organizations. The wide road to social capital). In O. G. Winsnes (ed), *Tallenes tale 2004. Perspektiver på statistikk og kirke (The Tale of the Numbers 2004. Perspectives on Statistics and Church)*. KIFO Rapport nr 27. Trondheim: Tapir Forlag.
- TNS Gallup (2006), "TNS Velferdstjenester– det totale overblikk". www.tns-gallup.no/arch/img/212689.
- Turner, B.A. and N.F. Pidgeon (1997). *Man-made disasters*. 2nd edition. London: Wykenham.
- Valen, H. et al. (1990). "Endring og kontinuitet" (Change and continuity), *Social and economic studies*, no 74. Oslo: Statistisk Sentralbyrå.
- Wildavsky, A. (2003). *Searching for safety*. Second edition. New Brunswick: Transaction Publishers.
- Wilson, J.Q. (1989). *Bureaucracy. What Government Agencies Do and Why they Do It?* New York: Basic Books.
- Wise, C.R. (2002a). "Reorganizing the Federal Government for Homeland Security: Congress Attempts to Create a New Department", *Extensions*, Fall 2002:14-19.
- Wise, C.R. and Nader, R. (2002). "Organizing the Federal System for Homeland Security: Problems, Issues, and Dilemmas", *Public Administration Review*, 62 (Special Issue), 44-57.

Appendix:

The survey of citizens:

The independent variables in Table 4 have the following values:

Demographic features:

Gender: 1 Man, 2 Woman;

Age: Continuous;

Civil status: 1 Unmarried, 2 Married/partner, 3: Separated/divorced, 4: Widow/widower; Place of residence: 1 Big city, 2 Suburb to big city, 3 Small city, 4 Densely populated area; 5 Scattered settlements;

Occupational status: 1 Working, 2: Student, 3: Retired 4: On benefits; Occupation: 1 Managers/ politicians 2 Academics/professions 3 Technicians/occupation with shorter academic education 4 Office work 5 Sales/service/caring work 6 Work in agriculture/forests/fisheries, 7 Craftsmen, 8 Manuel worker/transport 8 Unskilled work; Occupational Sector: 1 Private firm, 2 Foundations/Civil society org./Interest org., 3 Local/regional government 4 Central government 5 Other public sector/partly public organization 6 Other;

Education: 1 Primary school 2 Vocational training, 3 University/college 1-2 years, 4 University/ college 3-4 years, University/college 5 years or more;

Trust:

Civil rights attitude: Additive index based on responses to the following statements: a) *Hold people in custody as long as one wants without taking them to court*, b) *Tap people's phone calls* c) *Stop people at random on the street and search them without any particular suspicion*. The index is constructed as the average score across the three items on their four point ordinal response scale. High values on the index correspond to high valuation of civil rights. Cronbach's Alpha for the three item index is .685

Political efficacy: Additive index based on responses to the following questions or statements: a) *How interested are you in politics?*, b) *People like me have no opportunity to influence what the government does*, c) *Ordinary people have a lot of political influence* d) *I have a pretty good understanding of the important political issues that our country faces*, e) *I think that most people are better informed about politics than I am*, f) *members of parliament try to keep their campaign promises*, g) *We can trust that civil servants in general do what is best for the country*.

The index is constructed as the average score across the seven items on their five point ordinal response scale. Some of the response scales are reversed to produce a consistent pattern of scores. High values on the index correspond to high political efficacy. Cronbach's Alpha for the seven item index is .688.

Social trust: Additive index based on responses to the following statements: a) *There are only a few people I can really trust completely* b) *If you are not careful other people will take advantage of you*.

The index is constructed as the average score across the items on their five point ordinal response scale. High values on the index correspond to high levels of trust. Cronbach's Alpha for the two item index is .667

Religiousness: *How often do you attend church services or other religious meetings? 1 Several times a week, 2 Every week, 3 Two or three times a month, 4 Once a month 5 Several times a year 6 One or two times a year, 7 Less than once a year, 8 Never*

Social class: *In Norway there are groups that are more or less at the top of society and groups that are more or less at the bottom. Below you see a scale that goes from top to bottom. Where would you place yourself on that scale? The scale has 10 values from 1 (top) to 10 (bottom).*

Political Factors:

Left-right orientation: *In politics there is often talk of a cleavage between right and left. Below is a scale going from left (those who are politically very left-oriented) to right (those who are politically very right-oriented). Where would you place yourself on this scale? The scale has 10 values from 1 Strongly left-oriented to 10 Strongly right-oriented.*

Political party affiliation: *Which political party would you vote for if there was a general election tomorrow? 1 Red Election Alliance 2 Labour Party, 3 Progress Party, 4 Conservatives, 5 Christians People's Party, 6 Centre Party, 7 Socialist Left Party, 8 Liberals, 9 Others, 10 Don't know, 11 would not vote.*

The dependent variables:

The dependent variables used in table 4 and 5 are additive indexes. The indexes are constructed by adding the variables that are included and divide on number of variables. This means that the indexes will have five discreet values from 1 to 5, as the original variables that are included in the index also have. In the variable 'Prevention of crises' the attitudes towards the authorities' ability to prevent crises in the area of a) nature, b) traffic/transport and c) epidemics are included. In the variable 'Handling of crises' the citizens attitudes towards the authorities' ability to handle crises in the three same areas are included. In the variable 'Prevention and handling of crises' includes all six variables that are used in the two previous indexes.

