



Faculteit Sociale Wetenschappen
Departement Politieke Wetenschappen

**Legacies of the past: how structural reform histories can impact
public organizations**

Proefschrift voorgelegd tot het behalen van de graad van doctor in sociale
wetenschappen: politieke wetenschappen aan de Universiteit Antwerpen

te verdedigen door

Bjorn KLEIZEN

Promotoren:

Prof. dr. Koen Verhoest

Prof. dr. Jan Wynen

Antwerpen, 2020

Members of the doctoral committee

Chair: Prof. dr. Wouter van Dooren – University of Antwerp
Supervisor: Prof. dr. Koen Verhoest – University of Antwerp
Co-supervisor: Prof. dr. Jan Wynen – University of Antwerp
External member: Prof. dr. Sandra van Thiel – Radboud University

Members of the doctoral jury:

Prof. dr. Hans de Witte – KU Leuven
Prof. dr. Külli Sarapuu – Tallinn University of Technology
Prof. dr. Kutsal Yesilkagit – Leiden University

Copyright © Bjorn Kleizen, 2020

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means without prior permission of the author.

Abstract

Elections, crises, political demands, technological development and management trends are but some of the reasons public sector organizations are structurally reformed. Some have been restructuring for years, causing continuous turmoil and offering little reprieve for civil servants. Other organizations were stable for decades, but are suddenly thrust into repeated mergers and restructurings, catching employees off-balance and leaving them bewildered on where ‘their’ organization has gone. We already know that even a single major reform may produce substantial detrimental side-effects for both employees and their organizations, ranging from stress and absenteeism to reduced innovativeness. However, given the rate of structural reform confronting some public organizations, the question is arguably no longer how a single change may impact an organization, but whether and how sequences of change bring about detrimental and perhaps unforeseen side-effects. This dissertation examines this question by investigating the effects of histories of structural reform on public organizations. In doing so, it not only translates extant insights on single instance reform to a setting in which many organizations are confronted with frequent structural reform, but also examines multiple previously unidentified side-effects of structural reforms.

Results indicate that the side-effects of repeated structural reform are manifold, including detrimental effects on culture, heightened perceptions of the risk associated with speaking up on controversial issues (defensive silence), reduced perceptions of organizational autonomy and an increased tendency to emphasize political signals. The findings on culture and defensive silence suggest that repeated structural reform may affect work environments, with potentially negative consequences for employees and the organization. Our results on autonomy and attention devoted to signals suggest that the balance between politics and administration may be altered in unintended and unforeseen ways by repeated structural reform – an effect with potential ramifications for the position of traditionally independent entities, including law enforcement and supervisory agencies. Combined, these findings imply that being aware of the dangers of long sequences of structural reform is in the interest of not only public sector

organizations, but also the well-being of their employees and the public sector as a whole.

Voorwoord

Een doctoraat over de impact van meervoudige structurele hervormingen binnen overheidsorganisaties. Voor ik eraan begon prikkelde het thema me al, hoewel ik op verjaardagsfeestjes toch regelmatig ‘so what’ op het gezicht van mensen las. Soms impliciet en soms expliciet was de vraag vaak: is het geen academisch werk om maar academisch werk te doen? Vier jaar later en ik ben volledig overtuigd van de ‘so what’ van dit doctoraat en andere werken met een soortgelijk thema. Organisatieverandering is nodig, natuurlijk. Maar het is toch wel verontrustend hoe vaak je in gesprekken hoort dat veranderingen tot flinke problemen hebben geleid, of in het nieuws verwoordingen tegenkomt als ‘reorganisatiemoe’ en ‘bezuinigingsmoe’. Dergelijke discussies worden vervolgens regelmatig gekoppeld met thema’s als onrust, stress en angstcultuur, waardoor de praktische relevantie opeens enorm duidelijk wordt.

Het onderwerp kreeg naar het eind toe geheel onbedoeld zelfs een persoonlijk tintje. Een nieuwe baan van een naaste, waar diegene vol moed aan begon. Jammer alleen dat de organisatie na een half jaar zowat elk van de negatieve effecten bleek te vertonen die in dit project onderzocht zijn, inclusief een aantal zijprojecten van het doctoraat over verzuim en verloop. Op dat moment maakte ik van dichtbij kennis met de menselijke kosten die in extreme gevallen met een opeenstapeling van slecht uitgevoerde (structurele) hervormingen gepaard kunnen gaan. Mede door die ervaring hoop ik dat het onderzoek in dit doctoraat ooit zal helpen met het verminderen van de hoeveelheid situaties die dermate escaleren.

Dit doctoraat zou er niet gelegen hebben zonder de bijdrage van een aantal mensen. Natuurlijk allereerst mijn promotoren, Koen Verhoest en Jan Wynen. Jullie hebben me op sleeptouw genomen en hebben me ongelooflijk veel geleerd. Veel projecten waren gezamenlijke initiatieven, waardoor ik met veel meer ideeën en methoden in aanraking ben gekomen ooit het geval zou zijn geweest in mijn eentje. Oprecht bedankt voor de goede ondersteuning en fijne samenwerking de afgelopen jaren, het was (en is) ontzettend veel waard. Daarnaast wil ik ook Jan Boon en Evelien Willems enorm bedanken voor hun hulp, respectievelijk voor de bijdrages aan een aantal zijprojecten en voor een bijdrage aan de opbouw van een database die mede

gebruikt is binnen dit doctoraat. Naast mijn promotoren en directe collega's wil ik ook mijn jury bedanken. Allereerst Sandra van Thiel, voor het lenen van haar enorme expertise over overheidsstructuren en public management. Ten tweede Wouter van Dooren, in het bijzonder voor je scherpe kritiek op teksten, vertrouwen, aanmoediging en je helicoptervisie op de relevantie van het doctoraat en onze rol als sociale wetenschappers. Tot slot wil ik ook de juryleden die in de laatste fase het doctoraat beoordeeld hebben bedanken: Külli Sarapuu en Kutsal Yesilkagit voor de bestuurskundige aspecten en Hans de Witte voor de arbeidspsychologische invalshoek.

Het doctoraat zou er ook niet hebben gelegen zonder de ondersteuning van vrienden en collega's. Allereerst wil ik alle (ex-)collega's van onderzoeksgroep Politics & Public Governance en departement Politieke Wetenschappen bedanken voor een geweldige vier jaar, in het bijzonder Tom, Bas, Irena, Jolijn, Sarah, Sharon en Vidar. Ook wil ik de vriendengroep uit Hengelo – Boudewijn, Charlotte, Chantal, Frank, Joyce, Kirsten, Mark, Marc, Maaïke en Tristan – bedanken voor de nodige feestjes, willekeurige etentjes en de vele weekenden in Antwerpen. Tot slot is er natuurlijk de familie. Allereerst mijn schoonouders, Theo en Virgi, die me opgevangen en geïntegreerd hebben beneden de Moerdijk. Maar ook Ankita en Arnav, voor alle toffe momenten in Utrecht en de beroemde game nights. Niels, voor de eeuwige grote broerrol, toffe tijden in Utrecht (en nog meer game nights). Mijn moeder, Marijke, voor alle ondersteuning, zelfs al waren de onderwerpen af en toe wat ver van je bed. En mijn vader, Hans, voor de onvoorwaardelijke aanmoediging en ondersteuning (en soms ook wat opvang waar nodig).

Maar hoe belangrijk het afronden van dit doctoraat ook is, er is toch nog één belangrijker ding gebeurd in de afgelopen vier jaar. Frances, het is moeilijk uit te drukken hoe blij ik ben dat wij twee jaar terug naar de Muze zijn gegaan, zelfs al verstond je niks van m'n gemompel door toedoen van een overijverige saxofonist. Niet alleen kan ik je niet meer wegdenken uit mijn leven; je rust, hulp, geduld en belangstelling in de laatste twee jaar van mijn doctoraat waren belangrijker dan je denkt. En ik kijk enorm uit naar alle toffe dingen die ik met jou mag doen zodra ik binnenkort officieel in Roosendaal ben beland.

Table of contents

Chapter 1: Introduction: a world of (organizational) change	11
1.1. A changing public sector.....	12
1.2. Introducing structural reforms and structural reform histories.....	14
1.3. Structural reforms and detrimental side-effects: building on what we already know.....	16
1.4. Added value of the dissertation.....	19
1.4.1. <i>Theoretical contributions</i>	19
1.4.2. <i>Methodological contributions</i>	22
1.4.3. <i>Practical contributions</i>	23
1.5. Research questions and structure of the thesis.....	24
1.6. The theoretical framework used in the dissertation.....	28
1.6.1. <i>Threat-rigidity theory</i>	30
1.6.2. <i>Disruptive effects of organizational change</i>	35
1.6.3. <i>Imposed reform and relations with the political principal</i>	39
1.6.4. <i>Usage of theoretical perspectives in the remainder of the thesis</i>	41
1.7. Mapping reforms for quantitative research: state administration databases, the BSAD and its use in this thesis.....	42
1.7.1. <i>Mapping the public sector of the Belgian semi-autonomous region of Flanders</i>	42
1.7.2. <i>Using the BSAD and NSAD in econometric analyses</i>	46
1.8. A qualitative approach to supplement the quantitative analyses.....	50
Chapter 2: Just Keep Silent... Defensive Silence as a Reaction to Successive Structural Reforms	53
2.1. Introduction.....	54
2.2. Theoretical framework.....	57
2.2.1. <i>Defensive silence</i>	57
2.2.2. <i>The theoretical link between structural reforms and defensive silence</i>	59
2.3. Data.....	63

2.3.1. <i>Operationalizing defensive silence</i>	65
2.3.2. <i>An organization's history of structural reforms</i>	66
Table 2.1. <i>Comparison of histories of the original and used sample</i>	68
2.3.3. <i>Control variables</i>	68
2.4. Method & Results	69
2.5. Discussion.....	75
2.6. Conclusion	78
Chapter 3: More Reforms, Less Innovation? The Impact of Structural Reform Histories on Innovation-Oriented Cultures in Public Organizations	81
3.1. Introduction	82
3.2. The importance of organizational culture and the link with an organization's history of reforms	84
3.3. Data source, variables and descriptive statistics	91
3.3.1. <i>Measuring innovation-oriented culture</i>	94
3.3.2. <i>An organization's history of structural reforms</i>	96
3.3.3. <i>Control variables</i>	97
3.4. Analysis and results	99
3.5. Discussion.....	101
3.6. Conclusion	104
Chapter 4: Taking one for the team in turbulent times? How the disruptive and constricting effects of repeated structural reform may disrupt team-oriented cultures	107
4.1. Introduction	108
4.2. Unpacking team-oriented organizational culture.....	110
4.2.1. <i>Change and team-oriented culture</i>	111
4.2.2. <i>Sequences of structural reform and (team-oriented) culture</i>	115
4.3. Data and methodology.....	116
4.3.1. <i>Constructing indicators for reform history based on the BSAD</i>	117
4.3.2. <i>Dependent variable: team-oriented culture</i>	122
4.3.3. <i>Control variables</i>	124
4.4. Results	126
4.4.1. <i>Sample 1: 2013 COBRA survey data</i>	126

4.4.2. <i>Sample 2: 2003-2004 COBRA survey data</i>	127
4.5. Discussion and conclusion	131
Chapter 5: Structural reform histories and perceptions of organizational autonomy: do senior managers perceive less strategic policy autonomy when faced with frequent and intense restructuring?	139
5.2. Theoretical Framework	142
5.2.1. <i>Conceptualizing strategic policy autonomy</i>	142
5.2.2 <i>Perceptions of control and structural reforms</i>	145
5.2.3 <i>Structural reforms and accruing resources</i>	146
5.3. Data	148
5.3.1. <i>Measuring strategic policy autonomy</i>	152
5.3.2. <i>Measuring structural reform histories</i>	153
5.3.3. <i>Control variables</i>	155
5.4. Methodology	156
5.5. Results	157
5.6. Discussion	159
5.7. Conclusion.....	164
Chapter 6: Keeping a watchful eye in times of turmoil? How repeated structural reform leads to more attention to political signals.	167
6.1. Introduction	168
6.2. Theoretical framework	171
6.2.1. <i>Political signals and their interpretation in (repeatedly reformed) agencies</i>	171
6.2.2. <i>Threat-rigidity effects following structural reform</i>	173
6.2.3. <i>Threat-rigidity effects at the senior manager level</i>	174
6.2.4. <i>Threat-rigidity effects on individuals in lower levels of the organization</i>	175
6.2.5. <i>Threat-rigidity effects during repeated reform</i>	176
6.3. Data	177
6.3.1. <i>Measuring the weight attached to signals from political and administrative principals</i>	180

6.3.2. <i>Creating an indicator for an organization’s history of structural reforms</i>	181
6.3.3. <i>Control variables</i>	182
6.4. Method & Results.....	183
6.5. Discussion.....	191
Chapter 7: Senior manager perceptions of organizational change: the relevance of (dis)continuity, radicalness and self-initiated versus imposed change	197
7.1. Introduction	198
7.2. Theoretical framework	200
7.2.1. <i>(Dis)continuity and radicalness in change trajectories</i>	203
7.2.2. <i>Self-initiated versus politically imposed change</i>	205
7.3. Data and methodology.....	208
7.4. Results	211
7.4.1. <i>Narratives in which change was experienced as radical, discontinuous and externally imposed</i>	212
7.4.2. <i>Narratives in which change was experienced as (partially) self-initiated and/or non-radical and/or continuous</i>	218
7.5. Discussion and conclusion.....	223
Chapter 8: Conclusions	227
8.1. Answering the main research question: how do sequences of structural reform affect public sector organizations, in particular in terms of detrimental side-effects?.....	228
8.1.1. <i>Sub-question 1: How does repeated structural reform affect individual civil servants?</i>	228
8.1.2. <i>Sub-question 2: How are cultures of public sector organizations affected by sequences of organizational structural reform?’</i>	230
8.1.3. <i>Sub-question 3: How is the relationship between (members of) a public sector organization and its political principal affected by structural reform in particular in terms of autonomy and control?</i>	233
8.1.4. <i>Main research question: how do sequences of organizational change affect public sector organizations, in particular in terms of detrimental side-effects?</i>	236
8.2. Implications for practitioners.....	240
8.3. Methodological limitations and avenues for further research	243

8.4. Concluding remarks	247
References	251
Appendix 1. Note on contributors to chapters.....	285
Appendix 2. Supplementary material chapter 2.....	288
<i>A.2.1. Additional information on data.....</i>	288
<i>A.2.2. Utilized survey questions</i>	291
<i>A.2.3. Additional information analyses</i>	293
Appendix 3. Supplementary material chapter 3.....	297
<i>A.3.1. Overview of BSAD event codes.....</i>	297
<i>A.3.2. Expected impact of a reform (see also Table 1).....</i>	298
<i>A.3.3. Example Reform Trajectory.....</i>	300
Appendix 4. Supplementary material chapter 4.....	303
Appendix 5. Supplementary material chapter 5.....	305
<i>A.5.1 - Overview of BSAD event codes</i>	305
<i>A.5.2. OLS regression results.....</i>	307
Appendix 6. Supplementary material chapter 6.....	308

Chapter 1: Introduction: a world of (organizational) change

1.1. A changing public sector

On 2 October 2019, the new Flemish Government published its coalition agreement. In a few pen strokes, the new government announced that 19 Flemish public organizations – and with them thousands of their employees – would undergo major structural reform over the coming years (see e.g. Flemish Government, 2019; SERV, 2019 15-16). Such occurrences are not uncommon. The 2014-2019 Flemish government likewise announced mergers for 32 organizations. Remarkable is that several of the organizations established in the 2014-2019 period are again being disbanded through further mergers announced by the new government. One organization, the Department of the Chancellery and Administration, has already implemented two mergers in four years and, with the new coalition agreement, is now entering its third merger trajectory. This trend of continuously imposing structural reforms is apparent in other governments as well (e.g. Stoker, 2001). For instance, the British National Health Service (NHS) (McMurray, 2007; Carter, 2013), the Dutch Tax Service (NOS, 2016) and the Belgian military (Het Nieuwsblad, 2009; De Vriendt, 2015) are all undergoing such high rates of restructuring that their employees are reportedly suffering from reform fatigue.

Given the rates of restructuring implemented in some public organizations, one may wonder to what degree these reforms are still beneficial to organizations. We know from earlier studies and anecdotal evidence on the detrimental side-effects of organizational reform that even a single structural reform such as a merger can easily take multiple years to process for both the organization and its employees (Marks & Mirvis 1997; Seo & Hill, 2005; Amiot et al., 2006; Mr., 2019). In the meantime, such major reform can produce effects ranging from uncertainty and stress to reduced job satisfaction, withdrawal behavior and even burnout (Bordia et al., 2004; Amiot et al., 2006; Wynen et al., 2019a). A Dutch court merger starting in 2013 was for instance still being blamed in 2019 for high levels of uncertainty, average sick leave rates of 10% as well as various internal conflicts and communication issues, eventually leading to the resignation of the court's president (Mr. 2019). Side effects such as uncertainty and communication issues may, in turn, affect organizational-level factors such as

turnover and absenteeism rates. And if those are ‘just’ the effects of a single structural reform, what could happen when an organization undergoes major restructuring multiple times in a row?

This dissertation adds to an emerging yet scattered line of contributions in public administration (e.g. Pollitt, 2007; McMurray, 2007), the management sciences (e.g. Wanous et al., 2000) and organizational psychology (e.g. Rafferty & Griffin, 2006) on what happens to repeatedly restructuring organizations, with a particular emphasis on the potential detrimental side-effects of repeated structural reform. In this sense, it aims to provide a framework of the various issues that public managers may face when leading organizations with volatile ‘reform histories’. Given the sheer variety of the potential side-effects that may occur following reform, ranging from psychosocial factors such as stress to organizational factors such as turnover rates (see e.g. Vakola et al., 2011), the dissertation is by necessity incomplete in its examination of potential side-effects. Nevertheless, it explores a number of side-effects that are likely unexpected for both practitioners and scholars (such as effects on the relationship between an organization and its political superiors), as well as a number of side-effects that may be expected to some degree, but nevertheless undesirable (such as disruptions of valuable dimensions of organizational cultures). Ultimately, it is hoped that this thesis will aid public managers not only in retaining their organization’s performance, but also in reducing the ‘human cost’ that is often associated with reform trajectories gone awry.

An important note to make at the outset is that this dissertation is not intended as an elaborate argument against organizational change in the public sector. To the contrary, I fully acknowledge that change – including structural reform – is necessary to adapt organizations to the continually emerging technological, societal and political developments confronting public sectors. (Structural) reforms often also have positive effects, in particular where they increase an organization’s fit to its (perhaps changing) environment and keep the organization from stagnating. However, given the likelihood of structural reform also having unintended side-effects, the thrust of the argument in this dissertation lies instead in being aware that structural reform can be a double-edged

sword (Pollitt, 2007). In particular, when not taking into account the organization's earlier history of (structural) reforms, ill-informed structural reform may do more harm than good. This is particularly relevant for politically imposed change, as the political level is often too far removed from civil servants and their organizations to see the intricate effects that structural reforms may have on civil servants' attitudes and psyche (Bordia et al., 2004; Amiot et al., 2006). Thus, instead of being an argument against structural reform, it is an argument for well-informed and well-prepared structural reform, taking into account the earlier reform history of the organization (Pollitt, 2007).

1.2. Introducing structural reforms and structural reform histories

Governmental organizations are an interesting breed from the perspective of structural reform. As opposed to their private-sector counterparts, they almost never completely 'die'. Even in situations where private organizations would go bankrupt, public organizations tend to restructure. Kaufman (1976) already observed in this context that although governmental organizations may be abolished, their functions tend to live on in other organizations. Thus, an underperforming agency may for instance be split into several sections and absorbed into various other entities. This perspective has recently received further support in studies of the 'quango cullings' that have occurred in various public sectors, such as Great Britain and Ireland (e.g. Dommett & Skelcher, 2014; MacCarthaigh, 2014). Although governments often succeeded in reducing the total amount of public organizations by 'culling' non-essential ones and merging others, various studies have shown that these efforts result in only a marginal decrease in personnel and functions being executed by a government (Kaufman, 1976; Dommett & Flinders., 2015; MacCarthaigh, 2014). Thus, when tracing employees and functions over their various forebears, an interesting image tends to appear in which sections of organizations are founded and then repeatedly restructured, transferred, seceded, merged, split, absorbed and reoriented in their tasks and priorities, but almost never completely terminated (Van Thiel & Verheij, 2017).

This result is noteworthy from the perspective of the side-effects that repeated structural reform may have on the behavior and attitude of civil servants, as it suggests that starting with a clean slate in the public sector is uncommon. Instead, civil servants or their colleagues are likely to carry with them the cognitive and affective ‘baggage’ of previous structural reforms, even if this baggage was built up in a predecessor of the current organization.

In between the various mergers and splits that characterize many public sectors, organizations may undergo a variety of other structural reforms. A common occurrence in some states is for instance the transfer of agencies between ministerial portfolios following elections (Nieuwenkamp, 2001; Lewis, 2002a). Another well-studied process is that of ongoing agencification, leading some organizations to change legal forms towards a semi-autonomous agency status (e.g. Wettenhall, 2005). This has in part been facilitated by management trends such as New Public Management (NPM) in the 1990’s and early 2000’s, which sought to introduce organizational forms and management practices similar to those found in the private sector (Moynihan, 2006). In recent years, the agencification process has somewhat reversed, however, with various structural reforms instead being intended to reduce agencies’ autonomy and to better integrate them with other governmental organizations in what has been dubbed the post-NPM movement (Christensen & Laegreid, 2011). However, it must be kept in mind that, although macro-level processes such as NPM and post-NPM are important, agency or policy area specific circumstances also play an important role in the generation of (structural) reform. Competences, working methods and management trends may regularly change in dynamic policy fields such as care or migration, leading to a host of structural reforms to facilitate and implement such changes. These various processes may accumulate, generating multiple structural reforms from multiple sources.

The result is organizations experiencing structural reform histories of various types and intensities, which – at least in Belgium – are accurately measurable through changes in laws and ministerial decisions underpinning entities or delegating competences to them. Some entities are extremely unstable, experiencing high rates of

structural reform for prolonged periods of time (Pollitt, 2007; McMurray, 2007). Others go through episodes of stability before entering into a series of structural reforms. Still others conform more to the (otherwise somewhat inaccurate) stereotype that governmental organizations are slowly changing entities, experiencing major structural reform only once or twice over their ‘lifetimes’. The dissertation uses such variations in organizations’ reform histories to investigate how different lengths and intensities of reform histories may affect these organizations. The fact that not all public organizations are structurally reformed continuously is thus used to compare different reform trajectories’ outcomes, with the main expectation being that longer and more intensive reform histories result in higher levels of detrimental side-effects. The following sub-section will introduce the types of side-effects that the dissertation will investigate. To obtain such variations in structural reform histories, a database was created that maps the structural reforms occurring for public sector organizations in Flanders: the BSAD. The dissertation also draws upon a database that preceded the BSAD and was created to map the Norwegian public sector, i.e. the NSAD.

1.3. Structural reforms and detrimental side-effects: building on what we already know

Whatever the merits and necessities of structural reform, any major transition brings with it some amount of difficulties (Marks & Mirvis, 1997; Bordia et al., 2004). Whether this impact will eventually be for the better or the worse, employees may fear that their own positions or valued aspects of the organization will be negatively affected, thus potentially producing individual-level uncertainty and stress responses. In this context, Schweiger & Denisi (1991) noted 21 different sources of uncertainty during restructuring, such as uncertainty regarding lay-offs, uncertainty related to changes to organizational culture and uncertainty related to changes in career opportunities (see also Bordia et al., 2004). Although uncertainty is in itself considered an aversive state (Bordia et al., 2004), it can also function as the catalyst for a host of other outcomes (Staw et al., 1981). At the individual level it for instance forms an

important source of stress. Together with this stress, uncertainty may affect various attitudes and behaviors. In an attempt to increase their perceived level of control over their position, individuals may for instance resort to more risk-averse behavior or experience restrictions in cognitive processing – responses serving to avoid or reduce the perceived uncertainties of an individual’s environment (Bommer & Jalajas, 1999).

It must be kept in mind that, although occurring to various degrees at the individual level (some individuals may for instance be less prone to stress responses than others based on e.g. personality traits), such responses will manifest throughout the organization. This includes not only lower level employees, but also the organization’s senior and middle management. The combined uncertainty and stress responses of the organization’s members, as well as the resultant risk-averse behavior, may therefore begin to affect organizational-level variables when structural reform is sufficiently significant and/or frequent (Shah, 2000; Staw et al., 1981). Threat-rigidity theory has been developed to explain such processes and predicts that organizations in which individuals manifest high levels of uncertainty and stress will tend to display a constricting effect (Staw et al., 1981). This may produce various outcomes, including a tendency to fall back on familiar solutions and work-methods, increased centralization and formalization to reduce uncertainty and increased pressures for uniformity (Staw et al., 1981; Daly et al., 2011; Olsen & Sexton, 2009; Van Hootegeem et al., 2019).

This dissertation picks up at this point, and attempts to extend the implications of threat-rigidity theory to other likely outcomes. Previous research has for instance argued that centralization, risk-averseness and formalization may detrimentally impact innovativeness and communication within an organization (Borins, 2001; Bommer & Jalajas 1999). If structural reforms may indeed produce such risk-averse, centralizing and formalizing effects, it may therefore be expected that various dimensions of innovation and communication are affected (Bommer & Jalajas, 1999). Using the theoretical basis provided by threat-rigidity, this dissertation examines two outcome variables to examine these expectations, i.e. the effect of structural reforms on innovation-oriented cultures and the effect of structural reforms on employee decisions

to withhold their opinions for fear of reprisal – i.e. defensive silence behavior (Morrison & Milliken, 2003; Van Dyne et al., 2003). Similar effects may be expected on team-oriented cultures, as individuals feel less supported within their organizations (Shah, 2000). Moreover, it could even be that public organizations will begin to behave more risk-aversely towards their political superiors such as the minister, a proposition tested by examining the emphasis placed on political signals by civil servants following repeated structural reform.

Organizations in transition are not exclusively confronted with the outcomes of psychosocial effects, however. An organization confronted with one or more structural reform(s), is also likely to experience severe flux in terms of structures, operating procedures, social cohesion and retention (Shah, 2000; Rafferty & Restubog, 2010). Reporting lines are unclear and teams are disrupted, working processes may have changed and gaps in social networks may begin to arise (Marks & Mirvis, 1997). These ‘disruptive’ effects on the organization may themselves be a source of uncertainty, but may also directly impact the organization. This is a second theoretical mechanism, which would for instance predict effects on innovation- and/or team-oriented cultures, as we may for instance expect the long-term and repeated disruptions in social networks (Shah, 2000) to eventually manifest in a reduced emphasis on innovation and cooperation-based values and norms. Accordingly, when examining the effects of repeated structural reform on organizational cultures, we also discuss the potential relevance of such disruptive effects. Moreover, like threat-rigidity theory, strong degrees of organizational disruption following repeated structural reform may manifest in temporarily reduced organizational capabilities, as the organization a phase where significant resources are dedicated to the transition process. In such situations, the organization may (temporarily) be less capable of asserting its own preferences in decision-making, resulting in the organization perceiving itself to be less autonomous from its political superiors (a similar effect to the aforementioned risk-averseness towards the political superior). Accordingly, we also examine whether resource disruption is relevant to the explanation of perceived strategic policy autonomy.

Finally, in contrast to the private sector (and as was mentioned earlier), public sector reform is characterized by multiple sources of reform. In addition to the organization itself, the political level frequently decides to restructure organizations in one way or another (as was noted in sub-section 1.1) (Nieuwenkamp, 2001; Dommett et al., 2014). Given the current predominance of studies on the impact of reform in private sector organizations, the difference between change initiated by the organization and structural reform imposed by the political superior has not yet received substantial attention in the academic literature. On the one hand, this may result in imposed reform being perceived as a form of control – potentially affecting organizational perceptions of strategic policy autonomy. On the other, this difference could result in organizational trajectories and imposed structural reform contradicting one another, causing the organization to perceive unilaterally imposed reform less positively.

1.4. Added value of the dissertation

1.4.1. Theoretical contributions

By examining whether cultures, individual-level behavior and the relationship with the organization's principal is affected through repeated structural reform, this dissertation hopes to add to the extant theoretical knowledge on the micro- and meso-level side-effects of repeated structural reform. As mentioned earlier, repeated structural reform is becoming of increasing interest for public sector scholars, given that rates of reform in the public sector have become substantially high (Pollitt, 2007). In this context, simply extrapolating the insights from studies predominantly focused on single reform events in the private management literature and organizational psychology literatures seems insufficient (Moore et al., 2004). Instead, the dissertation builds on the valuable insights from single-event studies, combining it with the relatively scattered contributions on repeated (structural) reform, and aims to advance the study of repeated structural reform by examining a number of under-investigated side-effects. For instance, perhaps the most well-studied dependent variable in the

dissertation is innovation-oriented culture (with related variables such as self-reported innovation and creativity having already been investigated multiple times (Van Hootegem et al., 2019; Bommer & Jalajas, 1999)). However, studies on *repeated* structural reform and innovation-oriented cultures (or related variables) remain few in number. Moreover, while at least some studies exist on the relationship between reforms and innovation (Wynen et al., 2019b), to my knowledge no studies have been performed on the effects of reforms on team-oriented cultures, while only some studies have dealt with variables related to defensive silence behavior (e.g. Bommer & Jalajas, 1999). Thus, the contribution of this dissertation is not merely limited to extending insights from single reform studies to repeated structural reform contexts, but also examines a number of under-investigated side-effects of interest to all sciences related to management and organizational psychology.

Effects related to the organization's relationship with the political principal are variables primarily studied in public management, public administration and political science (see e.g. Carpenter 1996; 't Hart & Wille, 2006; Maggetti & Verhoest, 2014). As such, it is unsurprising that research teams focusing generally on management or psychology and the impact of reforms have not studied such variables. Simultaneously, while research on the relationship between organizations and political superiors is a recurring theme in public administration research, this topic is not often linked to the unintended side-effects of structural reform. Although agencification and disaggregation have frequently been studied (see e.g. Fedele et al., 2007; Overman, 2019), this only constitutes one relevant form of the structural changes that public sector entities may undergo. Thus, a major theoretical contribution of this dissertation is its study of reform side-effects that are particular to the public sector, specifically the influence of repeated structural reform on strategic policy autonomy and perceived importance political signals. In doing so, the dissertation aims to add to our knowledge on what determines why some organizations seem themselves as relatively autonomous, while others do not (e.g. Maggetti, 2007). The dissertation furthermore aims to contribute to the literature on the dynamics in the interaction between senior managers and political superiors (e.g. 't Hart & Wille, 2006), more specifically in the

context of the effects that politically imposing structural reform may have on the perceptions of senior managers (Nieuwenkamp, 2001).

The importance of this focus lies in the balance between autonomy and control that public sector organizations have to maintain. On the one hand, many public organizations have been hived off from the central public service to ensure at least some degree of autonomy in areas such as policy-making, policy implementation or internal management. This is often done to either reduce political influence on decision-making in areas where short-term political interests may differ from the long-term and/or public interest, or where an organization should be better placed to decide on the most efficient, effective or appropriate policy or management solution due to their knowledge of a given context (Rothstein & Teorell, 2008). However, such structural disaggregation does assume that political influence does not remain relevant through unexpected backdoors, as this would hamper the usefulness of said disaggregation efforts. In the chapters of section 3, we find that political superiors may subconsciously determine perceptions of policy autonomy at the strategic decision-making level, perceptions of the importance of political signals and attitudes towards the successfulness and desirability of reforms through the sequences of change they impose on organizations. These effects are likely to some degree unexpected for both public sector senior managers and their political superiors, implying that the balance between autonomy and control is affected without the involved actors being fully aware of it.

The dissertation also contributes to the emerging field of behavioral public administration, which studies topics in public administration from a psychological paradigm, drawing primarily on analyses of individual-level behavior and theories drawn from or informed by psychology. Grimmelikhuijsen et al. (2017) note in their overview of the behavioral public administration literature that a substantial amount of these contributions draw on labor and organizational psychology, for instance in the context of studies related to public service motivation or leadership (e.g. Bakker, 2015; Van der Voet, 2016). However, in the process of writing this dissertation and several side-projects on the same topic, it became apparent that advances in organizational and labor psychology regarding the potential detrimental effects of organizational change

remain relatively uninfluential in current behavioral public administration work. As such, another added value of the thesis lies in its usage of psychological theories (such as threat-rigidity theory) on the impact of organizational change in a public sector setting. These theories offer an interesting new avenue for the study of topics related to e.g. New Public Management (NPM) and post-NPM reform waves, austerity-based reform, or the repeated reshuffling of ministries that occurs following elections in many states.

1.4.2. Methodological contributions

The dissertation also contains a number of methodological innovations of interest to scholars working on reforms. First and foremost is its usage of recently developed databases of structural reforms, which allows us to use objective data to construe structural reform histories. Up until now, studies using objective reform data as an independent have been limited to relatively short reform histories or low numbers of organizations (e.g. Amiot et al., 2006; Moore et al., 2004). The alternative, i.e. self-report items on perceived change history (Rafferty & Griffin, 2006), while immensely valuable tools, do have the downside of introducing common method bias and halo effect issues (although panel methods may offer at least partial solutions to these issues). Moreover, they may miss the lingering effects of structural reforms imposed several years ago, as respondents are themselves often likely unaware of these reforms' continuing effect on the organization. The recent trend of public administration projects aimed at mapping state bureaucracies, public organizations and the structural reforms they endure, mainly used to explore why and how public organizations change up until now (e.g. MacCarthaigh, 2012; MacCarthaigh et al., 2012), therefore offered an interesting option to study the effect of longer histories of structural reform on public sector organizations.

Another, smaller methodological contribution made by this dissertation is our usage of interpretative interviewing techniques, more specifically narrative interviewing – an open interviewing technique designed to allow respondents to reconstruct a chronologically ordered plot (Søderberg, 2006). Interpretative studies are

a relatively new but interesting development in public administration (see e.g. Wolf & Van Dooren, 2018), which is adapted to the study of repeated reform here. By using timelines to structure senior manager-level respondent's narratives, a dual challenge is overcome. First, it indicates to respondents that the researcher is not merely interested in the most recent structural reform events, but also on past events and their interrelationship. Second, the timeline and narrative structure allow the respondents to construct their own plots, with minimal input of the researcher. This somewhat reduces the likelihood of the researcher imposing his/her views during the interview, while acknowledging the expert nature of senior manager-level respondents (Søderberg, 2006).

1.4.3. Practical contributions

As mentioned in subsection 1.1, it is hoped that this dissertation will go some way in helping practitioners prevent the worst side-effects from occurring within their organizations – even if some degree of detrimental reform side-effects are perhaps unavoidable following major transitions. If our expectations on the increased side-effects of repeated structural reform *vis-à-vis* single structural reform are confirmed, this will form the basis for a first aspect that practitioners will have to manage when developing or implementing change. Currently, much of the focus of change management implicitly lies on managing a single transition, as change is usually discussed as if occurring in a temporal vacuum (e.g. Montano, 2019). However, if a transition is somehow being hampered by earlier structural reforms (see e.g. Reichers et al., 1997), change management initiatives may become less effective. While not offering answers on how to design change management, a valuable result from this dissertation could thus be that a broader perspective on transitions is necessary: practitioners would need to examine the longer reform histories that their organizations have endured when analyzing the potential costs of introducing new structural reforms.

Another potential practical contribution is related to the different effects examined. The potential effects of repeated structural reform on the overarching themes addressed by this thesis, i.e. organizational culture, individual-level behavior in the form of defensive silence and the relationship between organization and political

principal, are all arguably likely to be missed in the preparatory phase of a structural reform. These are relatively intangible variables when compared to e.g. the expected support for or resistance against a reform, even though effects on these variables may be substantially important for organizations. As such, the dissertation hopes to function somewhat as a diagnostic tool, providing avenues for practitioners to predict the potential effects that new structural reforms may have when introduced on top of existing reform histories.

1.5. Research questions and structure of the thesis

Given the wide-ranging nature of the research presented, it is useful to introduce the main research question, sub-questions and structure of the thesis project. In formulating the main research question, the various aims and contributions outlined in sections 1.1, 1.2 and 1.3 are taken into account. On the one hand, given the high rates of restructuring manifesting in some public organizations, this dissertation aims at examining the effect of *repeated* structural reform on public sector organizations (Pollitt et al., 2007). On the other, it examines a number of side-effects which have hardly been addressed in the context of repeated structural reform (e.g. innovation-oriented cultures), have hardly been discussed as a consequence of reform at all (e.g. team-oriented cultures) or are of a particular interest to public administration research (e.g. effects on the relationship with the political principal). Thus, the main research question is written to include both an emphasis on multiple structural reforms and allow for the examination of a wide range of side-effects:

“how do sequences of structural reform affect public sector organizations, in particular in terms of detrimental and/or unintended side-effects?”

Simultaneously, the range of potential side-effects that could be examined is too broad for a single PhD thesis, requiring us to specify a number of sub-questions on categories of detrimental side-effects and their relationship with sequences of

organizational change. These questions are each addressed by one or more chapters dealing with distinct but related sub-topics. Subsequently, the conclusion aims to integrate insights from the various chapters to provide an answer to the main research question. The research questions pertaining to specific types of effects and chapters of the thesis are summarized in Table 1.1. Given that the dissertation is comprised of a collection of articles, this table also includes information on the publication status and chronological order of the different chapters as separate articles. It should be noted that chapters 2, 3, 5, and 6 were developed in a team-based context that included the author of this dissertation. For transparency purposes, Appendix 1 elaborates on the chapters written independently by the doctoral student and the contribution that the doctoral student makes to the other chapters, in conformance with the additional faculty PhD regulation and faculty guidelines.

Section	Research question	Chapters	Publication status	Chronological order of writing
1	Sub-question 1: How does repeated structural reform affect individual civil servants?	Chapter 2 – Just keep silent... Defensive silence as a reaction to successive structural reforms	Published (Public Management Review 2019)	3
2	Sub-question 2: How are cultures of public sector organizations affected by sequences of structural reform	Chapter 3 – More reforms, less innovation? The impact of structural reform histories on innovation-oriented cultures in public organizations	Published (Public Management Review 2017)	1
		Chapter 4 – Taking one for the team in turbulent times? how repeated structural reform may affect team-oriented cultures	Unsubmitted	6
3	Sub-question 3: How is the relationship between (members of) a public sector organization and its political principal(s)	Chapter 5 – Structural reform histories and perceptions of organizational autonomy: Do senior managers perceive less strategic policy autonomy when faced with frequent and intense restructuring?	Published (Public Administration 2018)	2
		Chapter 6 – Do reform histories affect the influence of administrative & political	Accepted, under editing (Public	4

	affected by repeated structural reform?	principals? A micro econometric study on Norwegian state agencies	Administration (2020)	
		Chapter 7 – Senior manager perceptions of organizational change: the relevance of (dis)continuity in change trajectories and self-initiated versus imposed change	Unsubmitted	5
4	Main research question: how do sequences of structural reform affect public sector organizations, in particular in terms of detrimental side-effects	Chapter 8 – Conclusion	Not intended for publication	7

Table 1.1: Structure of dissertation, paper titles, publication status and chronological order of writing

The first sub-question addresses the effects of repeated structural reform on individual-level perceptions and attitudes. In particular, chapter 3 investigates how repeated structural reform may lead to heightened levels of defensive silence behavior, i.e. behavior in which employees choose to withhold ideas and opinions due to a perceived risk of voicing them (Van Dyne et al., 2003). The research uses hierarchical regression on data from the Norwegian NSAD project (i.e. a database of structural reforms and civil service surveys) to show how employees may become risk-averse and will avoid speaking up on controversial issues following repeated structural reform (Bommer & Jalajas, 1999). Such defensive silence behavior may in turn form a sub-mechanism that links threat-rigidity theory and the disruption of cultures studied in section 2, as well as the tendency to closely follow a principal’s preferences in section 3. Thus, chapter 3 supplements extant contributions on threat-rigidity by further elaborating on the underlying mechanics of threat-rigidity theory and its impact on the organization (Van Hootegeem et al., 2019). Defensive silence is also an interesting outcome in and of itself, however, as organizations exhibiting high levels of silence may for instance have difficulty to detect concerns over performance, initiate new ideas at the grass-roots levels or underestimate the personal problems of their employees (Rhee et al., 2014).

Sub-question 2 subsequently concerns itself with the potential meso-level impact of repeated structural reform on organizational cultures. Both chapters addressing this question rely on a combination of the BSAD, a database of structural reforms implemented in Flemish public organizations, and the COBRA survey on senior manager perceptions. In chapter 3, we examine how threat-rigidity may lead to a reduced perception of innovation-oriented cultures (Van Hootegem et al., 2019), while in chapter 4 we extend these insights to team-oriented cultures. Organizational culture is an important factor for organizations and their employees alike, with innovation-orientated cultures having been linked to innovativeness and performance (e.g. O’Cass & Viet Ngo, 2007), while team-orientated cultures have been linked to employee job satisfaction, overall employee life satisfaction and performance (Harris & Ogbonna, 2002; Glomseth et al., 2007; Watson et al., 1998; Helliwell & Huang, 2010). Accordingly, the aim of the chapters addressing this sub-question is to show that the various immediate effects produced by repeated structural reform may have effects on slowly changing but valuable factors such as culture, which are often not immediate suspects when considering the detrimental side-effects of organizational change.

Finally, sub-question 3 considers a dynamic unique to public management, i.e. how sequences of (structural) reform may affect the relationship between public organizations and their political principals. In chapter 5 we use the same combination of datasets (i.e. the BSAD and the COBRA survey) drawn on in chapters 3 and 4 to show that imposed structural reform may reduce perceptions of strategic policy autonomy among senior managers, with strategic policy autonomy referring to the degree to which the respondent perceives his/her organization to be capable of setting the organization’s strategic orientation and selecting target groups (Verhoest, 2004). We follow this up by again using the Norwegian NSAD structural reform database and civil service surveys to study whether employees are also inclined to devote more attention to signals from the political level following organizational change in chapter 6. Finally, chapter 7 supplements these analyses by providing a thicker, qualitative account, as it uses interpretative interviewing techniques to examine how senior managers perceive organizational change differently when it is 1) perceived as externally imposed and 2) discontinuous with the earlier (change) trajectory of the

organization. Diverging somewhat from the other chapters, the a broader range of organizational change types are studied than other chapters (which focus on structural reform), as it was assumed that senior managers on the ground would be relatively unlikely to make a strong analytical distinction between types of reform and their corresponding effects.

1.6. The theoretical framework used in the dissertation

There is no dearth of research regarding the effects of organizational change (for an interesting meta-analysis, see: Oreg et al., 2011). Both organizational psychologists and management scholars have developed a wealth of paradigms, theories and concepts to explain the immediate individual-level effects of organizational change, some of which more dominant than others. Many contributions for instance focus on seminal models such as Lazarus & Folkman's stress appraisal theory (e.g. Lazarus & Folkman, 1984), which explains stress levels and coping usage on basis of individuals' assessment of a threat's potential impact and the degree to which an individual believes he or she is capable of countering said threat (e.g. Amiot et al., 2006). Other contributions focus on Social Identification Theory (SIT), which explains how individuals assign themselves to groups and how events such as organizational change may make these categorizations salient, resulting in individuals' reluctance to e.g. engage with employees from other merger partners (Robinson & Rousseau, 1994; Bellou, 2006). These theories provide immensely valuable insights to the study of individual-level responses to organizational change.

However, one of the foci of this thesis is what unexpected effects occur at the *organizational* level following (repeated) organizational change, primarily regarding organizational culture and perceptions on the degree of autonomy the organization possesses. The study of such phenomena is less well developed, and using a dominant micro-level paradigm such as stress-appraisal or SIT to provide an explanation for effects on higher level variables such as organizational culture likely yields an excessively narrow theoretical focus. After all, while chronic stress and/or inter-group

conflicts form likely micro-level mechanisms through which for instance organizational cultures may be affected, it is possible that a host of other micro- and meso-level mechanisms will add to the effect that change has on cultures. What was needed, therefore, was a broader theoretical underpinning that could explain and be compatible with the myriads of effects that are likely occurring simultaneously on both the individual- and the organizational-level in changing organizations, both in terms of cognitive and affective responses and in terms of mechanical changes to the organization's policies and structures.

A first part of the answer to this challenge was provided by threat-rigidity theory, a comprehensive theoretical account of the constricting effect that threats such as severe organizational change may have on groups and individuals (Staw et al., 1981). This theory is the result of an attempt to integrate individual-level, group-level and organizational-level processes that occur when a group of individuals is confronted with an urgent threat, and predicts – among other things – that such groups will experience restrictions in cognitive processing, increases in centralization and formalization and the formation of small decision-making in-groups (Staw et al., 1981). The second part draws on various literature lines that suggest that disruptions of organizational resources, such as the severing of social ties, reductions in human capital through turnover and reductions in expertise (Oliver, 1991, Shah, 2000). Finally, a third part of the main theoretical framework is specific to the public sector entities studied in this dissertation, recognizing that change in the public sector is not only generated by the organization, but may also be imposed from the political level (Zito, 2015; Ossege, 2015). This creates a unique dynamic in which the senior management of a public organization is not necessarily the psychological owner of the reforms imposed on him/her, which may translate into effects on the relationship between the political principal and the organization. The following subsections introduce all three sub-mechanisms, as they provide important red lines throughout this thesis.

1.6.1. Threat-rigidity theory

Threat-rigidity theory in its core predicts that organizations encountering a severe and urgent threat are likely to centralize control, formalize and become rigid (Staw et al., 1981). Finding its origins in organizational psychology, the theory has been used to explain a number of phenomena following significant organizational change, including reduced creativity and detrimental effects on innovative cultures and climates (Bommer & Jalajas, 1999; Van Hootehem et al., 2019; Wynen et al., 2019b). According to the theory, threatening and urgent events such as intensive reforms produce substantial degrees of uncertainty and threat (for evidence of such uncertainty, see e.g. Schweiger & DeNisi, 1991 and Bordia et al., 2004). Individuals confronted with such uncertainty and threat are likely to attempt to cope by reducing this uncertainty as much as possible (Staw et al., 1981). According to Staw et al. (1981), this generates a number of effects on the individual and organizational level that, together, cause organizations to experience a constriction of control, a restriction in information processing, an overreliance on familiar policies that worked in the past, and a reduction in scanning activities for novel solutions and peripheral cues.

Uncertainty and stress through perceived threats

The first step in producing threat-rigidity effects lies in the organization facing some form of threat. A variety of situations may arguably be threatening for organizations, including but not limited to major organizational change events, unanticipated crises, media storms or significant underperformance (D'Aunno & Sutton, 1992; Bommer & Jalajas, 1999; Muurlink et al., 2012). What these examples have in common is that they may be perceived by organizational members as dangerous to the continuity of the organization or the individual's position within it, either through major disruption or by being a potential reason for the organization's termination. Specifically for organizational change, such threats may include losing valued aspects of the individual's tasks, the organization's identity or issues in retaining continuity in performance (Van Hootehem et al., 2019; Bommer & Jalajas, 1999; Amabile & Conti, 1999). Moreover, for changes such as mergers, splits or absorptions, the threat is even

more profound due to the fear that the organization may completely cease to exist. An important aspect of threat perceptions is that individuals usually appraise threatening events as salient and urgent, as a failure to respond to the threat would allow the anticipated detrimental effects of the threat to manifest (Staw et al., 1981).

The perception of having to urgently resolve a threatening situation in turn results in heightened levels of cognitive stress and anxiety throughout the organization (Staw et al., 1981). It is important to emphasize that this does not only include the organization's regular employees, but also the management and CEO levels within the organization (Olsen & Sexton, 2009; Daly et al., 2011). Higher levels of stress and anxiety have a number of effects on employees and managers alike, including inducing a tendency to rely on previously held assumptions and a reduction in the ability to process critical information (Staw et al., 1981). These two effects may combine into a reduced ability to process peripheral cues, i.e. information not in line with or expected by internally held hypotheses. Moreover, individuals exhibiting high levels of stress and anxiety are likely to attempt to reduce – or at least not increase – the uncertainty of their position, thus increasing the likelihood of individuals to engage in risk-averse behavior (Bommer & Jalajas, 1999). For instance, the uncertainty of positions becoming obsolete and units becoming reshuffled introduces a greater tendency to adhere strictly to rules, existing guidelines and core objectives of the units to avoid sanctioning by superiors (Staw et al., 1981). This may further exacerbate the reduced ability of other employees to notice peripheral cues, as issues remain unmentioned to superiors and ideas for improvement are left unexplored (Bommer & Jalajas, 1999). Simultaneously, employees are likely to exhibit greater pressure for uniformity under threat, with Staw et al. (1981) suggesting this is due to the group's focus on achieving the goal of averting the threat.