The survey of civil servants:

The independent variables in Table 6 have the following values:

Structural features

Administrative level: 1 Ministries, 2 Central Agencies

Policy area: 1 Ministries and central agencies with significant responsibility for internal security/crisis management: Ministry of Justice and Police, Ministry of Defence, Ministry of Transportation, Ministry of Agriculture and Food, Ministry of Health and Care, the Directorate of Civil Protection and Emergency Planning, the National Security Authority, the Coastal Administration, the Civil Aviation Authority, the Maritime Directorate, the Railways Inspectorate, the Public Roads Administration, the Food Authority, the Directorate for Health and Social Affairs, the Pollution Control Authority, the Board of Health Supervision, The Water Resources and Energy Directorate, the Petroleum Safety Authority, the Radiation Protection Authority, the National Police Directorate ; 2 All other Ministries and Central agencies.

Position: 1 Senior executive officer, 2 Head of office, 3 Assistant Director General 4 Director General, 5 Secretary General/Head of agency

Tasks: *What are your main tasks?*

Personnel 1 Pay and personnel administration/organizational development/(re)organization 2 Other tasks;

Regulation: 1 Control, regulation, auditing, accounting, 2: Other tasks;

Coordination: 1 Coordination, 2 Other tasks.

Perceived Coordination Capability: Additive index based on the following questions: How would you characterize coordination in your own field of work along the following dimensions: a) Coordination with other governmental bodies within own policy area, b) Coordination with governmental authorities within other policy areas, c) Coordination with local and regional government, d) Coordination with super-national bodies/international organizations, d) Coordination with private firms/civil society organizations/private-sector interest organizations. The index is constructed as the average score across the five items on their five point ordinal response scale. To avoid a significant loss of cases the “not relevant” alternative was set to the average value of the response scale before the index was constructed. High values on the index correspond to low levels of coordination. Cronbach’s Alpha for the five item index is .772.

Management tools: Index based on the following questions: *Related to the modernization and renewal work in the government administration several new reform tools and measures have been launched. How important are the following reforms/tools in your own field of work?* Twenty-six different tools were listed and the respondents were asked to rank each of them on a scale from 1 Very important to 5 very unimportant/not used. A factor analysis differentiates between 6 different families of tools. In this paper we report on one factor that has a significant effect on the variation in the civil servants' assessment of their own capability to handle and prevent risk. This factor consists of the following reform tools: Knowledge-based management (factor loading .77), Team based management (factor loading .73), Value based management (factor loading .65), Ethical guidelines (Factor loading .63), Service declarations (factor loading .60) and Benchmarking (factor loading .48). The index is constructed as the average score across the six items on their five point ordinal response scale. To avoid a significant loss of cases the “not relevant” alternative was set to the average value of the response scale before the index was constructed. High values on the index correspond to low importance of the management tools.

Cultural features:

Identification: *Below we will ask you to report how strong or weak your identification is with the following organizational units?* Four categories were mentioned: a) Own department b) Own agency/ministry c) Central government in general d) Own profession/education. The respondents were asked to answer on a scale from 1 (Very strong identification) to 5 (Very weak identification). In this paper we use the two first units:

Own department: 1 (Very high identification) to 5 (Very low identification).

Own agency/ministry: 1 (very high identification) to 5 (Very low identification).

Mutual trust: *How would you characterize the level of mutual trust between your own agency and the superior ministry/own ministry and subordinate agencies?* The respondents were asked to respond on a scale from 1 (very good) to 5 (very bad).

Level of conflict: *To what degree would you say that your own field of work is characterized by agreement or disagreement?* The respondents were asked to respond on a scale from 1 (Very high level of agreement) to 5 (Very high level of disagreement).

Political salience: *To what degree are the cases that you work on the object of public debate?*

The respondents were asked to answer on a scale from 1 (Very high degree) to 5 (Very low degree).

Demographic features:

Gender: 1 Men 2 Women

Age: 1- Under 35 years, 2- 35-54 years, 3- 55 years and more

Education: 1 Military academy 2 Medical school/dental college/veterinarian, 3 Political science 4 Jurists, 5 Business economists, 5 Other education, 6 Natural science/mathematics/ civil engineer/architect 6 Bachelor' degree, 7 Economist, 8 Civil agronomy, 9 Other social science master's degree, 10 Humanities.

Tenure: *How long have you been working for central government?* 1 5 years or less; 2 More than 5 years.

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