Organizational processes initiated by threat-rigidity processes on the managerial level

Managers in a threatened organization are charged with ensuring continuity and improving performance as quickly as possible. Therefore, they may be likely to assert additional control, resulting in a centralizing and formalizing tendency within the

unit (Cameron et al., 1987). Under such circumstances centralization may not only occur through explicit redesigns of the unit's structures, but also through various informal processes. These processes may include a sub-conscious shift towards command and control management styles, a reduced tolerance of deviant opinions or initiatives and increased pressures towards uniform behavior (Olsen & Sexton, 2009; Daly et al., 2006). Managers may also reduce participation by forming decision-making in-groups, as the individual-level tendencies to ignore peripheral cues and focus on already held assumptions strengthens internal group dynamics, while signals from other groups are increasingly sidelined (Staw et al., 1981). Combined with the individual-level restriction in information processing, this may mean that the organization as a whole becomes less capable of assimilating new information and unfamiliar cues. Finally, threat-rigidity theory predicts that organizations will engage in resource conservation, when they are under threat and in particular under financial adversity. This translates into a strong focus on resource conservation, efficiency and cost-cutting, potentially at the detriment of other strategies to avert the financial threat (Staw et al., 1981; Shimizu, 2007).

Applications of threat-rigidity theory

Threat-rigidity theory is thus a broadly applicable theory, and as such has been used in multiple fields. Predominantly, it has been used in studies of strategic firm behavior in threatening circumstances, where threat-rigidity theory's prediction that organizations restrict their information processing and fall back on tried and tested solutions has been tested against the rival prediction that organizations under threat will increase their efforts to change. Results in this specific line have been mixed (Daly et al., 2011), although Shimizu (2007) integrated both perspectives by showing that high environmental ambiguity results in change when an organization's losses are relatively small. Conversely, when the threat becomes larger and exceeds what Shimizu (2007) calls a threat point, organizations will become risk-averse consistent with threat-rigidity theory. Another interesting insight on the divergent results in this literature was

provided by Greve (2011), who finds that smaller organizations tend to become rigid when underperforming, while larger organizations were relatively rigid to begin with.

A less extensive but in many ways for the purposes of this thesis more relevant branch of the threat-rigidity literature deals with environmental or organizational change – in particular downsizings – as a source of (usually detrimental) effects on various dimensions of employee perceptions and internal organizational factors. Findings from quantitative studies on variables related to innovation have been relatively consistent. Van Hooft et al. (2019) for instance find support for threat-rigidity's argument that threats – in their case job insecurity – increases levels of strain for employees, which, in turn, leads to a decrease in concentration and innovative work behavior. Amabile & Conti (1999) find that environments facilitating creativity are negatively affected by downsizings, while Bommer & Jalajas (1999) find negative effects on employees' willingness to take risks and to make suggestions, with both papers theorizing that these effects operate through the threat-rigidity mechanism. Wynen et al. (2019b), in a project related to this thesis, similarly find that the degree to which individuals experience change-related threat, operationalized as the degree to which change is multifaceted, determines their perception of support for innovative work behavior, and argue this may be due to the threat-rigidity effect.

Other predictions of threat-rigidity internal to the organization have found support in qualitative work by Olsen & Sexton (2009) and Muurlink et al. (2012). In Olsen & Sexton's (2009) work the pressure to conform to a school administration's reform plans following a threat of underperformance predominates, with the authors noting that this is in large part produced by the increased cognitive and structural inflexibility predicted by threat-rigidity theory. Interesting in their work is that – in addition to the underperformance threat facing managers – employees simultaneously perceived a threat to their job security, illustrating that organizational change may induce multiple perceived sources of threat simultaneously. The threat posed by job insecurity combined with pressure from management, causing employees to apply window dressing: showing conformity to the reform program while continuing older work methods in the classroom. Muurlink et al. (2012), although discussing the threat

of the financial crisis instead of organizational change, finds that managers may repetitively try the same response to a threat, despite indications that said response was maladaptive to a changed context. Moreover, they note that the rigidities produced by threats may themselves cause additional stress, illustrating that threat-rigidity may act as an intermediate mechanism for other variables (Muurlink et al., 2012). Similarly investigating the threat of the financial crisis in a sample of 980 organizations, Stoker et al. (2019) find that post-crisis, managers became substantially more directive, hierarchical and micro-managing in their leadership styles.

Despite the consistent results of contributions on change-related threat-rigidity, employee innovativeness, and internal constrictions of control, hardly any contributions have explored whether the dynamics of threat-rigidity theory differ under circumstances of *repeated* change. On the one hand, once threats dissipate we may see a return to less constricted and hierarchical organizations, while reductions in stress levels should lead to greater cognitive flexibility. Thus, it could be that organizations become less rigid in a period following change, essentially resetting before entering into a new change trajectory (Seo & Hill, 2005). On the other, it may be argued that at least some of the effects predicted by threat-rigidity theory may linger in the organization, causing newer changes' effects to accumulate on top of the still lingering effects of earlier structural reforms. This should occur in particular when changes are introduced relatively frequently, i.e. when the organization has no chance to completely recover from its previous changes. Several studies measuring psychological stress and job satisfaction responses following repeated change do provide some support for the argument that effects may linger and that repeated change may increase related to threat-rigidity theory, such as perceptions of stress and job demands (Allen et al. 2001, Moore et al., 2004; Rafferty & Griffin, 2006). Rafferty & Restubog (2010) find that there is no significant link between perceptions of change history and anxiety, potentially contradicting threat-rigidity theory, but do find a negative effect of negatively perceived change history on affective commitment to change, implying that employees retain experiences with previous changes as baggage.

Although a promising theory for the study of organizational and individual-level effects following organizational reform, threat-rigidity theory remains relatively underdeveloped compared to other major perspectives such as SIT and stress-coping theories. This dissertation partially addresses this gap, while also extending its predictions to the context of repeated structural reform – arguing that swift successions of structural reforms may enhance perceptions of threat and further increase centralizing and formalizing tendencies. The threat-rigidity thesis is most directly investigated in chapter 3, where we examine the individual-level prediction of threat-rigidity that employees become risk-averse in the face of repeated change, causing them to engage in higher levels of silence behavior. Chapters 2, 3, 4 and 6 draw on threat-rigidity theory as a theoretical mechanism, while empirically examining its consequences for other individual- and organizational level variables, i.e. organizational culture, perceptions of autonomy *vis-à-vis* political superiors and attention devoted to signals from these political superiors.

1.6.2. Disruptive effects of organizational change

Threat-rigidity theory deals, in large part, with the cognitive perceptions of employees and managers, their tendency to engage in constricting efforts, behave risk-adversely and rely on existing internal assumptions. As such, it primarily theorizes a psychological route, in which change affects the perceptions of individuals within the organization. Thus, change generates rigidity through cognitive processes, which in turn generates other detrimental side-effects. However, assuming that all effects operate purely through the cognitive perceptions of individuals and not through actual operational flux likely offers an incomplete theoretical mechanism of the effects incurred by repeated change. Thus, I propose the existence of a second, complementary route on the disruption that occurs within an organization, i.e. a route operating through the structural and social flux that an organization finds itself in following (repeated) change.

This view is based in part on Oliver's (1991) assertion that organizations possess various types of resources – with resources conceptualized broadly to

encompass not only financial resources, but also for instance strong cultures, human resources, reputations and expertise. These resources provide advantages for organizations that possess them. An organization with strong expertise in a certain domain may for instance be able to quickly adjust to new developments. Moreover, an organization that is *seen* to have a high expertise in that same area, i.e. having a reputation of possessing relevant expertise, may take a relatively authoritative position in its environments, implying that its judgments and decisions are challenged less frequently and less severely. Thus, possessing substantial amounts of resources may allow an organization to forge a stable and autonomous position, and resist pressure from actors such as political superiors or regulatees (Carpenter & Krause, 2012; Carroll & Delacroix, 1982) – although the exact type of resource that offers such benefits may differ depending on the organization and the situation at hand. Accruing such resources is thus important for organizations, although it often constitutes a long-term process. Reputations are for instance gradually forged, while expert employees are gradually accrued through experience with the organization’s task execution and hiring processes.

Organizational change may disrupt the resources of an organization through a redesign of the organization’s structure, operating procedures, cultures, positioning in its environment or working conditions. When substantially changing any or a combination of these core elements of an organization, the organization is likely to incur sizeable adaptation costs, both financially and in terms of other resources, such as workload, stability, internal resistance and learning curves (Ashford, 1988; Jimmieson et al., 2004). For instance, when an organization moves towards a different organizational structure, there is likely a transitional period in which hierarchies and procedures are in flux, causing work to be done relatively inefficiently, in some cases even duplicating older working methods with their new counterparts – i.e. a temporary state of operational disruption. This inefficiency in handling the organization’s regular workload combines with the workload caused by the need to develop and implement the new structure, causing a sudden increase in total workload and associated capacity issues. Operational disruptions can cause effects both on the individual level and on the organizational level. On the individual level, high levels of workloads and changes in

work-processes may act as an important stressor (Iverson, 1996). Many organizational changes require adaptation efforts from employees in terms of retraining and a reorienting of their priorities, with said efforts – or the prospect of having to undergo such efforts – having been found to generate additional uncertainty and role overload, i.e. the perception that required levels of performance are excessive (Ashford, 1988; Iverson, 1996).

Additionally, structural reform is likely to redistribute tasks, reshuffle work teams and result in a number of voluntary and/or forced employee exits from the organization, resulting in a form of social disruption (Shah, 2000; Jimmieson et al., 2004). Compared to sources of operational disruption, social disruption is relatively under-investigated. Nonetheless, a small number of studies do suggest its existence. An important contribution was made by Shah (2000), who used social network analysis to demonstrate that a downsizing resulted in losses of both friendship and advice ties within the organization. Moreover, although advice ties were rebuilt relatively quickly post-downsizing, the restoration of friendship ties proceeded more slowly. This suggests that although on a professional level employees are quick to restore the contacts necessary to ensure they have the required information to execute their tasks, social atmospheres may remain disrupted over longer periods of time. Similarly, Susskind et al. (1998) examined the relevance of structural holes, i.e. the lack of a direct connection or a common network contact to another organization member. Their results suggest a modest increase in structural holes following a merger, a positive effect of the increase in structural holes in a layoff survivor's network on perceptions of chaos, and a negative effect of increase in structural holes in a layoff survivor's network on openness to change (Susskind et al., 1998). This compounds the workload issues mentioned earlier, as social ties are severed and important social, cultural and technical knowledge is lost to turnover.

While these contributions directly address the existence of social disruption in organizations, a number of additional contributions provide indirect support through their findings that organizational change may induce heightened levels of turnover and absenteeism. Should changing organizations develop skepticism, cynicism and

skepticism towards changes, heighten workloads and stress, or breach the implicit or explicit obligations of the organization towards its employees (known as psychological contract breach), they are likely to experience heightened absenteeism and turnover rates – two related forms of withdrawal behavior (Wynen et al., 2019a; Wanous et al., 2000; Clinton & Guest, 2014). Contributions on turnover and performance have furthermore noted the negative effect of high rates of turnover through reductions in human capital (Wynen & Kleizen, 2017). As valuable human capital is lost, the expertise and social cohesion of the organization is detrimentally affected (Wynen & Kleizen, 2019). In terms of Oliver's (1991) resource-based perspective, this suggests that expertise and social cohesion are negatively affected following structural reform.

Looking at structural reform from a resource-based perspective suggests, therefore, that organizations undergoing or recovering from change are less capable of leveraging resources towards managing their external environments, as a significant share of their resources are either being used to address internal issues, or may be affected by the negative side-effects of change. Like threat-rigidity theory, one could argue that some of the effects of reform-related disruption should dissipate once the organization stabilizes from its change trajectory. However, Shah (2000) and Grunberg et al. (2008) show that some variables may remain suppressed for longer periods of time, suggesting that when change is introduced before the organization has completely recovered from disruption, the effects of multiple changes may accumulate. In terms of operational disruption, organizations may for instance continue to experience some degree of flux in their work processes as multiple overlapping systems remain operational for long periods of time, while employees continue to make adjustment costs for training. On the social side, friendship ties may only gradually be restored, suggesting that social support will be reduced when the organization enters into a new change relatively quickly. Moreover, contributions on change cynicism and affective commitment to change have found negative effects on support for new changes following bad experiences with earlier change (Rafferty & Restubog, 2010; Wanous et al., 2000), suggesting that negatively perceived earlier changes may result in the types of perceptions and attitudes that could potentially lead to increased absenteeism or turnover during new changes.

1.6.3. Imposed reform and relations with the political principal

A unique dynamic of public sector organizational change is that not all reform is initiated by the organization itself, but that the political principal, to whom the organization is in most cases accountable, is also an important source of organizational reform. Given that political realities may quickly shift, such reforms may be announced without warning, and in some cases as a remedy for perceived underperformance. In other cases, imposed reforms are part of a broader reform wave affecting entire policy sectors or governments, such as the NPM reforms initiated around the turn of the century or the austerity measures and ‘quango cullings’ that occurred following the financial crisis (Dommett et al., 2014). For such reforms, it is likely that some public organizations may not support the broader reform wave, or may perceive themselves as net losers following forced secessions of tasks or units. Conversely, some organizations may possess sufficient resources or alliances with political superiors and other entities capable of applying political and/or social pressure to be able to co-opt the political process and/or shield themselves from political influence, allowing most of the structural reform affecting them to be developed, at least partially, by themselves.

This view receives support from a small branch of private sector management studies, which assert that self-initiated change is often viewed more positively than imposed change (see Hargreaves, 2004; Lines, 2004). Employees who develop their own changes often feel proud and accomplished following their work, and believe that the change is beneficial to the organization or its stakeholders. Simultaneously, this does not imply that they perceive the structural reform to have been implemented without difficulty, with employees often seeing these difficulties as challenges that were overcome (Hargreaves, 2004). Conversely, when employees perceive structural reform as imposed, they are relatively likely to associate it with feelings of frustration, to be skeptical or even cynical about its effectiveness and intentions (Hargreaves, 2004). An interesting in-between category concerns employees who developed or contributed to change within an overarching imposed change. These employees were found to behave similarly to employees who had initiated their own changes, suggesting that they became invested in a change effort through their contributions (Hargreaves, 2004). Translated to the level of the organization’s senior management,

we argue that this effect may manifest in a preference for changes developed by the organization and its management *vis-à-vis* structural reforms unilaterally imposed by political superiors, unless the organization was able to participate in the development of the reform.

Moreover, politically imposed reform, in particular when a repeated occurrence, may be viewed and/or intended as a form of control over the organization (Zito, 2015). Accordingly, imposed reform may not only be seen relatively negatively (Nieuwenkamp, 2001), but also as a form of steering inhibiting the leeway the organization has to determine its own preferences on policy and management issues. Conversely, reforms in which the organization is capable of co-opting the political decision-making process may contribute to the degree to which the organization perceives itself to be capable of taking actions independently of political superiors. This view finds support in recent literature on what has been called the *de facto* autonomy of public organizations. Studies in this area argue that perceptions of autonomy (i.e. *de facto* autonomy) may diverge substantially from the formal level of autonomy of organizations as laid down in e.g. laws, statutes and performance agreements. Other factors, such as size, organizational age and reputation may add or detract from the level of *de facto* autonomy perceived by the organization (Carpenter & Krause, 2012; Maggetti, 2007; Bach, 2012; Maggetti & Verhoest, 2014). Should imposed repeated change also be one of these factors, this may imply that reforms can function as signals to the organization in terms of its informal latitude in decision-making (Carpenter, 1996). This finding would be relevant in particular for organizations that have been granted a level of autonomy for a substantive reason, such as judicial organizations that should be capable of executing some of their tasks without political oversight to prevent corruption and conflicts of interest.

As with threat-rigidity and disruption, we argue that sequences of change may alter the dynamics of politically imposed versus self-initiated reform. On the one hand, there may be cumulative effect of multiple imposed reforms, as the perception of not being able to control the organization's direction and managerial matters increases following repeated imposed reform. On the other, newly imposed changes may impede

the original direction the organization was in, increasing the likelihood that the change is perceived as frustrating. Thus, when considering the relationship between politically imposed reform and perceptions of the organization and/or its senior management, the sequencing of types of reforms may become important. For instance, when the organization is still attempting to implement its own reforms but this is subsequently faced with a sudden politically imposed reform, it may find its resources absorbed by the new change, leaving it unable to implement its own desired change trajectory.

1.6.4. Usage of theoretical perspectives in the remainder of the thesis

The remainder of the chapters in this thesis draw on one or more of the theoretical mechanisms outlined above. Threat-rigidity theory is the most extensively utilized perspective, with partial support for the theory being provided through our study of defensive silence in chapter 2, before it is used as an intermediary mechanism to explain innovation- and team-oriented cultures in chapters 3 and 4, as well as to explain attention devoted to political signals by civil servants in chapter 6. The disruption perspective is relevant for two chapters. In chapter 6 resource disruption is used relatively broadly, while chapter 4 focuses more specifically on disruption of social systems within the organization to explain effects on team-oriented cultures. The final sub-question also deals with self-initiated versus imposed change, with chapter 5 examining the effects of repeated imposed reform on strategic policy autonomy perceptions while chapter 7 focuses on imposed changes that are in tension with the earlier change trajectory, versus self-initiated changes (see Table 1.2. for an overview of the theories used in different chapters).

Chapters	Theoretical perspectives
Chapter 2 – Just keep silent... Defensive silence as a reaction to successive structural reforms	Threat-rigidity theory
Chapter 3 – More reforms, less innovation? The impact of structural reform histories on innovation-oriented cultures in public organizations	Threat-rigidity theory

Chapter 4 – Taking one for the team in turbulent times? how the disruptive and constricting effects of repeated structural reform may disrupt team-oriented cultures	Threat-rigidity theory; disruption
Chapter 5 – Structural reform histories and perceptions of organizational autonomy: Do senior managers perceive less strategic policy autonomy when faced with frequent and intense restructuring?	Disruption; imposed reform as control
Chapter 6 – Keeping a watchful eye in times of turmoil? How repeated structural reform leads to more attention to political signals.	Threat-rigidity
Chapter 7 – Senior manager perceptions of organizational change: the relevance of (dis)continuity, radicalness and self-initiated versus imposed change	Imposed reform versus self-initiated change

Table 1.2. Overview of theories used in different chapters in the dissertation

1.7. Mapping reforms for quantitative research: state administration databases, the BSAD and its use in this thesis

1.7.1. Mapping the public sector of the Belgian semi-autonomous region of Flanders

As was already mentioned, much of the research in this thesis revolves around the Belgian State Administration Database (BSAD) and its earlier developed Norwegian counterpart, the Norwegian State Administration Database (NSAD) (Rolland & Ronness, 2012).¹ The BSAD, inspired on the NSAD and designed to map the Flemish public sector, was constructed in a project spanning several years. In a first stage, it was opted to develop this database for the regional government of Flanders, a semi-autonomous region of Belgian comprising roughly 6,4 million inhabitants and with a governmental system of a full-fledged regional state (Flemish decrees are legally of the same standing as Federal laws). Mapping the Flemish government alone proved a formidable challenge, taking up a substantial portion of the PhD project, substantial effort from two co-authors of the chapters in this thesis and a large team of job students who aided us in tracing and verifying organizational histories.

¹ The NSAD is available online at: <https://nsd.no/polsys/en/civilservice/>

The end-result, however, is a database including all Flemish governmental organizations, from the founding of the Flemish government in 1981 until the provisional end of the mapping exercise around 2016-2017. For these organizations, the team possesses data on their entire histories of structural reform (following the definition introduced in section 1.3), as well as data on a number of control variables such as policy field, legal form, age and hierarchical subordination of the organization. Organizations are entered into the database as entities, and within these entities ‘change events’ were coded. These change events code the type of structural change that occurs at a given date, following a typology first devised by the NSAD team (see e.g. Rolland & Roness, 2012) and translated into the Belgian context by the UAntwerpen team (see Appendix 2, section A.2.1. for an overview of event codes). We distinguish between three categories of events, namely founding, maintenance (i.e. reform events that do not found or terminate an organization) and ending events (Rolland & Roness, 2012). Here, it must be noted that what constitutes founding and ending is a topic of ongoing debate in the public administration literature. Some databases, such as the Irish State Administration Database (ISAD), have for instance chosen to consider all major change events as endings of sorts, with a major change resulting in the replacement of an entity with a new entity (MacCarthaigh, 2012).

The paradigm used in our database instead uses an approach that aligns more intuitively with what employees or the external public would see as the start or end of an organization, or as maintenance to an organization that maintains its continuity (Rolland & Roness, 2011). We see founding events as events in which a clear break with the past is present, either through the creation of a completely new organization (pure founding) or e.g. the merger of two substantial preceding organizations into a new organization (founding by merger). Moreover, in part due to substantive reasons and in part due to methodological reasons we also consider a transfer from the federal Belgian or sub-regional levels to the Flemish level a founding event (i.e. the organization is ‘founded’ as an entity relevant for the Flemish database). Substantively, this is likely correct for organizations transferred from the federal to the regional level, as the large majority of organization undergoing such a transfer are split into three

entities – one for the Flemish region, one for the Walloon region and one for Brussels (the three main administrative regions of Belgium).

Ending events form the other side of the coin – for each founding event in which the organization is not completely new, another organization must have ‘perished’. Thus, in the case of two organizations merging into a new entity, we would code ending by merger for the preceding organizations, while we would code a founding by merger event for the new organization (Rolland & Ronness, 2012). There is also a pure termination code, which denotes an organization which has no substitute in either the public or the private sector, although instances of such events are remarkably rare (see Kaufman, 1976, who already noted that although organizations are terminated relatively frequently, their functions are normally not abolished but transferred to other entities; see also Van Thiel & Verheij, 2017). Finally, organizations may move to the private sector or another governmental level, with such events also being coded as ending events for the Flemish BSAD database. The relationship between both entities is then indicated through a related unit system, which allows us to trace units over time and across the boundaries of founding and ending events (Rolland & Ronness, 2012). Thus, in the aforementioned merger example, if the old entities were numbered 614 and 615 and the new entity was number 716, we would code 614 and 615 as related units for the new organization’s founding event, while 716 would be a related unit for units 614 and 615’s ending events.

The third category of events in the BSAD is the maintenance event, i.e. a structural reform in which an organization is ‘maintained’ but is not founded or ended (Rolland & Ronness, 2012). These include absorptions and secessions of relatively small sub-units (events that are too small to be coined mergers or organizational splits, as the organization clearly retains continuity while ‘absorbing’ or ‘seceding’ a minor section), changes in legal form, changes in political or administrative superior and delegations of new tasks. In many cases, such events form the majority of the structural reforms that the organizations in our database encounter. Including such maintenance events in our coding strategy allowed us to go beyond the literature on the causes of organizational termination in public administration from which databases such as the

NSAD and the BSAD first emerged, and also study the causes and effects of *all* types of structural reform that are likely to be impactful for public organizations (with effects being the primary focus of this thesis). To illustrate how the birth and life of an organization is captured by the BSAD, the coded reform history of the Flemish Service for Job Mediation and Vocational Training ('Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding' - VDAB) is shown in Figure 1.1, illustrating the organization being 'born' as a Flemish public organization from a transfer from the federal level in 1989, before undergoing various maintenance-type structural reform events.

In terms of organizations included in the database, the BSAD opts to define 'public sector' relatively broadly, including both core public entities and entities in the grey zone between the public and private sectors (Rolland & Roness, 2010). All Flemish-level public law-based entities as well as private-law based entities owned and controlled by the Flemish government or one of its administrations are included. Controlled here means some form of (executive) control, e.g. through a majority in a private organization's board, control over a majority of shares and/or appointment rights for the CEO of the organization in question, with this definition including Flemish state owned enterprises. We do not include entities that are merely subsidized by the Flemish government, without some other form of control also being present. Some discussion is possible whether this is truly the limit of the public sector (see e.g. Hardiman & Scott, 2012), as purely private entities entirely funded through governments could be considered at least partially public in nature. Nevertheless, it offers a definition that includes at least the majority of strongly public organizations, while providing a manageable workload in terms of amount of organization that required coding.

Moreover, as we focus on the executive of the Flemish government, the Flemish Parliament and its supporting organs as well as judiciary entities are excluded. Finally, an exception to our public sector definition is made for entities that are formally public but are in practice entirely autonomous educational and academic entities, such as specific Flemish universities. As these organizations generally perceive themselves as entities in the educational sector instead of the public sector, these are excluded.

Despite these limitations in scope, the database still encompasses a total of 364 entities, ranging from core departmental units to internally decentralized agencies, externally decentralized agencies, public law-based companies, private-law based companies and private-law based associations and foundations. Moreover, following several successive Belgian state reforms, the Flemish government’s competences have gradually grown to include social affairs, housing, science, culture, sports, economic affairs, education, agriculture and fisheries, trade, environmental affairs, transport and infrastructure, health and fiscal affairs. Thus, the database allows us to cover a multitude of policy fields.

1.7.2. Using the BSAD and NSAD in econometric analyses

While the specifics of the statistical procedure differ per chapter, there are some commonalities between the quantitative chapters that deserve mentioning. First, as all the chapters utilize survey data at one point in time while the BSAD and NSAD’s data on structural reforms is longitudinal, a way to link these data sources was necessary. More specifically, it can be assumed that structural reforms imposed years ago will be less impactful than structural reforms imposed one or two years back, or structural reforms currently being implemented (Seo & Hill, 2005). Moreover, it can be assumed that some types of structural reform will have a greater impact on organizations than others. Taking these aspects into account, the various quantitative chapters rely on a number of indicators that aggregate the effect of all structural reforms in an organization’s history, with most also correcting for the year in which these reforms were imposed and the expected impact of a given structural reform type. The quintessential indicator used throughout the thesis follows a form similar to equation 1.

$$\sum \frac{\text{impact of reform}}{\text{year of survey} - \text{year of reform}}^2 \quad (1)$$

In equation 1 it is apparent that, for a single structural reform, the impact of a reform will be divided by the number of years that have passed since the reform. This value is then squared to increase the decay speed. This yields an indicator for the expected impact that a single structural reform should still have in the survey year. Subsequently, all individual estimates of the expected reform impacts are summed, obtaining a value for the accumulated structural reform history of an organization. The events entered into this formula and related indicators are the maintenance events of the BSAD or NSAD, although we extend this to include founding events in chapter 4.

While the benefit of such an approach is that it allows us to use cross-sectional surveys where longitudinal surveys are unavailable and still obtain an index of longitudinal structural reform histories, this approach does rely on a number of assumptions. The indicator in equation 1 for instance expects decay to occur relatively quickly through its use of a squared term. Moreover, the use of a divisor implies that initial decay of a structural reform's impact is assumed to be quick, after which the decay levels out. This is partially solved through the addition of the undivided squared value of a structural reform when the 'age' of the structural reform is 0, which implies that its impact is the same as a structural reform with an 'age' of 1 year (as dividing the impact of reform value by an age of 1 simply yields the impact of reform value). Nevertheless, this addition itself introduces another assumption, namely that the expected impact is the same in the initial years following a reform, after which a quick decay process ensues.

The risk of such an approach is that relying on the wrong assumptions may lead to spurious results. Therefore, each chapter uses multiple indicators on structural reforms. By e.g. varying the expected impact of reform variable between a fixed value of 1 and a changing value based on theoretical ideas on the impact of a certain type of structural reform (such as 3 for absorptions and 2 for changes in legal status) and testing the robustness of both indicators, the various chapters intend to verify that slight changes in assumptions do not alter the results. Similarly, some chapters include indicators that diverge from the form shown in equation 1, instead relying on simpler summations in chapter 2 and a slightly more involved sigmoid (s-shaped) function in chapter 4.

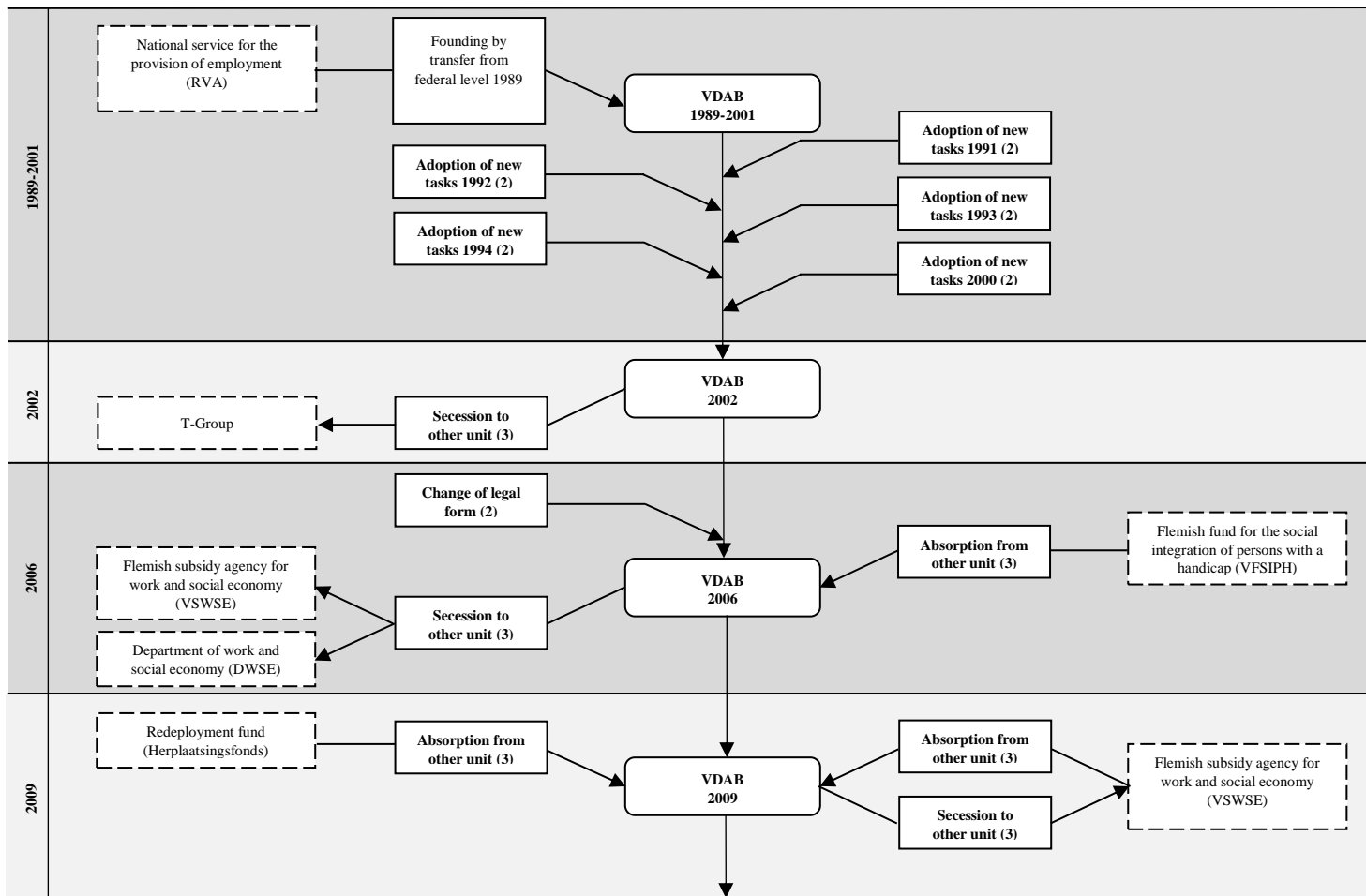


Figure 1.1. Example of a structural reform history for one organization included in the BSAD, period 1989-2010

The dependent variables are obtained from a number of cross-sectional surveys. The first is the Flemish COBRA survey. This survey was developed by an international project examining perceptions and attitudes of senior managers in the public sector and was held in Flanders in 2003 and 2013. Both iterations of the survey provide data on *inter alia* perceived organizational autonomy and perceived organizational culture (Wynen et al., 2014), which are used for the chapters on organizational culture (i.e. chapters 3, 4) and the chapter on strategic policy autonomy (chapter 5)). A major benefit of such surveys across multiple governmental organizations is that they allow researchers to make statements on differences between organizations in terms of structural reform histories. A downside of the COBRA surveys is, however, that their respondents are exclusively located at the CEO level, introducing potential biases. The second source of survey data are the Norwegian Staff Surveys, which are held by the Norwegian Social Science Data Service (NSD) every 10 years among Norwegian agency personnel (Egeberg & Trondal, 2009a). This survey is set up and funded by a collaboration between the University of Bergen, the University of Oslo and the University of Agder. Given its location on the individual civil servant level, this data provides an important complement to the COBRA data, allowing us to avoid the potential biases inherent in senior manager surveys. This is one of the reasons the chapter on perceptions of strategic policy autonomy, which utilizes COBRA data, is supplemented with a chapter on perceptions of political signals (chapter 6), a similar variable based on Norwegian Staff Survey data. Moreover, the analyses used in chapter 2 on defensive silence also draw on the Norwegian Staff Surveys and the NSAD.

Control variables are drawn from the BSAD, NSAD and both survey datasets, and may range from organizational-level factors such as task, age and policy field to individual-level factors such as tenure, position within the organization, and perceptual items (depending on the model at hand). All quantitative chapters rely on micro-econometric techniques, in particular various forms of regression analysis (e.g. OLS, Tobit and hierarchical regression models). Where appropriate, exploratory factor analysis (EFA) has been used as well.

1.8. A qualitative approach to supplement the quantitative analyses

Although a majority of the chapters in the thesis will be quantitative in nature, the quantitative approach does have some shortcomings. The first of these was mentioned earlier, and concerns the necessity of focusing on structural reforms to be able to measure change histories consistently (while structural reforms are in Flanders always traceable through legal data, internal reforms may be left undocumented). Another major downside concerns the assumptions that must often be made in terms of causal paths between structural change and any given outcome variable due to data limitations and availability. For instance, when discussing the link between structural reforms and defensive silence as we do in chapter 4, we need an intermediary theoretical mechanism such as a reflexive tendency of organizations to centralize and formalize following organizational change(s), to explain why employees may be discouraged from speaking up. This has become known in social sciences as the bathtub model and is a major problem for causal statements made purely on the basis of quantitative studies (Kittel, 2006). As no data was present on centralization and formalization as an underlying theoretical mechanism, linking the independent and the dependent variable remains a purely theoretical exercise. A third downside is that, although quantitative analyses can sometimes elucidate effects difficult to spot in qualitative research as they occur without respondents consciously being aware of these effects (e.g. whether repeated change heightens defensive silence levels more than a single change), they can also obscure any dynamics present in a case but not theorized *a priori* by the researcher (Bartunek & Seo, 2002; Garcia & Gluesing, 2013).

The thesis therefore also includes a qualitative account, using 15 interpretative elite interviews (roughly 17 hours of material) with senior managers from various Belgian public organizations. This chapter investigates how change is experienced by senior management in the Flemish public sector. Relying on an open structure and allowing respondents to narrate their own experiences (Wolf & Van Dooren, 2018), it was possible to construe why changes are experienced as frustrating and negative in some cases, and as smoothly implementable and beneficial in others. The analysis complements the

chapters on the effects of imposed structural reform on the relationship between the organization (and its senior manager) and the political level, suggesting that change perceived as externally imposed is relatively likely to be associated with negative effects and frustration, while (partially) self-initiated change is seen relatively positively.

The interviews were executed using narrative interviewing techniques. Narrative interviewing is an interpretative approach that invites a respondent to recount a chronological narrative, normally consisting of a plot with proponents, opponents and events (Søderberg, 2006; Patterson et al., 2012; Wolf & Van Dooren, 2018). As both a visual aid and a tool to encourage discussing the organization's history of reform instead of merely the latest reform, a timeline of the major structural reform and other change events of the organization was provided. In the initial stages of the interview, the interviewer avoids asking questions as much as possible, save for a limited amount of probes to encourage further elaboration. In later stages, the interviewer may add a number of questions on topics that were of particular interest during the respondent's recounting of his/her narrative. The major benefit of such an approach is that the timeline and narrative approach focuses attention on the chronological aspects of reform (a major interest of this dissertation), while not introducing bias through the interviewer's phrasing of a question (Grolaeu et al., 2006; Søderberg, 2006). Data-analysis proceeded in a combination of inductive and deductive coding with the aid of NVivo and followed the general scheme of grounded theory in applying open, axial and thematic coding, although the phases of open and axial coding were somewhat iterative.

Chapter 2: Just Keep Silent...
Defensive Silence as a Reaction to
Successive Structural Reforms

2.1. Introduction

Employee silence is a pervasive and potentially harmful aspect of organizational life (Premeaux & Bedeian, 2003; Vakola & Bouradas, 2005). While it was originally assumed that a lack of vocalized resistance implies agreement with decisions and with the behaviors of others, scholars of organizational science have more recently begun to recognize that silence may be engaged in as a strategic choice (Pinder & Harlos, 2001; Van Dyne et al., 2003). Employees may choose to avoid discussing topics or may withhold information due to a fear of conflict, reprisals or other harmful consequences, due to a belief that speaking up is fruitless, or to protect peers and/or the organization (Van Dyne et al., 2003; Milliken et al., 2003; Hassan, 2015). Employee silence, especially when rooted in fear or resignation, may have serious consequences for public sector organizations (Hassan, 2015). Civil servants may avoid raising problems, issues, and policy proposals in the areas in which they focus when they fear becoming embroiled in disputes or controversy as a result (De Graaf, 2010). For instance, information withheld from politicians may eventually give rise to issues in parliament while a failure to disclose imminent policy failures in running organizations may result in the emergence of various scandals and crises. Internally, failing to address issues regarding management decisions can create further discontent while wrongfully communicating agreement to an organization's leaders (Wang & Hsieh, 2013), thus potentially affecting services delivered to citizens (Vigoda-Gadot & Beerli, 2011).

While employee silence may thus have substantial detrimental consequences for public organizations, its relatively recent rise to prominence as a concept has meant that research into its antecedents remains incipient (Van Dyne et al., 2003; Wang & Hsieh, 2013; Jain, 2015; Hassan, 2015). Nevertheless, we know from previous research in the management sciences and in organizational psychology that substantial organizational changes can heighten perceptions of risk, uncertainty and fear of various adverse consequences affecting an organization (Staw, Sandelands & Dutton, 1981; Olsen & Sexton, 2011; Muurlink et al., 2012) and that frequent changes may exacerbate such effects (Rafferty & Griffin, 2006; Pollitt, 2007). Thus, in this paper we examine whether the imposition of multiple successive structural reforms in public organizations may

cause defensive silence, a specific subtype of employee silence associated with fear of adverse consequences for asserting one's position (Pinder & Harlos, 2001; Van Dyne et al., 2003). In particular, we expect to find that uncertainty and threat perceptions generated through such reforms heighten the propensity for individuals to remain quiet to avoid potential adversity, disputes and controversy (e.g., Bommer & Jalajas, 1999; Vakola & Bouradas, 2005). Moreover, when structural reforms are frequently imposed, cues to remain quiet should become recurrent. This may be reflected in heightened levels of defensive silence observed after sequences of reform, as well as a gradual internalization of defensive silence as an appropriate and normal form of behavior through social cues within the organization (Wang & Hsieh, 2013; Hassan, 2015; Kiewitz et al., 2016). These various processes should in turn manifest themselves in the degree to which employees report issues and problems that may create some degree of controversy among their superiors or peers.

While research on employee silence and on its sub-dimensions has gradually been gaining prominence in the private sector management literature (e.g., Wang & Hsieh, 2013; Jain, 2015), the concept and its potential antecedents have as of yet received scant attention in the field of public administration (although see Hassan (2015) and De Graaf (2010)). However, processes particularly important to public organizations, including the early detection of policy failures or the identification of areas of improvement in policy implementation, are highly dependent on the input of civil servants that implement an organization's policies and tasks (Walumbwa & Schaubroeck, 2009). Oftentimes such policy failures and areas of improvement are simultaneously subjects controversial to discuss within organizations, as suggestions and criticisms may run counter to the status quo or decisions from higher echelons (De Graaf, 2010).

One high profile and devastating example of such a silence-induced policy failure is Space Shuttle Columbia's disintegration during re-entry in 2003. Insulating foam struck the Shuttle's wing after takeoff, an issue long known to NASA engineers as potentially dangerous to the Shuttle's structural integrity (Farjoun, 2005, p.14-15). However, as this had not resulted in critical problems during earlier launches, management gradually became convinced that these occurrences were a non-issue, while engineers became reluctant to speak up against their superiors to avoid disputes. This led

to a misplaced sense of consensus at the management level that mission safety was ensured, a factor that was ultimately an important enabler of the 2003 disaster (Moorhead et al., 1991, 258).

In addition to policy failures, civil servants close to the execution of tasks may also have ideas or information useful to the performance or change processes of an organization (Van Dyne et al., 2003; Wang & Hsieh, 2013; Hassan, 2015; Vakola & Bouradas, 2005). The failure of an organization to utilize such grass-roots ideas may hinder its adaptability to its immediate external environment. Thus, given the importance of silence and voice in the public sector, and as empirical research on the side effects of repeated (structural) reforms remains scant (Pollitt, 2007), our contribution will have important implications for policy-makers regarding ways that they may inadvertently influence organizations.

We test these expectations we use data on Norwegian state agencies, linking responses to the 2006 and 2016 Norwegian staff surveys with the Norwegian State Administration Database (NSAD), which includes information on structural reforms that organizations have been subjected to. In this context, structural reforms are defined as change events that alter organizational boundaries in terms of units included (e.g., mergers/splits or the absorption/secession of organizational units), that alter tasks attributed to organizations (including the allocation of new tasks or the loss of existing tasks) and/or that alter the structural embeddedness of organizations in the broader public sector (i.e., their legal forms and ministerial portfolios in which they are positioned) (see e.g., MacCarthaigh & Roness, 2012).

The Norwegian public sector offers an interesting setting for our investigation into the effects of sequences of structural reforms. Despite being a reluctant reformer in the 1980s and 1990s, recent decades have seen not only NPM reforms but also New Public Governance and Neo-Weberian reforms. The most significant recent reform waves in Norway include hospital reforms (2001), welfare administration reforms (2007) and police reforms (2015). In contrast to those of many other European countries, the Norwegian reform trajectory has been relatively successful (Greve, Læg Reid and Rykkja, 2016). The presence of such reforms implies that various Norwegian public organizations

have undergone frequent structural reforms over the past decade, rendering this country a suitable case for studying the effects of sequences of structural reforms.

2.2. Theoretical framework

2.2.1. *Defensive silence*

While concepts such as voice have received considerable attention in recent decades, research on employee silence and its antecedents remains at a relatively early stage. In part, this is due to the previously held (often tacit) assumption that employees who remain silent agree with the policies, decisions and behaviors of their peers and superiors (Van Dyne et al., 2003). In the 1990s and early 2000s, however, researchers began to recognize that silence in organizations is often engaged in as a conscious choice. Pinder and Harlos (2001) recognized the concept's multidimensional nature and proposed a distinction between acquiescent silence (i.e., silence based on a belief that speaking up on a certain issue will not make a difference) and quiescent silence (i.e., silence based on a fear of the detrimental consequences of speaking up), the latter being the focus of this contribution. Although later typologies have often renamed quiescent silence as defensive silence, and have added a number of other dimensions,² the basic distinction introduced by Pinder and Harlos (2001) has remained prominent throughout the literature (e.g., Morrison, 2011; Wang & Hsieh, 2013).

In their seminal contribution Van Dyne et al. (2003) emphasize that defensive silence represents a proactive behavior on the part of employees. This distinguishes defensive silence from acquiescent silence, a behavior based on the resignation that an event is unchangeable, that speaking up will be futile and an unwillingness to exert effort to voice issues. Thus, acquiescent silence may be seen as a mixture of resignation and disengagement, related to neglect and inaction behaviors (Van Dyne, 2003). When engaging in defensive silence, on the other hand, an individual determines that speaking up is in some way risky to his/her position as doing so may cause disputes, controversies

² In addition to defensive and acquiescent silence, Van Dyne et al. (2003) identify prosocial silence, a positive form of silence designed to defend peers or an organization.

and/or sanctioning, and that this risk outweighs the benefits of speaking up (Van Dyne et al, 2003, see also De Graaf, 2010). The key difference between acquiescent and defensive silence thus lies in its antecedent motivation: while the former is based on resignation, lacking self-efficacy and/or a lack of engagement, the latter is based on the perception of risk associated with speaking up. Defensive silence notably may cause individuals to put aside suggestions, proposals, ideas and issues that they may have while preferring not to take action to avoid being viewed as a “troublemaker” (Vakola & Bouradas, 2005; Milliken et al., 2003; De Graaf, 2010).

Such fear is likely caused by a variety of factors. Not only can a message itself be controversial or potentially damaging, an employee’s relationship with his/her supervisors and risks of being sanctioned are also likely determinants of an individual’s inclination towards a defensive silence strategy (Vakola & Bouradas, 2005; Wang & Hsieh, 2013; Bommer & Jalajas, 1999; Rhee et al., 2014). Power asymmetries and perceptions thereof play an important role in this regard, as individuals with less power require the resources and support of their superiors, ensuring that the former will be sensitive to the latter’s signals (Kiewitz et al., 2016). However, this is not to say that defensive silence only manifests itself in relationships between supervisors and subordinates. Risks are inherent in exchanges with other colleagues as well, and defensive silence may serve to avoid disapproval from peers or to prevent a controversial issue from being disseminated throughout the workplace. Moreover, in the public sector, silence is likely present in external communication as well, as fear of stakeholder reprisals, public scrutiny and political disapproval loom when communicating on controversial actions.

Moreover, the broader organizational environment, encompassing aspects such as the degree to which participation and proactive behaviors are encouraged, as well as the degree to which individuals generally feel safe to speak up are likely to contribute to overall levels of defensive silence in an organization (Premeaux & Bedeian, 2003; Walumbwa & Schaubroeck, 2009; Wang & Hsieh, 2013). This is reinforced by the social cues within an organization, which inform individuals as to whether speaking up on a certain topic at a certain time is appropriate (Wang & Hsieh, 2013; Hassan, 2015; Kiewitz et al., 2016). These cues and environments may themselves be embedded in longer-term

organizational cultures, in which norms such as following instructions from superiors are passed on from employee to employee (Damanpour, 1991). This may even affect new entrants, as they quickly learn the nuances of the organization's culture through socialization processes, including which types of behaviors are deemed (un)acceptable (Kim, Cable, & Kim, 2005). Finally, occurrences external to an organization may reduce the degree to which input is accepted, as external crises may for instance foster a sense of short-term urgency within an organization (Vakola & Bouradas, 2005; Staw et al., 1981). This implies that factors influencing aspects such as power asymmetries, working environments, extant cultures and perceptions of urgency within an organization may be conducive to the strategic use of defensive silence by employees.

2.2.2. The theoretical link between structural reforms and defensive silence

Structural reforms have been found to have a large variety of intended and unintended effects on organizations, with many of the latter being related to perceptions of uncertainty that they produce (Bommer & Jalajas, 1999; Amiot et al., 2006; Pollitt, 2007; Moore, Grunberg & Greenberg, 2004; Rafferty & Griffin, 2006). Frequent changes in the makeup of an organization are accompanied by uncertainty regarding future structures, with employees wondering whether and how any changes will affect them and their position within an organization (Rafferty & Restubog, 2017). As the rate of public sector restructuring increases to the point that some organizations experience it as continuous (MacCarthaigh, 2012; Pollitt, 2007), perceptions of uncertainty may become exacerbated due to a lack of a determinate end to the structural reform process (Rafferty & Griffin, 2007; Rafferty & Restubog, 2017). In this context, it is important to emphasize that such uncertainty affects every echelon of an organization affected by a structural reform, with managers facing the uncertainty and urgency of implementing aspects of structural reforms falling under their remit while other members of an organization face consequences that are (partially) beyond their control.

We argue that, through such uncertainty, various effects are caused within the organization that increase the degree to which individuals engage in defensive silence. To understand why uncertainty resulting from frequent structural reforms may cause defensive silence it is helpful to briefly elaborate on threat-rigidity theory, which was

developed in organizational psychology to predict effects that an organization experiences when facing a potentially threatening situation (Amabile & Conti, 1999; Olsen & Sexton, 2006). In defining a threat as “*an environmental event that has impending negative or harmful consequences for the entity,*” Staw et al. (1981, p.502) argue that threatening events may have a number of effects on various levels of an organization. First, events perceived as threatening are likely to increase levels of stress and anxiety throughout the organization (Staw et al., 1981; D’Aunno & Sutton, 1992; Olsen & Sexton, 2006; Muurlink et al., 2012). This occurs not only for top managers tasked with guiding an organization through a threat (Muurlink et al., 2012) but also at lower levels of an organization, as individuals fear that their own positions, their future prospects or the organization’s well-being may be adversely affected by a given threat (Staw et al., 1981).

Second, threatening events generate perceptions of urgency and especially for decision-makers within organizations, who feel that they must avert or mitigate threats as soon as possible (Staw et al., 1981; Muurlink et al., 2012). Together, these effects have a variety of implications for the behaviors of individuals within organizations. At this level, some frequently observed consequences of the threat-rigidity effect include a centralization of control and a formalization of procedures by an organization’s management team (D’Aunno & Sutton, 1992), which exacerbate power asymmetries within an organization and which induce social cues against speaking up. Uncertainty resulting from structural reforms cause decision-makers to centralize control in small groups to be able to quickly and decisively address a threatening event *inter alia* by reducing the degree to which disputes and conflicts must be considered within an urgent context (Staw et al., 1981; D’Aunno & Sutton, 1992; Olsen & Sexton, 2006). Simultaneously, a less flexible, more formalistic mode of internal governance is adopted to ensure conformity during the threatening period (Olsen & Sexton, 2006). The combination of uncertainty and urgency is also likely to cause the organization’s decision-makers to experience information overload (Staw et al., 1981), leading decision-makers to overemphasize solutions and knowledge applied in the past (Muurlink et al., 2012; Daly et al., 2011). In this context, an increased focus on “in-group” decision-making during the threatening event serves to simplify information and problems

confronting the organization (Staw et al., 1981). However, this in-group decision-making combined with the aforementioned tendency to centralize control may simultaneously lead to groupthink and an intolerance for deviant opinions.

Third, employees in lower levels of an organization, similarly faced with a threatening stressor, will tend toward uncertainty-reducing behavior. Thus, to manage the uncertainty confronting them, employees may become more sensitive to cues from superiors and to their work environment, while becoming less inclined to take independent action (Staw et al., 1981; Bommer & Jalajas, 1999). This is reflected in existing research with authors finding a reduced propensity for creative behavior and involvement (Olsen & Sexton, 2006; Amabile & Conti, 1999) and a reduced willingness to take risks or make suggestions to supervisors (Bommer & Jalajas, 1999). This uncertainty-reducing tendency is compounded by processes occurring at higher levels in the organization, with the aforementioned increases in formalization and centralization increasing power asymmetries and the likelihood of hostile responses towards deviant behavior (Olsen & Sexton, 2006). In sum, through threat-rigidity effects, organizations may be expected to become less accepting of deviant opinions and suggestions while individuals may simultaneously become less inclined to engage in behavior that could lead to conflict and controversy and that could thus place their own positions at risk.

As elaborated on earlier in this section, defensive silence is motivated by perceptions of threat and fear regarding potentially adverse consequences of speaking up (Premeaux & Bedeian, 2003). Various elements of threat-rigidity theory may therefore foster an environment conducive to the use of defensive silence. Increases in uncertainty and threats to individual positions (e.g., job security, maintaining current job content or the continuation of valued projects) may directly heighten the degree to which individuals are likely to use strategies to avoid being viewed as a “troublemaker,” including those of defensive silence (Vakola & Bouradas, 2005). Moreover, as organizations under threat often increase levels of formalization and sanctioning when experiencing threatening events, the fear of being labelled a troublemaker upon speaking up may be heightened further (Staw et al., 1981).

Wang & Hsieh (2013) moreover report a negative effect on defensive silence when individuals experience their organization’s environment to be caring, nurturing and

ethical, and when they perceive high levels of organizational support. Similarly, Walumbwa and Schaubroeck (2009) find reduced levels of silence when employees experience a psychologically secure environment while Vakola and Bouradas (2005) find that whether or not supervisors deny employees the opportunity to express themselves is a powerful predictor of the occurrence of defensive silence. Therefore, the effects predicted by threat-rigidity theory, including reduced participation in decision-making, increases in groupthink and an increased intolerance of deviant opinions, may reduce the degree to which employees consider their environments supportive and safe to speak up in and encouraging the use of defensive silence. Finally, as employees are part of a broader social context involving a sequence of structural reforms, this effect may be further ingrained due to social cues emphasizing perceptions of threat, fear and silence (Hassan, 2015).

Moreover, there are some important indications that the effects of structural reforms, including those predicted by threat-rigidity theory, may be dynamic over time – increasing when reforms confront an organization sequentially and gradually decreasing as an organization enters calmer waters (e.g., Seo & Hill, 2005). Rafferty and Griffin (2006) and Rafferty and Restubog (2017) argue that repeated or continuous changes may further heighten levels of uncertainty and stress, as individuals see no discernible end to the structural reform trajectory. Moore, Grunberg and Greenberg (2004) and Grunberg et al. (2018) accordingly find that work-related stress is exacerbated for respondents who have experienced multiple reforms. Following threat-rigidity, we may expect to find further reductions in participation and information-processing and further increases in centralization, groupthink, formalization and sanctioning in such repeatedly reformed organizations. As these factors may in turn be conducive to defensive silence, it is likely that frequent and continuous structural reforms may increase levels of defensive silence in an organization beyond what we might expect to observe in organizations that have only experienced a single reform event. Moreover, when defensive silence is heightened for a prolonged period of time in a continuously reformed organizations, we may begin to expect a gradual effect on the organization's culture, causing it to become gradually less conducive to speaking up without consequences (Wynen et al., 2017, see chapter 3). We therefore propose, first, that structural reforms may increase the usage of defensive

silence on an individual level through effects predicted by threat-rigidity theory and, second, that multiple successive structural reforms occurring to an organization may further increase the propensity of organization employees to engage in defensive silence.

2.3. Data

To empirically test the relationship between an organization's history of structural reforms and degrees of defensive silence observed among employees working in these organizations, we make use of two data sources on Norwegian state agencies.

First, we use data from a comprehensive web-based survey conducted every 10 years on civil servants of the different directorates and of other central administration organizations functioning apart from the ministries in Norway. The survey is conducted as part of a Central Administration study, its technical execution is managed by the Norwegian Social Science Data Service (NSD) and its setup and funding is managed through a collaborative arrangement between the University of Bergen, the University of Oslo and the University of Agder. The survey includes information on individual demographic measures, on structural variables, on attitudes and on a range of other issues. Our analyses focus on employees of central state agencies and are based on the most recent 2016 and 2006 surveys, which are a continuation of corresponding surveys conducted in 1976, 1986 and 1996. The state agencies included in our sample have the following Norwegian-specific form of affiliation: "directorates, central agencies and other ordinary agencies outside the ministries which are the types most closely linked to the state centre and subject to general government regulatory frameworks" (Lægreid, Roness and Rubecksen 2012: 235). They are clearly Type 1 agencies as defined by Van Thiel (2012: 20) as semi-autonomous organizations without legal independence but with some managerial autonomy. We utilize the 2016 and 2006 waves of the survey as they offer the closest resemblance in terms of utilized questions. The 2006 staff survey has a response rate of 59.3%, accounting for 1452 respondents of 49 central agencies. The 2016 survey is based on 1963 respondents of 47 central agencies with a response rate of 59.5%. More precise information on the survey process, on response rates of each organization and on the validity of responses can be found at the NSD website

(<http://www.nsd.uib.no/polsys/en/civilservice/>). Item non-response reduced the total sample of both surveys to a usable dataset of 1077 employees within 41 central state agencies (with at least 5 respondents per organization). We compared the sample used with the original representative sample for the average respondent age and gender. Both samples are similar, suggesting that observations used to estimate the regressions constitute a representative subsample of all employees originally included in the survey. Moreover, we calculated a Representativity-indicator (R-indicator or $M()$) (see for a detailed discussion Schouten et al., 2012). Such an indicator is based on the standard deviation of estimated probabilities and is defined by:

$$M(\rho) = 1 - 2S(\rho) \quad (1)$$

The probability for being in the smaller subsample or not is estimated by applying a logistic regression model using the variables age, gender, tenure, position, task and starting job as auxiliary variables. The smaller subsample is not representative if there is much variation in response probabilities. This is reflected by a large standard error. The maximum value the standard error can assume is 0.5. In this case the value of the R-indicator is equal to 0. For our subsample the value of the R-indicator ($M()$) is equal to 0.95, indicating that respondents in the subsample do not differ significantly from respondents in the original and representative sample.

Second, as an indicator for the structural reforms that organizations have experienced through their lifetime was constructed from data of the Norwegian State Administration Database (NSAD; <http://www.nsd.uib.no/polsys/en/civilservice/>). For these 41 organizations, the NSAD lists all reforms made to formal organizational structures from the founding of the organizations to 2016. The database uses a predefined categorization that classifies structural reforms into three main categories: reforms related to the founding of an organization, reforms related to the survival or maintenance of an organization, and reforms related to the termination of an organization. We are primarily interested in the effects of structural reforms imposed during the lifetimes of organizations. Thus, we focus on maintenance events such as those involving absorption and secession while leaving birth and death events beyond consideration. In what follows

structural reforms leading to the creation or ending of public organizations are not included in our analysis. A total of 156 maintenance events are recorded with the following distribution:³

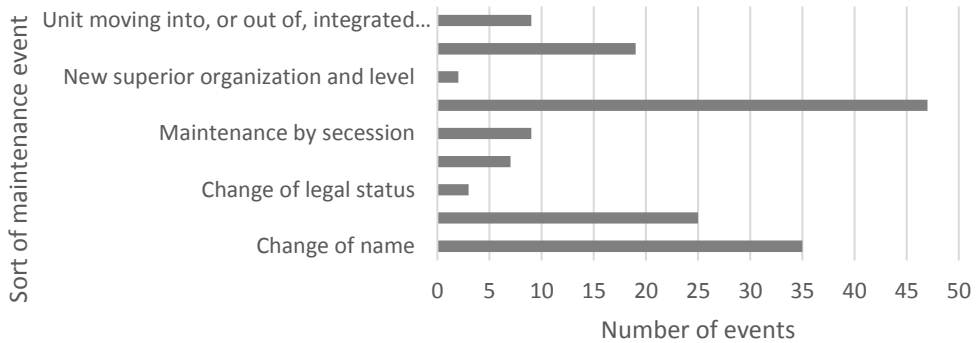


Figure 2.1 Available maintenance events and their distributions

2.3.1. Operationalizing defensive silence

As discussed by Pinder and Harlos (2001), defensive silence is an intentional and proactive behavior based on a fear of the consequences of speaking up (see also Van Dyne et al., 2003; Milliken et al., 2005). As such it involves a conscious decision to withhold ideas, information, and opinions as the best personal strategy (Van Dyne et al., 2003) to avoid conflict, disputes or controversy. To measure defensive silence, a two-item scale is used in line with the concept of defensive silence of Van Dyne et al. (2003). Both questions gauge the extent to which an individual has refrained to communicate or interact on a topic from a fear of spurring conflicts, disputes or controversy and utilize a 5-point Likert scale, ranging from 1 (very often) to 5 (never):

- *Have you, during the past year, failed to raise a problem / matter within your area because you assumed that there would be a dispute about it?*
- *Have you, during the past year, put aside program proposals, draft laws, regulations, etc. within your area because there was controversy about these?*

³ The complete list of structural changes (starting, maintenance and ending events) included in the NSAD can be consulted in Appendix 2, section A.2.1.

Answers given to these questions generated a single factor (based on a polychoric matrix) and a Cronbach's α for this index of .74. The factor score is used as the dependent variable.⁴ The lower the score, the higher the degree of defensive silence.

2.3.2. *An organization's history of structural reforms*

From information collected from the NSAD it was possible to construct an indicator for the history of structural reforms of each organization. This history was reconstructed from the date of each organization's founding to the time of each staff survey. It is difficult to make definitive statements on the length of time any single structural reform will impact the organization, in particular as a reform may interact with other structural reforms being implemented slightly earlier or later. Thus, to examine whether our analyses remain robust under slightly differing assumptions on the duration of the effect of structural reforms, our dependent 'history of structural reforms' was calculated in three ways;

$$\sum(\text{Reform events}) \tag{1}$$

The first operationalization consists of the total number of structural reforms that each organization has experienced over its lifetime.

$$\sum\left(\frac{\text{Year of reform event} - \text{Birthdate}}{\text{Age of the organization}}\right) \tag{2}$$

In the second operationalization, history is dependent on the date when reforms occurred, with a longer time period yielding a lower impact factor.

⁴ Based on the polychoric matrix, we calculated the weights (factor loadings). By doing so, the factor score will not center on zero nor will it have a standard deviation of 1. To ensure that this did not introduce a bias we re-ran the analyses whereby the dependent is a factor score based on a factor analysis without first computing a polychoric matrix (i.e. based on the variables directly). Results were identical.

$$\Sigma\left(\frac{1}{(2016-\textit{Year of reform})^2}\right) \quad (3)$$

The third operationalization takes the time dimension into account, yet unlike (2), it deviates from a linear depreciation by allowing for an exponential decline. It is, however, important to note that for reforms occurring in 2016, the denominator is set to 1. Hence reforms occurring in 2015 (year before the survey) and 2016 (year of the survey) have an equal effect. Moreover, in coding 3 it is clear that recent reforms have a significantly larger impact than ‘older’ ones.

Although little systematic research has been conducted, there are some articles that point to coding 3 as the most realistic operationalization. Allen et al. (2001), investigating a downsizing event, notes significant and sizeable effects on job security perceptions, role overload, organizational commitment and turnover intent immediately following a reform, and a resurgence in the same variables one year and four months following the reform (and without another reform being introduced). Despite moving towards pre-reform levels, most variables remained somewhat suppressed after a year had passed. In one of the rare studies tracking multiple reforms, Grunberg et al. (2018) and Moore et al. (2004) observe an accumulation of effects while the organization continues to encounter change, but Grunberg et al. (2018) also find a partial recovery one year after the studied organization enters more stable waters. Moreover, while recovery did set in relatively soon in the study by Grunberg et al. (2018), most well-being variables remain somewhat suppressed. Combined, these results suggest that the strongest effects manifest during the early phases of the reform, but that many effects may linger much longer. These results are similar to what is expected in the theoretical model proposed by Seo & Hill (2005), who suggest that uncertainty, conflict, job environment change and acculturation stress should be strongest in the initial planning and operational implementation phases of a structural reform, after which a stabilization period follows in which many effects still linger at reduced levels. Furthermore, as mentioned in the theoretical framework, papers such as those by Grunberg et al. (2018) and Moore et al. (2004) also indicate that effects may accumulate when recovery remains incomplete. Thus, a coding that 1) captures strong effects immediately following a structural reform,

2) that also allows for some (but a substantially reduced) effect of that reform in later times, and 3) allows this effect to accumulate with the effect of other structural reforms, seems the most well-supported interpretation of the long-term effects of a sequence of structural reforms.

As discussed above, we were forced to use a subsample of the initial data. To ensure that this did not introduce a bias in terms of organizational history, we compared the histories of the initial organizations with those of the organizations included in our sample. Averages for the different operationalizations of organizational history for both the original (including organizations removed from the analysis) and the used sample of organizations are presented in Table 2.1. Although values for the used sample are slightly higher than those of the original sample, the differences are not significant.

	Original sample				Used sample				Independent samples T-test	
	2006		2016		2006		2016			
	Mean	Sd.	Mean	Sd.	Mean	Sd.	Mean	Sd.	2006	2016
History (1)	2,21	2,77	3,04	2,90	2,40	2,88	3,29	3,03	t=1.55	t=.02
History (2)	1,35	1,87	2,37	2,34	1,43	1,94	2,58	2,47	t=0.73	t=0.48
History (3)	0,19	0,41	0,08	0,21	0,21	0,45	0,09	0,23	t=0.59	t=1.12

Table 2.1. Comparison of histories of the original and used sample

2.3.3. Control variables

Based on the literature on employee silence we consider a wide range of variables of the individual and organizational levels that control for alternative explanations for the occurrence of defensive silence. The first set reflects individual characteristics. The following variables are used: 1) age, 2) gender, 3) current position, 4) tenure within the organization, 5) the position of the respondent upon entering the organization, 6) language, 7) whether the respondent has studied abroad, 8) the respondent's current

responsibilities, 9) whether the respondent has received any job offers over the past year, and 10) whether a respondent is politically engaged. In addition to these individual characteristics, we also include the individual's perception on his/her job and the organization. Variables on these factors include 1) the degree to which there are clear rules concerning an individual's job, 2) attitudes towards superiors, 3) the importance of loyalty, 4) professional behavior and 5) the propensity to follow rules. Respondents were asked to assign a weight based on the importance of these elements while carrying out their work. Apart from these individual-level controls we consider information on the primary task of each organization (based on the Classification of the Functions of Government, see Appendix 2 section A.2.1) and on organizational age. Table 2.2 shows descriptive statistics while a correlation matrix for key variables is provided in Table 2.3. The precise wording of the survey questions as well as a full correlation matrix and an overview of the variance inflation factors are available in Appendix 2 section A.2.2. and Appendix 2 section A.2.3 respectively.

2.4. Method & Results

As our observations of defensive silence are simultaneously nested within organizations and years (we rely on 2006 and 2016 waves of the staff survey), a linear multilevel analysis⁵ with crossed random effects was employed. More precisely, we believe the effect of survey year to be systematic to that year and common to all employees. Our rationale is that we assume that survey year-specific random factors, such as overall economic and political conditions, have significant systematic effects on the defensive silence behaviors of all employees. As such, we model a two-way crossed-effects model with organization effects crossed with survey-year effects. Corresponding results are presented in Table 2.3. Entries included in the table are the full maximum likelihood estimates.

⁵ To test whether the errors of the dependent are distributed normally, polynomials (quadratic, cubic) of the fitted values were added as additional regressors. A Wald test was performed to check if these polynomials jointly carried significant explanatory power. The test statistic (chi2 (2) distributed under H0) equaled 0.57 with a corresponding Prob>chi2 of 0.7509). Hence, strongly rejecting the null hypothesis of non-normality of the errors.

Variables	Question ²		Mean	Sd.
	2006	2016		
Defensive silence	Factor Score		3.870	0.758
Failed to propose an issue	46	40	4.283	0.943
Failed to raise an issue	47	47_I	4.268	0.928
Organizational level N=41 (across 2 years)				
			Min.	6
Individuals per organization			Average	26,3
			Max.	78
Number of events			2.877	2.853
Linear depreciation			2.048	2.425
Exponential depreciation			0.117	0.257
COFOG			5.024	2.992
Orgage			39.60	46.71
Individual level N=1077				
Age	9	53I	3.807	1.062
Gender	10	54	1.434	0.496
Position	2	2I	1.750	1.071
Tenure	2B	6I_3	2.669	0.569
Startingjob	5	5I	2.004	1.073
Rules	17	7	2.829	1.159
Task	15	5	6.003	2.474
Joboffers	8A	52A	1.655	0.476
Study abroad	13	56	1.805	0.396
Language	54	57	1.929	0.374
Importance_loyalty	18B	18B	1.666	0.837
Importance_Professional	18F	18F	1.378	0.601
Importance_Law	18J	18J	1.499	0.852
Political	59	62	0.291	0.454
Attitude to superior	49	43	1.500	0.615
Year			2010	4.942

² The surveys can be consulted online:

<http://www.nsd.uib.no/polsys/StatiskeDokument/SpSkjemaDir06.html>

Table 2.2. Descriptive statistics

Variables	(1)	(2)	(3)	(4)	(5)
Failed to propose an issue	(1) 1.0000				
Failed to raise an issue	(2) 0.6011*	1.0000			
Number of events	(3) -0.0203	0.0016	1.0000		
Linear depreciation	(4) -0.0239	0.0039	0.8802*	1.0000	
Exponential depreciation	(5) -0.0026	-0.0664	0.2010*	0.1845*	1.0000

*** p<0.01. ** p<0.05. * p<0.1.

Table 2.3. Correlation matrix between key independent and dependent variables

We first estimated an ‘empty’ (also called ‘unconditional’ or ‘null’) model to determine the extent of variance between organizations (Column (1)). When averaging across respondents, organizations and years, the indicator for defensive silence equals 3.9. This corresponds well with the mean for defensive silence (see Table 2.2). Moreover, the Likelihood Ratio (LR) test value equals 44.30 with 2 degrees of freedom and with a p-value of .000, which must be halved to obtain a less conservative test.⁶ In this case, halving does not affect the conclusion. The null hypothesis should be rejected, as there is evidence of cross-organization and cross-survey year variation in levels of defensive silence.

The intra-class correlation coefficient (ICC) estimates the proportion of variance at the organization and year levels relative to the overall variance. As the dependent variable is measured at the individual level (civil servant level), this level should also present the highest ICC score (Steenbergen and Jones, 2002, p 231). The ICC equals roughly 7%, meaning that roughly 7% of the variance in defensive silence is attributable to differences observed across organizations and across both survey years, with the remaining 93 percent being attributable to individual differences. Even though the ICC is not very high, disregarding it would lead to erroneous conclusions, both statistically and empirically.

In the subsequent step (see column (2)), the level-1 covariates have been added to the model, for now assuming fixed effects. The intercept was, however, allowed to vary across organizations and survey years to accommodate cross-organization and year differences in baseline self-censorship. In this column it is noticeable that age, the degree to which clear rules are given concerning a respondent’s job, respondent tasks, the

⁶ We test a variance component for which the alternative hypothesis is one-sided. Negative variances, which exist under a two-sided test, do not apply.

importance of professional considerations and the political engagement of the respondents significantly affect levels of defensive silence. Again there is evidence of variation in the intercepts. Comparing the fit of the random intercept model to that of a regression model yields an LR score of 40.55 with a p-value of .000. Hence, we can clearly reject the null hypothesis that the intercept is the same across all organizations and survey years, as the regression model assumes. Moreover, these level-1 covariates account for roughly 16 percent of the variation in the outcome.

To account for variation in the intercepts, we add level 2 covariates to columns 3, 4 and 5. The difference between these 3 columns lies in the coding of organizational histories. Column 3 includes the first operationalization of organizational history (total number of structural reforms an organization has endured over its lifetime), column 4 includes the second operationalization of organizational history (taking the time dimension into account via linear depreciation) and column 5 is based on the third operationalization of history (taking the time dimension into account via exponential depreciation). For all models, the same level-1 covariates remain statistically significant. Of the newly added level-2 covariates, the function of the organization and of all codings of organizational history are statistically significant. We find that a higher score for organizational history significantly affects levels of defensive silence engaged in by employees. Thus, the more organizations are faced with structural reforms, the more their employees are likely to engage in defensive silence (reversed coding). Following from column 3 it appears that an increase of one structural reform leads to a 4% increase in this form of behavior. This is visualized in Figure 2.2.

A similar observation can be made for column 4 (linear depreciation). Yet the effect of structural reforms increases significantly when allowing for exponential depreciation. From this operationalization it appears that a new structural reform occurring in the following year (an additional event occurring in 2017 will increase the value of organizational history by a value of 1) will spur a temporal increase in levels of defensive silence engaged in by employees in a given organization of roughly 20%.

Variables	Index Defensive Silence				
	(1)	(2)	(3)	(4)	(5)
Constant	3.90*** (0.05)	3.72*** (0.26)	3.71*** (0.27)	3.71*** (0.28)	3.71*** (0.28)
Individual level					
Age		0.08*** (0.02)	0.08*** (0.02)	0.08*** (0.02)	0.07*** (0.02)
Gender		0.03 (0.05)	0.03 (0.05)	0.03 (0.05)	0.03 (0.05)
Position		$\chi^2(3)=1.37$	$\chi^2(3)=1.01$	$\chi^2(3)=0.92$	$\chi^2(3)=1.05$
Tenure		$\chi^2(2)=0.82$	$\chi^2(2)=1.4$	$\chi^2(2)=1.29$	$\chi^2(2)=1.42$
Startingjob		$\chi^2(4)=4.57$	$\chi^2(4)=3.85$	$\chi^2(4)=3.83$	$\chi^2(4)=4.15$
Rules		-0.07*** (0.02)	-0.07*** (0.02)	-0.07*** (0.02)	-0.07*** (0.02)
Task		$\chi^2(9)=18.32^{**}$	$\chi^2(9)=19.2^{**}$	$\chi^2(9)=19.16^{**}$	$\chi^2(9)=20.22^{**}$
Joboffers		0.06 (0.05)	0.06 (0.05)	0.06 (0.05)	0.06 (0.05)
Attitude to superior		0.03 (0.04)	0.03 (0.04)	0.03 (0.04)	0.03 (0.04)
Studiedabroad		0.02 (0.06)	0.01 (0.06)	0.00 (0.06)	0.01 (0.06)
Language		$\chi^2(3)=4.65$	$\chi^2(3)=5.33$	$\chi^2(3)=5.18$	$\chi^2(3)=4.99$
Importance_loyalty		0.00 (0.03)	0.00 (0.03)	0.00 (0.03)	0.00 (0.03)
Importance_Professional		-0.11*** (0.04)	-0.11*** (0.04)	-0.11*** (0.04)	-0.12*** (0.04)
Importance_Law		0.00 (0.03)	0.00 (0.03)	0.00 (0.03)	0.01 (0.03)
Political		-0.18*** (0.05)	-0.18*** (0.05)	-0.18*** (0.05)	-0.18*** (0.05)
Organizational level					
Cofog			$\chi^2(9)=23.6^{***}$	$\chi^2(9)=21.85^{***}$	$\chi^2(9)=19.35^{***}$
Organizational age			0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
History (1)			-0.04*** (0.01)		
History (2)				-0.03** (0.01)	
History (3)					-0.18* (0.10)
Observations	1.077	1.077	1.077	1.077	1.077
Number of Organizations	41	41	41	41	41
Number of Years	2	2	2	2	2
LR test (conservative)	$\chi^2(2)=44.30^{***}$	$\chi^2(2)=40.55^{***}$	$\chi^2(2)=8.08^{**}$	$\chi^2(2)=8.88^{**}$	$\chi^2(2)=9.62^{***}$
Intra-class correlation	0.068				
Level-1 R ²		0.158			
Level-2 R ²			0.683	0.631	0.597

Standard errors in parentheses *** p<0.01. ** p<0.05. * p<0.1.

Table 2.4. Multilevel results with crossed effects

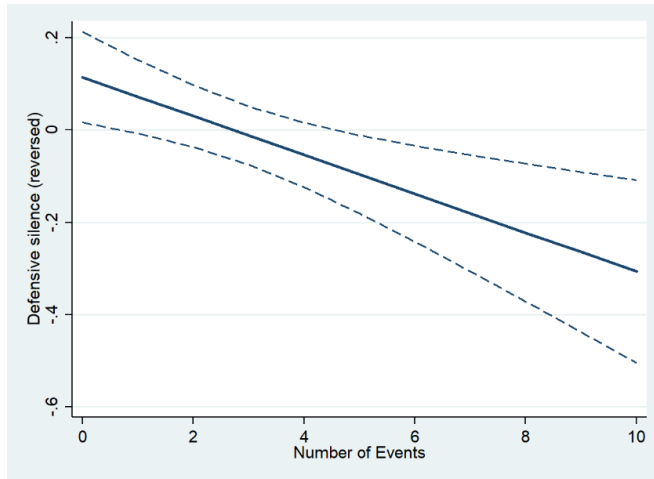


Figure 2.2. Plot of the coefficient of organizational history (number of events)

Moreover, while the effect of a new reform event will decline over time, it will boost the overall index of organizational history. As such, we argue that organizations may experience effects of any given structural reform over the long-term, even if their impact is gradually reduced over the years, and that these effects may accumulate when multiple reforms occur in quick succession. The level-2 R^2 values range from 68% to 60%, suggesting that the level-2 variables account for a significant proportion of the variation in the intercepts. Hence, sequences of structural reforms appear to significantly increase levels of defensive silence.

To check the robustness of our results, we removed structural reforms involving a ‘change of name’ from the list of structural reforms. Although this type of event can be argued to represent a discontinuation of ‘key structural features’ (Hajnal, 2012, p.837; Greasley and Hanretty, 2014), the inclusion of this type of change can also be criticized on grounds that it has little or no impact on the functioning of an organization. Following this reasoning, a name change should not contribute to the turmoil caused by a sequence of other structural reforms or should have only a minor effect. Therefore, our analyses were also tested across the maintenance events discussed in Figure 2.1. but while excluding events involving a name change. Corresponding results are presented in Appendix 2 section A.2.3. The exclusion of this type of event has no impact on our

findings; sequences of structural reforms increase employee engagement in defensive silence within an organization.

2.5. Discussion

The results presented in the previous section offer substantial support for our expectation that sequences of structural reforms increase the likelihood for public sector employees to engage in defensive silence options. Importantly, our results imply that the effects of structural reforms on defensive silence are determined not only by discrete structural reform events, but also by their accumulation and interplay over time (Rafferty & Griffin, 2006). It seems that these effects persist long after their imposition, either through lingering adaptation efforts or through their effects on the cognitive processes of employees (Allen et al., 2001; Rafferty & Restubog, 2017).

Our observation that employees become hesitant to speak up in frequently reformed organizations due to a fear of adverse consequences lends further credit to the arguments of threat-rigidity theory that structural reforms induce a constricting effect within organizations. In turn, this constricting effect causes individual employees to perceive voice options on controversial issues as riskful, reducing the likelihood of such options being utilized (Bommer & Jalajas, 1999). Moreover, from our observations we are able to make a number of propositions on the temporal dynamics that influence the defensive silence, and the mechanisms through which threat-rigidity in turn influences the degree of defensive silence in the organization. It has been argued that structural reforms heighten an employee's perceptions of risk associated with any given initiative due to perceptions of uncertainty or threat (Staw, Sandelands & Dutton, 1981; Bommer & Jalajas, 1999). As turmoil becomes a constant factor within repeatedly reformed organizations, employees may perceive the process as having no predictable path or discernable end, further increasing their perceptions of uncertainty regarding both the change process and their positions within the organization (Rafferty & Griffin, 2006). We argue that this process may in turn enhance perceptions of threat, discouraging employees from speaking up on controversial and sensitive issues. Threat-rigidity theory furthermore suggests that structural reforms render managers and decision-makers more

likely to operate in a top-down and formalized manner (Amabile & Conti, 1999), increasing fear of reprisal or of other adverse consequences for the display of deviant behaviors or opinions. The combination of both mechanisms gradually creates an atmosphere in which defensive silence is engaged in more frequently. Over the long-term, and as further structural reforms continue to confront an organization, levels of defensive silence may remain heightened and can gradually become ingrained within an organization through social cues and organizational cultures (Hassan, 2015).

It is also interesting that we observe this relationship within the context of the Norwegian public sector. As noted above, the threat-rigidity effect operates in part through power asymmetries, formalization and a decreased tolerance for deviant opinions. Simultaneously, Norwegian culture is characterized as comparatively cooperative, low in power distance levels and relatively tolerant of uncertainty; factors which are conducive to flat organizations and to the acceptance of deviant opinions (Hofstede, 1980; Hetland & Sandal, 2003). Thus, if national cultures would mediate or moderate the relationship between structural reforms and defensive silence, it is arguable that Norway would be a comparatively unlikely candidate to display the effects explored in this article. Indeed, Jain (2015) argues that employees working in countries characterized instead by high levels of power asymmetry and a strong sense of hierarchy should be relatively prone to engaging in various forms of silence. Given that we consistently find a relationship between sequences of structural reform and defensive silence even in the Norwegian context, we are cautiously optimistic that the results presented here are generalizable to other national contexts.

Our observation that long-term sequences of structural reforms have cumulative effects runs counter to a current tendency for the academic literature and policy-making circles to view (structural) reforms as isolated events (Moore, Grunberg & Greenberg, 2004) and suggests that a more holistic view of the long-term processes operating within organizations is needed (Pollitt, 2007). Our results imply that policy-makers should actively attempt to consider lingering effects of previous reform moments in their analyses of the costs and benefits that future structural reforms may have. Furthermore, our finding that previous structural reforms have left a legacy with regard to defensive

silence behaviors can encourage the exploration of improved change management during the implementation of future structural reforms, as organizations can attempt to implement programs intended to foster the perception that employees may safely voice their concerns and suggestions (Walumbwa & Schaubroeck, 2009). This may include additional communication and support from managers to enhance the perception that discussing problems and controversial topics is encouraged and emphasizing that no sanctions will be taken against employees that speak up on sensitive issues (e.g., Borins, 2001; Axtell et al., 2000; Premeaux & Bedeian, 2003; Rhee et al., 2014). In particular in cases where remaining silent could have strong detrimental consequences, this may include various procedures to safely or anonymously report issues, including the introduction of Ombudsmen and appropriate whistleblowing channels and safeguards. Procedures could include rules guaranteeing unequivocal protection of whistleblowers and effective follow-up of such rules through disciplinary action (Lewis, 2002b). Management could furthermore attempt to increase the awareness of reporting, mediation and whistleblowing procedures within their organizations, to ensure that employees are aware of existing options to safely voice serious concerns (Chiu, 2003).

Regarding control variables, we find interesting results for rule clarity, the importance of professional behavior and political engagement, all of which significantly increase the probability of a respondent having engaged in defensive silence behavior. The effect for rule clarity likely represents a general increase of wariness concerning the consequences of speaking up in more heavily regulated environments. This is consistent with results in innovation research, which find that organizational cultures that overemphasize rule-following behavior are less beneficial to creativity and new ideas (e.g. Damanpour, 1991). Our results for importance of professional behavior suggest that the degree to which behavioral norms are embedded in an organization's culture influences the perceived acceptability of speaking up. We speculate that increased institutionalization of certain roles could reduce the acceptability for employees to openly deviate from behavior expected in that role. Our result for political engagement is more puzzling, however. One could speculate that politically active employees fear being seen as politically biased, causing them to exhibit higher degrees of defensive silence

behavior. However, examining this in detail is beyond the scope of our analysis, as more fine-grained measures of political engagement are necessary to address this issue.

While our analysis includes several methodological improvements over previous studies in the field (notably the measurement of multiple structural reforms and the use of multilevel data and methods), this paper remains subject to several limitations. While we account for long-term developments in our measurements of structural reform history and defensive silence, the available data could not be used to compile panel data. Hence, the presence of reverse causation or simultaneity could not be ruled out. Thus, future studies should use panel data estimators to offer more definitive evidence on the causal direction between structural reform histories and defensive silence. Utilizing such panel data estimators should simultaneously mitigate issues of endogeneity beyond what was possible from our data. Moreover, given that threat-rigidity was used as a theoretical mechanism in the current study, future studies should attempt to apply data on the various effects proposed by the theory.

2.6. Conclusion

This paper set out to investigate how multiple reforms implemented over time produce a cumulative effect on the use of defensive silence strategies by employees. For a sample of 1077 civil servants employed at 41 Norwegian central agencies it was found that the use of defensive silence as a strategy to avoid conflicts increases following repeated structural reform. The insight that structural reforms are not independent interventions, but instead form an integral part of a broader organizational history, will hopefully inspire further research on the long-term processes that affect an organization's functioning and performance. Future research should for instance focus on the effects of multiple structural reforms on other outcomes, such as employee well-being, performance and organizational culture. Additionally, qualitative research on the workings of the threat-rigidity effect at various levels of an organization seems necessary to tease out the specifics of this mechanism. Third, additional research on the workings and antecedents of defensive silence for public organizations seems necessary, as this

factor may be an important determinant of an organization's capacity to avoid policy failure through feedback loops. Finally, other forms of self-censoring behavior such as acquiescent silence (i.e., a tendency to self-censor due to perceptions that one's opinions are inconsequential) form areas warranting further exploration. For practitioners and policymakers, the results presented here should serve as a warning that their plans for structural reform may be influenced to a considerable degree by earlier reforms and that imposing new reforms may have broader and more persistent detrimental effects than is often anticipated. Indeed, when organizations seek to encourage openness and feedback, it seems that the frequent and rapid introduction of structural reforms can become too much of a good thing.

Chapter 3: More Reforms, Less Innovation? The Impact of Structural Reform Histories on Innovation- Oriented Cultures in Public Organizations

3.1. Introduction

Rapid social developments, economic pressures, political changes, and increasing demands on public sector performance have made the environment in which public organizations operate substantially volatile. This requires organizations to continuously adapt in response to evolving circumstances and public demands (Damanpour, 1991; Damanpour & Gopalakrishnan, 1998; Valle, 1999). Public services have to be altered, new measures have to be prepared and operational action needs to be reprioritized to address evolving situations. A failure of a public organization to innovate in the context of turbulent environmental changes implies its environmental fit should gradually be reduced (Damanpour & Gopalakrishnan, 1998; Kontoghiorghes, Awbrey & Feurig, 2005), which will detrimentally affect its performance. Consequently, public organizations have to be creative and innovative (Pennings, 1987; Borins, 2001; Damanpour & Schneider, 2009; Frambach & Schillewaert, 2002; Nyhan, 2000; Walker & Boyne, 2006), meaning that an innovation-oriented organizational culture is an important attribute to help ensure that an organization continues to adapt to its turbulent environment (Osborne & Brown, 2011; Martins & Terblanche, 2003; Damanpour, 1991; Hogan & Coote, 2014).

Simultaneously, in response to the multitude of challenges posed by this volatile environment, politicians in the executive and parliament do not only launch new policies and management instruments, but also impose structural reforms upon public organizations. Such structural reforms might be part of government-wide reform programs, or more geared towards organizations in specific sectors, with specific legal forms or tasks. Through these structural reforms, organizations may receive or lose tasks, absorb or secede units from/to other organizations, change legal forms, be placed closer or further from the minister in terms of autonomy and control, or even undergo privatization (MacCarthaigh & Roness, 2012; Lægheid et al., 2010).

Some of these reforms have the aim to make the organizations more responsive and adaptable to their environment and hence increase their innovativeness (Walker & Boyne, 2006; Pollitt & Dan, 2011). Other structural reforms might be motivated on other grounds, like political favour-granting and package deals (logrolling) or isomorphic

behaviour. However, *irrespective of their underlying motivations and intentions*, research in organizational psychology posits that structural reforms will incur disruptive side-effects such as stress and anxiety within public organizations (De Vries, 2013; Marks & Mirvis, 1997; Pollitt, 2007; McMurray, 2007; Amiot et al., 2006; Grunberg, Moore & Greenberg, 2008; Seo & Hill, 2005). Given the potential occurrence of these side-effects, it is important to deepen our understanding of the impact that long-term reform trajectories may have on public sector organizations. Therefore, this paper tests the effects of *multiple* structural reforms on the organizational culture of the public organizations subjected to them, and more in particular on the extent to which this organizational culture is oriented towards innovation. In this context, structural reforms are defined as those reforms that change the organizational boundaries in terms of units included, change the tasks attributed to the organization and/or change the structural embeddedness of the organization in the wider public sector (i.e. its legal form and ministerial portfolio) (see e.g. MacCarthaigh & Roness, 2012; Læg Reid et al., 2010).

More specifically, we expect that as heightened levels of stress and uncertainty persist within organizations that undergo such sequences of structural reforms, they may move towards a more rigid, risk-averse and centralized state (Staw, Sandelands & Dutton, 1981; Dutton, 1986; Olsen & Sexton, 2009). In turn, the stress and uncertainty caused by frequent structural reform may detrimentally affect the innovative behavior of the organization as risk taking, autonomy and support for innovative action become reduced (Borins, 2001; Mintzberg, 1983; Damanpour, 1991; Voorberg, Bekkers & Tummers, 2015). Although the side-effects of single-event structural reforms should gradually dissipate over time (Seo & Hill, 2005; Moore, Grunberg & Greenberg, 2004; Grunberg, Moore & Greenberg, 2008), we argue that organizations in highly volatile environments may not have the time to recuperate from past structural reforms before a new set of reforms is introduced (Pollitt, 2007; De Vries, 2013). In these instances, the positive effects of a single structural reform on innovativeness (see on this topic e.g. Wynen et al., 2014; Dan & Pollitt, 2015) may be outweighed by the continued stress generated by a sequence of multiple structural reforms within the organization. Thus, although a turbulent environment requires a high level of innovation and adaptation, the stress and

uncertainty produced by frequent and severe structural reform may paradoxically be expected to reduce the level of innovation-orientedness of a public organization.

We explore this topic through a quantitative analysis of the structural reform histories of 45 Flemish public organizations. Flanders is one of the autonomous regions of the Belgian federal system with its own parliament, cabinet and public administration, consisting of departments and agencies, and the region can be considered a full-fledged state for the competences under its remit. As such, the Flemish government has been confronted with various social and economic developments, including the 2008 financial crisis and the 2015 refugee crisis, resulting in both policy and structural changes. Notable international reform trends have manifested themselves on the Flemish level as well, with for instance the 2003-2006 period being defined by far-reaching and government-wide reforms inspired by the New Public Management (NPM) doctrine (Verschuere & Barbieri, 2009) and the 2008-2015 period involving structural reforms inspired by the post-NPM doctrine (e.g. Roness et al., 2008) as well as by austerity programs (Vis, Van Kersbergen & Hylands, 2011). The simultaneous presence of these processes implies that various Flemish public organizations have undergone frequent structural reforms in the past decades. The Flemish public sector is therefore a suitable setting for an investigation into the effects of organizational reform histories on innovation-oriented culture.

The remainder of the paper is organized as follows. The next section discusses the importance of innovation-oriented culture and the effect of an organization's reform history in more detail. The utilized data is discussed in section 3. Section 4 presents an in-depth analyses of the examined relationship, and section 5 concludes.

3.2. The importance of organizational culture and the link with an organization's history of reforms

Management literature on innovation argues that organizations in changing and turbulent environments require an organizational culture that stimulates innovativeness, change and that provides space for employees to take risks (Osborne & Brown, 2011; Damanpour, 1991; Dorabjee, Lumley & Cartwright, 2003). In the private sector,

innovation allows companies to pre-empt rivals and changing environments in order to remain competitive (e.g. Damanpour, 1991). While the pressure of competition is often absent in the public sector, environmental factors such as rapid technological change, economic fluctuations, globalization and social change nonetheless confront public organizations with changing and tumultuous sets of demands that require organizational adaptation (Parry & Proctor-Thomson, 2002; Hacker, 2004). A service organization may for instance have to expand its services to new groups of beneficiaries, evolve new services to adapt to changing circumstances in its task environment, develop its existing services to better accommodate its beneficiaries, or even design a total overhaul of its services and interpretation of the relevant target group (Osborne, 1998). Thus, developing cultures that stimulate innovation and flexibility is important to adapt services and processes to the organizational environment and to sustain or increase performance (Damanpour, 1991).

The question is, however, to what extent the repeated imposition of structural reform programs is conducive to the development of innovation-oriented cultures. Culture is considered a relatively stable factor in organizations, which is difficult to mold through rational change initiatives. Indeed, Quirke (1995) argues that culture can sometimes impede perspective changes, noting that *“the force of the culture is for the status quo, culture is the means by which we bring stability to the threat of change”*. However, while culture is difficult to steer in a desired direction through top-down change initiatives, this is not to say that culture remains static after its initial development. Instead, organizational cultures are dynamic in the long-term, gradually undergoing change as external and internal factors emerge to shape it (for an overview of various factors, see Læg Reid, Roness & Verhoest, 2011). Organizations may for instance gradually incorporate the best-practices and views of similar entities through mimetic and normative isomorphism, with the adoption of these external items contributing to a steady adaptation of an organization’s culture (e.g. DiMaggio & Powell, 1983; Manville et al., 2016).

Following Schein (2000, p.8), we have therefore opted to define culture as follows: *“Culture is a pattern of shared basic assumptions that the group learned as it solved its problems of external adaptation and internal integration that has*

worked well enough to be considered valid and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems.” This interpretation of culture implies that external reforms hold the potential to influence culture in desired directions to some extent (see e.g. Wynen & Verhoest, 2015), but that these reforms may also have unintended consequences when the impact of reforms is filtered through the internal perceptions of the organization’s leadership and employees. Frequent and severe reforms of the organization’s structure may be perceived as threatening, stimulating the gradual development of a culture leaning towards centralization, risk-averseness and rigidity. The paradox is that while the ongoing reforms thus induce a rigid and top-down culture, the literature on innovation indicates that decentralization, autonomy and a supporting internal attitude towards innovations and risk-taking are important factors in stimulating innovative behavior (Borins, 2001; Osborne & Brown, 2011; Voorberg, Bekkers & Tummers, 2015; De Vries, Bekkers & Tummers, 2016).

To understand why large amounts of structural reforms implemented in quick succession can be detrimental to the development of an innovation-oriented culture, the response of organizations to the challenges that reforms pose must first be examined. The threat-rigidity effect explored by Staw, Sandelands & Dutton (1981) provides a useful starting point. This model predicts both individual as well as organization and group-level effects. On the organizational and group levels, Staw, Sandelands & Dutton (1981) argue that as threatening situations demand urgent action and endanger the legitimacy of organizational leadership, there will be a tendency to reserve decision-making to a small set of central leaders. Moreover, these leaders will opt to introduce more central steering, in order to prevent lacking coordination and mistakes on the decentral level that would further threaten the organization (see also Mishra, 1996). Dutton (1986) subsequently tested the centralization link in the context of an organizational crisis and found that crisis issues were indeed related to increased monitoring and control initiated by top-level management, and that lower-level echelons were excluded from decision-making by excluding them from communication on the issue. More recent research in various areas points to similar effects in organizations faced with a substantial threat (Daly et al. 2011; Olsen & Sexton, 2009). Thus, in the face of threatening, uncertain and hostile

environments, the literature on the threat-rigidity effect suggests that organizations will show a reflex towards greater centralization.

Public management literature provides strong indications that successive structural reforms constitute situations that could cause the threat-rigidity effect. It has been argued that public managers faced with implementing successive restructurings are forced to cope with continuously changing external demands from political superiors, for instance through new sets of performance indicators and performance contracts (Pollitt, 2007; McMurray, 2007). In addition to these new output requirements, the political superior itself may change due to a reform, forcing senior managers of the involved organization to rebuild social ties and trust with the new principal of the organization and to reaffirm that they lead the organization effectively (Pollitt, 2007; De Vries, 2013). These external demands are moreover accompanied by internal demands for the managers to lead the organization through the reform as well as possible – for instance by appropriately redeveloping the organization's services and management techniques post-reform (see e.g. Manville et al., 2016).

As many structural reforms leave some leeway for organizations to decide on the steps necessary for their implementation, this also encompasses deciding to what extent internal changes are necessary. Senior managers have to weigh the interests of the organization and its employees with appropriate adaptation to the new institutional environment to find a balance found appropriate by the affected employees (Habermas, 1973, p.105), and consequently are faced with the choice to either change the internal makeup as minimally as possible, or to implement more radical changes (Laughlin, 1991; Capano, 2003; Hernes, 2005). Public managers tasked with the implementation of successive reforms are therefore confronted with multiple legitimacy crises, both internal and external, which will lead to cognitive perceptions of threat on part of the managers. We thus expect that managers will operate in line with the predictions made by Staw, Sandelands & Dutton (1981), and will attempt to improve internal coordination by focusing on the proliferation and improvement of control mechanisms and uniform work-methods, as well as draw decision-making power towards themselves to make the urgent decisions they perceive as necessary to maintain legitimacy.

On the individual level, the threat-rigidity effect predicts that employees will have to cope with stress and anxiety flowing from the threatening situation, causing them to fall back on established work patterns and avoid deviant behavior (Staw, Sandelands & Dutton, 1981). This argument finds support in both psychological and management literature on the effects of reforms. The continuous surge of structural changes imposed on the organization has been observed to sever social ties, disrupt manager-employee relationships, destroy valued elements of organizational identity and place employees in unfamiliar settings and positions (e.g. Palma, Pina e Cunha & Lopes, 2010; Pollitt, 2007; McMurray, 2007; De Vries, 2013). In addition to these social and organizational disruptions, employees are repeatedly faced with the direct threat of changes in settings, tasks and rank and reductions in benefits (e.g. Amiot et al., 2006; Nelson & Cooper, 1995). Their focus will therefore be on surviving the variety of reforms imposed as well as possible. In this context deviant behavior will form a risky strategy, as negative appraisals by superiors may potentially have far-reaching effects on the interests of the employee during a reshuffling of the organization. Therefore, in the context of continuous organizational upheaval, we expect that risk-averse behavior will reinforce the centralization process, aiding in the generation of a more control and command oriented culture, which emphasizes rule compliance over discretionary action.

Furthermore, some contributions expect a reduction in the threat-rigidity effect if the threatening event occurred several years ago and no new threats are expected (e.g. Amabile & Conti, 1999). However, when structural reforms are repeatedly imposed on organizations, we expect that the threat-rigidity effects of an organization's reform history will be sustained or increased, as employees in the organization have no recuperation time between past and newly imposed structural reforms.

As the organization gradually moves towards (or maintains) a culture of hierarchical control and compliance due to the repeated structural reforms imposed on it, its subsections become less well-suited for discretionary action. It is exactly this potential for discretionary action, however, which has been shown to be vital in stimulating innovation and bottom-up change in organizations (e.g. Brown & Eisenhardt, 1997). Helpful in this regard is the concept of the ambidextrous organization (Damanpour, 1991; Tushman & O'Reilly III; 1996; O'Reilly & Tushman, 2004, 2011), which can be

conceptualized as an organization having autonomous and decentralized units through which it can simultaneously pursue both incremental and discontinuous innovation (Tushman & O'Reilly III, 1996). In their investigation of 35 organizations that maintained viable structures to stimulate the innovation of new breakthroughs, O'Reilly III & Tushman (2004) for instance noted that successful organizations often established an independent unit with its own structures and work-processes, subject only to senior management. The independent unit could focus on the development of new products or processes and would not be bothered by the forces valuing inertia and old work-methods in other sections of the organization. The ambidextrous organization therefore implies the existence of several cultures in the organization, one associated with existing work-processes and one that is allowed to develop independently. Moreover, O'Reilly III & Tushman (2004, p.4) argue that senior management must be particularly sensitive to the differing needs of the various parts of the organization – they have to be 'consistently inconsistent'.

Similarly, Damanpour (1991) states that although centralized structures may be more effective in implementing changes, he also states organizations that possess low degrees of centralization and formalization are better equipped to initiate the development of innovations. Mintzberg (1983) reasons along the same lines, arguing that divisionalized and bureaucratic structures impede innovation. Conversely, dynamic organizations that emphasize the discretion of small project teams, create an adaptable organizational structure and integrate their mid-level management as peers into the project teams should be better suited to innovate (Mintzberg, 1983). He succinctly summarizes the argument for the link between decentralization and innovation as: "*innovation requires entrepreneurship, and entrepreneurship does not thrive under standardized external control*" (Mintzberg, 1983, p.242). Brown & Eisenhardt (1997), studying the differences between successful and less successful private innovators, similarly find that those companies linking decentralized and lowly structured work-processes with a steady rhythm of new projects achieve the best results, and argue that too rigidly designed work-processes may inhibit innovation.

Contributions on public sector innovation hint at a similar link between centralization and decentralization and the extent to which governmental organizations

are equipped to initiate innovations. Various scholars have pointed out that decentralized structures that promote autonomy and support new ideas are beneficial to innovative behavior, while centralized, top-down and rigid structures impede such behavior (Borins, 2001, 2002; Voorberg, Bekkers & Tummers, 2015; Wynen et al., 2014; Arundel, Casali & Hollanders, 2015; De Vries, Bekkers & Tummers, 2016). Kim & Chang (2009), while not directly testing the effect of decentralization on innovation, do note that an organizational environment which stimulates learning and information-sharing is conducive to innovative behavior. The presence of these factors in an organization imply that central managers stimulate and allow their employees to engage in these activities (see also e.g. Borins, 2001, 2002), instead of limiting their discretion through top-down command and control structures. Osborne & Brown (2011), moreover, emphasize the importance of mandating organizational members to take the risks involved with the innovation process and to manage these risks without stifling the available space to innovate. Thus, we may expect the centralizing and risk-averse tendencies caused by the threat-rigidity effect to have similar inhibiting features for innovation in the public sector as they would have in the private sector.

Based on the above, we propose that repeated reforms may generate sustained or – in some cases – increasing levels of perceived threat in the organization (see also Pollitt, 2007; Grunberg, Moore, Greenberg, 2008; De Vries, 2013). Therefore, organizations that have experienced series of (severe) reforms in their recent histories should have greater tendencies towards centralized, rigid and risk-averse behavior. These extensive reform histories should, through the threat-rigidity effect, thus also have a greater detrimental effect on the innovative behavior of the organization. As the repeatedly threatened organization persistently discourages risk-taking and autonomy, a culture that inhibits innovation instead of encouraging it gradually develops. Thus, we expect that an extensive history of structural reforms, which are often *inter alia* intended to produce flexibility and innovation, will paradoxically result in reduced levels of innovation-oriented cultures. The remainder of this paper will be devoted to empirically testing our expectations.

3.3. Data source, variables and descriptive statistics

In order to empirically test the relationship between an organization's history of structural reforms and an organization's innovation-oriented culture, we make use of two different data sources. An indicator for the structural reforms organizations experienced throughout their lifetime is constructed with the help of the Belgian State Administration Database (BSAD) while data on innovation-oriented culture is provided by the COBRA-network ("Comparative Public Organization Data Base for Research and Analysis").⁷

The BSAD captures for all Flemish public organizations in the period between 1980 and 2013 all changes in formal organizational structure from the founding of an organization to its termination. The BSAD uses a similar structure as the Norwegian State Administration Database (NSAD). More precisely, a predefined categorization that classifies organizational change events in three main categories is used: changes related to the founding of an organization, changes related to the survival or maintenance of an organization, and changes related to the termination of an organization. For each main category of change events there are several sub-categories, including splitting, secession, merger and absorption, as well as movement of organizations vertically and horizontally within the state apparatus and into or out of it (Rolland & Roness, 2011, 405-407). As we are interested in the effects of reforms on the culture of existing organizations, only maintenance events are taken into account. Structural reforms leading to the creation or ending of public organizations are therefore not included in our analysis. The following maintenance events, categorized according to their expected impact on the organization, are available:⁸

⁷ For more information, see; <http://soc.kuleuven.be/io/cost/index.html>.

⁸ The complete list of structural events (starting, maintenance and ending events) included in the BSAD, as well as an explanation on the categorization (major, moderate and minor) as well as an example reform trajectory can be consulted in Appendix 3, section A.3.1.

Major impact	Moderate impact	Minor impact
Restructuring the organization by absorption of (parts or tasks from) another organization	Restructuring the organization by changing its legal status	Restructuring the organization by shifting organizations to another ministerial portfolio (sub-ordinance to another ministry)
Restructuring the organization by secession of parts or tasks of the organization (which are shifted to other organizations)	Restructuring the organization by the attribution of new tasks, not existing before in the public sector	Change of name

Table 3.1. Available maintenance events in the BSAD, categorized according to their expected impact on the organization

The BSAD allows us to vividly capture the structural reforms in the Flemish public sector, of which many stem from an array of environmental processes, such as the succession of several reform waves, inspired by NPM and Post-NPM doctrines, fast-paced societal change and economic pressures. With regard to those structural reforms inspired by administrative doctrines, the 90's and early 2000's showed an increasing preference towards New Public Management (NPM) ideas of governing, resulting in legal form changes and shifts from public to private service provision (Moynihan, 2006; Lapsley, 2009; Capano, 2003; Hacker, 2004; Palma, Pina e Cunha & Lopes, 2010; Manville et al., 2016). Subsequently, an additional wave of structural reforms based on the post-NPM doctrine of reintegrating independent organizations and creating a joint-up government sought to combat the increasing fragmentation of the Flemish public sector (Christensen & Læg Reid, 2011; Bumgarner & Newswander, 2012; Christensen, 2012).

Beyond these policy trends, ongoing societal and economic processes seem to be an important factor causing the imposition of structural reforms. A prominent recent example is the 2008 financial crisis and the subsequent period of austerity in European governments, providing a budgetary impetus for the Flemish government to reduce the size of its government through structural reform (Vis, Van Kersbergen & Hylands, 2011). Moreover, the ongoing devolution of powers from the federal Belgian government to the regional government has repeatedly generated structural reforms in order to accommodate newly transferred tasks and units. While these processes are the root cause

for a large quantity of reforms in the Flemish public sector, a sizeable amount of *ad hoc* and *sui generis* structural reforms are also imposed on public organizations. These are not directly traceable to any of the aforementioned government-wide reforms, but are the consequence of policy sector-specific policy changes, media storms or specific incidents linked to individual organizations.

To illustrate how these environmental factors bring about structural reform in practice, Appendix 3 section A.3.3. includes the structural reform history of the Flemish Service for Job Mediation and Vocational Training ('Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding' - VDAB), one of the 45 organizations in our sample. This organization has encountered several of the aforementioned processes during its lifetime, including its creation through the devolution of powers to the regional level, the 2003-2006 NPM-inspired Better Administrative Policy reform, the privatization of some of its services and several *ad hoc* and *sui generis* structural reforms due to e.g. sector-specific changes in labour market policies.

As Flanders is an autonomous region in the federalized system of Belgium, the Flemish government enjoys substantial policymaking and policy-implementing autonomy in most sectors. A particular element of Belgian federalism is that federal laws have the same legal standing as decrees issued by the regional governments, implying that federal governments and regional governments have equal legislative and executive powers. This feature implies that the Flemish government for its own competences is to be perceived as a full-fledged government, making its public sector comparable to that of Western European states. The combined presence of substantial environmental volatility in the Flemish public sector and the region's far-reaching autonomy make it a suitable setting for our investigation into the effects of reform histories on innovation-oriented cultures.

Data on organizational culture comes from the COBRA-network which developed a common questionnaire in order to survey senior managers of public organizations in particular, (semi)-autonomous agencies located directly beneath ministries and ministers (see Wynen and Verhoest 2015). The top-level management (the Chief Executive Officers (CEO) level) of these organizations was asked to fill in a web-based questionnaire containing several types of questions (i.e. perceptions of autonomy

and control, innovative behaviour, management and organizational culture). Although the COBRA data originally included 15 different countries, we only use the Flemish data since these can be combined with the BSAD. The response rate for the Flemish survey was 70%. Missing data on the outcome, explanatory, and/or control variables, leaves us with a sample size of 45 Flemish public organizations. These organizations proved to be representative for the total population, with a broad distribution across organizational types, primary tasks and policy fields.⁹ Purely private-law based entities in the hands of the Flemish government were excluded from our selection, as the mechanism underlying reform stress in the public sector may not be generalizable to such hybrid organizations.

3.3.1. Measuring innovation-oriented culture

A measurement instrument for organizational culture as developed and tested by Tepeci (2001) was used in the COBRA survey (see also Lægheid et al. 2011). Following Tepeci's (2001) clustering of culture-items, the following set of items is used to construct the dependent variable on an innovation-oriented culture (see also Lægheid et al. 2011; Wynen et al. 2014):

- Innovation,
- Risk taking,
- Willingness to experiment, &
- Creativity.

Each organization was asked to indicate on a scale of 0-6 how distinctive each of these items was for their organization as a whole. These scores have been aggregated and the sum has been divided by 24, resulting in a value between 0 and 1. This index has been found to be reliable (Cronbach's Alpha is 0.8425). This was also confirmed by an exploratory factor analysis¹⁰, whereby all four items load on the same factor.

As discussed by Wynen & Verhoest (2015), there is a high likelihood that this kind of measurement of culture is biased. Organizations may report to have an

⁹ The representativeness of the data was tested using Chi-square goodness of fit tests. The number of agencies per type in the sample was compared with the number of agencies per type in the population.

¹⁰ A polychoric correlation matrix was employed in order to take the categorical nature of the items into account.

innovation-oriented culture, but this doesn't mean that they also exhibit innovative behavior. Hence we will conduct a similar robustness check as the one applied by Wynen & Verhoest (2015). We will correct the original index with an index capturing the presence of 'new' and 'innovative' management techniques. This index is constructed based on the following items:

- Use of quality standards for production and/or services;
- Use of quality management systems such as; ISO, CAF, EFQM, etc.;
- Use of customer/user surveys; use of service points for users;
- Use of customer/user panels.

For each of these management techniques the agency CEO was asked to which degree these were implemented and used in their organization (scale from 0-4). These items were aggregated and divided by 16, leading to a value between 0 and 1. This index was found to be reliable (Cronbach's Alpha of 0.79). Moreover, all items load on the same factor when running an explanatory factor analysis¹¹.

A 'corrected' index was created by comparing the original index with the index on the use of these innovative management techniques. In case of a divergence between the two indexes, penalties were given. This was only done in one direction; if organizations reported to have a higher score for innovation-oriented culture than the actual score on the use of innovative management techniques. Such a robustness check thus corrects for an overestimation of the value for innovation-oriented culture. A complete list of penalties per difference between the indexes is provided in Table 3.2.

Difference between the index on an innovation-oriented culture and the index on the use of innovative management techniques equals:		Penalty (the initial index of an innovation-oriented culture is reduced by:)
0.1	0.2	0.1
0.2	0.3	0.2
0.3	0.4	0.3
0.4	0.5	0.4
0.5	0.6	0.5

¹¹ Again using a polychoric correlation matrix to take the categorical nature of the items into account.

0.6	0.7	0.6
0.7	0.8	0.7
0.8	0.9	0.8
0.9	1	0.9

Table 3.2. Construction robustness check innovation-oriented culture

3.3.2. An organization's history of structural reforms

Based on information from the BSAD, it was possible to construct for each organization an indicator for its history of structural reforms. This history was reconstructed starting from the founding date of each organization until the survey year of the COBRA data (2013). This is calculated in two steps. First, we calculate for each organization a value for organizational history based on the following formula;

$$\sum \left(\frac{\text{Strength of an event}}{(2013 - \text{Year of reform event})} \right)^2 \quad (1)$$

Here year of reform event refers to the date when the event took place and 2013 refers to the survey year of the COBRA data. Organizational history is taken into account until that year. The impact of each reform event depends on the date when it occurred. The further away in time, the lower its impact factor. It is important to note that we included a squared term in order to account for the fact that the effect of reform is expected to decrease in a nonlinear way. Strength of an event is a subjective measure that corresponds to the three levels of reforms distinguished earlier (see Table 3.1, and Appendix 3 section A.3.2. for a more thorough discussion). More accurately: in case of a major reform the numerator has been set to 3, to 2 if the event is expected to have a moderate effect on the organization and the numerator is equal to 1 if the effect of the event is expected to be minor. Each reform the organization encountered is as such given an impact. These impact factors have been aggregated per organization. This in turn led, for each organization, to a value for its history of reforms.

It is however, likely that organizations compare their own history of reforms with that of other organizations within the same government. In a second step, an

organization's history of reforms is therefore related to the average history which is calculated across all organizations.

$$\text{Organizational history of reforms} = \frac{(1)}{\text{mean}(1)} \quad (2)$$

A significant negative impact for this indicator (2) would imply that large amounts of structural reforms imposed on an organization will be detrimental to the degree to which it possesses an innovation-oriented culture.

3.3.3. Control variables

Furthermore, we control for some other factors which are based on previous studies, believed to influence organizational culture (e.g. Verhoest et al. 2010, Læg Reid et al. 2011, Wynen et al. 2014). This reflects the idea that innovation-oriented culture may be determined in part by differences in the characteristics and design of public organizations, such as their tasks and size (Borins, 1998; Damanpour, 1991; Læg Reid et al. 2011). Our dataset allows us to control specifically for the following factors:

- 1) A dummy **Type** is included in order to examine the effects of agency type. Type is coded 0 if the organization is a department, and 1 if the organization is one of the various types of arms-length and independent agencies in the Flemish system. According to literature (Bouckaert & Van Dooren, 2003; Bach and Jann, 2010) organizations closer to government are less in direct contact with citizens and are more politicized, which is typically seen as hampering an innovation-oriented culture.
- 2) Task related factors are also taken into account by the inclusion of a dummy (**Services**). The dummy equals 1 if the agency's primary task includes general public services or business and industrial services. It equals 0 for primary tasks related to regulation, exercising public authority and policy formulation. Agencies having service delivery as primary task have been found to have a greater focus on customers since they interact most with citizens and private organizations as

customers (Borins 1998; Læg Reid et al. 2011). This in turn is expected to have a positive effect on an innovation-oriented culture.

- 3) Size (**Size (FTE)**) measured in FTE is included as a continuous variable. Following Hull & Hage (1982), Borins (2001) and Damanpour (1989, 1991) size can have an effect on organizational culture.
- 4) Age (**Age**) measured as 2013- founding date is included as a continuous variable. The development of a distinct culture and tradition within an organization takes some time (Læg Reid et al. 2011). As such age can be linked to organizational culture (Krause 2003).

Because the distributions of Size and Age are highly skewed, we use the logarithms, that is; $\ln(\text{Size})$ and $\ln(\text{Age})$ in our models.

Variable	Description	Mean	SD	Min	Max
Organizational history of reforms	This variable reflects the number, severeness and sequence of reforms an organization encountered and simultaneously takes the history of other organizations into account.	1.136	2.851	0	16.270
Innovation-oriented culture (original)	Index based on the following items: innovation, risk taking, willingness to experiment and creativity	.671	.135	.429	.929
Innovation-oriented culture (robustness check)	The original index which is corrected for the use of the following innovative management techniques: use of quality standards for production and/or services; use of quality management systems such as; ISO, CAF, EFQM,...; use of customer/user surveys; use of service points for users; use of customer/user panels.	.614	.142	.38	.89
Age (log)	2013 - birthdate (log)	2.439	.692	.693	3.497
Type	Type (0= Department/1=otherwise)	.822	.387	0	1
Size (log)	Size (number of FTE) (log)	5.452	1.107	2.902	8.290
Task	Service delivery (0= primary task other than service delivery/1= service delivery as primary task)	.511	.506	0	1

Table 3.3. Descriptive statistics (N=45)

Table 3.3 shows summary statistics for the main variables, while in Table 3.4 the correlation matrix is presented. Not surprisingly there appears to be a strong correlation between task and type of public organization. Consequently, we also test for multicollinearity using the variance inflation factor. The mean VIF equals 1.29 whereby, as expected, the highest VIFs exist for Task (1.50) and Type (1.40). These values indicate that no collinearity exists between the variables.

Variables		(1)	(2)	(3)	(4)	(5)	(6)
Organizational history of reforms	(1)	1					
Innovation-oriented culture (original index)	(2)	-0.300**	1				
Age	(3)	-0.091	0.171	1			
Type	(4)	-0.071	0.006	0.356**	1		
Size	(5)	0.033	-0.048	0.241	0.084	1	
Task	(6)	-0.218	0.031	0.249*	0.475***	0.299**	1

* p<0.10, ** p<0.05, *** p<0.01

Table 3.4. Correlation matrix

3.4. Analysis and results

Standard micro-econometric techniques are employed for the multivariate analysis. More precisely, standard Ordinary Least Squares (OLS) is utilized. Admittedly, Tobit models are the preferred estimations, as they account for the fact that our dependent is bounded between 0 and 1. However, these estimations rely on the restrictive assumption of normality and are sensitive to small sample bias (Long, 1997). OLS does not take into account that our dependent is bounded at 1, but has the advantage of not relying on the normality assumption and being less sensitive to small sample bias. We therefore opted to only present the OLS results. However, the Tobit results led to similar results (same sign and significance levels) and are available upon request from the authors.

The OLS results are presented in Table 3.5. In the first column, the effect of organizational history, taking the number of reforms, the strength and time effect of a

reform event, and history of other organizations into account, is examined on the original index of an innovation-oriented culture. While in the last column organizational history is tested on the ‘corrected’ index on an innovation-oriented culture (Robustness Check). Both models have been tested for heteroscedasticity, revealing no significant methodological issues.

Variables		
	Original index	Robustness check
Organizational history of reforms	-0.0138* (0.00736)	-0.0151* (0.0076)
Age (log)	0.0371 (0.032)	0.0422 (0.0329)
Type	-0.0219 (0.0628)	-0.00194 (0.0646)
Size (log)	-0.0086 (0.0198)	0.0145 (0.0204)
Task	-0.00786 (0.0491)	-0.0127 (0.0506)
Constant	0.664*** (0.119)	0.455*** (0.122)
Observations	45	45
R-squared	0.122	0.156
Log-Likelihood Full Model	29.602	28.305
Breush Pagan test for heteroskedasticity	$\chi^2(1)=1.54$	$\chi^2(1)=1.09$
Skewness and kurtosis test for normality dep. var.	$\chi^2(2)=2.71$	$\chi^2(2)=3.69$

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 3.5. Regression (OLS) results for the impact of history on an innovation-oriented culture

When examining the results for the original index of an innovation-oriented culture, we notice that the effect of reform history is negative and significant. Consequently, organizations with a more turbulent history of reforms are less likely to develop an innovation-oriented culture. This finding seems to support our proposition

that larger and more severe histories of reforms will inhibit innovation-oriented cultures, and will instead cause the exact opposite. As was noted in section 2, we consider the most likely explanation for this observation that too many reforms imposed in a too short a time span lead to more centralized structures within the organization, which in turn hampers the innovation-oriented culture within these organizations. As a robustness check we also tested different operationalisations of organizational history (one which only accounts for the number of events an organization encountered and one which takes the number and strength of events into account). However, the results did not differ significantly and thus proved that these are robust.

None of the other explanatory variables (Task, Age, Size and Type) have a significant effect on innovation-oriented culture.

Yet as discussed, the original index of an innovation-oriented culture is likely to be biased. What organizations say they do, does not necessarily reflect in their behaviour. Hence we have constructed a more robust measure whereby we compare the original index with an index on the presence of innovative management techniques within the organization. The regression results on this 'corrected' index of an innovation-oriented culture is presented in the last column of Table 3.5. Results however stay the same; too many reforms lead to a lower degree of an innovation-oriented culture. In short, it does appear that our initial results on the original index of an innovation-oriented culture are robust.

3.5. Discussion

In this paper we have proposed that turbulent structural reform histories may adversely affect the degree of innovation-oriented culture in public organizations. We have argued that the upheaval caused by the imposition of frequent and severe structural reforms on public organizations may result in organizations reflexively centralizing to cope with the threatening situation (Staw, Sandelands & Dutton, 1981; Amabile & Conti, 1999; Daly et al., 2011). In turn, such a centralized and rigid structure was argued to be un conducive to an innovation-oriented culture of an organization, as uniformity, control and coordination are emphasized above autonomy and discretionary action. However, room for discretionary action, support for the activities and ideas of employees that

directly execute the organization's tasks and a tolerance for risk are consistently mentioned as important factors in fostering an organization's innovativeness (Damanpour, 1991; Tushman & O'Reilly III, 1996; Borins, 2001, 2002; Voorberg, Bekkers & Tummers, 2015; Arundel, Casali & Hollanders, 2015; De Vries, Bekkers & Tummers, 2016), and it is exactly these factors which are diminished by the threat-rigidity effect.

The results presented in the previous section provide support for these arguments. Utilizing data on the structural reforms imposed on Flemish public organizations as well as self-report surveys on innovative culture, two regression models were developed. These models indicate that structural reform histories significantly impact the degree to which organizations possess an innovation-oriented culture. Organizations that had recently undergone trajectories of severe and frequent structural reforms were shown to possess a relatively lower score on our items of innovative culture (corrected by scores for usage of innovative management techniques). This effect remained significant after controlling for other factors which have been suggested as antecedents to innovation-oriented organizational culture, specifically task, type, size and age variables (Hull & Hage, 1982; Borins 1998; Damanpour, 1989; Damanpour, 1991; Krause, 2003; Lægreid et al. 2011), which suggests that our results are robust.

Our findings corroborate the arguments made by the burgeoning literature on the side-effects of extensive and repeated reform programs following doctrines such as NPM and post-NPM (Pollitt, 2007; De Vries, 2013; McMurray, 2007). It seems that more turbulent structural reform histories are indeed capable of generating a state of organizational upheaval, in which successive reforms result in potentially unintended consequences for public organizations. Furthermore, the results presented here also seem to provide indirect support for theories on the threat-rigidity effect (Staw, Sandelands & Dutton, 1981) and the crisis-centralization thesis (Dutton, 1986; Olsen & Sexton, 2009). While centralization and rigidity were not directly tested with our data, earlier work positing these variables as potentially being caused by threats such as structural reforms and potentially resulting in less innovation-oriented organizational cultures make them likely candidates for the causal mechanism underlying the relationships found in the course of our study. Our examination of the organizational-level consequences of the

stress incurred by structural reforms across a variety of organizations thus lends further support to already existing theories from organizational psychology and public reform literature, which up until now have largely remained limited to studying one or several organizations (e.g. Dutton, 1986; Olsen & Sexton, 2009; Grunberg, Moore, Greenberg, 2008; McMurray, 2007, but see De Vries, 2013).

Simultaneously, the contribution adds novel insight into the factors that contribute to the development of innovation-oriented cultures – or the lack thereof – in the context of the public sector, as to our knowledge this article is the first to measure the impact of multiple reforms of varying severity (e.g. Damanpour & Schneider, 2009; Damanpour, 1991; De Vries, Bekkers & Tummers, 2014). According to the results, organizations attempting to stimulate an innovation-oriented culture should avoid imposing reforms too frequently, as this could be counterproductive to their intentions. Instead, organizations should aim for a balance where necessary changes are implemented but enough time is given for the organization to recuperate from the (structural) reform before a new set of changes is introduced.

At this point it is also important to note that our results do not necessarily imply that every type of organizational change is detrimental to an organization, and other researchers have for instance found that organizations capable of steady, internally developed changes on the project level are better innovators (Brown & Eisenhardt, 1997). Similarly, it is worth reiterating that a single structural reform in itself might have beneficial effects (see e.g. Dan and Pollitt 2015). Our argument does not undermine the validity of these viewpoints as it looks at a specific form of organizational change. We posit that when an organization undergoes multiple and externally dictated structural reforms during its lifetime, these reform events will repeatedly generate stress for employees. In turn, the stress accumulated from a fast-paced sequence of severe structural reforms results in detrimental side-effects on innovation-oriented culture.

Finally, although this paper is only a first exploration of the effects that successive reforms may have on organizational culture in the public sector, our results nevertheless also hold some important practical implications. In particular, the paper suggests that unintended side-effects and an organization's history should be important

considerations for policy-makers and politicians to take into account when deciding upon the implementation of a reform.

Our analysis was limited by several factors, which warrant some caution when interpreting our results. While we possessed a representative sample of organizations in the Flemish public sector, the sample size was unfortunately relatively low. Furthermore, the cross-sectional data on our dependent variables imply that some uncertainty still exists on the causal direction of the relationships found. It is not entirely ruled out that organizations that perform poorly on innovation are reformed more often, or that a dual causation exists whereby both a low degree innovation-oriented culture and a high amount of reforms explain one another. Nevertheless, as many reforms in our sample are attributable to factors other than organizational performance, including politicization of the organization and the aim of governments to implement new management ideas, it is relatively safe to assume that our interpretation of the causal direction is correct. Finally, while the research seems to indirectly support the presence of a centralizing reflex in heavily reformed organizations, the data utilized here only allows us to presuppose the existence of this reflex through theoretical arguments.

3.6. Conclusion

In this article we examined the impact of histories of structural reforms on the innovation-oriented cultures of public organizations in the Belgian region of Flanders. The results of our analysis provide support for the argument that frequent and severe reforms may have significant and detrimental side-effects on an organization, even after controlling for other factors such as age, task, size and type. The article adds valuable quantitative findings to the literature on organizational-level consequences of the stress incurred by structural reforms, as studies conducted up until now have largely remained confined to studying only one or several organizations (e.g. Dutton, 1986; Amiot et al., 2006; Grunberg, Moore, Greenberg, 2008; McMurray, 2007).

In addition to the immediate implications of the analysis for the design of future reform programs, the results suggest that reform history is a promising avenue for further inquiry. Moreover, as this contribution is explorative in nature, further research is needed to confirm and complement the analyses presented here. Research that also incorporates

panel data is particularly necessary, as this will allow for the verification of the causal direction of the relationship found in our paper. Such a research design could also include variables on various cultural orientations, centralization and control in order to more fully test the causal mechanism proposed here. As government reforms are frequently being imposed on public organizations, such research into the detrimental, unintended and unexpected effects that these reforms can cause is more necessary than ever.

Chapter 4: Taking one for the team in turbulent times? How the disruptive and constricting effects of repeated structural reform may disrupt team-oriented cultures

4.1. Introduction

Given that employees in the Western world often spend much of their lives in the workplace, it is perhaps no surprise that the quality of interpersonal workplace relationships are an important determinant of individual-level well-being, not only in terms of job satisfaction but also in terms of overall life satisfaction (Helliwell & Huang, 2010). Fostering an atmosphere conducive to such relations is not only in the interest of employees, however, as various of studies have already demonstrated a link between team-oriented cultures and the strength of interpersonal workplace relationships and various aspects of organizational performance (Glomseth et al., 2007; Watson et al., 1998). Accordingly, an organizational culture that emphasizes values such as team reciprocity, collaboration, trust, empathy, non-opportunistic behavior and a sense of belonging can be an important asset for any organization. Simultaneously, the turbulence in modern organizational life can sometimes be so severe that developing such a culture may be difficult. High rates of change may for instance mean that individuals are frequently reshuffled into new teams, repeatedly requiring them to re-establish lost social ties (McMurray, 2007). If such high rates of change persist over the years, the question can be raised whether team members will still adhere to values such as team collaboration and interpersonal trust, or whether such cultural traits may gradually be lost to an increased tendency to de-emphasize team-oriented behaviors and emphasize formal interaction and self-reliance (McMurray, 2007).

We therefore examine the potential impact of sequences of multiple structural reforms on team-oriented culture in Flemish public organizations. We theorize that this effect may operate through two routes – through the disruption of existing social ties and through the continuous state of uncertainty that a repeatedly reformed organization is in (Susskind et al., 1998; Shah, 2000; Van Emmerik & Euwema, 2008). Regarding the first mechanism, we argue that repeatedly reformed organizations may see co-workers come and go and repeated internal employee reshuffling, which in turn causes trust- and interpersonal relationships to remain immature. The resulting fluid nature of interpersonal relations in repeatedly structurally reformed organizations may

detrimentally affect socialization, as norms, values and assumptions relating to team-orientation are passed on less effectively (Shah, 2000; Shaw et al., 2004; Gibbons, 2004).

The second mechanism is based on threat-rigidity theory, which postulates that the uncertainty and sense of urgency generated by threatening situations (such as the severe turmoil caused by major structural reform) may generate a constricting effect in organizations (Staw et al., 1981; Muurlink et al., 2012). Managers tend to centralize, formalize and sanction deviant behavior, both to deal with the urgent challenge of implementing a structural reform and to maintain operational continuity during the transition process. Simultaneously, employees may tend lay low to comply with the increased formalization and to avoid sanctions and the further uncertainty they imply. When such a threat-rigidity effect is induced over the long-term due to repeated reform, a top-down and risk-averse tendency may gradually be introduced in the organization (Wynen et al., 2019a), which in turn negatively impacts the tendency of individuals to engage in extra-role behaviors to support their team.

Given that some organizations are in structural reform trajectories consisting of multiple reforms and lasting years on end (Pollitt, 2007; Bulder et al., 1996), we may expect such effects on the perceptions and behaviors of employees to gradually begin to manifest in organizational cultures. Gaps in employees' inter-personal networks and risk-averse working behaviors may eventually seep through into a reduced cultural focus on team-based working. While such unintended side-effects may be mitigated with appropriate change management or dissipate in time, it is likely that introducing additional structural reforms at a high rate prevents the organization from fully recovering from its earlier reform trajectory (Wynen et al., 2019a).

We focus on the impact of structural reform in particular, defined as changes that alter organizational boundaries in terms of units included, alter tasks attributed to the organization and/or alter the structural embeddedness of the organization in the wider public sector (i.e. legal form and the ministerial portfolio in which the organization is positioned) (MacCarthaigh & Roness, 2012; Læg Reid et al., 2010). We opt to examine the impact of this type of reform as it is consistently measurable over the years through publically available Flemish governmental decisions and laws, and thus allows us to

accurately reconstruct long-term reform histories. Moreover, as structural reform often results in redrawn organigrams and task orientations, it is relatively likely to disrupt existing social ties within organization (Shah, 2000; Susskind et al., 1998), making such reforms particularly likely candidates to produce detrimental effects on team-oriented cultures.

We investigate our expectations by mapping the history of structural reforms experienced by two samples of over 40 Flemish public sector organizations, incorporating all structural reforms imposed over their lifetimes, and linking this with survey data on perceptions of culture. Such an examination holds several benefits over usual research into the effects of organizational change, which usually focuses on one specific reform event. In particular, it allows us to take into account the accumulated effect of all changes, with some lingering on through organizational memory while others require adaptation efforts even years after their initial introduction. Moreover, it allows us to investigate the effect of trajectories of structural reforms in multiple organizations, whereas most investigations are limited to one or several organizations.

4.2. Unpacking team-oriented organizational culture

Organizational culture is often considered to consist out of a coherent set of shared artifacts, symbols, beliefs, norms and assumptions of the organization's members (Meyerson & Martin, 1987; Rousseau, 1990; Harris & Ogbonna, 1999; Harris & Ogbonna, 2002). According to Schein (1984), these aspects constitute different levels at which culture may be analyzed. At the level of artifacts and symbols we may see how an organization's culture manifests in the organization's architecture and members' behavior. Under this level one may distinguish the beliefs, values and behavioral norms held by the organization's members. Finally, the lowest level constitutes shared but often unconsciously held assumptions determining and underpinning the higher-level perceptions, cognitions and behaviors of employees (Glomseth et al., 2007). It must be noted that in the original conception put forward by Schein, this deepest level of assumptions was considered to be the organization's culture, with higher levels being

manifestations of the underlying culture. Here, however, we adhere to the more pluralistic view that incorporates all levels as elements of an organization's culture and which has become increasingly prevalent in more recent management literature (Harris & Ogbonna, 2002; Chatman & O'Reilly, 2016).

In addition to acknowledging the multi-leveled nature of culture, authors usually distinguish between several dimensions of organizational culture, which may co-exist simultaneously (Harris & Ogbonna, 2002). Van den Berg & Wilderom (2004), comparing several well-known typologies, find that most authors include some form of team-oriented culture, although the nomenclature of the dimension differs per author. Others have for instance coined similar dimensions such as support orientation and employee orientation (Van Muijen et al., 1999; Hofstede et al., 1990). We use the term team-orientation as this phrasing emphasizes values related to the harmonious interaction between colleagues that underlie dimension emphasizes, while recognizing that the promoted behavior is directed internally, that is towards the organization's members (which is dissimilar from for instance client-oriented cultures). Team-oriented cultures hold strong assumptions of and beliefs in the value of collaboration, friendship and self-sacrifice for the team (Erdogan, Liden & Kraimer, 2006). Reciprocity is highly important between both colleagues and supervisors and subordinates. Opportunistic behavior and antagonism are instead discouraged, as these may result in feelings of injustice and threaten the bonds between organizational members (Erdogan, Liden & Kraimer, 2006). Instead, organizational members exhibit a group orientation based on trust, extra-role behaviors and personal initiative (Glomseth et al., 2007; Lievens et al., 2008). At the higher artefact level these organizations are likely to manifest strong HR functions (Van den Berg & Wilderom, 2004) and team activities, while de-emphasizing the need for strong management positions (Glomseth et al, 2007).

4.2.1. Change and team-oriented culture

Although much remains unclear regarding the degree to which culture is controllable and malleable, scholars by and large agree that culture is formed through both the influence of senior officials championing a given culture (whether consciously or subconsciously), the decentralized, day-to-day interactions between the organization's

members and external signals (Harris & Ogbonna, 1999). Moreover, it is becoming increasingly clear that forcefully changing an existing organization's culture is often difficult, as such an effort implies altering strongly ingrained values and previously held assumptions (Schein, 1984). Simultaneously, cultures do undergo some degree of perpetual, albeit gradual change (Meyerson & Martin, 1987), as new members bring in new ideas and various internal and external signals challenge prevalent norms, values and assumptions. Organizational change, including structural reform, constitutes an important source of such cultural change, as it inherently suggests that previous organizational behaviors – and in some cases underlying norms, values and assumptions – require an adaptation to current and future realities (Bulder et al., 1996).

In some cases, structural reform challenges pre-existing cultures as its explicit goal, aiming to foster a different cultural direction (Wick et al., 2015; Harris & Ogbonna, 2002). In others, the challenge to predominating cultures is more an inadvertent consequence, occurring for instance when several agencies are merged, bringing about cultural conflicts on issues such as hierarchical steering vs. autonomy, priorities, professional values, work-methods, etc. (Schein, 1984, 34-35). Whatever the case, cultures usually require some time to gradually adapt, with changes in underlying assumptions and beliefs often taking years to manifest (Schein, 1984, 291). Organizational change that recognizes this facet thus takes into account that shifting cultures requires a multiannual commitment in a given direction (Harrison & Ogbonna, 1999). However, when an organization undergoes a sequential combination of various structural reform efforts, it is possible that cultural assumptions are challenged frequently, severely and in some cases in a discontinuous manner – i.e. with a new change being in opposition to the direction of a previous change.

Although they remain theoretical in our study due to data limitations, earlier studies point to two potential mechanism through which structural reform may disrupt an organization's culture. We postulate that structural reform may affect organizational cultures through a indirectly through the uncertainty and perceptions of threat generated by such structural reform, as well as through a more direct social disruption mechanism (Daly et al., 2011; Shah, 2000; Bulder et al., 1996). Moreover, we argue that when

structural reform is repeated relatively frequently, the impact of these two mechanisms on an organization's team-oriented culture may be increased, as cultural norms, values and assumptions are repeatedly challenged. The following paragraphs therefore elaborate on the uncertainty and threat mechanism, the social disruption mechanism, and the nature of repeated structural reform *vis-à-vis* single instance reforms.

We first discuss the indirect mechanism, operating through perceptions of threat and uncertainty. Threat-rigidity theory suggests that organizations, when confronted with adverse circumstances threatening to their continued survival and well-being, may undergo a 'constricting' effect (Staw et al., 1981). On the individual level, perceptions of threat cause both managers and rank-and-file employees to experience high levels of uncertainty. Employees and managers alike may for instance be confronted with potential changes in their social environments, to their career paths, to valued aspects of their jobs, geographical changes or a combination thereof (Amabile & Conti, 1999; Muurlink et al., 2012). What is more, managers are likely to perceive a sense of urgency in implementing a reform's main tenets, ensuring continuity during a time of transition and restoring the organization to normal operations as soon as possible (Amabile & Conti, 1999; Daly et al., 2011). Responsible for managing and mitigating such an urgent threat, management-level employees (consciously or sub-consciously) tend to introduce increased levels of centralization, formalization and sanctioning for deviant behavior (Muurlink et al. 2012).

As the organization manifests such a top-down administration, increasingly hierarchical interactions, acquiescence and defensiveness on the lower levels and a lack of openness for dissent and criticism, providing a long-term supportive environment for (co-)workers may begin to take a backseat to dealing with urgent operational issues. More specifically, centralized, hierarchical and top-down modes of control may undermine the autonomy and safety of individual employees to go beyond their individual roles to aid one another (Amabile & Conti, 1999). Risk-adversity on the individual-level may add to this, as following orders and procedures to not incur informal sanctions begins to take precedence. Thus, individuals may remain silent regarding issues in teams' interpersonal relationships, deriving team leaders from information on potential issues occurring within teams (Wynen et al., 2019a).

Second, repeated structural reform may disrupt existing teams through the reshufflings it generates. This is readily apparent for changes in organigrams (e.g. mergers, secessions), as individuals are formally (and quite often physically) transferred to other sections or even other organizations. In some cases such transfers may be voluntary, but in many transitions transfers may be imposed on workers and their teams against their desires. This severs social ties within the organization, requiring individuals to re-establish social ties in new teams, within new sections and sometimes entirely new organizations. In such circumstances, the social capital built up within the pre-reform organization may be disrupted to at least some degree (Bulder et al., 1996), contributing to further risk-averse behavior and individuals displaying less extra-role behavior to support their team and co-workers. Shah (2000) reports in the context of a downsizing that friendship networks in organizations become severely disrupted following the implementation of the reform. Advice networks, on the other hand, remained relatively healthy, with downsizing survivors re-establishing advice contacts sooner and to a greater degree than friendship ties. The implication of his result is that, although individuals do indeed adapt to keep the organization functioning following structural reform, the ‘thickness’ of interpersonal ties within the organization is reduced. Susskind et al. (1998), also investigating a downsizing, find that individuals who perceive their inter-personal network to have developed structural holes are relatively likely to experience chaos within the organization. They argue that such individuals may have become more detached from others in the organization, resulting in greater difficulties in obtaining and sorting through information.

This social disruption process may affect the organization’s culture in two analytically distinct, but likely related ways. First, it may hamper the diffusion of culture between members of the organization. Cultural values form gradually within the organization, materializing through the interaction between employees and being passed on in the selection and socialization of both new and existing members (Gibbons, 2004). After the selection of a new employee, the interpersonal ties within the organization determine the degree to which such values are created and passed on. However, as social ties are disrupted and gaps persist throughout organizational members’ networks, the generation and diffusion of cultural values may become impeded (Shah, 2000) while

informal peer sanctioning through social control may become reduced. Thus, organization members become less incentivized and less aware of cultural values related to both the service-provision to clients and to the organization's internal team-orientation, eventually causing the degree to which the organization adheres to such values to become reduced.

Second, individuals may increasingly perceive their organization and team members to be less concerned with each other's well-being through the reduced thickness of interpersonal ties. As organization members become more detached from their peers, they may increasingly become self-reliant due to the lack of accessible peers others that provide valuable resources (Shah, 2000; McMurray, 2007). This sub-mechanism may affect team-oriented culture in particular, as individuals are less inclined to ask for and provide mutual assistance. Moreover, the value of supporting one's team may be challenged repeatedly in reform trajectories, as investing in social relationships and support is repeatedly undone by team reshufflings. As one might expect interpersonal ties to recover when an organization experiences a single-instance structural reform (see e.g. Van Emmerik & Eeuwen, 2008 on recovery of social capital), this effect is likely particularly relevant for organizations that have repeatedly or even continuously been structurally reformed, causing team-orientation to become gradually less ingrained within the organization.

4.2.2. Sequences of structural reform and (team-oriented) culture

Under normal circumstances, the effects of both the direct and the indirect mechanisms should gradually dissipate once the organization stabilizes from its structural reform (Seo & Hill, 2005). However, when an organization encounters repeated and perhaps even discontinuous structural reform sequences, it may not have an opportunity to recover. Instead, a self-reinforcing loop is created, in which repeated urgent events cause managers to remain focused on operational transition issues instead of support for their teams, while repeated social queues in the form of sanctions cements rank-and-file level risk-averseness over the long-term (see also chapter 3). Incipient evidence for such effects of repeated structural reforms already exists. Most relevant is a recent study in

which repeated structural reform was observed to increase employee silence, one of the effects logically flowing from an organizational response in line with threat-rigidity theory (Wynen et al., 2019a). Moreover, other studies have observed that repeated or continuous change may foster heightened levels of uncertainty and stress beyond what individual reforms would generate, thus providing evidence for the increased manifestation of individual-level responses that spark further group- and organizational-level effects in threat-rigidity theory (Rafferty & Restubog, 2010; Moore et al., 2004; Allen et al., 2001). Finally, we found in chapter 3 that repeated structural reform may gradually affect organizational culture in terms of innovation-oriented characteristics, providing some evidence that long sequences of structural reform may eventually influence an organization's culture. Thus, we expect that repeated structural reform may effect team-oriented organizational cultures through the recurrent and exacerbated manifestation of a threat-rigid response to multiple structural reforms.

4.3. Data and methodology

To map the structural reforms experienced in the lifetimes of Flemish public organizations, we utilize the Belgian State Administration Database (BSAD). This database was compiled through analysis of changes in the legal *acquis* relevant to an organization, annual reports, historical accounts of the organizations, governmental indexations of existing organizations, public statements and – in some cases as verifying sources – news items. Each organization was tracked up to its founding date. Changes in laws underpinning Flemish public sector organizations form an excellent source of information, as most structural changes to such organizations require altering either founding decisions and laws or other governmental decisions and law delineating the competences of the organization. Moreover, as all governmental decisions and laws are published in the official journal of the Belgian State, the risk of non-detection of structural changes is relatively low. Other information sources are mostly used to supplement legal information, for instance on how a given legal change was implemented. For instance, although legal information normally indicates when (parts of) multiple organizations are integrating into a new organization, supplementary

information in e.g. annual reports and official statements allowed us to more definitively determine whether these were more or less equal organizations entering into a merger, or whether a dominant organization ‘merely’ absorbed a smaller division from another organization.

The result of this exercise is a database of structural reforms in which organizations can be tracked from their current forms to their initial founding and potential predecessors, sometimes dating back to the creation of the Flemish Government in 1981. In these ‘reform histories’, founding events, ending events (organizational deaths) and maintenance events (reforms not creating or abolishing an organization, but altering its current composition and place in the public sector) were coded. In doing so, we follow the system of event codes developed by the NSAD for the Norwegian public sector, although several alterations were made to appropriately capture the federal nature of the Belgian system (resulting e.g. in transfers of entities between levels). This coding system further distinguishes between multiple founding events (e.g. pure founding without the organization having a predecessor, mergers, founding by splitting, or founding by regionalization), multiple ending events (e.g. pure termination, ending by merger, ending by transfer to the local level), and multiple types of maintenance events (e.g. imposing new tasks, changing legal forms, changing names, absorbing sub-entities from other organizations).

4.3.1. Constructing indicators for reform history based on the BSAD

To appropriately capture the structural reform histories experienced by Flemish public organizations, we create several indicators using the BSAD’s entries for founding and maintenance events. Maintenance events, such as the legal changes, secessions of subunits and absorptions of subunits occurring during an organization’s lifetime reflect the majority of structural reform entries used to construct this database. However, only including these events would exclude the mergers and splits establishing the organizations in our sample, which often constitute impactful structural reforms in their own right. Thus, we include the various types of founding events that denote some type of reform of a predecessor organization, such as mergers and splits. We also include

transfers from the federal level as relevant events – in particular given the waves of regionalization of federal competences in the recent Belgian history – as such an event moves an actor to a completely new external public sector environment. However, we exclude pure foundings (i.e. events in which entirely new organizations were established without a discernable predecessor), as these events do not imply the disruption of a pre-existing organization. Table 4.1. shows all types of events included in the analysis.

Following the papers by Wynen et al. (2017) and Kleizen et al. (2018) (included in dissertation as chapters 3 and 5), we use a number of indicators. The most naive of these is a simple count of all structural reforms experienced over an organization’s lifetime. We then move to several indicators that are arguably more realistic, starting with two indicators drawn from chapter 3 that allow us to incorporate the degree to which the impact of a structural reform may be expected to decrease over time. This is then further refined by adding expected weights to each reform (e.g. a merger may be expected to be more impactful than a name change). Finally, we present a novel indicator that models the decay of reforms over time in a smoother way than the indicators drawn from Wynen et al. (2017) (chapter 3). The reason we include multiple indicators for structural reform history is that each relies on a number of unfortunately untestable assumptions (e.g. decay speed, strength of events). By changing these assumptions and ascertaining whether results remain robust, we are capable of improving the robustness of our results.

As a first, relatively naïve indicator of an organization’s structural reform history, we simply count all reforms experienced over the lifetimes of an organization. Subsequently, we move on to indicators with several modifications intended to reflect the decreasing impact of a reform over time and/or expected differences in impact between different types of reform. The general formulas proposed by Wynen et al (2017) (chapter 3) to calculate these altered indicators of structural reform history can be expressed as follows:

$$Reform\ event\ score = \begin{cases} 1 & \text{if } year = 0 \\ \left(\frac{1}{(2013 - Year\ of\ reform\ event)} \right)^2 & \text{if } year > 0 \end{cases} \quad (1)$$

$$Reform\ history\ score = \sum Event\ score \quad (2)$$

Formula 1 causes the impact of the reform to be corrected for the amount of years that have passed since a reform was introduced in a non-linear fashion. The squared term increases the decay speed, and is included in Wynen et al. (2017)'s indicator. All reform event scores calculated through formula 1 are then summed, as expressed by formula 2. We also estimate a version of formula 1 without the squared term, causing a slightly slower decay. All reforms occurring since the organization's founding moment according to the BSAD are included in the summation. It must, however, be noted that reforms imposed in 2013 or 2003 (the survey years) would result in a division by 0 error if introduced directly into the above formula, and are thus only added to the other reforms with only their expected weight and the squared term. Note furthermore that if for instance two absorptions were to occur at different times for the organization, the expected impact score for both reforms will be calculated before summing this score over *both* reforms. In doing so we obtain a score not for individual reforms, but for an organization's entire structural reform history, which can then be entered into the regression model. A final note is that, in the BSAD, sometimes accurately capturing a structural reform event required coding two types of reform (e.g. an absorption of an entity coinciding with a change in legal form). In these cases, the most impactful event was retained to construct the indicator, as retaining both database entries would result in counting structural reforms events twice.

In a further refinement for expected impact of a reform introduced by Wynen et al. (2017), the 1 in the numerator is replaced by a 'strength of reform' variable, which can range from 1 to 3. Reforms which are likely very impactful are assigned a value of 3, and include mergers, absorptions of entities and regionalizations. Simultaneously, less impactful reforms such as changes in legal form, changes in name and changes in tasks are assigned a value of either 1 or 2 (see function 3; see Figure 4.1 for a visualization of the effect sizes for a given weight and year and Table 4.1. for an overview of weights assigned to the various structural reform types).

$$\text{Reform event score} = \begin{cases} \text{Strength of reform}^2 & \text{if year} = 0 \\ \left(\frac{\text{Strength of reform}}{(2013 - \text{Year of reform event})}\right)^2 & \text{if year} > 0 \end{cases} \quad (3)$$

Major impact (value=3)	Moderate impact (value=2)	Minor impact (value=1)
<ul style="list-style-type: none"> · Restructuring by absorption from (an)other organization(s) (units or tasks) · Restructuring by seceding units or tasks to (an)other organization(s) · Restructuring by seceding units or tasks to (an)other organization(s) · Founding by splitting, secession or merger · Founding by transfer from another governmental level 	<ul style="list-style-type: none"> · Restructuring by change in legal form · Restructuring by attribution of new tasks, not existing before in the public sector · Restructuring by shift to another ministerial portfolio (subordination to another ministry) 	<ul style="list-style-type: none"> · Change of name

Table 4.1. BSAD events included in the dataset and their weights

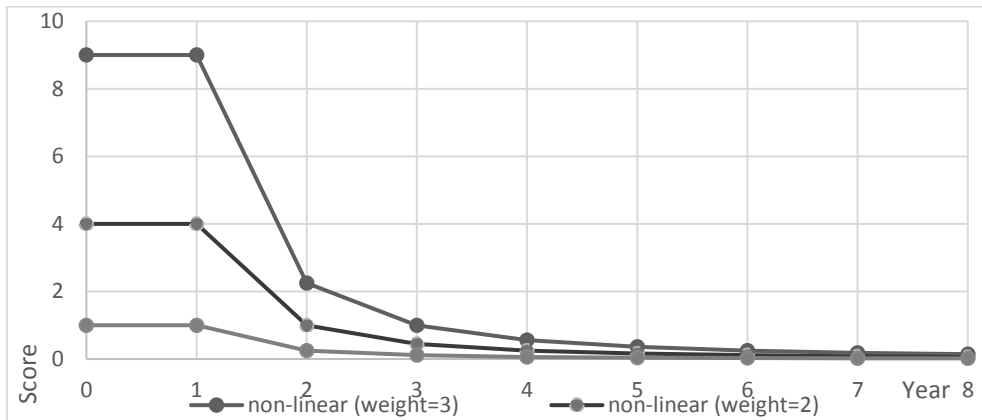


Figure 4.1. decay rates for a single structural reform as calculated by Formula 3 (i.e. before summation of all structural reforms) (Wynen et al., 2017)

A small drawback of the indicators suggested by Wynen et al. (2017) is, however, that it produces identical values for the first two years, followed by an initially strong decay that levels out in later years. This is likely less realistic than a decay process that starts slowly (implying that the immediate implementation period is likely to last for some time), gradually increases as the immediate impact of the reform decreases, but then gradually decreases again as some experiences remain rooted in organizational memory for some time. This reasoning implies an S-curve to the decay process, which can be modeled through a sigmoid function:

$$\sum \frac{\textit{strength of reform}}{1+e^{(\textit{year}-\textit{strength of reform})}} \tag{4}$$

For a single (unsummed) reform event, function 4 produces an s-shaped curve with two additional attractive properties: the numerator allows the initial strength of more impactful reforms to be higher, while the inclusion of strength in the denominator causes more impactful reforms to decay more slowly (see Figure 4.2). This means that a highly weighted structural reform (e.g. mergers and absorptions) only decays over a period of roughly 5 years, while less impactful reforms (e.g. changes in political superior or legal form) already approach an effect size of 0 after 2-3 years. Moreover, more impactful reforms start out with a higher base impact in year 0, indicating that their immediate impact is likely more severe than other types of structural reform.

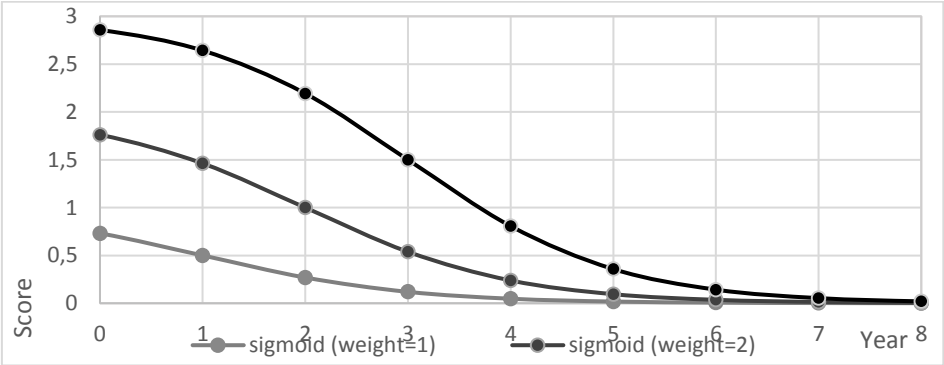


Figure 4.2. decay rates for a single structural reform as calculated by Formula 4 (before summation of all structural reforms)

4.3.2. Dependent variable: team-oriented culture

For the dependent, we use data on organizational culture perceptions from the Flemish version of the international COBRA survey. The COBRA survey was held by an international network interested in the culture, autonomy and control of public sector organizations, and examined the perceptions and attitudes of senior public managers in various Western European states, the EU and several non-European states. It was conducted in two waves, with the Flemish version being administered in 2003-2004 and 2013. While at face value this suggests that panel methods could be used, unfortunately a whole-of-government reform meant that many Flemish public sector organizations were split or merged in 2006. While their successors are often present in the 2013 dataset, it is often difficult to compare their composition – and thus their cultures – to their pre-2006 versions. Nevertheless, although the analyses must thus be kept separate, possessing two waves does provide the opportunity to replicate cross-sectional analyses in two samples. Although there is some degree of overlap in entities included in both samples, both the fact that there is a 13 year time difference and that only 19 entities were available in both datasets implies that the 2003 data is sufficiently different to use for replication purposes.

The 2013 sample includes 45 public sector organizations, ranging from departments and internally decentralized agencies to externally decentralized public law agencies. Moreover, the sample attained substantial variation in organizational tasks and policy fields. In terms of tasks, organizations with policy formulation tasks are included in the sample through the departments. Various agencies possess service-delivery or supervision and enforcement tasks, some agencies are mainly information-providing and coordinating, while others are primarily tasked with research and information-gathering. While strong variation was also present in terms of policy domains, it must be mentioned that the Flemish government is not competent in areas relating to security, law enforcement, migration and defense, implying that care needs to be taken to externalize results to these policy areas. All 45 organizations could be linked to the BSAD, although missing values for survey items result in a final sample of 40 organizations.

The 2003-2004 sample possesses similar variation in terms of legal types, policy fields and tasks. However, there is one important difference with regard to the legal types of sampled organizations: where the 2013 sample focused on the core of the Flemish administration (with the most autonomous type of agency sampled being the externally decentralized public law agency), the 2003-2004 sample also included publically controlled private-law based entities. Accordingly, in addition to core administration entities, the 2003-2004 wave includes several publically controlled companies, associations and foundations. Several of these entities were mainly controlled by the public sector through financial means. As inclusion in the BSAD required at least an additional form of public control through e.g. a public law basis, a majority presence in the management board or appointment rights for the head of the organization, some of the 2003-2004 COBRA survey entities could not be linked to the BSAD. Nevertheless, the linkable amount of organizations was sufficient as 60 entities were incorporated in both datasets, with missing values for survey variables resulting in a final sample of 43 organizations. These 43 organizations still include a number of private-law based entities ranging from Flemish transport company De Lijn to publically controlled entities for agricultural promotion and a Flemish civil servant social association. Thus, the 2003-2004 sample allows us to generalize to a slightly wider population of organizations than the 2013 sample.

We utilize the 36-item survey battery based on the scale developed by Tepeci (2001) as the source for data on team- and client- detail-oriented cultures for both the 2003-2004 sample and the 2013 sample. To construct variables on these dimensions we utilize exploratory factor analysis (EFA). A downside of the EFA strategy employed here is that the amount of observations is lower than the general rule of thumb of 10 observations to 1 item (Costello & Osborne, 2005). While this problem is difficult to overcome, utilizing factor analysis based indices is still considered preferable to utilizing single items, face value-based indexes or simple correlation-based indexes, as these methods would entail the risk of incorrectly assessing whether an item (adequately and/or comprehensively) measures a latent construct. To somewhat mitigate the low sample-size issue, we do not include culture items clearly tapping constructs unrelated to team-oriented cultures, i.e. those items intended by Tepeci (2001) to relate to performance-

oriented culture, detail-oriented culture and innovation-oriented cultures. A full list of the items included (28) and excluded (8) in the factor analysis is included in Appendix 4. As the cultural dimensions included in our analysis are likely to be correlated, oblique (promax) rotation is used that allow for such correlations are utilized instead of orthogonal rotations (Costello & Osborne, 2005). The final indicator for team-oriented cultures is obtained by using the rotated factor loadings to predict a continuous variable for team-oriented culture, weighted by factor scores.

Results are substantially similar between the 2003-2004 and 2013 editions of the survey, with both samples producing high factor loadings for items on team spirit, cooperation between colleagues, trust between colleagues and cooperation with others. This reflects many of the values underpinning team-oriented culture described in earlier contributions, such as reciprocity between colleagues, friendship, group orientation and an emphasis on collaboration (Glomseth et al., 2007). However, we also see some differences between both samples, with the ‘empathy with employees’ item loading on the same factor for the 2003-2004, while the ‘integrity’ item loads on the 2013 factor (see Appendix 4). Despite these differences, both EFA results indicate the existence of a similar team-orientated cultural dimension, distinct from arguably related cultures emphasizing advancement opportunities and fair compensation. Moreover, the items loading on the factor in one sample but not the other are not inconsistent with team-orientations, as empathy with employees is e.g. related to elements such as reciprocity, while integrity e.g. relates to emphasizing non-opportunistic behavior inside an organization (Erdogan, Liden & Kraimer, 2006; Glomseth et al., 2007).

4.3.3. Control variables

A number of control variables are added to the regressions to mitigate issues relating to model misspecification and omitted variable bias. First, we incorporate an organizational task dummy, which is set equal to 1 if the organization executes general public services or business services as its primary task and 0 otherwise. This dummy is included as service-delivery agencies often possess a different demographic composition than their more conceptual policy formulation, regulatory and coordinating counterparts,

potentially affecting the cultures within them (Lægreid et al., 2011). Simultaneously, earlier research has found indications that tasks such as financial service delivery are associated with public organizations undergoing a greater amount of structural reforms (Van Thiel & Verheij, 2017). This potential correlation with both the independent variable of interest and the dependent variable make task a particularly likely source of omitted variable bias if excluded from our models. However, as we are unsure of the effect of task on team-oriented cultures, we do not assume a specific direction for this effect.

Second, we control for organizations' legal forms. Specifically, we create a dummy for departments and internally decentralized entities without legal personality on the one hand, and more formally autonomous externally decentralized entities on the other – thus forming a proxy for formal autonomy. Following the NPM doctrine, those organizations that were placed further from the political center and given some degree of formal autonomy were often expected to operate akin to private sector organizations, reducing public sector entities' supposed inclination towards bureaucratic command and control-based procedures and cultures. Therefore, even though in practice the results of NPM practices on the policies, cultures and identities of public organizations has been found to be mixed (Skålen, 2004; Christensen & Lægreid, 2011), it may be important to control for an organization's legal form. In this context, the more autonomous externally decentralized organizations are particularly important to control for through a dummy, as they are controlled by their own management board and have their own legal personality, arguably making these organizations particularly likely to develop cultures diverging from other public sector entities.

Third, we account for organization size (logarithmically transformed to account for the variable's skewed distribution). Larger entities are likely more formalized than very small agencies, although they may also possess more advanced HR policies geared at supporting team-orientation. Fourth, we control for organizational age (also logarithmically transformed), as culture may be relatively well-established and stable and older organizations, while newer organizations may be in a state in which they are either integrating cultures from their predecessors or developing an entirely new culture.

4.4. Results

4.4.1. Sample 1: 2013 COBRA survey data

Table 4.2 displays Pearson's correlation coefficients for the variables included in our models, indicating relatively high negative correlations between team-oriented culture and our various indicators for structural reform history. We estimate several OLS regression models, with the first being an 'empty' base model including only control variables. Subsequent columns show results for regression models of the various indicators of structural reform history (and control variables) on team-oriented culture. Although Breusch-Pagan tests for heteroscedasticity were not significant at the 5% level, some did yield significance at the 10% level. We therefore opted to estimate our models with robust standard errors, which, while admittedly being marginally less efficient than regular standard errors, are calculated correctly in the presence of heteroscedasticity. Column 1 displays model with only control variables. Column 2 includes a simple count of the amount of reforms experienced by an organization, after which columns 3 and 4 include an indicator which includes decay over time (non-squared in column 3, squared in column 4). Columns 5 and 6 show results for the same indicators as 3 and 4, although now adjusted for the expected impact of an event (Wynen et al., 2017 (see chapter 3)). Finally, column 7 shows results for the novel sigmoid decay function, which also includes weights for the expected impact of an event.

Results for the regressions performed on the 2013 data are displayed in Table 4.3. The first and 'most naïve' indicator of structural reform history, i.e. a simple count of all structural reforms, is significant at the 10% level (model 2). However, the likelihood ratio test for this model suggests that there is no significant improvement of model fit over the 'empty' model. Adding more information by including a decay term for the reduction of a reform's impact over time yields a significant result at the 5% level (model 2), with a likelihood ratio test suggesting a significant improvement in model fit. Moreover, specifying a version of the model with a stronger squared decay term also yields a significant result, albeit this time only at the 10% level (model 3). Models 4 and 5 subsequently add more information by including weights for various types of structural reforms. While reform history is significant at the 5% level for the model with the non-

squared decay term (model 4), a squared *and* weighted reform history indicator (model 5) does not produce significant results. Finally, changing the indicator proposed by Wynen et al. (2017) to one that allows for a smoother and arguably more realistic decay of an individual reform in their early years before summing all structural reforms (sigmoid indicator, model 7) again yields a significant result for reform history at the 5% level. Together, these results provide tentative evidence that longer and more intensive reform histories negatively impact team-oriented cultures. However, although the majority of the indicators that include some form of decay are significant, the non-significant result of the weighted and squared version of the indicator suggests that the evidence of our 2013 sample is not entirely conclusive.

The control variables also yield several interesting results. Business and service-delivery tasks as well as organizational size produce a significant negative effect, while age produces a significant positive effect. Thus, larger organizations, as well as organizations with general service delivery and business services tasks seem to possess less strongly developed team-oriented cultures, while older organizations seem to possess more strongly developed team-oriented cultures. This could suggest that large and/or service delivery agencies are more inclined to retain traditional command-and-control structures, while smaller agencies and/or agencies with other tasks were moving towards more team-based arrangements around 2013. Moreover, it could be that socialization and HR support is more ingrained in relatively old cultures, while younger organizations still possess greater gaps in their social networks. Finally, some models suggest a negative impact for organizations that are externally decentralized, although this result is not robust over different model specifications. However, given that the results for the 2003-2004 sample differ somewhat, we have to qualify these results as tentative.

4.4.2. Sample 2: 2003-2004 COBRA survey data

The 2003-2004 sample is analyzed in a manner similar to the 2013 sample data. Table 4.4 includes descriptive statistics and the Pearson's correlation coefficients. The correlations again suggest a reasonably sized negative relationship between our structural reform history indicators and team-oriented culture. Further analysis is performed using OLS regression. While the data seemed normally distributed and did not exhibit notable

outliers, some models do suggest a degree of heteroscedasticity. Therefore, we again use robust standard errors.

The results for structural reform history are largely consistent with those of the 2013 sample (see Table 4.5). In these estimations, however, the most naïve indicator, i.e. the simple count of structural reforms, produces no significant result. All other structural reform history indicators including a decay term do produce significant negative effects on team-oriented culture, and all do so at the 5% level. This includes the indicator that utilizes both weights and a squared decay term. Further support for the explanatory value of the reform history indicators is provided by performing likelihood ratio tests, which suggest that models 3-7 provide better model fit than model 1 at the 5% significance level. Moreover, where the 2013 results included a model in which the regressor with weights and a squared decay term was not significant, the same model applied to the 2003 data does produce significant results. Taking the 2003 and 2013 results together, 9 out of 10 models including regressors that correct for time and/or weight the reforms experienced by public organizations are significant, implying our results are substantially – albeit not entirely – robust to different specifications.

Variable	Mean	Std.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Team-oriented culture (1)	0	0,98	1										
Reform history (count) (2)	3,422	2,509	-0,276*	1									
Reform history (unweighted) (3)	0,566	0,463	-0,306*	0,616***	1								
Reform history (unweighted, squared) (4)	0,203	0,390	-0,178	0,172	0,861***	1							
Reform history (weighted) (5)	1,421	1,235	-0,342**	0,515***	0,957***	0,852***	1						
Reform history (weighted, squared) (6)	1,332	3,132	-0,213	0,062	0,759***	0,914***	0,865***	1					
Reform history (sigmoid) (7)	0,754	1,203	-0,337**	0,249	0,843***	0,850***	0,914***	0,878***	1				
Task (general public services and business services = 1) (8)	0,511	0,506	-0,385**	0,138	-0,138	-0,215	-0,165	-0,244	-0,160	1			
Log(age) (9)	2,475	0,699	-0,042	0,744***	0,255	-0,052	0,129	-0,166	-0,115	0,197	1		
Log(size) (10)	5,571	1,117	-	0,452***	0,455***	0,221	0,023	0,225	0,038	0,147	0,290*	0,224	1
Legal type (externally decentralized = 1) (11)	0,267	0,447	-0,146	0,502***	0,109	-0,164	0,075	-0,143	-0,069	0,168	0,659***	0,048	1

* p<0.10, ** p<0.05, *** p<0.01

Table 4.2. Descriptives and Pearson correlation coefficients, 2013 COBRA survey sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Reform history (count)		-0.134*					
		(0.07)					
Reform history (unweighted)			-0.698**				
			(0.27)				
Reform history (unweighted, squared)				-0.663*			
				(0.33)			
Reform history (weighted)					-0.267**		
					(0.11)		
Reform history (weighted, squared)						-0.083	
						(0.05)	
Reform history (sigmoid)							-0.261**
							(0.11)
Task	-0.530*	-0.597**	-0.699***	-0.650**	-0.715***	-0.668**	-0.663**
	(0.27)	(0.27)	(0.25)	(0.25)	(0.25)	(0.26)	(0.25)
Log(age)	0.415**	0.743***	0.559***	0.460**	0.460**	0.358*	0.329*
	(0.20)	(0.24)	(0.20)	(0.18)	(0.19)	(0.20)	(0.19)
Log(size)	-0.359***	-0.258*	-0.290**	-0.342***	-0.275**	-0.325***	-0.290**
	(0.12)	(0.14)	(0.12)	(0.11)	(0.12)	(0.12)	(0.12)
Legal type	-0.571*	-0.505	-0.605*	-0.692**	-0.534	-0.582*	-0.522
	(0.33)	(0.34)	(0.33)	(0.33)	(0.34)	(0.33)	(0.32)
Constant	1.419**	0.535	1.196*	1.457**	1.323**	1.560**	1.515**
	(0.60)	(0.86)	(0.67)	(0.60)	(0.65)	(0.61)	(0.60)
<i>Observations</i>	40	40	40	40	40	40	40
<i>F-test</i>	4,65***	5,46***	5,91***	4,98***	5,74***	4,70***	5,20***
<i>R</i> ²	0,323	0,37	0,424	0,394	0,432	0,395	0,425
<i>Lr-test (versus model 1)</i>	N/A	0,107	0,011**	0,035**	0,008***	0,0347**	0,011**
<i>Shapiro-wilk test (p>z)</i>	0,606	0,265	0,499	0,807	0,475	0,689	0,928
<i>Breusch pagan test (p>χ')</i>	0,07*	0,178	0,120	0,06*	0,087*	0,039**	0,055*

Robust standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01

Table 4.3: OLS regression results for team-oriented cultures (2013 COBRA survey sample), robust standard errors in parentheses

The control variables again suggest a negative effect for legal type, with the 2003 sample regressions providing more robust results for this variable than regressions on the 2013 sample. A potential explanation is that the 2003 sample included more private organizations in the grey zone between public and private sectors, which may have possessed a different culture. The direction of the effect seems puzzling, however, as

such organizations are usually expected to operate more akin to private sector organizations with less bureaucratic cultures (Skålen, 2004; Christensen & Lægreid, 2011). Otherwise, the control variables are not significant in our 2003 sample results. This divergence between samples is again somewhat puzzling, requiring us to qualify our results for the 2013 sample as tentative.

4.5. Discussion and conclusion

Our results provide tentative evidence that sequences of structural reform are a relevant indicator of team-oriented culture. Most of our estimations suggest that if over the years an organization has encountered 1) more structural reforms, 2) of a more impactful nature and 3) and/or has encountered these reforms relatively recently, perceptions of team-oriented culture are reduced. These results are mostly robust over multiple indicators that model structural reform history slightly differently and across two samples of Flemish public organizations, although one indicator including a relatively strong decay term and weights provided non-significant results. Simultaneously, in the 9 models that yielded significant results, the effect size of the reform history variable seems to be considerable, suggesting that repeated structural reform is a substantial contributor to unexpected developments in organizational cultures.

As team-orientation and related variables such as interpersonal trust and social capital have been linked to important outcomes, including job satisfaction, knowledge-sharing innovation and organizational performance (e.g. Glomseth et al., 2007), these results tentatively suggest that repeated attempts to improve the organization through structural reform could be a double-edged sword (McMurray, 2007; Pollitt, 2007). What is more, such repeated attempts may affect not only the organization's performance, but also individual-level well-being as job satisfaction, motivation and even life satisfaction are likely to be reduced (Helliwell & Huang, 2010).

Variable	Mean	Std.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Team-oriented cultures (1)	-0,002	1,02	1										
Reform history (count) (2)	2,326	2,317	-0,278*	1									
Reform history (no weights) (3)	0,855	1,097	-0,353**	0,734***	1								
Reform history (no weights, squared) (4)	0,680	0,995	-0,344**	0,616***	0,984***	1							
Reform history (weighted) (5)	2,070	2,728	-0,354**	0,697***	0,978***	0,965***	1						
Reform history (weighted, squared) (6)	3,703	6,516	-0,274*	0,479***	0,857***	0,880***	0,924***	1					
Reform history (sigmoid) (7)	1,379	2,264	-0,367**	0,585***	0,933***	0,938***	0,982***	0,955***	1				
Task (general public services and business services = 1) (8)	0,744	0,441	0,247	-0,103	-0,024	-0,005	-0,051	-0,020	-0,038	1			
Log(age) (9)	2,464	0,633	0,114	0,078	-0,217	-0,263*	-0,253	-0,421***	-0,274	0,364	1		
Log(size) (10)	4,631	1,652	-0,025	0,465***	0,292*	0,215	0,317**	0,216	0,278*	0,044	0,196	1	
Organization type (1=externally decentralized) (11)	0,674	0,474	-0,209	0,034	-0,168	-0,185	-0,194	-0,209	-0,233	0,161	0,265*	-0,054	1

* p<0.10, ** p<0.05, *** p<0.01

Table 4.4. Descriptives and Pearson correlation coefficients 2003-2004 COBRA survey sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	b/se	b/se	b/se	b/se	b/se	b/se	b/se
Reform history (count)		-0.125 (0.10)					
Reform history (unweighted)			-0.393** (0.18)				
Reform history (unweighted, squared)				-0.430** (0.19)			
Reform history (weighted)					-0.164** (0.07)		
Reform history (weighted, squared)						-0.059** (0.02)	
Reform history (sigmoid)							-0.213** (0.08)
Task	0.590 (0.37)	0.497 (0.50)	0.669 (0.49)	0.707 (0.49)	0.657 (0.49)	0.739 (0.56)	0.691 (0.48)
Log(age)	0.178 (0.27)	0.186 (0.24)	-0.019 (0.27)	-0.046 (0.28)	-0.051 (0.28)	-0.140 (0.34)	-0.077 (0.28)
Log(size)	-0.045 (0.10)	0.038 (0.09)	0.044 (0.09)	0.025 (0.09)	0.056 (0.10)	0.027 (0.09)	0.052 (0.10)
Legal type	-0.609* (0.34)	-0.562** (0.24)	-0.688** (0.28)	-0.701** (0.28)	-0.703** (0.28)	-0.676** (0.28)	-0.753*** (0.28)
Constant	-0.259 (0.70)	-0.333 (0.52)	0.146 (0.59)	0.239 (0.61)	0.190 (0.60)	0.347 (0.64)	0.236 (0.58)
Observations	43	43	43	43	43	43	43
F-test	1,50	2,52**	2,95**	2,82**	3,04**	3,28**	3,31**
R ²	0,137	0,199	0,285	0,284	0,288	0,238	0,313
Lr-test (versus model 1)	N/A	3,19*	0,004***	0,005***	0,005***	0,02**	0,002***
Shapiro-wilk test (p>z)	0,586*	0,122	0,09*	0,07*	0,094*	0,058*	0,141
Breusch pagan test (p>χ ²)	0,004***	0,000***	0,05**	0,113	0,056*	0,015**	0,134

Robust standard errors in parentheses * p<0.10, ** p<0.05, *** p<0.01

Table 4.5. OLS regression results for team-oriented cultures (2003-2004 COBRA survey sample), robust standard errors in parentheses

As one model specification did provide inconsistent results with the other 9 estimations, we encourage further replication of our analyses. Nevertheless, given the

consistency of all other models across two samples, we are cautiously optimistic regarding the support our evidence provides for a relationship between structural reform histories and team-oriented cultures. Moreover, out of the various model specifications, the non-significant indicator including a squared decay term and weights that were assigned by the researchers may have been based on assumptions that were too strong. Other, arguably somewhat more realistic indicators such as the sigmoid indicator did produce consistent results over both samples. This implies that further research into the functional form of the decay process that the impact of a reform undergoes over time would be a valuable avenue for further research (Seo & Hill, 2005).

We would also like to point out that a negative relationship between structural reform histories and team-oriented cultures – if confirmed – does not imply that structural reform is always detrimental for organizations. A single or a small number of structural reforms may deal a short-term blow to team-oriented cultures, but our results tentatively suggest that organizations that have not been reformed for some period of time do not display the extensive detrimental effects of organizations that have encountered a recent trajectory of intensive structural reforms. This means that, given that the organization is given sufficient respite from a recent structural reform trajectory, the detrimental side-effects should disappear, which would allow potential benefits of the reform(s) to surface.

Such a chronological perspective on the decay of detrimental side-effects fits well with the theoretical mechanisms that we believe lie at the root of the negative relationship between reform histories and team-oriented cultures. We argue that the urgency and threat that impactful reforms present to agency managers in terms of ensuring the continuity and performance of the organization will translate into their internal policies, at least in the short-term. This causes a formalizing and centralizing tendency to allow managers to combat the incoming threat (Staw et al., 1981; Daly et al., 2011). While this response may be rational in the short-term, the repeated imposition of structural reforms may allow such a threat-rigidity response to persist within the organization (McMurray, 2007). Simultaneously, employees in such repeatedly changed organizations become prone risk-averse behavior, such as withholding their ideas and suggestions during a time of reform, as their own positions have become more uncertain

(Amabile & Conti, 1999; Wynen et al., 2019a). This reduces their tendency to engage in personal initiative, as they instead focus on the core tasks set out by management, thus reducing their extra-role commitment to the team (Glomseth et al., 2007). These constricting responses coincide with the repeated severing of social ties within the organization due to continued structural reshuffling, further prompting employees to rely on themselves instead of their teams (Shah, 2000; McMurray, 2007). As the organization remains in a reform trajectory for a substantial amount of years, the continued generation of these effects may gradually be ingrained in the organization's culture, as values relating to supporting teams, reciprocal behavior and non-opportunistic behaviors are repeatedly challenged, causing team-oriented cultures to become less emphasized (McMurray, 2007).

Conversely, when no further structural reform is imposed on the organization, it is likely that the constricting and disruptive effects of reforms will gradually dissipate (Seo & Hill, 2005). As the urgency and threatening elements of a reform subside and the organization enters into a more stable state, there is less need for a strong centralized response on part of managers. Moreover, the formalization introduced during the reform may gradually be relaxed as some rules are abandoned and others are incorporated in a manageable way in employees' work-processes. Employees should gradually become less uncertain regarding their positions and will start to rebuild their social ties to team members (De Jong et al., 2016). In this regard, the finding by Van Emmerik & Euwema (2008) that employees perceiving sufficient organizational support and perceiving a previous change positively tend to rely more on new social capital more easily is relevant, as it suggests that the recovery process is to some degree manageable by providing adequate support during the change. Thus, while single, impactful reforms may introduce some negative effects on team-oriented culture that are found in this paper, these are likely to be less significant than multiple, repeated structural reforms.

The effects suggested by most of our estimations hold implications for the design of structural reform trajectories in public organizations, in particular given a similar finding on innovation-oriented cultures presented in chapter 3. Acknowledging that restructuring an organization too frequently and intensively can be strongly disruptive to

often-valued aspects of organizational cultures (Pollitt, 2007), it may be valuable for public organizations to comprehensively analyze the structural reform trajectories that they have experienced until then. This could entail indexing what employees think of earlier (structural) reforms, to what degree change readiness is present in the organization, to what degree desired cultural values and norms are already expressed by employees and the future direction preferred by them. Given that many structural reforms in our database are developed at the political level, our results also imply stronger cooperation between the political and organizational-level to ascertain the risks associated with implementing certain structural reforms. We would argue that, although the focus of politicians and academia alike is currently mainly directed towards the political legitimacy and design aspects of structural reforms, structural reforms that are politically legitimate and (at least on paper) well-designed may be counterproductive if implemented in the wrong context.

Notable in this study is that our control variables yielded different results in 2003-2004 and 2013. While task, age, and size variables were consistently significant in the 2013 data, legal form provided consistently significant results in 2003. Instead, the 2003-2004 data consistently yields a significant result for legal type. Although care should thus be taken in interpreting the implications of these results, we can speculate that the changing structure of the Flemish government may have played a role in the divergent results of both samples. In 2003, NPM principles were relatively new in the Flemish government, with their most significant implementation occurring three years later during a 2006 whole-of-government reform affecting almost all organizations. After 2006, a set completely new set of legal forms (often combined with mergers or secessions) were imposed on the majority of Flemish public organizations, which were aimed at some degree of integration with their tasks. Following NPM principles, executive competences were for instance to be concentrated in often relatively large service-delivery agencies, while policy-making competences were to be delegated to departments. Although this distinction between agencies and departments became more blurred in later years following the 2006 reforms, it offers a potential cause for the significant effect of size and task in the 2013 sample.

In addition to the non-significant results for reform history in one of our estimations, several methodological limitations warrant discussion. First, while we possessed two waves of a Flemish survey including culture items, the large amount of Flemish organizations merged and split in 2006 meant that insufficient organizations could be linked between waves to create a panel dataset. Our lack of panel data implies that endogeneity and reverse causality issues cannot be ruled out, although our two-sample approach does replicate our results in another timeframe. Third, as the survey relies on senior-manager perceptions, potential differences between senior manager perceptions and those of their subordinates remains an issue. We nevertheless believe our results offer a relevant contribution, as the data offered the rare opportunity to link a database on reform histories that sometimes span decades with perceptions of culture. However, future contributions could for instance attempt to link shorter reform histories with a broader sample of public sector employees

**Chapter 5: Structural reform histories
and perceptions of organizational
autonomy: do senior managers
perceive less strategic policy autonomy
when faced with frequent and intense
restructuring?**

5.1. Introduction

Across the globe, governments have engaged in the creation of autonomous organizations in order to streamline the public sector. The rise of New Public Management (NPM) styles of governing – which entailed the belief that governments should operate more akin to private sector businesses in order to be efficient and effective – provided a strong impetus for this development. Although its implementation differs per country (Torres, 2004), common NPM tenets include the agencification of public administrations and the introduction of performance measurement to allow for control on results instead of procedure (Kickert, 2001; Smullen et al., 2001; Torres, 2004), providing organizations the autonomy required to deliver services as they see fit (Majone, 1997a). Despite increasing skepticism regarding the fruits of NPM and the devolution of tasks to autonomous entities, the agency form remains relevant and continues to diffuse in one way or another across capitalist economies (Jordana et al., 2011). Today, granting an organization autonomy continues to be a widely used tool, both to stimulate effective policy implementation and to shield organizations from interfering political forces (Lewis, 2004; Dommett & Skelcher, 2014; Ennser-Jedenastik, 2015).

However, research has demonstrated that providing an organization with formal autonomy (e.g. by designing it as a separate legal person) does not necessarily equate to the organization having an autonomous position in practice (Verhoest et al. 2004; Maggetti, 2007; Yesilkagit & Van Thiel, 2008). Other conditions, including slack resources, expertise, information asymmetry, tasks, organizational size and inclusion in (supranational) policy networks have also been suggested or observed as predictors of *de facto* autonomy (Majone, 1997b; Verschuere, 2006: 178-179; Maggetti, 2007; Groenleer, 2009: 34-35; Egeberg & Trondal, 2009a; Yesilkagit, 2011; Bach, 2012; Van Thiel & Yesilkagit, 2014; Maggetti and Verhoest 2014; Bach et al., 2015; Zito, 2015).

Furthermore, the influence of long-term factors such as culture, age, learning, coalition-building and institutionalization have increasingly been studied in the context of autonomy (Maggetti, 2007; Zito, 2015). However, a perspective that studies organizational histories of structural reforms and their influence on the perceptions of individual senior-level managers remains lacking. This contribution aims to add to our

knowledge on the long-term determinants of autonomy by investigating whether perceptions of strategic policy autonomy – an important, far-reaching dimension of autonomy, encompassing the ability of the organization to decide on its overarching goals and direction – may be altered by histories of imposed structural reforms.

We propose that senior managers, when confronted with severe and frequent structural reforms imposed by their political superiors, will perceive their ability to set strategic goals to be limited, as they believe political principals to be heavily engaged in determining the direction of the organization for them. Simultaneously, organizations in continuous flux with regard to tasks, structure, principals and client groups will likely find it more difficult to maintain and build up stable cultures, identities, expertise, external network ties and reputations (Carpenter & Krause, 2012). This may detrimentally affect the amount of resources available to maintain the organization's autonomy and may reduce its ability to accrue such resources. In this context, structural reforms are defined as externally imposed changes that alter organizational boundaries in terms of units included, alter tasks attributed to the organization and/or alter the structural embeddedness of the organization in the wider public sector (i.e. legal form and the ministerial portfolio in which the organization is positioned) (MacCarthaigh & Roness, 2012; Lægheid et al., 2010).

By testing the aforementioned propositions, we contribute to the dynamic and relational perspective into the study of organizational autonomy (see Maggetti & Verhoest 2014), a burgeoning section of the literature attempting to determine to what extent perceived autonomy is a function of an organization's experiences with political principals and other environmental actors during its lifetime (see also Carpenter, 2004; Zito, 2015; Ossege, 2015). Moreover, the study complements existing work on *de facto* versus formal autonomy by zooming in on the senior manager perceptions. As strategic directions are largely set out by senior-level managers, a focus on individual-level processes and how these determine *de facto* autonomy is essential (Korinek & Veit, 2015).

Exploring the relevance of structural reform histories is important given the large quantities of structural reforms introduced in public sectors over the past decades (March

& Olson, 1983; Pollitt, 2007). Varying reform doctrines, macro-level crises (e.g. the financial crisis), technological and social developments and changing public demands all lead to high frequencies of structural reforms. Determining how perceptions of strategic policy autonomy are shaped in the long-term by the structural reforms imposed by political principals is therefore necessary to increase our understanding how reforms may bring about unintended and unexpected side-effects (Pollitt, 2007; Bulder et al., 1996). If governments attempt to create a certain degree of strategic policy autonomy through organizational design, but this is subsequently undermined by the cumulative effects of repeated structural reforms, it is vital for governments to know why their design choices have not led to the desired outcome.

Using data from the Belgian State Administration Database (BSAD), which comprehensively maps the structural reforms experienced by public organizations in the Belgian region of Flanders between 1990 and 2015, we could construct a measure of the structural reform histories experienced by Flemish public organizations. This is combined with data on senior manager perceptions of strategic policy autonomy, gathered for Flemish public organizations in the context of the international COBRA project. This combination provides us with a unique dataset that allows us to test the overarching relationship between structural reforms and strategic policy autonomy, while controlling for several other factors, although data limitations restrict us to theoretical statements on underlying causal mechanisms.

The data, methodology and findings are presented respectively in sections 3, 4 and 5, and a discussion of our findings is subsequently presented in section 6. Before turning to the analyses, however, we first explore the relevant theoretical underpinnings in section 2.

5.2. Theoretical Framework

5.2.1. *Conceptualizing strategic policy autonomy*

The increasing interest of governments in creating autonomous agencies spurred the interest of public administration scholars in the early 2000's, who have since devoted substantial attention to the nature and role of organizational autonomy. Verhoest et al.

(2004) asserts that organizational decision-making autonomy consists of two distinct dimensions, one encompassing managerial affairs and the other encompassing policy development and implementation (Verhoest et al., 2004; Groenleer, 2009; Busuioc et al., 2011; Bezes & Jeannot, 2017). The policy autonomy dimension may be subdivided into operational policy autonomy and strategic policy autonomy. Where the first of these sub-dimensions refers to discretion on the instruments and procedures used to implement a given policy, the second sub-dimension – the primary focus of this contribution – refers to the ability of an organization to decide on its own strategic goals and course. Strategic policy autonomy can in some ways be seen as the most far-reaching and important type of organizational autonomy, as its presence allows an organization to determine its own mission and societal function, instead of being a passive implementer of strategies created on the political level (Verhoest et al., 2004). Granting a substantial degree of strategic policy autonomy is simultaneously controversial, as it implies only limited degrees of control from political principals, even on system-level policy choices (Kickert, 2010). An organization placed at arms-length and with the ability to take strategic policy decisions may therefore be argued to undermine direct democratic scrutiny of the policy-making process.

Notwithstanding potential control and accountability issues, granting an organization a degree of strategic policy autonomy can serve various purposes. A high degree of strategic policy autonomy e.g. allows an organization to judge, on the basis of its expertise, what the priority goals in its task environment are (Majone, 1997a), or allows it to collaborate with private parties in order to steer the organization's direction. Such discretionary space can aid in making an organization and the policy it produces adaptable in the face of complex, rapidly changing environments, which are difficult to regulate through classic command-and-control legislation. Such effectiveness arguments have accordingly been seen as important justifications for the delegation of policy-making powers to executive organizations without direct democratic legitimation (Kickert, 2010). Moreover, some strategic choices, e.g. with regard to monetary policy, may be considered to be unsuitable for political involvement (Dommett & Skelcher, 2014; Ennser-Jedenastik, 2015), as short-term priorities and political incentives may lead to biased outcomes and credibility issues (Majone, 1997a; Majone, 1997b; Maggetti,

2007). Simultaneously, an organization's strategic policy autonomy is relatively susceptible to outside influences due to the visible nature of strategic policy decisions, versus for instance managerial or implementing policy decisions. Thus, examining the impact of structural reforms on strategic policy autonomy is not only highly relevant, but this sub-dimension of autonomy is also relatively likely to be affected by factors such as imposed structural reforms.

Beyond studying the various substantive dimensions of autonomy, researchers have developed the crucial insight that an organization's formal level of autonomy, as determined for instance through founding laws or performance agreements, does not necessarily equate to the *de facto* level of autonomy as perceived by organizations (Verhoest et al. 2004; Yesilkagit, 2004; Maggetti, 2007; Busuioc et al., 2011; Korinek & Veit, 2015; Bezes & Jeannot, 2017). Instead, *de facto* autonomy is also shaped by an internally developed logic of appropriateness, determining the organization's perception of what actions are normatively acceptable and desirable (March & Olsen, 2009), as well as rational calculations of the consequences of their actions for stakeholders. This insight implies that an organization's autonomy on a given dimension is not merely determined by formal 'hardwiring', but is also a function of environmental and organizational antecedents (Verschuere, 2006: 175-180).

A senior manager's perception of strategic policy autonomy is thus shaped by a combination of formalized rules and procedures, as well as informal interactions, naming and shaming and sanctions beyond those included in formal accountability mechanisms (Korinek & Veit, 2015). As strategic actions are mostly decided upon at the senior manager level, it is arguably the perceptions of senior managers that contribute most to the degree of *de facto* strategic policy autonomy of public organizations (Korinek & Veit, 2015). Moreover, as the *de facto* levels of strategic policy autonomy perceived by senior managers do not necessarily equate to the level formally attributed to the organization, the strategic actions taken these managers may inadvertently differ from what was originally intended by policy-makers designing the organization.

The following subparagraphs will elaborate on two mechanisms through which structural reforms may influence senior manager perceptions of strategic autonomy, one

operating through perceptions of control, while the other is based on an organization's resources. While we are limited to theoretical statements on these mechanisms, they form important propositions for future research, and essential links between our independent and dependent variables.

5.2.2 Perceptions of control and structural reforms

One important avenue for governmental control of a public organization's strategic direction is organizational design. Ministers, their cabinets and parliamentarians, confronted with societal pressure and the inability to directly steer the actions of (semi)autonomous agencies, may resort to the imposition of structural changes on organizations to maintain control. If parliament or ministers repeatedly impose new organizational forms, inter-organizational transfers of units and changes in tasks upon an organization under their remit, the involved organization will most likely perceive itself as being confronted by a relatively controlling political principal. This control, in turn, will be interpreted by the organization's managers as a signal that the political principal prefers to keep important decisions in his/her own hands and opts to constrain the choices of the agent. Power exertion through structural reform may therefore create the perception that the agent lacks the autonomy to make important strategic choices and that its actions are mistrusted (Zito, 2015; Falk & Kosfeld, 2006). Thus, even if an organization receives a certain degree of formal strategic policy autonomy through its competences and (legal) insulation, the organization's senior management may experience a more constrained mandate through signals given by the principal's recurrent imposition of structural reforms. Moreover, as the threat of further structural reform is apparent, overstepping this mandate may be seen as costly. Thus, senior managers under these conditions may become substantially risk-averse and engage in anticipatory behavior, leaving strategic policy choices to the organization's principal.

Although this expectation on the influence of structural reforms has not been tested to our knowledge, substantial indications for the validity of a relationship between controlling behavior by the political principal and perceived strategic policy autonomy may be found within the literature. In line with the argument that we make in this article,

Zito (2015) found, within the context of the British Environmental Agency (EA), that repeated structural reforms were imposed *inter alia* to steer the agency's task execution, and that these efforts were combined with explicit signals that the EA should not challenge government policy. In interviews with EU agencies, Busuioc (2009) observed that controlling behavior by the European Commission was perceived as reducing or even nullifying the formal decision-making autonomy of agencies. Verschuere (2006: 208) similarly noted that if governments strongly scrutinize the organization's output and Chief Executive Officers (CEO) appointments, Flemish agencies report lower degrees of *de facto* policy autonomy in choosing target groups. More broadly, Yesilkagit & Van Thiel (2008) found that perceived influence of various principals, including the responsible minister, the finance minister and the Second Chamber of the Dutch Parliament, was negatively associated with the perceived ability to independently choose target groups. When organizations are repeatedly confronted with a political principal that asserts its control over the organization through structural reform, it may thus be expected that the organization's perception of control over its direction and the direction of the policies under its remit is detrimentally affected. This will translate itself into lower scores on indicators of perceived strategic policy autonomy.

5.2.3 Structural reforms and accruing resources

While the control perspective sees perceptions of autonomy as being influenced by a top-down process, it is also important to recognize that organizations are not merely passive recipients of their principal's wills (Zito, 2015; Ossege, 2015). Drawing from both resource-based and resource dependence theory, it may be argued that organizations will attempt to ensure their own survival, stability and autonomy by securing necessary resources (Oliver, 1991; Majone, 1997a; Carpenter & Krause, 2012; Overman et al., 2014; Barnett & Coleman, 2005) – processes which may be hindered in the turbulent circumstances that typify a severe structural reform trajectory.

Resource dependence theory emphasizes that political actors, public organizations as well as civil society and private organizations are interdependent on one another's resources to varying degrees (Overman & Van Thiel, 2014). Some public

organizations will be heavily dependent on their political principals for the availability of resources, forcing them to frequently acquiesce to their principals' demands and thus reducing an organization's maneuvering space in terms of strategic policy autonomy (Barnett & Coleman, 2005). Other public organizations, however, possess substantial resources, such as profound substantive expertise or a positive reputation with external stakeholders, which may bolster the organization's degree of autonomy to decide on its strategic direction (Majone, 1997b; Carpenter, 2004; Ossege, 2015). Moreover, organizations whose dependencies are spread across a range of actors besides their political principals will likely be less reliant on any single actor for their survival (Oliver, 1991), or may be able to play out differing interests between actors (Overman & Van Thiel, 2014; Roberts, 2006; Zito, 2015, see also Maggetti, 2007). Thus, an organization that has accrued substantial resources internally or has access to them through a diverse set of external relations will be relatively shielded from external threats, increasing its leeway to take strategic decisions autonomously, and reducing the potential for external actors to sanction the organization by depriving it of resources.

While resources such as expertise, information exchange, strong network embeddedness and a positive reputation with stakeholders are therefore valuable assets to organizations seeking to maintain autonomy (Majone, 1997b; Yesilkagit, 2004; Egeberg & Trondal, 2009a), it is important to recognize that such resources cannot easily be gained overnight. Instead, they form gradually as the organization evolves, institutionalizes and builds on its core and distinctive competencies (O'Toole Jr. & Meier, 2003; Bryson et al., 2007). However, structural reforms, in particular when they are severe or imposed frequently, can potentially disrupt this process of "forging autonomy" (see Carpenter, 2010; Bryson et al., 2007). Specifically, when an organization's tasks, units, name and priority stakeholders are in flux due to continuous structural reform, its chances to build up valuable resources, links to organizations possessing such resources or positive reputations are limited. The organization may for instance have difficulty building up strong network ties if relevant client groups are repeatedly changed, and may be faced with the arduous task of (re)developing expertise when its tasks and/or units are significantly reshuffled (Pollitt, 2007). Potential internal resources such as a positive morale, identity and internal culture are also under threat, as restructurings result in

substantially altered or completely new departments and priority tasks within the organization (Marks & Mirvis, 1997; Amiot et al., 2006; Rafferty & Griffin, 2006; Grunberg et al., 2008; Zito, 2015). Similarly, when the organization's identity is repeatedly altered through name changes, splits, task changes and mergers it may not be able to build up a stable and positive reputation with stakeholders (Palma et al., 2010).

With the organization's own resources and access to network resources diminished through successive reforms, its dependence on its political principal for its continued survival is heightened. This, in turn, means that its perception of opportunities to plot out its own strategic course will be diminished. Thus, we may expect continuous, severe and frequent reforms to diminish strategic policy autonomy not only due to increased perceptions of control from the principal, but also due to the decreased ability of the organization to accrue the resources necessary to maintain its own autonomous position.

5.3. Data

In order to examine our expectations, we rely on two data sources: the BSAD, which traces structural reforms in the Flemish public sector during the period 1990-2015, and the 2013 COBRA survey on senior public manager perceptions. The BSAD contains entries for the founding, structural reform and termination events experienced by Flemish public organizations. It was compiled by tracing the organizational and legal history of each Flemish public organization. The main source of information is legislation, which in Flanders accurately tracks imposed changes in legal forms, name changes, task alterations, mergers, splits, etc. Where legislation was nonetheless inconclusive or incomplete supplementary data was utilized, including parliamentary questions, ministerial reports, annual organizational reports, audits, and organizational websites. For public organizations with a private legal form the data was supplemented by examining statutes and changes therein. The combination of legislative information and supplementary data from other sources allowed us to vividly and accurately track the structural reform histories of Flemish public sector organizations.

The BSAD uses a similar structure as the Norwegian State Administration Database (NSD).¹² More specifically, a predefined categorization that classifies organizational change events in three main categories is used: changes related to the founding of an organization, changes related to the maintenance of an organization, and changes related to the termination of an organization. For each main category of events there are several sub-categories, including splitting, secession, merger and absorption, as well as movement of organizations vertically and horizontally within the state apparatus and into or out of it (Rolland & Roness, 2011, 405-407).¹³ As we are interested in the effects of reforms on the perceptions of senior managers within existing organizations, only maintenance events are taken into account. Structural reforms leading to the creation or ending of public organizations are not included in our analysis. As there are various subcategories of maintenance events, we can form models that take into account that some types of structural reforms are likely to have a more substantial impact on the organization than others (see subsection 3.2).

The data on perceived strategic policy autonomy is taken from the 2013 Flemish COBRA survey, which is part of a larger international research effort to study the attitudes and perceptions of senior public managers in a variety of western countries. The top-level management (CEO-level) of these organizations was asked to fill in a web-based questionnaire containing several types of questions (e.g. perceptions of autonomy, innovative activity, management and organizational culture). The motivation behind using the perception of senior managers about the *de facto* autonomy of their agency is that this will likely heavily influence their actions and the way they make strategic decisions (Korinek & Veit, 2015).

The response rate for the Flemish survey was 70%, i.e. 45 organizations. Excluding one organization for which data was missing on the dependent variable leaves us with a sample of 44 Flemish public sector organizations. These organizations are representative for the total population on most variables. The sample for instance includes both departments and semi-autonomous agencies, as well as organizations of various ages and sizes. The representativeness of the data was tested firstly on the basis legal type, with

¹² See: <http://www.nsd.uib.no/polsys/en/civilservice/>

¹³ For a full overview, see Appendix 5, section A.5.1.

results indicating there is no significant difference between sample and population.¹⁴ Moreover, a test on the total amount of structural reforms experienced per organization did not suggest a significant difference between both groups in terms of the amount of reforms experienced.¹⁵ However, when accounting for the type and recentness of reforms we do see a difference between both groups.¹⁶ This suggests that, while the non-responding organizations were on average not structurally reformed less or more frequently, they did experience some of their reforms comparatively recently.¹⁷

For each organization, an overview of the reform trajectory until 2013 – the year of the COBRA survey measurement and thus the last year BSAD reform entries are taken into account – as well as information on strategic policy autonomy is available, allowing us to test the relationship between an organization’s reform history and senior manager perceptions of strategic policy autonomy. The main characteristics of these organizations are included in Table 5.1.

Type	N	Mean size (FTE)	Age (year)
Department	8	205	7
External autonomous agency with public legal personality	12	662	23
Internal autonomous agency with legal personality	18	342	9
Internal autonomous agency without legal personality	6	515	24

Table 5.1. Descriptive information on sampled organizations (N=44)

¹⁴ With a Chi-square goodness of fit test, yielding $\chi^2=1.92$, $df=3$, $p=0.5901$

¹⁵ With a Mann-Whitney U test, yielding $Z=-0.784$, $p=0.4333$

¹⁶ $Z=-3.383$, $p=0.0007$

¹⁷ To verify that this did not influence results, a subsample of our original sample was automatically generated with an average structural reform history score that is not significantly different to that of the non-responding organizations. The analyses of section 5 were repeated on this subsample (albeit with fewer control variables due to reduced sample size). Results remain robust for structural reform history, and are available on request.

Figure 5.1 provides an overview of the amount of organizations that have accumulated a given amount of restructuring events. It illustrates that, although the number of organizations on which no reforms have been imposed is reasonably high at 10, the number of reformed organizations is far greater, namely 34. Additionally, it is notable that many of the sampled organizations have encountered multiple reforms in their histories. Thus, the dataset includes a variety of relatively stable organizations, organizations that have experienced moderate amounts of structural reforms, and organizations with substantial structural reform histories. Therefore, although the data on the independent is not entirely representative of the broader population of Flemish organizations, we retain a substantial amount of variation, which should allow us to capture the effect of different levels of structural reform histories.

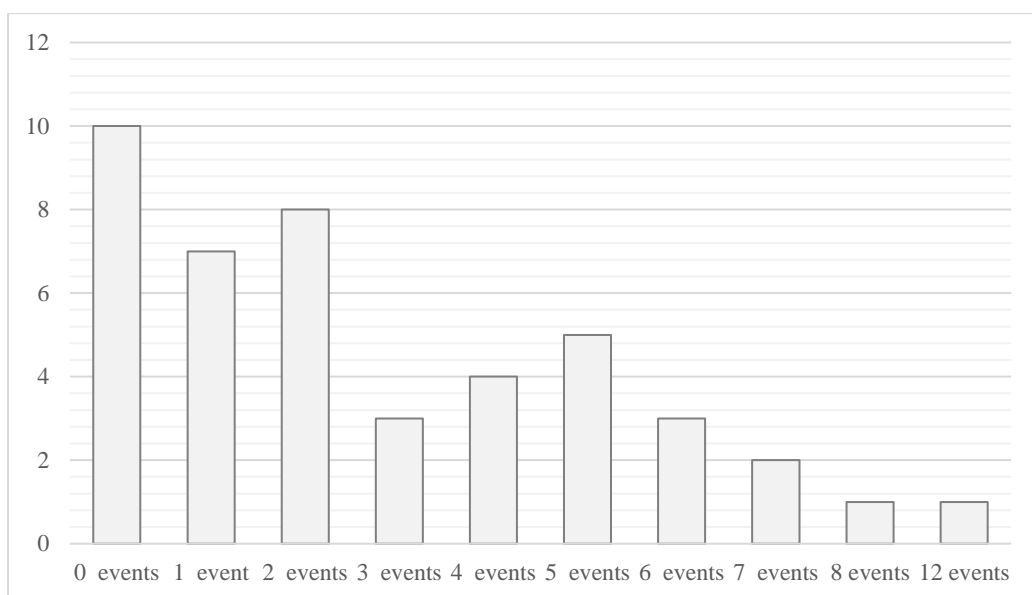


Figure 5.1. Reform histories by amount of imposed restructuring events for the 44 sampled organizations

As the northern autonomous region in the Belgian federal system, Flanders possesses far-reaching legislative independence and has developed an intricate government apparatus of (primarily) departments and agencies, similar to the administrations of other Western countries and some subnational entities (such as the

German Länder or US states). Beyond incidental structural reforms, an NPM inspired whole-of-government reform was implemented in 2006 and a move to post-NPM type structures and reintegration was made from 2008 onwards (Verschuere & Barbieri, 2009). Moreover, several structural reforms were implemented as austerity measures following the 2009 financial crisis (Vis et al., 2011). The 2006 NPM reforms have sought to implement a strict typology of agencies and has simultaneously accorded a degree of formal autonomy to departments – with the latter not directly being headed by ministers. Combined, the legislative independence of the Flemish government, the presence of several types of organizations with varying degrees of autonomy, as well as the variety in reform processes, means that the Flemish public sector provides a suitable setting for our investigation into the effects of structural reform histories on strategic policy autonomy perceptions.

5.3.1. Measuring strategic policy autonomy

Strategic policy autonomy is measured using the following item: “*is your organization involved in the formulation of its goals?*” Respondents were asked to answer this question using the following categories (without reverse-coding, in order from high to low strategic policy autonomy):

5. We formulate these ourselves
4. We formulate these ourselves, after consultation with the minister/
Flemish government
3. We formulate them together with the minister/ Flemish government
through a process of negotiations whereby each party has an equal say
2. The minister/Flemish government formulates these, after consultation
with our organization
1. The minister/Flemish government formulates these.

5.3.2. *Measuring structural reform histories*

Based on the BSAD, it was possible to create two indicators for organizational histories of structural reforms. These histories were reconstructed starting from the founding date of each organization until the survey year of the COBRA data (2013). The first of these indicators aggregates the impact of all structural reform events coded for an organization, after these have been provided with an adjusted value based on the amount of years that has passed between the reform event and our measurement of strategic policy autonomy, and may be expressed in the following formula;¹⁸

$$\Sigma \left(\frac{1}{(2013 - \text{Year of reform event})} \right)^2 \quad (1)$$

Here year of reform event refers to the date when the event took place and 2013 refers to the survey year of the COBRA data. Organizational history is taken into account until that year. The impact of each reform event depends on the date when it occurred. The further away in time, the lower its impact factor. Furthermore, it is important to note that we included a squared term in order to account for the fact that the effect of reform is expected to decrease in a nonlinear way.¹⁹

In a second, slightly more refined coding, we account for the fact that different types of structural reforms may be expected to affect an organization to varying degrees. An imposed secession of a unit to another organization may for instance be expected to have a stronger impact on senior manager perceptions than a change of name event. We therefore distinguish between reforms that are likely to have only a minor impact, reforms that are likely to have a moderate impact, and events that are likely to have a major impact on an organization. These event impact levels are respectively accorded the values 1, 2 and 3. Thus, utilizing formula (1) and substituting the 1 in the numerator for these impact values provides the formula for coding 2. The weights accorded to the various BSAD

¹⁸ This formula applies to all events imposed in 2012 or before. Events occurring in 2013 are taken into account simply with their squared strength value, as entering them into the formula would result in dividing by 0.

¹⁹ Note that this squared term is applied before regression analysis and does not denote a polynomial regression term

structural reform event codes are based on Wynen, et al. (2017) (see chapter 3), and are included in the top rows of Table 5.2.

While our second coding of organizational history follows the original weight distinction utilized by Wynen et al. (2017), we apply an additional robustness check by constructing a third coding. This coding alters the weight of ‘change of legal form’ events from moderate to major impact, reflecting that changes in legal form are often accompanied by changes in the formal autonomy of an organization, and may therefore have a relatively strong effect on the perceived autonomy of senior managers. The weights for coding three are shown in the bottom rows of Table 5.2.

Organizational history (coding 2)		
Major impact (value=3)	Moderate impact (value=2)	Minor impact (value=1)
<ul style="list-style-type: none"> · Restructuring by absorption from (an)other organization(s) (units or tasks) · Restructuring by seceding units or tasks to (an)other organization(s) 	<ul style="list-style-type: none"> · Restructuring by change in legal form · Restructuring by attribution of new tasks, not existing before in the public sector 	<ul style="list-style-type: none"> · Restructuring by shift to another ministerial portfolio (subordination to another ministry) · Change of name
Organizational history (robustness check)		
Major impact (value=3)	Moderate impact (value=2)	Minor impact (value=1)
<ul style="list-style-type: none"> · Restructuring by absorption from (an)other organization(s) (units or tasks) · Restructuring by seceding units or tasks to (an)other organization(s) · Restructuring by change in legal form 	<ul style="list-style-type: none"> · Restructuring by attribution of new tasks, not existing before in the public sector 	<ul style="list-style-type: none"> · Restructuring by shift to another ministerial portfolio (subordination to another ministry) · Change of name

Table 5.2. Available maintenance events in the BSAD and expected impact on the organization

5.3.3. Control variables

In order to account for the spurious effect of factors not included in our proposed causal mechanisms, we include a number of control variables. First, many Flemish agencies have been strongly geared towards service delivery and implementation instead of discretionary types of decision-making following the introduction of NPM initiatives in Flanders (see Van Thiel & Yesilkagit, 2014; Bach, 2012), perhaps limiting their involvement in strategic issues. A dummy (Task) is therefore included, which is set to 1 when service delivery is the primary task and to 0 otherwise. Additionally, an organization's *de facto* perception of strategic policy autonomy may be determined by its legal type. Flemish public organizations can be subdivided in organizations lacking legal personality, directly steered by the responsible minister, and organizations with legal personality and greater operational discretion. Following the classification by Van Thiel (2012) of public sector organizations, a dummy (Legal Personality) is therefore included, which is coded 1 if the organization possesses legal personality and 0 otherwise.

Additionally, organizational size in terms of FTE is included as a control. Organizational size has been argued to improve an organization's autonomy by providing slack resources that function as a resource, and by increasing organizational complexity (Bach, 2012). Furthermore, 'Organizational Age' in years is included in the model due to its potential endogenous effects on the relationship between structural reforms and strategic policy autonomy. An organization may naturally accrue a more substantial structural reform history over time, while simultaneously acquiring resources and reputation beneficial to its strategic independence (see also Maggetti, 2007). Since the distributions of size and age are highly skewed, we use logarithm-transformed variables ($\ln(\text{Size})$ and $\ln(\text{Organizational Age})$).

We furthermore include control variables on the personal characteristics, due to their potential influence on perceptions of *de facto* autonomy. First, we include tenure as senior manager within the organization (Senior Manager Tenure). Furthermore, we add a dummy capturing whether the responding senior manager leaves the organization in the measurement year of the COBRA survey (Senior Manager Leaving in 2013, coded 1 if a senior manager leaves in 2013 and 0 otherwise), as this may influence their perception of

risk associated with independent action. Finally, as research has found indications that female senior managers behave differently to their male counterparts, both within their own organization and with regard to their external environments (Jeong & Harrison, 2017), we include ‘Senior Manager Gender’ as a dummy (coded 1 for female and 0 for male respondents).

Table 5.3 provides the summary statistics and a correlation matrix.

Variable	Mean	Sd,		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Policy autonomy	4,00	0,72	(1)	1,00								
Organizational history	1,29	3,18	(2)	-0,30**	1,00							
Legal Personality	0,55	0,50	(3)	-0,08	-0,08	1,00						
Task	0,23	0,42	(4)	-0,19	-0,22	0,47***	1,00					
Size (log)	5,47	1,11	(5)	-0,07	0,03	0,09	0,33**	1,00				
Organizational Age (log)	2,45	0,69	(6)	-0,22	-0,08	0,35**	0,22	0,28*	1,00			
Senior Manager Gender	0,25	0,44	(7)	0,15	-0,11	0,14	0,26*	-0,09	0,07	1,00		
Senior Manager Tenure	6,00	2,26	(8)	0,12	-0,13	0,21	0,12	0,12	0,34**	-0,19	1,00	
Senior Manager Leaving in 2013	0,20	0,41	(9)	-0,08	0,28*	0,09	-0,17	0,00	0,14	-0,16	0,20	1,00

* p<0.10, ** p<0.05, *** p<0.01

Table 5.3 Descriptive statistics (N=44)

5.4. Methodology

Our analyses use Tobit models, in which one can set the lower and upper bounds. Utilizing Tobit models allows us to take into account that the dependent is bounded between 1 and 5, while OLS regressions would assume a continuous distribution. Moreover, while ordered models are generally speaking a viable option for such data structures, our relatively small sample of 44 organizations implies that the various categories would receive too few observations, making Tobit regression the preferred estimation method.²⁰

We have to take some assumptions underlying the Tobit model into account, such as normally distributed errors and homoscedasticity, i.e. $\varepsilon \sim N(0, \sigma^2)$. Departure from

²⁰ As a robustness check, standard OLS regression has also been employed with the same organizational history codings. This led to results with the same sign and significance level, which have been included in Appendix 5, section A.5.2.

homoscedasticity or normality will cause the estimators to be inconsistent (Wooldridge, 2002). In order to test the normality assumption, we estimate the Tobit model with polynomials (quadratic, cubic) of the fitted values as additional regressors. A Wald test is then performed to check whether these polynomials have jointly significant explanatory power. For all of our models, the null hypothesis of normality could not be rejected. If the assumption of homoscedasticity is violated in Tobit models, regressions may result in inconsistent coefficient estimates. Consequently, we also estimated heteroscedastic models where we model a heteroscedasticity term. The heteroscedasticity term includes the variable Legal Personality. When performing LR-tests on heteroscedasticity for all models, we notice that the null hypothesis (homoscedasticity) cannot be rejected in any of the models.

5.5. Results

Based on the Tobit results shown in columns 3 and 4 of Table 5.4 it is clear that organizational history has a significant negative effect on perceived strategic policy autonomy.²¹ In other words, the more turbulent an organization's structural reform history, the less likely it is to have a higher than average degree of strategic policy autonomy. Modelling the third coding of organizational history (see column 4) furthermore illustrates that the effect holds for an indicator which alters the weights for change of legal form events. Given these similarities for the three different coding methods of organizational history, it seems that the results of our models are robust.

In terms of control variables, possessing service delivery as a task does seem to produce consistent significant results, indicating that senior managers of public organizations focused strongly on the implementation of service-delivery tasks feel less capable of determining the strategic goals of the organization. It is furthermore notable that two senior manager characteristics produce significant results, albeit mostly at the

²¹ Additional Tobit and OLS tests were performed with fewer control variables, with results for organizational history codings remaining identical. Due to space limitations and the similarity of the results, we opted to present the full model in the article. Results for the other tested models are available upon request.

.10 significance level. Female senior managers seem to experience greater levels of strategic policy autonomy, a result that remains robust across the three main specifications as well as the robustness test. Moreover, there are limited indications that tenure may be positively associated with higher perceptions of strategic policy autonomy, although this variable is only significant in two model specifications, and only at the .10 level.

Variables	(1)	(2)	(3)	Robustness
	Coef	Coef	Coef	check (4) Coef
Organizational history (1)		-0.824*** (0.221)		
Organizational history (2)			-0.0927*** (0.0192)	
Organizational history (3)				-0.0871*** (0.0235)
Legal Personality	0.256 (0.394)	0.361 (0.382)	0.282 (0.366)	0.327 (0.376)
Task (Service delivery)	-0.691* (0.362)	-0.822** (0.367)	-0.789** (0.360)	-0.797** (0.364)
Size	0.103 (0.134)	0.131 (0.131)	0.136 (0.131)	0.126 (0.131)
Organizational Age	-0.458* (0.245)	-0.499** (0.227)	-0.488** (0.226)	-0.482** (0.226)
Senior Manager Gender	0.690** (0.323)	0.604* (0.312)	0.656** (0.313)	0.643** (0.313)
Senior Manager Tenure	0.131** (0.0582)	0.0902* (0.0531)	0.107** (0.0517)	0.0946* (0.0542)
Senior Manager Leaving in 2013	-0.252 (0.323)	0.0505 (0.311)	-0.0326 (0.292)	0.0106 (0.310)
Constant	3.913*** (0.654)	4.180*** (0.617)	4.055*** (0.606)	4.142*** (0.618)
Observations	44	44	44	44
McKelvey & Zavoina's R ²	0,246	0,324	0,335	0,325
Cragg-Uhler R ²	0,253	0,337	0,348	0,338

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 5.4 Regression (Tobit) results for the impact of history on strategic policy autonomy

5.6. Discussion

The results described in the previous section provide support for our theoretical argument that intense histories of structural reform may reduce a public organization's perception of strategic policy autonomy. This result remains robust across differently coded indicators of structural reform history. Our finding implies that policymakers and politicians should remain mindful of their long-term relationships with their administrative entities – and the senior managers that occupy these. As has been noted by scholars in fields related to change resistance and organizational culture, organizations and reform programs are not perfectly malleable and designable. Instead, both senior managers and employees in other ranks of the organizational hierarchy may act in *ex ante* unpredicted ways when they perceive structural reforms as externally imposed threats (Reichers et al., 1997; Pollitt, 2007).

With regard to perceived strategic policy autonomy, it seems that senior managers that experience their principal to be prominently present through structural reforms are less likely to perceive their organization to possess significant strategic discretion (see also Zito, 2015; Busuioc, 2009). Instead, the organization's senior managers, aware that the organization is under substantial scrutiny and control as well as under the threat of further structural reforms, will act in relatively risk-aversely. Therefore, they are likely to report the array of strategic choices available to them as relatively limited, and subject to at least some degree of involvement on part of the organization's principal.

Simultaneously, the continuous disruptive effect of structural reforms may – as was theorized in section two – prevent the organization from accruing substantial resources and a positive reputation within its task environment, hindering the organization with regards to maintaining or building up the resources necessary for a substantial degree of *de facto* strategic policy autonomy (Carpenter, 2004). For instance, those organizations frequently confronted with changes in their tasks or makeup may not be able to develop particularly specialized knowledge on a topic, nor will the organization be able to invest in long-term (personal or inter-organizational) relationships (Pollitt, 2007; McMurray, 2007; Seo & Hill, 2005). Organizational identities may be obscured

both internally and towards external audiences when names, tasks and forms are repeatedly subject to change. Internally, the remolding of organizational identities and reshuffling of units might disrupt the cultural unity of the organization, leading to culture conflicts and misunderstandings in units strongly affected by the structural reform (Marks & Mirvis, 1997). Moreover, when the symbols of the organization are externally obscured due to repeated changes, this may hinder the build-up of strong reputations. With internal turmoil preventing the organization from accruing or regaining the resources necessary to assert itself as an autonomous actor, it seems that the strategic policy autonomy perceptions of senior managers is detrimentally affected.

It furthermore seems that when no further reforms are imposed, senior manager perceptions of strategic policy autonomy may gradually be restored. We speculate that senior managers will gradually become more confident with regard to the strategic choices that the organization may make, while the organization simultaneously becomes more embedded in the field, adapts to its new structure and tasks and develops positive relations with external stakeholders. This would explain why indicators for the intensity of structural reform history that include a non-linear decay term, which becomes smaller the more time has passed since a given structural reform, function well in our models. This argument is in line with behavioral science research on the impact of single reforms, which suggests that post-reform an organization should gradually stabilize after a certain time-period (Seo & Hill, 2005). Conversely, the results also imply that when organizations are frequently reformed and are given no breathing space between structural reforms, the effects of these events may accumulate (Rafferty & Griffin, 2006; see also Moore et al. (2004), who find similar results for stress and well-being variables). Thus, perceptions of strategic policy autonomy may be reduced to a greater degree when the structural reforms the organization has experienced are frequent, recent and severe.

Combined, our results support the recent development in the literature that organizational autonomy is substantially dynamic in nature. Therefore, when a political principal deems a substantial degree of strategic policy autonomy necessary for the execution of an organization's tasks, it should not only establish its legal insulation, but should also attempt to provide conditions conducive to autonomous decision-making

during that organization's lifetime. Following our findings, this could for instance mean refraining from additional structural reform soon after an organization has undergone a sequence of particularly severe changes. Alternatively, it could mean delaying certain aspects of structural reforms to give an organization time to recuperate from previous reforms.

Simultaneously, our conclusions also corroborate arguments emerging from the (public sector) reform literature in recent years, which suggest that imposing reforms too frequently may generate detrimental side-effects (Rafferty & Griffin, 2006; Pollitt, 2009; McMurray, 2007). Moreover, articles examining the impact of single reforms have indicated that a variety of such detrimental effects may occur. These may include – but are not limited to – increased stress (Rafferty & Griffin, 2006; Marks & Mirvis, 1997), reduced job satisfaction (Amiot et al., 2006), change cynicism (Reichers, et al., 1997), transition costs (Pollitt, 2007) and disruptions of innovation-oriented cultures (see chapter 3). Our observation that strategic policy autonomy perceptions may also be reduced after repeated structural reform suggests that a broader range of factors within organizations may be influenced than was previously expected.

In this context, it is important to note that we do not argue against the necessity or desirability of structural reforms, but emphasize how their side-effects on perceptions of strategic policy autonomy may persist or even be amplified when such structural reforms are continuous and severe. Moreover, given the substantial evidence that public sector restructurings often achieve their goals to a limited degree (March & Olson, 1983; McMurray, 2007; Pollitt, 2007; although see also: Dan & Pollitt, 2015), the occurrence of such unintended side-effects suggests that reformers should consider the anticipated costs and benefits of structural reform realistically and comprehensively.

It is furthermore notable that the dummy included on legal personality is non-significant, providing no evidence that formal autonomy stemming from legal personality and the associated (relatively independent) Flemish agency forms relates to the degree of strategic policy autonomy perceived by senior public managers. This supports the emerging consensus in the literature that formal autonomy and *de facto* autonomy are different concepts, and that the presence of one does not necessarily imply the other

(Korinek & Veit, 2015). Conversely, having service delivery as the organization's primary task does produce consistent significant results. The combination of both results implies that, while *de facto* and formal autonomy should be treated as separate concepts, structural features of the organization may simultaneously remain powerful explanatory antecedents of *de facto* autonomy as perceived by senior managers.

Interesting is furthermore that age produces non-significant results in all but one of our models, contradicting earlier findings on the determinants of policy autonomy (Maggetti, 2007). This may be explained by taking into account that our operationalization of structural reform history provides a more precise interpretation of an organization's path through life, specifically whether it has had a stable or a tumultuous history. If correct, this argument implies that age is in fact a proxy for other dynamic variables, including the structural reform histories examined here. Another surprising finding is that the size variable does not produce significant results, implying that large public organizations cannot use their size to leverage greater degrees of strategic policy autonomy – which differs from the conclusions of Van Thiel & Yesilkagit (2014) and Bach (2012). However, the difference between our findings and those reached by other authors may be partially explained by our narrower focus on strategic policy autonomy. Thus, further research distinguishing between policy autonomy and its sub-dimensions seems necessary for a more conclusive statement on the effect of organizational size.

Finally, it is worth pointing out that gender and tenure seem to influence strategic policy autonomy perceptions. The results on tenure are intuitive: longer tenures seem to be associated with higher levels of strategic policy autonomy, suggesting that senior managers may leverage their experience and embeddedness in networks to improve their autonomy. However, given that the variable was not robust across all model specifications, this result should be interpreted with caution. Moreover, the consistent effects shown by our gender variable indicate that female senior managers perceive a somewhat higher degree of strategic policy autonomy. This is a puzzling result, which deserves additional scrutiny in further research.

One criticism that may be levelled against the arguments of this contribution is that some structural reforms may also be beneficial to the strategic policy autonomy of public bodies. Some events may be aimed at enhancing the formal autonomy of organizations (Busuioc et al., 2011), or may be initiated in a bottom-up manner, potentially increasing senior manager perceptions of strategic policy autonomy. While deserving further investigation, we argue that this issue is in our case mitigated by the fact that many of the changes of legal form included in our database were imposed pursuant to the introduction of a new typology of agencies during the 2006 whole-of-government reform. Many of the organizations did not experience substantial changes in distance from the political superior in this stage, but were incorporated into the new typology with a similar degree of autonomy as before. While this still entailed procedural changes for the organizations, thus making the event a potential source of disruption and perceptions of control consistent with our theoretical mechanisms, the influence of changes in levels of formal autonomy on perceptions thereof should have been minimal. Moreover, only three organizations experienced change of legal type events in the period 2008-2012, of which two included an increase in formal autonomy. Moreover, as all coefficients for structural reform history consistently display a negative effect, any other potential positive effects that might be included in the coefficients have apparently not been powerful enough to offset the negative effects on strategic policy autonomy.

Additionally, there remain a number of limiting factors that should be taken into account when considering our results. With regard to the available data it is noteworthy that we were limited to a cross-sectional analysis of a relatively small sample. Endogenous factors could for instance be present if weak senior managers perceive less strategic policy autonomy, and are also more susceptible to structural reforms as they lack the competences to adequately resist these. We believe such issues are partially mitigated by the long histories of structural reforms that are examined in this article, through which structural reforms imposed before the tenure of the newest manager become relevant as well. Nevertheless, subsequent studies should utilize panel-data structures with larger samples, thereby addressing dual or reverse causation issues and validating the results presented here.

Furthermore, while on most variables the sample is representative, we found that the responding organizations on average experienced less of their reforms in recent years, although an additional test on a subsample, which was generated with a mean that did not significantly differ from non-responding organizations, did show that results remain robust when accounting for this (see footnote 8). We have also not been able to address issues such as potential interactions due to the limited number of organizations in the sample. It is possible that – although the overall effect seems to be robustly negative – some organization types experience a larger or smaller effect for reform histories due to for instance their formal autonomy or their size, which would be an interesting aspect to incorporate in future studies.

Additionally, as we focused on the cognitive aspects of strategic policy autonomy by examining the perceptions of senior managers, we cannot make statements on how these perceptions translated into actual behavior. While senior manager perceptions are arguably the most relevant indicators for strategic policy autonomy given their responsibility for the strategic decisions within the organization, objective data that would reflect whether organizations actually exhibit less diverging strategic initiatives *vis-à-vis* their political principals could provide a powerful complement to our findings. Finally, the results presented here are limited by the lack of available data on the causal mechanisms underlying the relationship between structural reform histories and strategic policy autonomy, i.e. perceptions of control and disruptions of resources, restricting us to theoretical statements on these mechanisms.

5.7. Conclusion

As administrative autonomy continues to be valued for a variety of purposes by Western governments, the study of what drives autonomy in practice remains an important topic for public administration scholars. The findings presented here confirm our expectation that long and severe histories of structural reforms have a detrimental effect on senior managers' evaluation of their organization's discretion with regard to strategic goals. We argue that this result can be explained through two mechanisms. First,

as structural reforms can be seen as interventions and thus controlling behavior on part of the political principal, senior managers will perceive their organization's mandate as restrained and will tend to behave risk-aversely. Second, as the continuous structural changes affecting organizations tend to disrupt internal work-routines, interrupt inter-organizational ties and reduce the ability to establish a stable and well-developed reputation, frequently affected organizations will have difficulty accruing the resources necessary for an autonomous position.

Our findings confirm arguments made in the public sector reform literature that continuously reforming organizations can produce detrimental side-effects (Pollitt, 2007). This article illustrates that these effects are broader than for instance the transition costs (Pollitt, 2007) or organizational well-being effects (Rafferty & Griffin, 2006; McMurray, 2007) often expected, and may also include senior manager perceptions. As such, our results should encourage scholars to investigate a wider array of potential organizational reform effects, as to ascertain the full impact (structural) reforms may inadvertently have on organizations.

This contribution has furthermore added to the burgeoning literature offering a relational perspective on how autonomy is formed, maintained or lost. Such a perspective pushes our understanding of autonomy further than the already developed distinction between legal and *de facto* autonomy on the basis of static predictors, and sees cognitive perceptions of autonomy as a function of previous interactions between a public organization and its environment – in particular influential actors such as an organization's political principals (Maggetti & Verhoest, 2014). We add to this literature that effects on strategic policy autonomy may come from unintended and possibly unanticipated corners – in our case structural reform histories – working through mechanisms such as perceptions of control and the availability of resources. The findings of this burgeoning literature therefore suggest that adding dynamic, relational data to the already prevalent static predictors of organizational autonomy is a promising avenue for further research.

Chapter 6: Keeping a watchful eye in times of turmoil? How repeated structural reform leads to more attention to political signals.

6.1. Introduction

One of the rationales for the creation of semi-autonomous public organizations is to increase the distance between politics and administration. Not only does imbuing an organization with a given degree of formal autonomy provide a signal of credible commitment (Gilardi, 2002; Ennser-Jedenastik, 2016a; Ennser-Jedenastik, 2016b), it also serves to emphasize that the organization should operate at some distance from politicians and politically-lead sections of government (such as ministries or departments) (Majone, 1997a; Egeberg & Trondal, 2009b; Grønlie & Flo, 2009). As such, the semi-autonomous agency is an organization form that can be used to shield policy implementation from the short-term priorities of political life (Majone, 1997a; Busuioc, 2009; Lavrijssen & Ottow, 2012). Thus, many agencies are created on the assumption that, both *de jure* and in practice, they will operate beyond the daily purview of politicians and politically controlled parent ministries. This would provide these agencies with the ability to operate impartially and prioritize professional values and cues from non-political actors such as citizens and companies (Hood & Lodge, 2008, 30-31).

However, previous work already indicates that political actors have a strong urge to steer and control their implementing organizations, even when these organizations are placed at some distance from the government ('t Hart & Wille, 2006; Van Thiel, 2011; Kleizen et al., 2018). As many formal control mechanisms that allow for *ad hoc* steering, such as the competence to provide direct and binding instructions, are unavailable towards formally autonomous agencies, political actors may resort to intervening through structural reforms altering the tasks, legal statute and organizational framework underpinning the agency (Carpenter, 1996; Hood & Lodge, 2008, 184; Terman, 2014; Zito, 2015). Such imposed structural reforms often coincide with various structural reforms developed by the agency itself, in some cases creating series of disruptive and contradictory reform (Pollitt, 2007).

Research in organizational psychology and the management sciences has shown that even single structural reforms generate substantial levels of uncertainty and cognitive stress (e.g. Bordia et al., 2004), while multiple reforms is associated with higher levels of uncertainty (Rafferty & Griffin, 2006). Threat-rigidity theory suggests that, under such uncertain and stressful circumstances, individuals will avoid additional uncertainty,

causing the organization becomes risk-averse, more centralized and more formalized (Staw et al., 1981; Van Hootegem et al., 2019). This paper builds on these insights by considering whether we may expect agency employees that have experienced longer structural reform histories to more closely monitor their political and administrative principals. We argue that such employees are likely to place increased emphasis on signals from the government, the competent minister or state secretary and his/her ministry or political advisors – which we will refer to as political signals for purposes of succinctness – to anticipate and prevent additional turmoil (Terman, 2014; ‘t Hart & Wille, 2006). Thus, we argue that when an agency is reformed too frequently, a situation may arise in which the effort to insulate an organization from political life is (partially) undone by the psychological processes produced by the reform fever confronting said organization (Kleizen, et al., 2018).

Although not all agencies are created with the intent of insulating them from political interference (with some agencies even being created to increase political control (Park & Joo, 2010)), such a positive effect of repeated structural reform on attention devoted to signals could be detrimental in cases where impartiality and credible commitment are considered important. To provide a concrete example: supervisory and enforcement agencies (such as competition law agencies) are often imbued with substantial formal autonomy in an attempt to legitimate their output and mitigate concerns over potential biases that political actors may have on these agencies’ enforcement decisions (Norwegian Competition Authority, 2017). This autonomy thus aims to ensure that norm addressees are treated impartially and with regard for due process, as supervisory and enforcement action often results in significant alterations to citizens’ and/or organizations’ rights and obligations (NCA, 2017; Rothstein & Teorell, 2008; Egeberg & Trondal, 2009b; Lavrijssen & Ottow, 2012; Barron, 2008).

However, a supervisory agency having recently experienced a severe reform trajectory may wish to prevent – or at least anticipate – further turmoil by closely monitoring the preferences and communications of its principals, including the government, the competent minister or state secretary, as well as the competent ministry (Wood & & Waterman, 1991). Within the agency, social cues and hierarchical instructions to take heed of a political signal may reach various levels of civil servants,

allowing the effect to manifest not just on the senior-manager level, but also in mid-level and rank-and-file inspectors and policy officers. This introduces the risk of political influence on what were intended to be impartial and expert-based considerations, policies and decisions (e.g. withholding, delaying or slightly reframing sensitive reports, decisions or investigations).

Moreover, while one might argue that changing the organization's overarching course to match the preferences of its political principals might be the goal of some structural reforms (e.g. Carpenter, 1996; Zito, 2015), it is likely that altering the individual-level attentiveness to political signals of civil servants is an unexpected side-effect (Kleizen et al., 2018). In particular when a history comprising frequent structural reform increases this effect, it is likely that at least some of these structural reforms were not intended to alter the degree to which individuals within the organization devote attention to political signals.

In sum, we expect that when organizations are confronted with *frequent* structural reforms in their relatively *recent histories*, both the organization's senior management and its employees may attribute more weight to signals from politicians and parent ministries than they would when an organization's history of structural reforms is relatively modest. To analyze this expectation, we run hierarchical regression analysis on a dataset combining data from the Norwegian State Administration Database (NSAD) on the frequency and recentness of structural reforms that organizations have experienced throughout their lifetime with survey data on the importance of signals provided by politicians and parent ministries as perceived by civil servants within Norwegian semi-autonomous agencies. The next section of this paper will explore the theoretical mechanisms through which we expect histories of structural reforms to influence the perceived importance of signals from political principals and parent ministries. Subsequently, section three will elaborate on the data used. Sections four and five will respectively be devoted to the analysis and discussion of the data, after which several concluding remarks round up the paper. Results provide support for our propositions, and suggest that more intense reform histories are positively related to the importance attached to signals from responsible politicians and ministries.

6.2. Theoretical framework

6.2.1. *Political signals and their interpretation in (repeatedly reformed) agencies*

Despite being semi-autonomous, agencies are normally required to monitor signals from their political superiors to at least some degree, as they remain subject to various accountability and control mechanisms and dependent on political and ministerial decision-making. Indeed, such mechanisms are part and parcel of regular public sector governance, as democratic control over the civil service aims to keep the latter's actions in line with voter preferences and the public good (Christensen & Lægreid, 2007). Simultaneously, however, disaggregating agencies to some extent implies a balancing exercise between the degree to which the agency emphasizes political signals and the degree to which the agency is capable of and willing to pursue its own direction (Christensen & Lægreid, 2007). In particular where an agency is required to be (seen as) impartial in the execution of its tasks (see on impartiality e.g. Rothstein & Teorell, 2008), as is often the case for e.g. supervisory, arbitration, independent advisory and enforcement entities, it may be undesirable for its civil servants to emphasize political signals too strongly (Rothstein & Teorell, 2008). Thus, the 'right' level of emphasis placed on signals may differ between public organizations, depending *inter alia* on their tasks and formal relationship with the broader public sector.

The extant literature on political signals implicitly assumes that the degree to which organizations devote attention to such signals is a constant, with agency response merely being conditional upon the degree to which signals are used to control the agency (e.g. Carpenter, 1996, Terman, 2014). However, taking inspiration from the related literature on perceived (or *de facto*) autonomy, i.e. the literature investigating the degree to which organizations believe they are able to take decisions themselves, it may be argued that both organizations and individuals within organizations vary on the degree to which they perceive signals from political and administrative principals as important (e.g. Verhoest et al., 2004; Maggetti, 2007; Bach, 2010). Severe disruption (e.g. in the form of repeated structural reform) within an agency may make both its senior management and subordinate civil servants increasingly risk-averse ('t Hart & Wille, 2006). While *de facto* autonomy scholars have found that such disruption may thus reduce perceptions

of autonomy (Kleizen et al., 2018),²² we posit it is also likely that they may increase the attention devoted to signals, as the organization's management attempts to safeguard the organization's stability.

This is where we expect the underlying link between repeated structural reform and importance attached to political signals is likely to manifest. As the amount of structural reforms increases, the resulting turmoil may generate heightened levels of risk-averseness. As a result, the organization becomes less likely to maintain a fully unconstrained position in terms of the signals it takes into account (Wood & Waterman, 1991; 't Hart & Wille, 2006), with individuals in the organization perceiving a need to pay increased attention to political signals to detect, anticipate and possibly prevent further turmoil (Dommett & Skelcher, 2014). As mentioned in the introduction, this may result in formally autonomous agencies inadvertently operating in a way that takes into account political considerations. Although such a change in the relationship between an organization and its superior is not always problematic, it may be undesirable where an agency was explicitly set up to be impartial or to emphasize non-political signals (Miller, 2000). Sub-section 2.2 elaborates on threat-rigidity theory, an organizational-psychological theory that comprehensively explains this potential link between repeated structural reform and importance attached to political signals. Although data-limitations unfortunately mean that we cannot measure this underlying theoretical mechanism, it provides a likely explanation for the effects of repeated structural reform on perceived importance of political signals presented in section 4.

Before discussing this theoretical link, however, it is relevant to discuss our conceptualization of political signals. Given that civil servants may pick up signals from a wide variety of sources, we are required to acknowledge the possibility of political actors using an array of informal signals or formal signals not embedded in control mechanisms. Political actors may for instance provide signals on policy preferences through the media, reports and white papers or in direct contact with a bureaucracy's

²² We treat de facto autonomy and perceived importance of political signals as separate, albeit likely correlated concepts. While perceiving political signals to be important is likely a predictor of de facto autonomy and vice versa, we believe it is possible that an entity would heavily monitor political signals whilst also exhibiting perceptions of high levels of autonomy, for instance if it has an audit role vis-à-vis politicians and ministries.

managers and/or policy officers (e.g. Zito, 2015; 't Hart & Wille, 2006). Signals may also manifest in parliamentary debates, with for instance the minister or state secretary or a political advisor making a statement on the agency's level of performance or a preferred new policy direction. Alternatively, the preference of ministers and parties may be passed down through ministries, with parent ministry officials acting as an intermediate step in relaying political programs to agency employees (Zito, 2015; 't Hart & Wille, 2006). In this sense, parent ministries in many OECD countries may, to some degree, act as an extension of their political leaders, translating the views of the incumbent government into policy actions and communication. This is particularly relevant to take into account for countries such as Norway, where a strong reliance on the principle of ministerial responsibility creates comparatively strong sectoral ministries (Greve & Ejersbo, 2016, p.48). Given that signals may thus be transmitted through a variety of platforms and mechanisms, we define political signals broadly as: 'signals relevant to the organization and/or a civil servant's functioning, provided by the organization's superior politicians and/or sections of the bureaucracy directly under political control'.

6.2.2. Threat-rigidity effects following structural reform

The theoretical link between series of structural reforms and perceived importance of political signals is provided by threat-rigidity theory. This theory posits that when an organization confronts severe threats, it may undergo a multifaceted process consisting of effects on both the individual and the organizational level, which lead to increased rigidity, centralization and formalization (Staw et al., 1981; Boin & Otten, 1996; D'Aunno & Sutton, 1992; Daly et al., 2011; Niesen et al., 2014). The theory predicts that individuals in intensively and frequently reformed organizations are likely to experience high degrees of uncertainty, anxiety and stress (Staw et al., 1981). Such uncertainty, anxiety and stress introduce tendencies towards risk-averseness and reduces individuals' capacity to focus on peripheral informational cues (Staw et al., 1981; Daly et al., 2011). Through these effects, individuals throughout the organization's hierarchy are likely to become more focused on their immediate superior's preferences and less inclined to speak up regarding concerns or to provide a proactive contribution to organizational decision-making (Olsen & Sexton, 2009).

Although individuals in all levels of the organization may thus exhibit threat-rigidity effects, the implications of these effects for the organization may differ slightly depending on the level of decision-making. We therefore first discuss its implications on the senior manager level, before elaborating on the effects that are likely to occur for the remainder of the organization's employees.

6.2.3. Threat-rigidity effects at the senior manager level

For senior managers, the threat-rigidity effect implies devoting increased weight to the cues from their political and administrative principals. As the organization is unstable due to multiple ongoing and/or past structural reform processes, senior managers will tend to avoid causing additional uncertainty for themselves and the organization by closely managing their political and administrative principals' signals and preferences. This allows them to anticipate issues, avert sanctioning (Busuioc, 2009), and, through this anticipatory behavior, avoid additional cognitive uncertainty at the personal level (Niesen & De Witte, 2014).

As threat-rigidity theory was primarily developed with private-sector organizations in mind, its original version only recognizes such behavioral responses as occurring within an organization (Staw et al., 1981). However, we propose that this relationship holds for external relations to principals in the public sector as well. We reason that, in the public sector, inter-organizational ties are particularly important: members of semi-autonomous organizations are part of a broader government with intricate links in terms of financing and resources (Busuioc, 2009) as well as accountability links towards the responsible minister or state secretary and – often through ministerial responsibility – democratically legitimated institutions (Flinders & Buller, 2006). Indeed, the principle of ministerial responsibility often causes political and administrative principals to become relatively involved with their subordinate organizations, in many cases despite the formal insulation that such an organization enjoys (e.g. Flinders & Buller, 2006; Nieuwenkamp, 2004; 't Hart & Wille, 2006; Busuioc, 2009; Zito, 2015).

6.2.4. Threat-rigidity effects on individuals in lower levels of the organization

In addition to the aforementioned effects on the level of an organization's senior management, lower level employees will attempt to mitigate uncertainty by avoiding action that could lead to formal or informal sanctioning by their superiors (Olsen & Sexton, 2009; Wynen et al., 2019a). This may include a reduced propensity to speak up regarding issues perceived as controversial, reduced levels of creativity, an increased focus on a civil servant's core tasks and a reduced propensity to pick up peripheral cues (Staw et al., 1981; Amabile & Conti, 1999; Bommer & Jalajas, 1999; Olsen & Sexton, 2009). This risk-averse behavior on part of subordinates is amplified by senior- and middle management tendencies to centralize decision-making, introduce pressures towards uniformity and introduce increased levels of formalization within their organization (Staw et al., 1981; Muurlink et al., 2012).

As the organization is confronted with uncertainty and threat due to the serial introduction of structural reforms, managers are likely to attempt to mitigate this uncertainty by shifting decision-making to higher-level groups, while granting lower echelons less freedom to operate autonomously and less opportunities to be included in decision-making processes (Olsen & Sexton, 2009). Combined with the risk-averse effects incurred at lower levels within the organization, these centralizing and formalizing phenomena inadvertently serve to reduce the organization's propensity to notice various peripheral cues and may introduce increased groupthink and tunnel vision, through which the emphasis on political signals may be increased (Staw et al., 1981; Amabile & Conti, 1999).

Thus, threat-rigidity theory expects a variety of effects on both the senior management and the lower levels of the organization that are likely related to an increased tendency to emphasize signals from superiors, both internal and external to the organization. We summarize the inter-organizational, senior management and lower level effects predicted by our adaptation of threat-rigidity theory in Figure 6.1. This figure illustrates that signals directly transmitted by the minister or the ministry to the organization's senior management will be emphasized more heavily following repeated, recent structural reforms, as senior management is confronted with uncertainty and threat and begins to behave risk-aversely. Moreover, internal centralization and formalization

ensures that any lower level follow-up to the signal will also perceive it to be relatively important, while ignoring the signal may lead to sanctioning by the organization's management. Additionally, there are likely cases where signals do not pass through the managerial level, as lower level civil servants are for instance in direct contact with the minister or the ministry or receive a signal indirectly through e.g. the media. Nevertheless, as management begins to emphasize risk-averseness towards the political superior and attempts to enforce compliance with political preferences, the interpretation of these signals are still likely to be influenced by threat-rigidity effects.

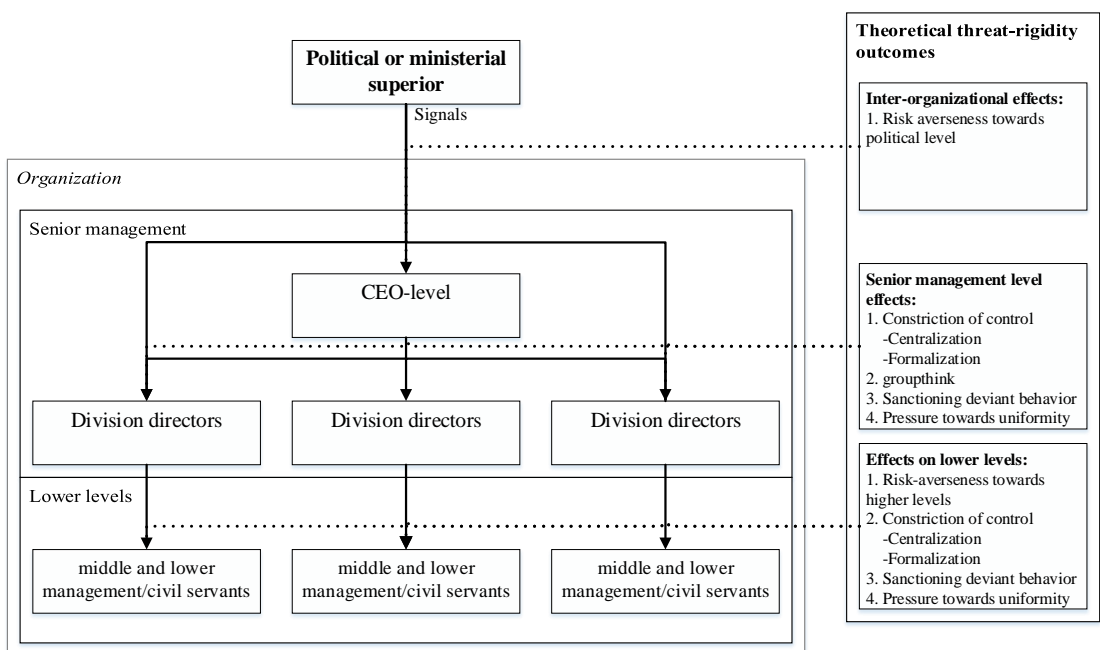


Figure 6.1 Hypothetical organigram with political signal pathways and relevant threat-rigidity outcomes superimposed.

6.2.5. Threat-rigidity effects during repeated reform

Moreover, we propose that as the organization is confronted with an increasing number of structural reforms in quick succession, we may also expect to observe a higher degree of formalization, centralization and attention towards political and administrative principals, i.e. the government, the competent minister or state secretary, political

advisors and the competent ministry. Such a temporal dynamic of structural reform histories remains largely unexplored in the extant literature, although a small number of studies does provide evidence for its occurrence. The organizational psychological literature lines on job satisfaction and stress have for instance observed higher detrimental effects following repeated reform events (Moore et al, 2004), or as perceived degrees of organizational change increase. In this context, Rafferty & Restubog (2017) posit that repeated reforms may bring about a situation of perceived continuous change, with no seeming end to a reform process, which will generate higher levels of uncertainty than single-event reforms. Similarly, through the threat-rigidity effect, we may expect repeated structural reforms to increase the weight attached to signals from political and administrative principals beyond what we would expect from single-event structural reforms.

In sum, we expect that civil servants will perceive signals from ministries and the superior minister that have greater weight following series of recent structural reforms, and that is effect runs through increased internal centralization, formalization, sanctioning and risk-averseness towards the political level and towards internal superiors. Although some aspects of threat-rigidity theory will unfortunately be theoretically assumed due to data constraints, the following sections will report results on the overarching proposition on emphasis placed on political signals, while also presenting supporting results that indicate the relevance threat-rigidity mechanism in repeatedly reformed organizations.

6.3. Data

We rely on Norwegian data to examine the impact of multiple structural reforms on the weight attached to signals from political and administrative principals. Despite being a reluctant reformer in the 1980s and 1990s, Norway is no longer characterized this way. Fast-paced reforms have involved NPM reforms but also New Public Governance and Neo-Weberian reforms in a layered manner. The most significant structural reforms made in Norway recently include hospital reforms (2001), welfare administration reforms (2007) and police reforms (2015). In contrast to those of many other European countries,

the Norwegian reform trajectory has been rather successful (Greve, Lægreid and Rykkja 2016). The presence of such reforms implies that various Norwegian public organizations have undergone frequent structural reforms over the past decade, rendering this country a suitable case for studying the effects of series of structural reforms. Simultaneously, previous findings of autonomy studies suggest that Norwegian organizations generally consider themselves relatively autonomous compared to their counterparts in other Western states (Rones et al., 2008; Bach, 2014). As a variable that is likely correlated to perceived importance of political signals, this could imply that Norway is a relatively unlikely setting to observe a negative relationship between longer structural reform histories and perceived importance of political signals. Thus, finding evidence of a relationship in such an unlikely setting would tentatively suggest that results may hold in other democratic states.

Using the Norwegian State Administration Database (NSAD; <http://www.nsd.uib.no/polsys/en/civilservice/>) we were able to reconstruct, for all central state agencies, all reforms in formal organizational structure from their founding until 2016 and is based on the work of Rolland and Rones (2011). State agencies are located directly beneath ministries as part of the central government. These state agencies form part of the civil service, but are structurally disaggregated from ministries. They carry out public tasks on a permanent basis, are staffed by civil servants, are subject to public law procedures, and are mainly financed through the state budget. They enjoy some autonomy from ministries in policy decision-making and implementation and in personnel, financial and managerial matters (Lægreid, Rones and Rubecksen 2012). The state agencies included in our sample have the following Norwegian-specific form of affiliation: “directorates, central agencies and other ordinary agencies outside the ministries which are the types most closely linked to the state centre and subject to general government regulatory frameworks” (Lægreid, Rones and Rubecksen 2012: 235). They are clearly Type 1 agencies as defined by Van Thiel (2012: 20), i.e. semi-autonomous organizations without legal independence but with some managerial autonomy.

The NSAD uses a predefined categorization that classifies structural reforms in three main categories: reforms related to the founding of an organization, reforms related to the survival or maintenance of an organization, and reforms related to the termination

of an organization. As such, it takes an institutional legacy point of view (Dommett and Skelcher, 2014) in which the maintenance events act as an intermediate step between life and death (Rolland & Roness, 2012). Since we are interested in the effects of structural reforms that are imposed during the lifetimes of organizations, we leave all birth and death events out of consideration.

These data are coupled with information from a comprehensive web-based survey among civil servants within different Norwegian central state agencies. The survey is part of the Central Administration study and has been conducted every 10 years since 1976 (Christensen et al., 2018), with our study drawing mainly on the 2016 wave while also using the 2006 wave for replication purposes. The technical execution of the survey is managed by the Norwegian Social Science Data Service (NSD) and the setup and funding of the survey is a collaboration between the University of Bergen, the University of Oslo the University of Agder. It contains information about individual demographic variables, structural variables, attitudes as well as data on the influence of political and administrative principals.

The 2016 wave includes a representative sample of 1963 respondents across 47 central state agencies, having a response rate of 59.5%. More precise information on the survey process, response rates per organization as well as on the validity of responses can be found on the website of the NSD (<http://www.nsd.uib.no/polsys/forvaltning/sentraladm2016.html>). The coupling of both data sources resulted in a final dataset of 918 employees within 38 central state agencies. To ensure that the reduction in observations did not introduce a bias, we compared the structural reform history of the 47 organizations included in the staff survey with the one of our subsample of 38 organizations. It is not unlikely that respondents of organizations with ‘turbulent’ structural reform histories are less prone to respond to survey questions regarding the influence of political and administrative principals. This non-response would consequently lead to an exclusion of such organizations from our sample. Hence, we compared the average number of structural reforms in our subsample with those in the original sample. Although the value in our subsample is slightly higher than that of the original sample (3.29 versus 3.04 (with a standard deviation of 3.03 versus 2.90)), the

difference proves not to be significant ($t=.02$; $p=.98$). The structural reform history of our 38 organizations is consequently representative for the entire sample of 47 organizations. *Secondly*, we calculated a Representativity-indicator (*R-indicator* or $M()$) (see for a detailed discussion Schouten et al., 2012 or the related RISQ project²³). Such an indicator is based on the standard deviation of estimated probabilities and is defined by:

$$M(\rho) = 1 - 2S(\rho) \quad (1)$$

The probability for being in the smaller subsample or not were estimated by applying a simple logistic regression model using the variables age, gender, tenure, position, task and starting job as auxiliary variables. The smaller subsample is not representative if there is much variation in response probabilities. This is reflected by a large standard error. The maximum value the standard error can assume is 0.5. In this case the value of the R-indicator is equal to 0. For our subsample the value of the R-indicator ($M()$) is equal to 0.93, indicating that respondents in the subsample do not differ significantly from respondents in the original and representative sample. In short our subsample thus proves to be representative with regard to both individual respondents and organizations.

Moreover, while individual-level data could not be linked across different iterations of the survey, it was possible to use the 2006 data to provide both a replication and a robustness test of our initial results. The demographics and representativeness of this supplementary second dataset are similar to the main 2016 data (with the final 2006 subsample consisting of 48 organizations and 1093 individuals, representative for the broader population of individuals and organizations).²⁴

6.3.1. Measuring the weight attached to signals from political and administrative principals

The weight attached to signals from political and administrative principals is measured using the following survey questions: “What weight do you add to each of the

²³ <https://www.cmist.manchester.ac.uk/research/projects/representative-indicators-for-survey-quality/>

²⁴ Results for the R-indicator were also similar and are available on request

following considerations in carrying out your work tasks? A) Signals from political leadership (government, minister, state secretary, political advisors) & B) Signals from the ministry” On both A and B, respondents could answer using a 5-point Likert-type scale ranging from 1 (never) to 5 (very often).

6.3.2. *Creating an indicator for an organization’s history of structural reforms*

Using information from the NSAD, we found that organizations in our sample endured a total of 107 maintenance events during their existence (starting from the founding date of each organization until 2016 (year of the staff survey)) with a distribution as shown in Table 6.1.

Event (N=107)	Freq. over total reforms	Freq. across organizations
new superior organization (horizontal movement)	19,63%	34,21%
change of legal form	2,80%	7,89%
change of location	5,61%	15,79%
maintenance by secession	7,48%	15,79%
maintenance by reorganization	40,19%	55,26%
new superior organization and level	1,87%	2,63%
maintenance by absorption	14,95%	21,05%
unit moving into, or out of, integrated organizations	7,48%	15,79%

Table 6.1. Distribution of structural reforms

Note that the right hand side of the Table 6.1. displays the percentage of organizations having experienced a specific type of reform. As organizations are likely to experience multiple reforms, the percentages in this column will not add up to 100%.

A first operationalization of *an organizations history of structural reforms* simply consists of the number of structural reforms an organization experienced.

However, just taking the sum of reforms per organization does have an important downside since each reform is given an equal weight. Recent reforms are consequently equal in value to reforms which have happened a longer time ago. Since this would lead to an overestimation of the effect of earlier structural reforms, we have added an

operationalization which accounts for this issue. More specifically, this *second operationalization not only focuses on the number of reforms experienced but also takes the timing of each reform into account*. More specifically, we employ following formula for calculating a value for each specific reform:

$$\sum \left(\frac{\text{Year of reform event} - \text{Birthdate}}{\text{Age of the organization}} \right) \quad (2)$$

By taking the sum of all these single values for each reform and per organization, a value is obtained for organizational history. This approach causes recent reforms to carry more weight than older ones. A significant positive impact for both indicators of organizational history would imply that these series of structural reforms positively affect the influence of principals.

6.3.3. Control variables

In line with literature on managerial autonomy (e.g. Lonti, 2005; Van de Walle, 2018) we control for socio-demographic differences by adding a number of individual-level control variables: age and gender of the respondent, current position (What is your current hierarchical level?), tenure within the organization, the position (hierarchical level) of the respondent when he/she entered the organization, the current task of the respondent, whether the respondent received any job offers in the past year, the degree to which there are clear rules concerning their job, the degree to which the respondent identifies with his department and finally the degree to which the respondent characterizes his field of responsibility by agreement or disagreement.²⁵ Apart from these individual-level controls and based upon the more developed managerial autonomy literature, we also add include control variables on the organizational level. As such, the policy field of the organization (see for instance Maggetti & Verhoest, 2014) is included. In our models, policy domain is operationalized using the Classification of the Functions of Government, or COFOG, see Appendix 6, section A.6.1. Moreover, and based upon a similar reasoning, we include the age of the organization (e.g. Maggetti, 2007). Table 6.2

²⁵ The precise wording of these questions can be consulted online at: <http://www.nsd.uib.no/polsys/StatiskeDokument/SpSkjemaDir06.html>.

shows descriptive statistics with a reference to the precise survey question that was used, as well as a (Pearson) correlation analysis. As discussed previously, all organizations are central state agencies, making it not necessary to control for the formal structure of organizations, an often cited determinant of organizational autonomy (e.g. Maggetti & Verhoest, 2014).

6.4. Method & Results

Since our observations of the influence of principals are nested within organizations, there is reason to believe that individuals' observations within a particular organization are not truly independent of one another, resulting in inefficient—or even biased—estimates depending on the severity of the between-group differences. Hence, we employ a hierarchical linear model. The results are presented in Table 6.3 (the influence from political leadership) and 6.4 (the influence from ministries).

For both tables, we started out by estimating an 'empty' (also called 'unconditional' or 'null') model to determine the extent of variance between organizations (Column (1)). When averaging across respondents and organizations, the indicator for the weight attached to signals from political leadership (Table 6.3) equals 4.02 and the weight attached to signals from the parent ministry (Table 6.4) equals 4.2. This corresponds well with the mean of each of these variables, see also Table 6.2. Moreover, the Likelihood Ratio (LR) test equals 40.75 (Table 6.3) and 39.93 (Table 6.4) with 1 degree of freedom and a p-value of .000, which should be halved to obtain a less conservative test.²⁶ In this case halving does not affect the conclusion. The null hypothesis should be rejected since there is evidence of cross-organization variation in the degree of the influence of political principals.

The intra-class correlation coefficient (ICC) estimates the proportion of variance at the organization level, relative to the overall variance. Since the dependent variable is measured at the individual level (civil servant level) this level should also have the highest ICC score (Steenbergen and Jones, 2002: p 231). The ICC equals 0.076 for the

²⁶ We are testing a variance component, for which the alternative hypothesis is one-sided. Negative variances, which would exist under a two-sided test do not make sense.

weight attached to signals from political leadership and 0.087 for signals from ministries, meaning that around 8% of the variance is due to differences across organizations, with the remaining 92 percent attributable to individual differences. Even though the ICC is not very high, ignoring it would lead to erroneous conclusions, statistically as well as empirically.

In the subsequent step (column (2)), level-1 covariates have been added to the model, for now assuming fixed effects. The intercept is, however, allowed to vary across organizations to accommodate cross-organization differences in the baseline weight attached to signals of political principals. When examining this column for both tables, we notice that gender, task and the position of the respondent significantly affect both the importance of signals from political leadership and the parent ministry. Again, there is evidence of variation in the intercepts. Comparing the fit of the random intercept model to that of a regression model yields a LR score of 26.33 for Table 6.3 and 24.81 for Table 6.4 both with a p-value of .000. Hence, we can clearly reject the null hypothesis that the intercept is the same across all organizations as the regression model assumes.

Variables	Survey Item	Mean	Sd.		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
<u>Signals from political leadership</u>	18_C	4.07	1.09	(1)	1															
<u>Signals from the ministry</u>	18_E	4.21	0.92	(2)	0.700***	1														
<u>Individual level N=918</u>																				
Age	53I	3.93	1.02	(3)	0.041	0.015	1													
Gender	54	1.50	0.50	(4)	0.065**	0.073**	-0.159***	1												
<u>Position</u>	2I	1.36	0.85	(5)	0.117***	0.094***	0.104***	0.016	1											
<u>Tenure</u>	6I_3	2.55	0.73	(6)	0.031	0.072**	0.203***	-0.062*	0.100***	1										
<u>Startingjob</u>	5I	1.85	0.86	(7)	0.112***	0.089***	0.142***	-0.009	0.380***	-0.001	1									
Rules	7	2.58	1.13	(8)	0.058*	0.052	0.012	0.040	-0.064*	0.048	0.042	1								
<u>Task</u>	5	6.05	2.35	(9)	-0.034	-0.066**	0.048	-0.057*	0.048	-0.021	0.009	0.027	1							
<u>Joboffers</u>	52A	1.69	0.46	(10)	-0.033	0.023	0.093***	-0.019	-0.051	0.008	-0.119***	-0.064*	0.004	1						
Identity	51	1.71	1	(11)	-0.021	-0.065**	-0.041	0.037	-0.137***	0.003	0.020	0.205***	-0.004	0.031	1					
Conflict	35	2.40	0.87	(12)	-0.033	-0.030	-0.167***	0.057*	-0.026	-0.044	-0.059*	0.209***	0.026	-0.052	0.139***	1				
<u>Organizational level N=38</u>																				
		Min.	3																	
		<u>Average</u>	24.2																	
		Max.	73																	
<u>Number of events</u>		2.78	2.33	(13)	0.051	0.068**	0.017	0.010	0.041	0.007	-0.078**	0.025	-0.022	-0.013	-0.0371	0.054	1			
<u>Linear depreciation</u>		1.51	1.59	(14)	0.011	0.053	0.012	0.019	0.032	-0.006	-0.076**	0.000	-0.032	0.003	-0.0510	0.040	0.933***	1		
COFOG		4.92	3.07	(15)	0.130***	0.100***	-0.060*	0.051	-0.030	-0.014	-0.023	0.011	0.027	-0.017	0.0172	0.045	0.076**	0.011	1	
<u>Orgage</u>		50.20	47.62	(16)	-0.146***	-0.119***	0.075**	-0.011	-0.011	-0.020	-0.168***	-0.041	-0.034	0.025	0.00142	0.002	0.567***	0.650***	-0.350***	1

*** p<0.01. ** p<0.05. *<0.1

² The surveys can be consulted online: <http://www.nsd.uib.no/polsys/StatiskeDokument/SpSlkjemaDir06.html>

Table 6.2. Descriptive statistics

Variables	(1)	(2)	(3)	(4)
Constant	4.02*** (0.06)	3.83*** (0.34)	3.66*** (0.35)	3.73*** (0.35)
Individual characteristics				
Age		0.03 (0.04)	0.04 (0.04)	0.04 (0.04)
Gender		0.12* (0.07)	0.13* (0.07)	0.12* (0.07)
Position		$\chi^2(3)=7.74^*$	$\chi^2(3)=7.00^*$	$\chi^2(3)=7.42^*$
Tenure		$\chi^2(2)=0.23$	$\chi^2(2)=0.22$	$\chi^2(2)=0.18$
Startingjob		$\chi^2(4)=4.23$	$\chi^2(4)=3.19$	$\chi^2(4)=3.18$
Rules		0.01 (0.03)	0.01 (0.03)	0.01 (0.03)
Task		$\chi^2(9)=34.41^{***}$	$\chi^2(9)=39.00^{***}$	$\chi^2(9)=39.01^{***}$
Joboffers		-0.04 (0.08)	-0.04 (0.08)	-0.04 (0.08)
Identity		-0.02 (0.04)	-0.02 (0.04)	-0.02 (0.04)
Conflict		-0.06 (0.04)	-0.06 (0.04)	-0.06 (0.04)
Organizational characteristics				
Cofog			$\chi^2(8)=8.07$	$\chi^2(8)=6.14$
Organizational age			0.00 (0.00)	0.00 (0.00)
History (1)			0.08*** (0.02)	
History (2)				0.09*** (0.04)
Observations	918	918	918	918
Number of Organizations	38	38	38	38
LR test (conservative)	$\chi^2(1)=40.75^{***}$	$\chi^2(1)=26.33^{***}$	$\chi^2(1)=1.28$	$\chi^2(1)=2.96^{**}$
Intra-class correlation	0.076			
Level-2 R ²			0.826	0.721

Standard errors in parentheses *** p<0.01. ** p<0.05. * p<0.1

Table 6.3. Results multilevel signals from political leadership

Variables	(1)	(2)	(3)	(4)
Constant	4.20*** (0.06)	3.77*** (0.28)	3.59*** (0.30)	3.66*** (0.30)
Individual characteristics				
Age		0.00 (0.03)	0.01 (0.03)	0.01 (0.03)
Gender		0.12** (0.06)	0.13** (0.06)	0.13** (0.06)
Position		$\chi^2(3)=5.47$	$\chi^2(3)=5.03$	$\chi^2(3)=5.12$
Tenure		$\chi^2(2)=3.46$	$\chi^2(2)=3.43$	$\chi^2(2)=3.5$
Startingjob		$\chi^2(4)=6.46$	$\chi^2(4)=5.51$	$\chi^2(4)=5.44$
Rules		0.03 (0.03)	0.02 (0.03)	0.02 (0.03)
Task		$\chi^2(9)=24.96***$	$\chi^2(9)=27.30***$	$\chi^2(9)=27.74***$
Joboffers		0.06 (0.06)	0.07 (0.06)	0.06 (0.06)
Identity		-0.06** (0.03)	-0.06** (0.03)	-0.06** (0.03)
Conflict		-0.04 (0.04)	-0.04 (0.03)	-0.04 (0.03)
Organizational characteristics				
Cofog			$\chi^2(8)=7.7$	$\chi^2(8)=5.7$
Organizational age			0.00 (0.00)	0.00 (0.00)
History (1)			0.07*** (0.02)	
History (2)				0.10*** (0.03)
Observations	918	918	918	918
Number of Organizations	38	38	38	38
LR test (conservative)	$\chi^2(1)=39.93***$	$\chi^2(1)=24.81***$	$\chi^2(1)=3.44**$	$\chi^2(1)=2.83**$
Intra-class correlation	0.087			
Level-2 R ²			0.694	0.696

Standard errors in parentheses *** p<0.01. ** p<0.05. * p<0.1

Table 6.4. Results multilevel signals from the parent ministry

To account for the variation in the intercepts, we add the level 2- covariates in columns 3 and 4. The difference between these columns lies in the coding of organizational history. Column 3 includes the first operationalization of organizational history (total number of structural reforms an organization endured during its lifetime) while column 4 includes the second operationalization of organizational history (taking

the timing of each single reform into account). For both models, the same the level-1 covariate, task of the respondent, remains statistically significant. However, position of the respondent loses its significance for the model on the importance of signals from the parent ministry. Of the newly added level-2 covariates, we notice that a higher score on organizational history significantly affects both the weight attached to signals from political leadership as well as to signals from the parent ministry. I.e. the more that organizations are faced with structural reforms, the more likely their employees are to attach greater importance to signals from political (Table 6.3) and administrative (Table 6.4) principals. The level 2 R^2 ranges from 82.6% to 72.1% for Table 6.3 and from 69.4% to 69.6% for Table 6.4, suggesting that the level-2 variables account for a significant part of the variation in the intercepts. Hence, reform histories that include 1) more structural reforms and 2) relatively recent structural reforms appear to significantly increase the weight attached to signals from both political and administrative principals.

One possible threat to these results that, recently, Norwegian administrations have increasingly pursued post-NPM goals such as re-integration, joint up government and horizontal cooperation, resulting in various reforms to create a less fragmented and more integrated public service (e.g. Christensen et al., 2014; Christensen & Lægred, 2010 259-264). Given the gradually increasing relevance of post-NPM in Norway, one could claim that our analyses on 2016 data have a bias towards reforms aimed at increasing attention to signals from political and administrative principals, potentially confounding our results or affecting generalizability. Since recent reforms carry more weight than older ones, our finding would consequently reflect the nature of these recent reform trends instead of the rigidizing effect of an intense series of structural reforms.

Thus, in part to replicate our initial results, and in part to verify whether our initial results were robust to the broader reform trends in and around 2016, we reran our analyses on the 2006 wave of the survey and the reform histories occurring until then. This time-period in Norwegian administrative history is characterized by the usage of multiple, co-existing reform paradigms, with some structural reforms focusing on NPM (e.g. structural devolution), some focusing on post-NPM (e.g. stronger integration), some being a mix of both NPM and post-NPM and, finally, some structural reforms being more incidental in nature (Christensen & Lægred, 2010, 264).

Variables	(1)	(2)	(3)	(4)
Constant	3.79*** (0.09)	2.85*** (0.43)	2.94*** (0.46)	2.98*** (0.46)
Individual characteristics				
Age		0.06 (0.04)	0.06 (0.04)	0.06 (0.04)
Gender		0.33*** (0.07)	0.33*** (0.07)	0.33*** (0.07)
Position		$\chi^2(3)=8.14^{**}$	$\chi^2(3)=8.14^{**}$	$\chi^2(3)=8.04^{**}$
Tenure		$\chi^2(2)=0.42$	$\chi^2(2)=0.42$	$\chi^2(2)=0.38$
Starting job		$\chi^2(4)=6.83$	$\chi^2(4)=6.73$	$\chi^2(4)=6.45$
Rules		-0.02 (0.03)	-0.02 (0.03)	-0.02 (0.03)
Task		$\chi^2(9)=11.5$	$\chi^2(9)=11.33$	$\chi^2(9)=12.32$
Joboffers		0.02 (0.07)	0.02 (0.07)	0.02 (0.07)
Identity		-0.05 (0.04)	-0.05 (0.04)	-0.05 (0.04)
Conflict		0.05 (0.04)	0.05 (0.04)	0.05 (0.04)
Organizational characteristics				
Cofog			$\chi^2(9)=13.53$	$\chi^2(9)=13.61$
Organizational age			-0.01*** (0.00)	-0.01*** (0.00)
History (1)			0.12*** (0.04)	
History (2)				0.16*** (0.06)
Observations	1,093	1,093	1,093	1,093
Number of groups	48	48	48	48
LR test (conservative)	$\chi^2(1)=110.22^{***}$	$\chi^2(1)=89.97^{***}$	$\chi^2(1)=29.82^{***}$	$\chi^2(1)=32.28^{***}$
Intra-class correlation	0.16			
Level-2 R ²			0,51	0,5

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 6.5. Signals from political leadership (Robustness test 2006 data)

Thus, while some structural reforms implemented in or before 2006 may still seek to increase political control, data from this time-period should be less susceptible to a disproportionate amount of structural reforms having such an aim. Our analyses are presented in Table 6.5 and 6.6. The results verify our initial findings. We notice that intensive structural reform histories positively affect the weight public sector employees attach to signals from political and administrative principals. The 2006 coefficient for signals from political leadership is somewhat higher, while the coefficient for signals

from the parent ministry remains nearly identical, suggesting that increased focus on post-NPM did not generate the lion's share of the 2016 results' effect size.

Variables	(1)	(2)	(3)	(4)
Constant	3.99*** (0.07)	3.30*** (0.37)	3.35*** (0.40)	3.37*** (0.40)
Individual characteristics				
Age		0.07** (0.03)	0.06** (0.03)	0.07** (0.03)
Gender		0.34*** (0.06)	0.34*** (0.06)	0.34*** (0.06)
Position		$\chi^2(3)=8.7^{**}$	$\chi^2(3)=8.79^{**}$	$\chi^2(3)=8.8^{**}$
Tenure		$\chi^2(2)=2.98$	$\chi^2(2)=2.24$	$\chi^2(2)=2.3$
Startingjob		$\chi^2(4)=2.77$	$\chi^2(4)=2.74$	$\chi^2(4)=2.49$
Rules		-0.03 (0.03)	-0.03 (0.03)	-0.03 (0.03)
Task		$\chi^2(9)=17.54^{**}$	$\chi^2(9)=17.55^{**}$	$\chi^2(9)=18.11^{**}$
Joboffers		0.11* (0.06)	0.10 (0.06)	0.10 (0.06)
Identity		-0.07** (0.03)	-0.07** (0.03)	-0.07** (0.03)
Conflict		-0.02 (0.04)	-0.02 (0.04)	-0.02 (0.04)
Organizational characteristics				
Cofog			$\chi^2(9)=13.9$	$\chi^2(9)=13.39$
Orgage			-0.00** (0.00)	-0.00** (0.00)
History (1)			0.06* (0.03)	
History (2)				0.08* (0.04)
Observations	1,093	1,093	1,093	1,093
Number of groups	48	48	48	48
LR test (conservative)	$\chi^2(1)=73.14^{***}$	$\chi^2(1)=61.7^{***}$	$\chi^2(1)=20.28^{***}$	$\chi^2(1)=20.06^{***}$
Intra-class correlation	0.12			
Level-2 R ²			0.49	0.51

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 6.6. Signals from the parent ministry (Robustness test 2006 data)

6.5. Discussion

The results presented in the previous section support the argument that repeated structural reform may increase attention devoted to political signals at the individual civil servant level. Both indicators of organizational histories of structural reform provide evidence that more intensive histories of structural reforms (as measured by 1) the amount of structural reforms and 2) their recentness) impact the degree to which individuals in public organizations attach weight to the signals provided by signals from government, their responsible minister or state secretary, political advisors and the organization's superior ministry. Moreover, this result has been replicated on 2006 data, providing additional evidence that our findings are not biased due to temporal aspects of the 2016 Norwegian setting (i.e. a relatively strong focus on integration and a re-assertion of central government in and around the 2016 survey wave).

Threat-rigidity theory suggests that this relationship may operate through the uncertainty and stress generated by (repeated) structural reform, although data limitations imply that this mechanism remains theoretically assumed. The theory suggests that both managers and civil servants within an organization can perceive the implementation of structural reforms as a threat (Staw et al., 1981; Van Hooft et al., 2019). As an organization restructures multiple times over several years, its internal makeup remains unstable for a prolonged period. For employees in all levels of such an organization, this instability forms a source of long-term uncertainty on various potential reform outcomes, including the possibility of individual positions becoming redundant or of being reshuffled into new units (Van Hooft et al., 2019). This is compounded by the stress generated by increased workloads during the transition period.

Threat-rigidity theory predicts that organizations in such a situation may exhibit a constricting effect. Managers, facing the uncertainty and stress of an organization in long-term transition, may attempt to exert additional control over the organization. This tendency to introduce greater control is predicted to result in increased centralization, formalization, groupthink, pressure for uniformity and an overreliance on familiar solutions (Staw et al., 1981). Moreover, peripheral informational cues become less recognized and less accepted within the organization, as stress inhibits cognitive processing, while pressures towards uniformity and centralization increase the

sanctioning of deviant positions (Staw et al., 1981; Wynen et al., 2019b). Thus, with higher levels of centralization and pressure for uniformity emerging within a repeatedly restructured organization, it is likely that the signals perceived as salient by senior managers are also considered increasingly important within the remainder of the organization. We argue that this forms a likely – albeit due to data-limitations theoretically assumed – cause of our result that higher reform history scores cause effects on perceived importance of political signals on lower levels within the organization.

Threat-rigidity theory is classically an intra-organizational perspective. However, we adapt this theory to include that, at least for the public sector, the risk-adverse tendencies produced by threat-rigidity effects may also manifest in inter-organizational settings. Organizational boundaries within the public sector are relatively ‘porous’ compared to other sectors, with semi-autonomous agencies remaining accountable to – and partially under the control of – political superiors (Christensen & Lægveid, 2007). Thus, the tendency to avoid uncertainty and sanctioning may result in the CEO’s of repeatedly reformed organizations closely monitoring the signals provided by the political level, while instructing individuals in the remainder of the organization to do likewise. Even political signals bypassing the senior manager level and directly being interpreted by lower ranked civil servants may gain more perceived weight, as civil servants become increasingly fearful of the potential internal sanctioning and controversy that may follow the inadequate follow-up of a signal from the organization’s political superior (Wynen, 2019a; Bommer & Jalajas, 1999).

On the one hand, such an effect on the perceived weight of political signals may not be necessarily detrimental, as it may allow the organization to survive while simultaneously stimulating its responsiveness to the preferences of the democratically legitimated political level (Carpenter, 1996). On the other hand, when the purpose of an organization’s creation was to let it emphasize signals other than those from political principals (e.g. Majone, 1997a), such an increased weight attached to political signals may be undesirable. Some agencies have attained their devolved status to foster an apolitical and impartial execution of tasks (Elston, 2014; Barron, 2008). This holds in particular for regulatory, enforcement, supervisory, arbitration, advisory and even some service-delivery agencies (Barron, 2008). Should an increased emphasis placed on these

signals in turn affect decision-making (e.g. avoiding decisions and policies which run counter to the political and administrative principals' recent signals (Terman, 2014)), the impartial and apolitical nature of the organization's decision-making may (Esty, 2006), in this case likely inadvertently and unintentionally, be threatened. It should therefore also be noted that, while testing the actual influence of signals on actual decision-making was beyond the scope of this article, previous work in the area of formal signals suggests that political signals may generate substantial bureaucratic response (Carpenter, 1996; Terman, 2014; see also e.g. Barron, 2008 at p.1116).

In this context, it is also worth reemphasizing that the ICC, while comparatively small compared to the variance explained by the individual level, still suggests that organizational-level aspects (including reform histories) may explain a sizeable amount of the variance of attention devoted political signals. Additionally, the effect sizes of the structural reform history indicators seem non-negligible, with the models incorporating coding one – the most directly interpretable coding – suggesting that every extra structural reform introduced results in an average increase of attention devoted to signals from 1) the government and the competent minister/state secretary and political advisors or 2) parent ministry of respectively 0.07 and 0.08 on a 5-point Likert scale. Given that the mean amount of structural reforms experienced is 2.78, with a standard deviation of over 2.3, the accumulated effect size predicted for many organizations may become quite substantial. Moreover, as the standard deviation of both dependent variables is close to 1, the predicted effect of for instance an organization experiencing three reforms ($0.07*3=0.21$ or $0.08*3=0.24$) can be considered quite substantial.

Although some structural reforms may admittedly be geared towards increasing the degree to which an organization is responsive to its political and ministerial superiors (Christensen et al., 2008), we believe this is unlikely to be the case for all structural reforms that are implemented in repeatedly reformed entities. Many reforms are instead introduced for *sui generis* reasons relating to a specific organization, changes in policy preferences or efficiency concerns. In other cases, structural reforms may even be intended to increase the autonomy of an organization, especially if impartiality or credible commitment is valued highly for that organization (see e.g. NCA, 2017). Thus, when studying the accumulated histories of all structural reforms across multiple

organizations, the effect of structural reforms aimed at greater political control should be offset by structural reforms with other aims. We therefore believe that the effect of increasing perceived importance of political signals is likely in large part an unintended byproduct of the organization-psychological processes that manifest following repeated structural reform.

Accordingly, an important contribution of this paper is practical in nature: politicians, policymakers, managers and reformers should anticipate that an organization may not behave as intended over its lifetime due to effects caused by long-term developments such as the amount of structural reforms that the organization has experienced. When such changes in the predisposition of the organization are detected, policymakers or public managers may take additional measures to ensure that civil servants within the organization are not increasingly caught up in the short-term priorities of political life (Flinders & Buller, 2006; Zito, 2015). This could for instance include re-emphasizing the original mission through information-provision or training, refraining from imposing additional reforms or culture management etc.

The first and perhaps foremost limitation of this study is its lack of data on threat-rigidity effects. On the one hand, the threat-rigidity perspective provides a theoretically sound explanation for our results. Moreover, contributions that do address threat-rigidity effects such as uncertainty and reductions in cognitive processing provide relatively consistent findings, attesting to the theory's validity in the context of organizational reform (e.g. Van Hootegeem et al., 2019; Bommer & Jalajas, 1999; Daly et al., 2009). On the other, our current data-limitations mean that the relationship between threat-rigidity and political signals, as well as the argued inter-organizational dimension of threat-rigidity remain theoretical assumptions. Further research is therefore necessary to confirm the theoretical framework developed here. A second important limitation of the current study is its cross-sectional nature. As respondents from the utilized survey could not be followed over time, it was not possible to use panel estimators to reduce endogeneity issues. As the combined availability of surveys linkable on the individual-level over time and long-term (structural) reform data is to our knowledge not currently available, this would be a point to address in future data-gathering endeavors.

Another potential limitation lies in the context studied. In this vein, it is particularly notable that Norwegian agencies tend to report relatively high levels of perceived autonomy (Roness et al., 2008; Bach, 2014), a variable likely highly correlated with perceived importance of political signals. However, if the autonomy of public organizations in other states is indeed more qualified than seems to be the case for Norway, we would expect any potential moderating effect of national culture to limit effect sizes for Norwegian studies—implying that the relationship observed here might manifest more strongly in other states. After all, agencies in other states may be comparatively inclined to see imposed structural reforms as attempts at control (see chapter 5), or be more attuned to controlling political and ministerial principals in general. Accordingly, we are cautiously optimistic that our findings are generalizable at least to other democratic states, even if effect sizes may differ. Another notable contextual feature is that recent Norwegian post-NPM efforts have sought to improve control and coordination of public organizations (Christensen & Lægreid, 2008). However, the threat of these management trends being a potential confounder should be mitigated by our replication of results for both the 2006 and 2016 Staff Surveys, which allowed us to test whether the relationship between structural reform histories and perceived importance of political signals holds across different temporal contexts with different management trends.

**Chapter 7: Senior manager
perceptions of organizational change:
the relevance of (dis)continuity,
radicalness and self-initiated versus
imposed change**

7.1. Introduction

Organizational change is rife in the public sector, as new legislatures demand reforms, as internal organizational processes initiate change and as stakeholder demands change over time (Pollitt, 2007). This produces a large variety of change trajectories, with some organizations being (repeatedly) reformed through imposed political choices, others possessing the ability to co-opt political decision-making to introduce their own changes and still others largely operating outside the purview of political life, either introducing their own changes independently or remaining relatively unchanged for years until they encounter a ‘big bang reform’. Such changes can be strongly emotional for both the organization’s employees and its leadership, inciting responses varying from resistance to burnout and absenteeism (Oreg, 2006; Wynen et al., 2019a), with extensive research being performed on the elements influence how employees cope with change trajectories (Oreg et al., 2011). However, much of this research has focused on either on the private sector or on the effect of leadership styles on reception of a change within a public organization. Whether and how senior public manager perceptions are impacted by the changes they implement in particular remains an under-investigated topic (although see e.g. Nieuwenkamp, 2001, 152 for an exception). This despite the fact that – at least in the public sector – senior managers are often as much the recipients of politically imposed change as their employees are (Nieuwenkamp, 2001, 152).

We report evidence from 15 narrative interviews (Søderberg, 2006; Patterson et al., 2012) suggesting that the attitudes of an organization’s senior management towards changes is determined by:

- 1) the degree to which senior managers perceive themselves to involved in the organization’s change trajectory
- 2) the degree to which new reforms are radical for the organization and;
- 3) whether these reforms are perceived to be discontinuous with the earlier change trajectory of the organization.

Combining inductive and deductive approaches, we find that greater perceived involvement in, and greater continuity in the development of a change process coincides with manager perceptions that the reform was relatively successful and accepted within the organization (Hargreaves, 2004). Conversely, a combination of politically imposed,

radical and strongly discontinuous change seems to result in high levels of frustration on part of senior managers, which we speculate could trickle down to their implementation efforts. Finally, we find that a reform that is imposed and discontinuous but non-radical in the sense that it involves relatively minor adaptations to the organization does not result in strongly negative attitudes.

These results are consistent with earlier findings and theoretical contributions in the management sciences, public administration and organizational psychology. Hargreaves (2004) provides particularly valuable insights, finding among regular employees that a degree of involvement in developing a sub-process of an otherwise imposed change was associated with relatively positive perceptions of that change. Conversely, employees who were faced with unilaterally imposed change without having any control over its development reported relatively negative perceptions. We combine these insights with public administration contributions on the managerial public service bargain and insights from organizational psychology on psychological contract breach, with these concepts helping to explain *why* senior managers would perceive imposed change negatively. Contributions on the public service bargain have noted that political superiors and public sector organizations usually establish a set of explicit and implicit agreements on their mutual obligations and prerogatives – among which a bargain on the managerial space that should remain beholden to the organization (Hood, 2000; Van Dorp & 't Hart, 2019). This is similar to the psychological contract research, which has provided expansive and consistent evidence for the argument that employees adopt implicit contracts on the mutual obligations of themselves towards the organization and the organization towards them (Robinson & Morrison, 2000). These lines of research suggest that violating such implicit expectations – e.g. by imposing change that severely infringes upon the managerial space senior managers expect to have – may result in substantial frustration (Robinson & Morrison, 2000; Bellou, 2006).

Our results paint a vivid picture of the way in which change trajectories are experienced by senior managers in the public sector. Far from being passive recipients of political preferences, public managers attempt to reconcile political demands and loyalty to democratically elected officials with what they believe is in the best interest of the organization and its mission (Nieuwenkamp, 2001, 151-154). Where political demands

are opposed to what senior managers believe is in the interest of the organization and/or its stakeholders, this may result in strategic (and often evasive) behaviors and high levels of cynicism and frustration. Our results suggest that consulting the civil service before a political reform program is introduced could reduce opposition and reduce the likelihood of negative change outcomes. In essence, what seems missing in public sector reform is active change management performed at the strategic levels, through which departments or political support staff may be able to signal and prevent strong degrees of resistance from sections of the civil service.

7.2. Theoretical framework

An organization's leadership is currently considered to be one of the foremost factors in determining the degree to which change is implemented successfully (Nadler & Tushman, 1990; Van der Voet et al., 2014). High levels of trust between leadership and employees, as well as CEO charisma and senior management's internalization of the organization's culture have for instance been noted as important factors in enabling or inhibiting reforms to succeed (Kavanagh & Ashkanasy, 2006; Söderberg, 2006). Similarly, leadership style as a determinant of general organizational performance and its ability to initiate and implement change has emerged as an important focus for academic attention. For instance, studies on leadership suggest that a transformational approach – i.e. an approach emphasizing a clear mission and vision, inspiring employees, functioning as a role model and management as a source of intellectual stimulation – is important to both performance and satisfaction (Wright & Pandey, 2009). In the context of public sector organizational change, transformational leaders are expected to be particularly adept at fostering a sense of need for change, in turn increasing internal levels of support for and commitment to that change (Van der Voet, 2014; Van der Voet et al., 2016). By contrast, transactional leadership styles focusing on quid pro quo type relationships have been found to have a negative effect on change appraisal (Holten & Brenner, 2015).

Although undoubtedly valuable in examining the successfulness of certain leadership styles during change, an implicit assumption in these studies is that they posit senior management as a rational change agent, acting independent of managers' human biases, frustrations and perceptions (see e.g. Nadler & Tushman's (1990) seminal work

for an example). Some studies do acknowledge that senior management often has difficulties in assessing the ambivalence or resistance towards change among lower ranks in the organization, thus recognizing the bounded rationality of management (e.g. Jones et al., 2008). Similarly, Van der Voet et al. (2014) note that management may be introspective on its own change management style, and attempt to improve its own functioning. Nevertheless, even such studies often implicitly see senior management as an actor roughly in line with the *homo economicus* model, with perceptions on the organization's internal change process being determined by (the lack of) information-gathering capability on the true position of the organization's employees. We argue that this implicit assumption provides a one-sided view on senior management behavior during the implementation of change, as organizational change is often an involuntary exercise for senior managers and employees alike, making it likely that senior managers are subject to the same psychological processes that create e.g. frustration, stress, cynicism, skepticism and resistance towards change as their employees.

This is true in particular for senior managers in the public sector, who usually share their role in plotting the strategic direction of the organization with political superiors (Nieuwenkamp, 2001, 73). Even where public sector organizations are formally hived off from the core of the central government, it has been found that various (semi-)independent organizations may be prone to political superiors attempting to exert control through system-level reforms, organization-level reforms, as well as immediate instructions on the organization's operations (e.g. Kleizen, Wynen & Verhoest, 2018 (chapter 5); Zito, 2015; Flinders, Dommett & Tonkiss, 2014). Moreover, when legislatures change, new political superiors often determine new courses while old policy and financial plans are abandoned, requiring organizations in the civil service to undergo swift and drastic changes in both strategic orientation and operational implementation (see e.g. Lewis, 2002a; Van Dorp & 't Hart, 2019). In this context, the preferences and affective responses of the civil service regarding organizational change are often likely of secondary importance to the fulfillment of electoral promises – despite the detrimental consequences negatively perceived change may have on individual-level well-being and organizational performance. This can create situations in which 1) change is not instigated by the organization or its senior management but by external, political

decisions and 2) change can be politically imposed instead of internally driven, with change sometimes being imposed without warning and without substantial heed to the preferences and earlier change direction of the organization. These factors external to the organization may be in tension with the change trajectories already developed and being implemented within the organization, however. Where this is the case, such tension may affect senior manager perceptions, forming a source of frustration (Nieuwenkamp, 2001, 154).

The research presented here iteratively combines inductive and deductive approaches, meaning that although initial coding was inductive, this inductive exercise was subsequently linked to existing theoretical insights that were then deductively applied. The remainder of this section therefore discusses a number of relevant theoretical factors that emerged from the coding process and informed the later stages of coding: the degree to which a change event is perceived as externally imposed on the organization's senior management, in combination with the degree to which the change event is 1) discontinuous and/or 2) a radical change for the organization. In explaining these factors, the theoretical section draws on the management literature on organizational change, public administration literature on political-administrative relationships and psychological literature on the effects of violated expectations in organizational contexts. In this context, we see a discontinuous change as a change in tension with the earlier direction of the organization. A radical change is seen as a strategic and organization-wide change event that – even if in line with the organization's trajectory – requires substantial adaption costs (Nadler & Tushman, 1990).

We propose that when senior managers feel they can exert substantial control over their reform process, either by developing the majority of changes internally or by co-developing reforms with the political superior, these changes will be seen as self-initiated and, accordingly, associated with positive emotions and be experienced as positive for the organization (Hargreaves, 2004; Nieuwenkamp, 2001 152). However, when strongly radical and discontinuous change is imposed suddenly and externally, leaving no room for senior manager participation in the change's design, senior managers will be relatively likely to be frustrated, cynical and skeptical of the change due to politicians' violation of the managerial discretion of public organizations (Wanous et al.,

2000). We argue that the degree to which a change is unilaterally imposed from the political level mediates the relationship between the degree to which the change is discontinuous and/or radical on the one hand and perceptions of the senior manager on the other. In other words, we expect that discontinuous and radical change initiated by the senior management will still be regarded in a positive light as the managers in question exhibit a sense of ownership over the change, while discontinuous and radical change that is externally imposed will likely be met with relatively negative and frustrated appraisals. These expectations are summarized in Figure 7.1.

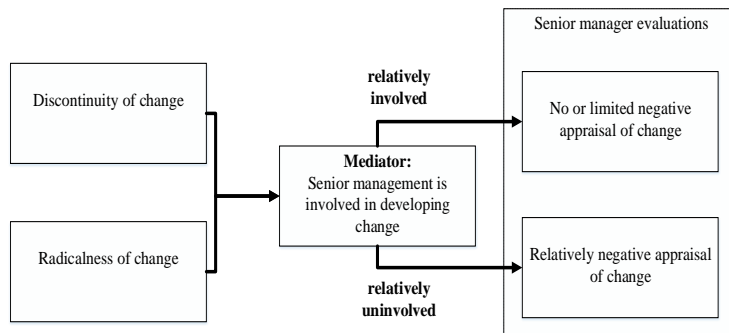


Figure 7.1. *expected relationships between variables*

7.2.1. (Dis)continuity and radicalness in change trajectories

Organizational change does not occur in a vacuum. Some public organizations remain relatively stable, sometimes even causing a degree of inertia (Boin, 1996). Other organizations change continuously due to the quickly changing needs of their political and societal environments (Pollitt, 2007; Nadler & Tushman, 1990). In both cases, however, a new change may interact with the organization's earlier history and cause upheaval for the organization in question (Bartunek et al., 2006; Nieuwenkamp, 2001, 154). When such discontinuous change occurs in previously stable organizations, existing norms, traditions and symbols are suddenly at stake, often causing widespread uncertainty and resistance among employees (Bordia et al., 2004). At the same time, organizations already in a longer change trajectory may also not be immune to experiencing discontinuous change. Such organizations can be confronted with a sudden pull towards a direction in tension with earlier changes, causing employees to experience their change trajectories as unending and confusing (Rafferty & Restubog, 2016;

Bartunek et al., 2006) and sometimes even violating promises made to employees during the implementation of earlier changes (e.g. growth opportunities or the scrapping of desired policy changes) (Robinson et al., 2000).

While almost all types of organizational change may bring about some degrees of uncertainty and resistance, we define discontinuous change as a change exhibiting a break with the earlier change direction of the organization, and accordingly is more likely to display severe levels of negative reform side-effects than changes that correspond better with the organization's earlier trajectory (Nieuwenkamp, 2001 154; Bartunek, 2006). Particularly good examples of reforms that are usually experienced as discontinuous organizational changes are mergers, as these events nearly always entail strong adjustments in the organization's structure, changes in work methods, culture clashes, alterations in working conditions and social changes due to the integration of departments (Marks & Mirvis, 1997). What is more, mergers frequently produce the perception that one or more organizations are ending as self-standing entities, making it likely for their employees to feel a strong sense of loss, and making such a change a particularly jarring shift in the organization's trajectory from employees' perspectives.

However, it has previously been found that discontinuous changes may be perceived relatively positively by the organization's senior management, even in cases where this perception is not shared by their subordinates (e.g. Corley, 2004; Jones et al., 2008), indicating that the severity of the event itself is not a sufficient condition to cause negative attitudes among senior management. Instead, we propose that the degree to which the senior manager feels ownership over the contents of a change and in control of the implementation of the reform is essential to the degree he/she displays positive attitudes regarding that reform. While relatively little is known regarding the attitudes of senior public managers to politically imposed organizational change, we can glean some insight from management research among employees on self-initiated change, imposed change and participation in organizational change.

Simultaneously, where reforms require a substantial shift in the organization that is nonetheless in line with the change trajectory that the organization is on, the impact of that reform may be lessened somewhat. In such changes, both senior management and the organization's employees may be more convinced of the need of the new changes and

see them as the logical extension of a pre-existing situation. This may occur in particular if the new change in addresses outstanding problems for employees and the organization's management that were not solved by previous changes. Thus, an important distinction must be made between reforms that radically change an organization's structures and/or procedures, but are continuous with its earlier change history, and reforms that are both radical and discontinuous with the organization's previous change history.

However, it is likely that not all discontinuous change should be received as severely impactful on the organization. A second aspect to take into account, therefore, is the degree to which a certain change is radical in nature, or whether it forms a relatively limited and incremental change. Even when change is discontinuous, a lack of impact on an organization may mean its implementation is a relatively minor issue, reducing any potential frustration that could stem from the discontinuous nature of that change. Conversely, when change is discontinuous *and* strongly impactful in nature, we may expect senior managers to be more likely to be frustrated at its implementation.

7.2.2. Self-initiated versus politically imposed change

Even when change is both discontinuous and radical in nature, we argue a third mediating variable may come into play: the degree to which senior management is involved in the design of a change. Hargreaves (2004), investigating mandated and self-initiated change among high school teachers, importantly finds that self-initiated change is often associated with positive feelings and emotions. Respondents expected more benefits of self-initiated changes compared to mandated changes, and were generally enthusiastic in their accounts of self-initiated change. While many of these changes produced difficulties, overcoming them provided substantial satisfaction and a sense of pride in achieving challenges and overcoming obstacles (Hargreaves, 2004). Similar results are presented by Goodson (2001), who notes that externally imposed changes often encounter reluctance on part of implementing agent, whereas agents introducing self-initiated change may be expected to be more committed. A caveat introduced by Hargreaves (2004) is, however, that changes perceived as self-initiated by respondents often flow from broader externally mandated changes. Specifically, these respondents

seemed to have relatively positive attitudes towards changes that were in principle imposed, but in which they could include elements developed by themselves. This notion is supported by employee-level research in change management, which suggests that participation in developing a change is a method to increase support for a change (Lines, 2004). Conversely, unilaterally imposed change has for instance been linked to employee perceptions of poor change management, job satisfaction, turnover and cynicism about organizational change (Bordia et al., 2011)

Further insight on why the combination of radical and/or discontinuous change may be mediated by the degree of involvement of the senior may be gleaned both from public service bargain studies in public administration and psychological contract research in organizational psychology (Robinson & Morrison, 2000). The public service bargain denotes a set of formal and informal rules on “duties and entitlements relating to responsibility, autonomy and political identity” (Hood, 2000; Van Dorp & ‘t Hart, 2019). For The Netherlands, for instance, Van Dorp & ‘t Hart (2019) suggest that an overarching institutional set of rules revolve around mutual respect, reciprocal loyalty and discretionary space for both politicians and civil servants to execute their respective roles. These general roles and rules are supplemented by the expectations built up in the interaction between political superiors and senior managers. For senior managers, these bargains include some form of managerial public service bargain, which entails the responsibility of public servants for the management of the civil servants on the one hand, and a degree of “managerial space that politicians cannot enter” on the other (Hood, 2000). When the bargain is maintained by both parties, this may aid in developing an effective political-administrative division of labor. Even when changes are abrupt and cause a major shift for the internal organization, compliance with managerial public service bargains by involving senior managers causes these shifts to be interpretable and legitimate according to the existing ‘rules of the game’ (Hood, 2000; Van Dorp & ‘t Hart, 2019).

However, it is likely that there are also cases in which cheating by one of the parties may cause the managerial public service bargain to become violated. Unexpected crises, signs of underperformance, governmental and parliamentary turnover, or even the minister’s character traits and/or the strength of a senior manager’s position may result

in the political level interfering with the managerial space that a senior manager perceives beholden to him/herself by politically-imposed, top-down reforms. A similar effect may occur during whole-of-government reform waves, in which design choices are made at a relatively abstract level (e.g. to include NPM traits for entire categories of agencies). Such programs are often difficult to tailor to the needs of each and every organization, causing them to interfere with the needs and expectations of organizations in unanticipated ways (Pollitt, 2007).

Helpful insight into the potential consequences of such managerial public service bargain violations is provided by employee-level psychological contract research in organizational psychology (Robinson et al., 2000). Psychological contracts as studied in this branch of organizational psychology are similar to public service bargains, as they entail a set of formal and informal expectations on the obligations of the organization towards its employees and the duties that these employees reciprocate. When these implicit contracts are breached severely enough by organizational change, employees can become frustrated and cynical towards that change, straining the relationship between them and the organization (Bellou, 2006; Conway et al., 2014). Another useful aspect of psychological contract theory is the insight that not every breach of expectations necessarily leads to strong emotional responses (Robinson & Morrison, 2000). Minor breaches may be seen as an inconvenient occurrence in an otherwise stable relationship. Translated to the senior manager – political-level dyad, relatively minor politically imposed organizational changes that infringe upon the senior manager’s perceived managerial autonomy may not bring about a violation of the managerial public service bargain, despite the potential misgivings that the senior manager may have regarding the imposed change. Conversely, when the managerial public service bargain is breached due to a discontinuous change being imposed unilaterally on the organization, this is likely to produce severe negative associations with the change, causing senior managers to perceive it to have negative effects on the organization while being relatively difficult to implement and straining the relationship with the political principal.

In sum, we propose that when change is perceived to be radical and/or discontinuous as well as externally imposed, senior managers will associate said change with relatively negative emotions and effects. When an imposed reform is neither radical

nor discontinuous, some negative effects may still occur, but these should be less pronounced. Finally, change perceived as (in part) self-initiated change will be associated with relatively positive effects and pride among senior managers, due to senior management involvement in the change's development mediating the relationship between change and perceptions of that change.

7.3. Data and methodology

Our study makes use of just over 17 hours of interpretative interview material with senior managers in Belgian public organizations. More specifically, 15 senior managers from the same number of public organizations were approached to provide their perceptions of their organization's reform trajectory. The study uses a narrative interviewing technique, which is a sub-form of the interpretative interview encouraging the respondent to provide an in-depth chronological narration in a language familiar to him/her (Søderberg, 2006). We use a version of narrative interviewing in which, as preparation for the interview, a timeline of the major organizational changes confronting the organization during the senior manager's tenure is construed (Søderberg, 2006; Patterson et al., 2012; Wolf & Van Dooren, 2018). This timeline is then presented at the outset of the interview to the respondent to facilitate recollection and to encourage the respondent to discuss the organization's entire change trajectory, instead of focusing on a single (e.g. the latest) organizational change. In addition, this approach has the dual benefit of avoiding social desirability as would be present in e.g. structured interview styles (Groleau, 2006), while simultaneously encouraging the respondent to construe a story with a plot, an integrated sequence of events, proponents and opponents, and thus allowing evaluative judgments and emotions to shine through (Søderberg, 2006).

Timelines were constructed using document analysis, with sources primarily including annual reports, organizational websites, preparatory parliamentary documents (in the case of major policy changes) and, where relevant, news sources. Each timeline corresponds to a different organization and senior manager. While done as extensively as possible before the interview, respondents were also invited to make additions to the timeline at the beginning of each interview. During the discussion of the timeline the researcher attempted to refrain from steering the respondent too strongly, mainly using

probes to elicit more information on changes that were not discussed or asking for further elaboration on a statement just made by the respondent (Groleau, 2006). Although several interviews consisted only of a discussion of reforms on the timeline due to the length of this phase, most were followed up by a number of supplementary questions that were relevant in light of the discussion of the timeline. While most were follow-up questions on the basis of the timeline discussed in the first stage of the interview, a limited number were semi-structured case-specific questions prepared as supplementary material, although preference was given to questions revealing themselves during the narration process. In practice, interviews lasted between 0:45 minutes and 1:45 hours, with most interviews being around 1:10 hours. All interviews were held in respondents' native language (Dutch or French in Belgium), although quotes reported here have been translated as precisely as possible into English.

The organizations interviewed were selected to maximize variation on reform trajectory, degree of formal autonomy from the political center and size. Moreover, organizations from multiple policy domains were included (scientific affairs, health, labor, infrastructure, environment and general public services) so as to ensure that multiple relationships with ministerial principals would be included in the study. This strategy allows us to tease out differences between narratives resulting from differing reform trajectories and senior-manager-political principal relationships. Moreover, including variation on organization form and size provides a limited degree of confidence that the phenomena described in our contribution are not limited to a single type of public organization, although generalizability – in particular outside our selection criteria – does remain an issue given the study's small-N design.

For reform trajectories, we approached four organizations with a long and seemingly discontinuous reform trajectory, four organizations with a short but recently discontinuous reform trajectory, six organizations exhibiting multiple reforms as well as recent but non-radical change and one organization with a long reform trajectory but that was currently stable. In terms of formal autonomy, we based our selection on the typology of public organizations created Van Thiel, which ranges from 1 – departmental entity to 5 – private law based entity. After translating this typology to the Belgian public sector, we included 5 internally decentralized agencies (categories 2 and 3), 7 externally

decentralized public law agencies (category 4), and 1 major Belgian public enterprise (category 5), as well as 3 sub-entities (category 1) with a relatively separate identity (two of them having been abolished as a single agency and being split up over two absorbing organizations) and one being a departmental division which operates relatively autonomously. In terms of size, six agencies possessed less than 250 employees, 5 possessed between 251 and 1000 employees, and four possessed over 1.000 employees. Table 7.1 shows the cross-tabulation of reform histories with agency type and organizational size, illustrating that our sampling taps a wide variety of organizational profiles (although 3 out of 18 variable combinations are admittedly left untapped in this study, i.e. type 1 agencies with long reform histories, type 2-3 agencies with short reform histories and large organizations with short reform histories).

	Agency type			Size		
	Type 1	Type 2-3	Type 4-5	Small (<250 Employees)	Medium (250-1000 employees)	Large (>1000 employees)
Long reform history	0	2	3	1	2	2
Medium reform history	1	3	2	3	1	2
Short reform history	2	0	2	2	2	0

Table 7.1: cross-tabulation of organizational characteristics

Our analysis could be biased based on sampled senior managers' tenures. For instance, a new senior manager may have relatively little experience with the changes introduced the organization, potentially making him/her a less reliable source on the way the organization and its members coped with changes in that organization. The senior managers interviewed in this study mostly have relatively long tenures, largely counteracting this potential source of bias. Figure 7.2 shows the tenure of sampled senior managers per category and shows that only two managers had tenures under three years, while five had tenures greater than ten years.

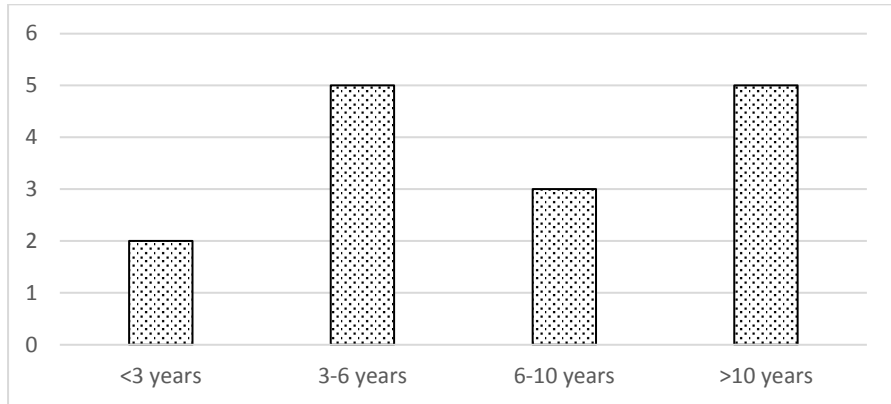


Figure 7.2: sampled senior managers' tenures in categories

Coding proceeded in NVivo and on the basis of initial inductive open coding of several interviews. After 5 interviews were processed a first round of axial coding was performed, refining open codes in a smaller number of categories. A prototypical version of the emerging themes was also established. Subsequently, an additional round of open coding was performed to incorporate the other 10 interviews. A second round of theoretically informed (and thus more deductive) axial coding was then performed after processing all 15 interviews and, finally, a stage of grouping concepts by themes was performed.

7.4. Results

Our interviews in general suggest that senior public managers are well aware of the difficulties that change may bring about, with all interviews noting the occurrence of at least some negative side-effects. In over half of the interviews, senior managers noted that change brought about at least some degree of resistance. Moreover, just under half of respondents noted that at least some skepticism towards changes was present in the organization. Another remarkable resemblance across interviews is that respondents from all organization's change history that included either a merger or the integration of units from other organizations note that these changes have brought about at least some degree of culture shock or culture conflict.

However, while almost all senior managers thus recognize that changes may be difficult for their organization, the degree in which senior managers perceive the end-result of the change trajectory as positive varies considerably. Some recognize the difficulties of their organization's trajectories, while perceiving the overall added value of the changes to be positive. These managers generally also perceive implementation difficulties to have been limited, instead often noting that change was accepted relatively soon and brought about its intended effects. Others perceive substantial difficulties to exist, but assert that these (sometimes ongoing) issues are manageable and that the combined result of changes over the years of their tenure was still positive. Finally, roughly one third of respondents perceive the change trajectory to be relatively difficult for the organization. These senior managers were inclined to mention a higher degree of resistance and other negative effects among employees of the organization, displayed signs of frustration regarding the implementation of changes, and in a small number of cases even reported negative effects on their own position or wellbeing. In subsection 4.1, we therefore outline 2 narratives in which imposed change was relevant for a large section of the narrative, and 3 narratives in which imposed change played a notable, if not entirely dominant role. In subsection 4.2 we subsequently discuss several of the other narratives included in our study, in which imposed change, radicalness or both factors were absent. Senior managers of different organizations provided all but one of the narratives. The one exception concerns two senior were in charge of separate units that succeeded an organization split two years earlier.

7.4.1. Narratives in which change was experienced as radical, discontinuous and externally imposed

Important indications on why our respondents' narratives diverge so substantially can be found in the degree to which the organization's earlier change trajectory was both discontinuous and radical in nature, combined with the degree to which the organization was itself in control over its reform trajectory. In 5 cases, respondents reported that a radical change was strongly discontinuous with the organization's earlier trajectory, as well as being unilaterally imposed by political superiors. This combination was a particularly strong source of frustration, according to respondents, both for senior

managers themselves and for members of the organization. One narrative concerned a senior manager leading a merger of two relatively autonomous service-delivering sub-entities of a department. The senior manager reported that an internally driven change trajectory towards a drastically revised catalogue of products was disrupted by the announcement of the merger. In the initial stage of the respondent's narrative, discussing the revised product catalogue before the announcement of the merger, the respondent indicates that the change trajectory of his/her merger partner towards the new catalogue was perceived quite positively and carried broad support within the organization.

The narrative of the respondent then continues with the merger, which did not allow the organization to retain all aspects of its internally devised reorientation, to a degree breaking the dynamic of the earlier change processes. According to the respondent, the imposed nature of the merger caused it to be less legitimate among employees and management than earlier internally devised changes. The respondent furthermore indicated that a similar story was relevant for the other merger partner. The second merger partner had a strong sense of autonomy and a distinct culture, according to the respondent, but had recently undergone significant changes following an intensive audit, after which the merger was imposed on them. This abrupt accumulation of two shifts in direction disrupted the strong sense of identity among employees, leading to heightened levels of turnover. Two years after the merger, this identity issue remained salient. The respondent indicates that employees usually still identify themselves with the organizations as they existed before the merger instead of the new entity. This is compounded by the respondent's lack of control over the broader merger of his/her overarching department, which meant that he/she faced issues with developing new symbols as the communication unit did not support her unit as well as he/she had hoped. The respondent emphasizes that this was difficult externally, but also produced issues in motivating employees internally. Thus, the involuntary nature of the merger for both partners seemingly combined with a lack of control through the implementation process, the radicalness of the changes, *and* their discontinuity compared with the previous direction of the organization to produce strongly negative perceptions on the effects of that reform. For one of the merger partners, this change in direction was formed by the merger being in tension with internally driven reforms, which seem to have intruded in

managerial space of the organization in the eyes of the senior manager. For the other, discontinuity seemed to have been caused by a sudden and involuntary shift in the organization's earlier autonomous direction. Nevertheless, both partners were unhappy with their sudden involuntary jerk in direction, which seems to be reflected in the senior managers perceptions of and attitudes towards the implementation of the merger.

A second respondent (of another organization) narrates an experience that exhibits differing circumstances on the surface, but that is indicative of a very similar underlying mechanism. The respondent's story emphasizes how – at the time of his/her installation as senior manager – the agency was under threat of being too heavily influenced by the field it was supposed to coordinate, and even faced potential termination by the government. He/she considered that a drastic change in the agency's direction and strategic priorities was considered necessary to ensure its continued survival. At the time, a recent inter-policy area initiative was being conceptually set up at the political level, which in the eyes of the respondent provided a chance for the agency to reinvent itself. The transition process itself required the agency to radically alter its operational activities from a largely executive agency to a primarily conceptual and coordinating network agency. The radicalness of the redesign necessitated comprehensive preparatory change management and sufficient time to redesign internal structures, create new digital systems, introduce a cultural shift and hire staff with a more conceptual orientation. However, the political superior of the agency unilaterally moved the deadline to implement the new policy several months forward, disrupting the change process that the agency had initiated internally and, in, the eyes of the respondent, producing high workload and internal resistance towards the change:

Respondent 10: given that, the government pulled that forward [ed: the implementation date for the new decree] we were put under heavy pressure by [the competent department] on EVERY meeting basically, as well as by our cabinet, to say are you going to be able to provide [the newly setup service]? Because [the competent department] is ready, but are you going to have [the newly setup service]?

Followed several lines later by:

Respondent 10: The entire reform we were preparing, that we were preparing, I gathered all my people in a room on the opposite side of the road, told them this is a war situation, we are going to have to go far more radical than we thought we could go. But fundamentally, it is my experience that every radical reform in an organization is wrong. Radicalness in organizations is wrong. You can force something but you are going to pay the price afterwards, while gradualness, deliberation, participation is far more sensible in an organization.

The senior manager subsequently indicates that the implementation of the reform encountered substantial difficulties during implementation, with employees resisting the shift away from the original executive orientation of the agency, as well as the organization being unable to install HR functions which were aimed at easing the transition process. At this stage during the narration of transition process, the senior manager notes:

Respondent 10: that [ed: the lack of an HR function] caused a lot of unrest, of course. And that type of escalation, in which at one point we thought the coalition of people who were against grew, and the coalition of people who went with was shrinking, that was the case at one point.

Although the respondent thus perceives to have almost lost control over the transition process due to the forced implementation of such a radical change ahead of schedule, in later stages – as control over and support for the introduced changes gradually increased – the narrative becomes markedly more positive. The senior manager reflects that this increase in support was largely due to the organization achieving its performance goals, despite the unrest caused by the reform:

Respondent 10: Because in such an organization in complete turbulence you would think, okay, we are going to lose a wheel or drop the ball somewhere, that is, somewhat to my own surprise, but all those targets were achieved. That is important because after your transition you are fighting to get everyone on board, is the coalition of people who support the new story going to grow? Is it

going to get bigger than the people still living in the past? And then there is a sort of tipping point at which a sort of positive energy comes in...

The initial reform begins to cascade into other, internally initiated changes, including a further shift from network coordinator to a more hands-off “ecosystem” enabler, further internal decentralization and a culture of continuous incremental change, with these subsequent changes being narrated far more positively by the respondent than the initial radical change.

In a third example, an organization operating in the health domain was required by its political superiors to work in multiple networks. A radical and imposed first change constituted the move towards a networked service-provision for adults. Subsequently, a second radical change was imposed by implementing an at face value similar network for adolescents, but with different geographical boundaries, actors and operational standards. The networks’ requirements furthermore caused the senior manager to perceive his/her organization to be the junior partner in the new network, while also testing the capacity of the organization as both adolescents network and non-network entities tended to refer too many clients to the respondent’s organization. Similar to the previous narratives, the senior manager is frustrated with what he/she perceives as political insensitivity regarding the operational requirements of organizations affected by politically imposed changes. Simultaneously, the discontinuity between both imposed network changes was perceived to problematize adjustment to the networks, with the respondent remarking:

Respondent 8: Again, it’s baffling to conclude, the federal legislator creates a structure around a network adults, then sets up a structure for adolescents that is completely different, that you wonder, how do they come that? Other standards, with other partnerships, with other regions. Interviewer: yeah the boundaries are actually different right? Respondent: yeah, then I think, how, why are you doing this, huh?

A fourth narrative concerns a decision to split an agency taken at the political level without prior consultation of that agency, with the decision appearing in a new coalition agreement. The respondent indicates that his/her employees were proud to work

for the pre-splitting agency, causing the sudden announcement of the decision to split the agency to be perceived negatively and employees to feel disillusioned with the Flemish government as an employer. Accordingly, it was important for the senior manager to maintain some continuity within the organization post-splitting, endeavoring to keep his/her section of the organization together in a new section within the absorbing agency. This discontinuity with the organization's earlier trajectory still played out strongly within the senior manager's organization, and formed a test for employees' motivations in the eyes of the respondent. In a final case noteworthy to mention here, the senior manager of the other section split off from the original agency experienced other discontinuities, which mainly concerned the repeated change encountering his/her section. It was politically decided that, after the split, this section would first merge with one organization. This was followed by a second political decision to merge the new parent organization with another organization roughly a year later, which included a merger of the section with several other divisions. The senior manager, although only presiding over the section in question after the second merger, did note that the reform fatigue caused by repeated politically imposed radical change for the employees of the recently absorbed section continued to be a point relevant in his/her management of the new entity – more so than for sub-entities with shorter politically imposed reform trajectories.

The first two narratives paint the most vivid picture of how radicalness of a change, combined with unilateral behavior by the political principal of the organization, may cause senior managers to perceive the transition process as substantially problematic. In the first narrative a politically imposed “jerk” of suddenly merging two organizations causes substantial difficulties, as the merger's goals were disputed, as one merger partner was disrupted in its implementation of its internally initiated reform trajectory, and the other was perturbed by the sudden loss of a valued organizational identity. In the second narrative, it is the unilateral political decision to implement a policy change ahead of schedule that causes the organization to enter the transition with less preparation than planned. In neither case, the organizations seemed to have sufficient time to prepare the transition process, or to soften the blow for employees, leading senior managers to experience the process as hectic, difficult and – at times – frustrating, with

both managers strongly emphasizing the issues caused by unilateral political decisions at various points in their narratives. By contrast, both respondents were notably more positive regarding internally driven trajectories, which they perceived as motivating for employees and comparatively easy to implement. While these two narratives offer the most striking evidence of the joint relevance of top-down political change and a change's radicalness *vis-à-vis* the organization's earlier change, this mechanism seemed at play in at least three other cases.

While overall the latter three narratives were not dominated by the repercussions of externally imposed discontinuous change, the underlying mechanism in these three cases again seems to be similar: where the narratives discussed externally driven changes in tension with the organization's earlier trajectory, perceptions were more negative than for either internally driven changes or for externally driven changes in line with the organization's change path. For the public hospital case, the main difference seems to be that the network change, while certainly radical, seemed to less extremely redefine the organization than was the case in the initial two cases. For the section which reported difficulties with the disillusionment of employees following the splitting of an organization they were proud of, the main difference in perceptions seems to be caused by the senior manager succeeding in including his/her section's interests in other aspects of the splitting, e.g. retaining the autonomous functioning of his/her section. Finally, for the other section of the splitting organization, it seems that the senior manager's entry into the organization through the other merger partner meant that his/her perceptions noted the problems generated by the discontinuous nature of the reforms, but that he/she was less influenced by them personally due to his/her relatively recent appointment.

7.4.2. Narratives in which change was experienced as (partially) self-initiated and/or non-radical and/or continuous

Conversely, when either the perception of having no control over a change or the degree of radicalness of a reform compared to an organization's earlier direction is missing, perceptions of the organization's change trajectory seem to more benign. We can draw on multiple narratives to illustrate this difference. In a first example, an organization was confronted with the repeated political imposition of budget savings,

leading to the organization gradually having to trim 20 percent of its total FTE count. Nevertheless, senior management apparently retained a high degree of control in implementing this political-level decision. Moreover, until now it had felt in control over the situation as technological development allowed it to reduce its FTE's naturally, while an HR program in which employees could buy free days was successful in allowing the organization to divert the resultant budget savings to retain employees. By contrast to many of the narratives discussed in the previous sub-section, the gradual nature and the managerial autonomy the autonomy retained in implementing change seems to have mitigated the effect on senior manager's perceptions. Thus, the changes, while substantial over time, did not amount to a sudden, discontinuous change. This, combined with the organization's autonomy, seemed to enable this organization's senior management to perceive itself as in control. Nevertheless, it should be noted that the senior manager did feel that additional savings would be untenable, and would result in a reduction of the organization's service-delivery capacities.

Two narratives are illustrative for situations in which a reform is discontinuous for the wider organization and caused a variety of operational issues, but in which a senior manager's strong position allowed him/her to co-opt the reform process and co-develop an at face value politically imposed decision, ultimately allowing the senior manager to perceive his/her reform trajectory relatively positively. One respondent was required by political superiors to thoroughly reform his/her organization and present a plan within several years. However, the senior manager was able to develop this plan internally, received support from political superiors in various areas, and was capable of taking the autonomy necessary to adjust a politically imposed change through self-initiated sub-trajectories within the larger reform. The senior manager was for instance able to creatively outsource an under-performing accounting shared service center's tasks to the private sector, as this would remain within the politically dominant paradigm of reducing the total amount of civil servants (even though nominally costing more).

Throughout the narrative, this senior manager did note the appearance of various issues such as culture shocks in the organization's decentralized units, internal inertia and a need to manage a degree of reform fatigue that was creeping into the organization. Simultaneously, however, the senior manager seems satisfied with the organization's

reform trajectory, having successfully introduced his/her initiatives at various points. Moreover, the respondent indicated that, by altering the strategic orientation of the organization and communicating the necessity of these changes to the political level, he/she and the organization were successful in altering the political and administrative paradigm on the function of their sector within the wider economy. The respondent was thus also positive regarding the general outcome of the reform for his/her organization and for the field in which it operates.

In the second narrative, a senior manager was capable of partially insulating his/her organization from most political reform through a set of organization-wide reforms initiated by the organization itself, allowing him/her to focus on the needs of his/her external stakeholders, technological change (primarily the need for further digitalization in service-provision) and societal change. He/she accomplished this through a set of organization-wide reforms initiated by the organization itself, allowing him/her to focus on the needs of his/her external stakeholders, technological change (primarily the need for further digitalization in service-provision) and societal change. These internally generated reforms were substantial in nature, implying a switch from primarily face-to-face and paper-based service provision in local offices to greater digital service provision with a fallback option for citizens incapable of using such digital services, and thus requiring a substantial amount of employees to internally change positions, work-methods and tasks. The changes necessitated substantial internal restructuring for a relatively long period of time, prompting the senior manager to remark that while the necessity of change was felt and that the reforms enjoyed support in most of the organization, there was an issue with the organization's pace of change. However, while the organization's change trajectory was acknowledged by the respondent to be radical and impactful, the senior manager had a high degree of faith in his/her organization's change management in mitigating this impact throughout the organization. The successfulness of the organization's change management was in, in the eyes of the respondent, caused by the degree to which the organization could prepare itself for the incoming changes. Moreover, although there was an imposed element to these reforms through a simultaneous regionalization of several competences in the context of a 2014 Belgian state reform, the respondent indicated that this imposed reform could be absorbed

quite well by the organization due to the structured change preparation that the organization had already done for its internally generated reform trajectory.

Other narratives illustrate how imposed but relatively minor changes lack the extensive and negative attitudes of a change combining radicalness, external imposition and discontinuousness, although they can still induce some degree of frustration. In one narrative, the senior manager discusses how an initial open conversation with various administrative entities on which packages of overhead services could and should be centralized into shared service centers turned into politically imposed centralization, with the political decision going further than the preferences of the senior manager's entity. The senior manager notes his/her frustration at the lack of dialogue possible with political superiors on the imposed changes, as it led to a situation where the organization had to give up an important administrative employee, while the procedure simultaneously became prone to long throughput times. While the senior manager's expectations on the decision-making procedure were thus breached, leading to some degree of frustration, he/she provides a nuanced image regarding the perceived effects of the changes on the wider organization, noting at first that the reform had no large impact in terms of affected personnel in his/her organization. However, the inefficiency of the new procedures did impact procurement within the organization, which according to the respondent sat badly with the broader organization as well.

Finally, several narratives included a radical reform that was continuous with earlier changes. One narrative concerned an entity which had cooperated relatively intensively for years, and which had more recently implemented several changes towards greater horizontal cooperation between both entities. According to the respondent, this created a situation in which both management and employees considered the separation between both entities as an artificial status quo, which would preferably be abolished. Thus, the announcement of a merger between both entities was considered a logical next step in the development of both organizations as well as the broader policy field. Moreover, given the shared history between both organizations, the respondent expected the merger to be less impactful than earlier integration efforts:

Respondent 4: ... that will never be a culture shock as with [redacted organization name], and, so this has been a sister agency for longer so employees also know each other, with which we already cooperated very intensively and where again everybody understands very well why we are doing this.

A similar observation is made by the senior manager of the public hospital already discussed in section 4.1, who notes that gradually an awareness crept into the organization that further reform towards society-based care is necessary, reducing the degree to which the senior manager experiences resistance towards new changes to that end in the organization. Thus, while changes experienced as discontinuous with an organization's earlier change trajectory seem to increase the degree to which change is perceived as frustrating and harmful to the organization, continuity with a longer reform trajectory may conversely increase a new change's legitimacy with at least senior management.

Combining the insights of all our narratives, an image emerges in which the degree to which a reform is (perceived as) self-initiated versus unilaterally imposed by external political superiors is an important driver of senior manager perceptions of and attitudes towards organizational change. Even though radical reform is recognized as producing various issues within the organization, senior managers often considered these issues as manageable as long as the change was self-initiated or developed in consultation with the organization (Hargreaves, 2004). However, the degree to which the reform is radical also plays an important moderating role, with politically imposed reforms that are discontinuous with the organization's previous change trajectory or identity being perceived as particularly impactful. Conversely, smaller reforms that exclude the organization's senior management are still perceived more negatively than self-initiated changes, although senior managers do often perceive these trajectories as frustrating. Finally, it appears that radical reforms may themselves be experienced relatively positively as long as they exhibit strong continuity with a pre-existing and legitimate change history within the organization. Accordingly, it seems that taking into account only the frequency of organizational change is not sufficient to gain a full understanding of the impact that an organization's longer reform history may have.

7.5. Discussion and conclusion

Our results suggest that senior managers react to externally imposed change in ways very similar to employees in lower ranks of the organization (Conway et al. 2014). In several cases radical, politically imposed reform was seen as discontinuous compared to the previous change trajectory of the organization was. In these cases, senior managers tended to be substantially frustrated with the reform trajectory and its implications for the wider organization in terms of detrimental side-effects (such as change resistance or heightened employee turnover). Senior managers' expectations of how the political level should have handled the decision-making process seemed substantially violated, indicating what organizational psychologists would coin psychological contract breaches (Robinson, 1996; Robinson & Rousseau, 1994). In public administrations, the somewhat narrower concept of the managerial public service bargain might be more familiar, which similarly implies that senior public managers establish expectations on the managerial space beholden to the organization, and which politicians are expected not to enter (Hood, 2000).

Our research suggests that the (managerial) public service bargain is a sub-form of the psychological contract, and that severely breaching it may have adverse consequences for both political-administrative relations and the implementation of a reform. When imposed reform is less radical it might be too extreme to speak of a psychological contract or managerial public service bargain violation (Robinson & Morrison, 2000), although the imposed changes are still relatively likely to cause at least some frustration and incomprehension at the senior manager level. Despite personal frustrations, however, senior managers frequently note that the impact of such minor externally imposed changes on their organization was not devastating, with such reforms often being less dominant in narratives than radical, discontinuous *and* unilaterally imposed reforms. This reaffirms the necessity for researchers to closely examine and report the expected impact of changes, in particular in relation to the earlier change trajectory the organization was on, as neglecting to do so may lead to inconsistent results between studies.

The perceptions of senior managers towards politically imposed reforms starkly contrasts with their perceptions on self-initiated change, even when self-initiated change

was radical and/or discontinuous. Like employees on lower levels (Hargreaves, 2004), senior managers describe change perceived as self-initiated relatively positively and emphasize the usefulness of the introduced changes for the organization. It must be mentioned at this stage, however, that senior managers did by and large recognize that even self-initiated discontinuous changes caused various difficulties within the organization, a result contrasting somewhat with research that suggests that senior management-level employees may miss many of the grievances and issues of lower-ranking employees (Corley, 2004; Jones et al., 2008). Our research suggests a more nuanced reason for senior managers positive attitudes towards self-initiated change: senior managers perceive themselves as change owners when changes are self-initiated and strongly believe that the introduced changes will or have already benefited the organization. They often seem proud of their accomplishments in the organization and concerned for the entity's ongoing well-being, and see self-initiated change and its detrimental side-effects as a necessary evil in adapting the organization to its environment.

Finally, the difference between continuity and discontinuity in change is an aspect emerging from our data not often taken into account in current research. Change that related well to previous reforms implemented in the organization tended to be accepted quite easily by senior managers and (if our respondents' perceptions are correct) by their subordinates. Conversely, imposed *and* discontinuous reforms can severely disrupt pre-existing vested interests and self-initiated change processes (Nieuwenkamp, 2001 154). This causes the imposed changes to be perceived as not only illegitimate and frustrating by the public organization's senior management, but also results in high degrees of change resistance and other change-related side-effects among employees. This is reminiscent of work on organizational change cynicism, which predicts that negative experiences with previous changes may increase the cynicism of employees towards new changes (Wanous et al., 2000; Bordia et al., 2011). However, our work suggests that the very contradiction between new changes and previous changes may cause similar phenomena, even if older changes were implemented in a relatively accepted way.

This result adds a new perspective to our knowledge on the heightened impact of repeated reform (often dubbed repetitive change injury), at least with regard to the senior manager level. Instead of solely relying on the frequency of change (e.g. Abrahamson, 2004), it seems that the content of said changes and their match to an organization's existing change trajectory is relevant to examine (Wynen et al., 2019a). This is illustrated well by the example of the organization attempting to change its services, before this change was disrupted by a politically imposed merger of the organization is relevant here, as the mismatch between the first and second reforms resulted in a management issue that persisted for a prolonged period of time within the organization. Future research on repeated change should therefore attempt to incorporate both dimensions, as in some cases these could potentially be mutually reinforcing.

Together, these results suggest there are limits to the top-down malleability of the civil service. Large sections of public management research and political decision-making currently tend to see public organizations as building blocks, which can be reassembled and reformed at will to create a more effective, efficient or legitimate public service. This tendency is for instance apparent in both the NPM and the post-NPM doctrine (Thomas & Davies, 2005, see also e.g. Dan, 2014), in which the final structural form of (a set of) governmental organizations, e.g. a hived off set of agencies from departments, is considered more important than the process leading to that form. However, such paradigms tend to neglect that organizations build up not only their own histories, traditions and preferences, but also internally set out change trajectories e.g. to improve service-delivery, to increase innovation, to provide career perspectives or to motivate and empower their employees. When these existing realities clash with newly imposed changes, long adjustment periods may be expected before the dust settles. The implication of this frequent oversight is that any evaluation during a period of change-related upheaval is likely to detect no increase in performance due to the disheveling nature of the change process, but is likely to attribute this result to the content of a change instead of the process that change's implementation.

While political decision-making and externally imposed change is inevitably an important factor for public sector organizations, our research suggests that including some degree of co-optation of the organization's management could mitigate the effects

of externally imposed change at the senior management level. Here, the finding by Hargreaves (2004) that employees perceive changes as self-initiated even if these were developed against the backdrop of mandated change seems relevant. Allowing the organization and its management to weigh in on aspects of a reform that are key to that organization may both mitigate frustration and improve commitment towards that reform. This was also supported by our data, as senior managers who developed reforms in consultation with their political superior tend to perceive themselves as change agents, and accordingly display relatively positive attitudes towards the changes they are expected to implement. Simultaneously, some respondents observed that mixed trajectories (i.e. trajectories that include political-level changes, but that allow the organization to co-develop these changes to at least some degree) result in a better preparation of the transition process, allowing the senior manager to foster a greater degree support for the change within his/her organization than when an external reform is imposed with little warning. Finally, while still speculation on the basis of this contribution, we propose that improved senior manager attitudes of a reform could aid in their efforts to implement that reform internally, mitigating the impact of externally imposed change for the entire organization. Future studies on the effect of differing senior manager perceptions of externally imposed change for the broader organization may therefore be desirable.

Chapter 8: Conclusions

8.1. Answering the main research question: how do sequences of structural reform affect public sector organizations, in particular in terms of detrimental side-effects?

The previous chapters gave an overview of various detrimental side-effects that may follow repeated structural reform. These correspond to the three main sub-questions, with the first dealing with micro-level attitudinal effects observed in employees of affected public organizations, the second dealing with meso-level effects on organizational culture and the third dealing with meso-level effects on the relationships between public organizations and their principals. Together, these results suggest that the detrimental side-effects of repeated structural reform are diverse in nature and may come from unexpected corners. This final chapter aims to bring the varying results of the dissertation together and provide several general recommendations for future research and practice. To that end, I first present an answer to the sub-questions and main research question underlying the dissertation. Subsequently, the implications of our results are discussed, as are the various limitations to the methodologies used to obtain the results of the previous chapters. Several concluding remarks are then presented.

8.1.1. Sub-question 1: How does repeated structural reform affect individual civil servants?

The first sub-question, considering how individual civil servants are affected by repeated structural reform, was investigated by examining the effect of repeated structural reforms on the tendency of civil servants to remain silent on controversial issues to their superiors, i.e. defensive silence. Using data on structural reform from the NSAD and the Norwegian Staff Surveys, we find that employees of organizations that have experienced 1) longer structural reform sequences 2) relatively recent structural reforms and/or 3) relatively intensive structural reforms report higher levels of defensive silence than their counterparts in relatively stable organizations (Bommer & Jalajas, 1999). This is evident

from the indicators used for the defensive silence paper, which include the amount of structural reforms, while correcting for their expected impact and recentness. While a myriad of other topics could have been chosen regarding individual-level effects (with several side-projects of the author for instance finding significant effects of change skepticism on employee turnover and repeated structural reform on levels of absenteeism (Wynen et al., 2019a; Boon et al., forthcoming), defensive silence was a particularly relevant choice to include in the thesis for two reasons. First, while there are already some indications in the extant literature that individuals may become more risk-averse and less creative following major organizational change, ours is to our knowledge only the second study that explores the effects of change on defensive silence (Bommer & Jalajas, 1999). Second, defensive silence is likely closely related to several elements of threat-rigidity theory, including pressure towards uniformity, sanctioning of deviant positions, centralization of decision-making, prioritization of habituated responses and exclusion of divergent information (Staw et al., 1981; Bommer & Jalajas, 1999). As such, defensive silence served as the best proxy available to us to examine whether repeated structural reform may increase the effects of threat-rigidity. With the indicator employing a simple summation of structural reforms suggesting that the degree of defensive silence increases with each additional structural reform implemented in the organization, there is an indication that defensive silence and the threat-rigidity process generating it is stronger when organizations experience more structural reforms. This is further supported by more complex indicators of structural reform history, which include decay over time and weighting according to the expected impact of specific types of structural reform events.

The generation of defensive silence in turn is likely to affect various other factors in the organization. First, increased levels of employee silence are detrimental to the feedback processes existing within organizations. This links silence with variables such as flexibility and innovation (Bommer & Jalajas, 1999): if individuals are increasingly fearful of making deviant proposals or notifying potentially controversial information to superiors or colleagues, the organization is likely to become less adaptable in the face of sudden environmental changes and less likely to engage in high levels of grass-roots innovation (Borins, 2001). Moreover, when silence behavior is increased, internal problems may not be signaled soon enough. This may affect the degree to which

management can support its employees, as it remains unaware of interpersonal conflicts, personal problems or projects that (may soon) go awry, etc. (Wynen et al., 2019b). This likely reinforces groupthink processes suggesting to leadership that the organization is managed well at the decision-making level, while also reinforcing discontent and distrust at the employee level. As will be explained in the answer to the following sub-question, one might even argue that, if the organization remains in a state of heightened defensive silence for years due to the continued introduction of structural reforms, the tendency to fear detrimental consequences of speaking up may even become ingrained in an organization's culture. Thus, while not tested in this thesis, one could suggest that defensive silence is one of the intermediate variables that link the threat-rigidity effect to negative effects on e.g. innovation- and team-oriented cultures.

8.1.2. Sub-question 2: How are cultures of public sector organizations affected by sequences of organizational structural reform?'

In answering sub-question 2, we considered how repeated structural reform may affect the cultures of public sector organizations. An important prediction of threat-rigidity theory is that organizations under threat undergo of a mechanistic shift, i.e. an organization under threat constricting its control, centralizing decision-making and formalizing its structures (Staw et al., 1981). Simultaneously, pressures for uniformity should increase, while defensive silence becomes more pervasive throughout the organization – a proposition supported by chapter 3 (Bommer & Jalajas, 1999). The implication of repeatedly introducing threat-rigidity and disruption through repeated reform is that organizations are confronted with a centralizing, formalizing and rigidizing tendency over a prolonged period of time. Simultaneously, both social processes and the resources of the organization (such as human capital and expertise) may be disrupted due to the internal turmoil flowing from the repeated implementation of reforms (Shah, 2000), a process likely to accumulate when new reform trajectories are implemented before the organization has recovered from an earlier structural reform (Moore et al., 2004).

With rigidity and disruption occurring for sometimes years on end in an organization, it is possible that the centralized and formalized tendencies initially

produced and sustained by threat-rigidity eventually become ingrained in the organization's culture, while the increasing amount of gaps in employees' social networks prevent pre-existing cultural norms from effectively being passed on (Shah, 2000; Susskind et al., 1998; Gibbons, 2004). Although cultural change is a continuous but slow-changing process (Schein, 1984; Harris & Ogbonna, 1999; Glomseth et al., 2007), the long-term of presence of the effects of sequences of structural reforms should make them likely candidates to slowly but surely affect cultures. Chapters 4 and 5 put these considerations to the test for respectively innovation- and team-oriented cultures.

For variables related to innovation, some indications already existed that point to a detrimental effect of single reform events, with Amabile & Conti (1999) and Bommer & Jalajas (1999) finding negative effects on creativity and innovativeness, while Van Hootehem et al. (2019) finds an indirect negative effect on innovative work behavior (IWB) through proxies of threat-rigidity. These findings were supported by a side-project of this dissertation, which found that managerial support for IWB was reduced following the introduction of relatively complex and multifaceted change (Wynen et al., 2019b). Chapter 4 extends these findings to innovation-oriented cultures developing over the long-term and as perceived by the organization's senior manager. Our literature review indicates that factors previously found to foster innovation-orientation include organizational support for grass-roots initiatives (Wynen et al., 2019b), decentralized and flat organizational structures, a tolerance for deviant behavior and trusting and safe environments for employees (Borins, 2001). However, research into threat-rigidity, including chapter 3 on defensive silence in this paper, suggests that precisely these factors may be inhibited by rigid responses following multiple reforms (e.g. Olsen & Sexton, 2009). This makes innovation-orientation a particularly likely dimension of organizational culture to be detrimentally affected by repeated reforms that threaten the organization. Our various indicators for structural reform history confirm this expectation in a sample of 45 surveyed Flemish public sector organizations.

As of yet, team-oriented cultures or similar variables have not been connected to repeated organizational change. Nevertheless, a similar argument to innovation-oriented culture may be made regarding its potential inhibition of team-orientation. Team

orientations focus on putting the team first in various ways, and consist of values and norms such as helping and showing empathy to colleagues, management support of teams, a focus on team spirit and trust (Watson et al., 1998). Threat-rigidity effects are particularly likely to impede these values, as the organization experiencing threat-rigidity, instead starts to emphasize centralization, hierarchical line management, internal sanctioning, a lack of tolerance for deviation and a focus on managerial decision-making in-groups while disregarding input from other levels. Moreover, repeated structural reform may continuously sever the ties between individuals, breaking up existing friendship ties and providing no space for new ties to grow due to heightened turnover and absenteeism rates (Shah, 2000; Wynen et al., 2019a). As such, ties are likely conducive to strong team-orientations, such social disruption is likely to add to the detrimental effects of threat-rigidity. Our expectations on team-oriented cultures are confirmed in samples of cultural perceptions of Flemish organizations. Moreover, in this paper we were capable of replicating our results for two samples. Again, multiple indicators of structural reform history are strongly significant, suggesting our results are substantially robust.

While discussed in separate chapters, our findings for team-orientation and innovation-orientation are likely very much connected. Many of the components of team-oriented cultures – including being supportive and collaborating – are factors that could foster innovation-oriented cultures, implying that both dimensions are likely correlated – if not causally related (Borins, 2001). While other dimensions of culture remain to be tested, it seems that at least cultural aspects related to caring, support and creativity are inhibited by long-term sequences of structural reform. What is perhaps most striking regarding our results is that they suggest that structural reform, in particular when repeated, intensive and long-term, may gradually start to affect the very norms and values upheld by the organization – i.e. two underlying layers of organizational culture (Schein, 1984; Harris & Ogbonna, 2002). In many cases, this effect is likely unintended, as modern practitioners often strive for high levels of dynamism and strong people-orientations, attesting to the potentially destructive impact of structural reforms implemented in the wrong context (Pollitt, 2007; McMurray, 2007). These implications are particularly ironic for innovation-orientations, as they suggest that sequences of

repeated structural reform that become too long and intensive may almost paradoxically inhibit the effective development of other types of change, such as new policies, services, technologies or processes (innovation).

8.1.3. Sub-question 3: How is the relationship between (members of) a public sector organization and its political principal affected by structural reform in particular in terms of autonomy and control?

A novel perspective on the side-effects of (repeated) structural reform introduced in this thesis is that politically imposed reform and change-related disruption may be a factor that shapes the relationship between the administration and its political superiors. Three chapters addressed this topic, two from the angle of imposed reform's influence on perceptions of autonomy and the perceived importance of signals from political, and one from the perspective of how imposed change is experienced differently than self-initiated change.

The first two chapters draw on insights from several lines of public administration and organizational psychology research. The first relevant literature line concerns research into US agencies, which observes that political actors can use non-traditional instruments to signal their preferences to agencies, including budgetary adjustments, political appointments and reforms (e.g. Carpenter, 1996; Terman, 2014). The second perspective reasons from the opposing direction, i.e. the level of autonomy perceived by agencies, and suggests that factors such as age, stability and relationship with the political principal may cause such perceptions of autonomy to diverge from the organization's formal level of autonomy (Kleizen & Verhoest, forthcoming). This may include structural reforms, as these can be perceived as attempts at control (Carpenter, 1996; Zito, 2015), while also potentially disrupting the agencies' resources so that it may be lacking the necessary resources to resist political preferences. Finally, we argue that as the organization constricts its control internally and becomes risk-averse externally, civil servants throughout the organization may become more inclined to monitor the preferences of political superiors.

Our findings support these assertions, and suggest that as organizations are confronted more frequently by structural reforms, they perceive less strategic policy autonomy while their civil servants attach more weight to political signals. The chapters thus complement each other's findings, despite investigating slightly differing dependent variables and doing so in two different legal orders, i.e. Flanders and Norway. Theoretically, these findings link the public sector reform literature with recent developments in the agency autonomy literature, the latter of which suggests that simply providing an organization with some degree of formal insulation is not a sufficient condition for its independent operation in practice (e.g. Verhoest et al. 2004; Maggetti, 2007; Busuioc, 2009; Verhoest, 2018). Moreover, as our chapter on strategic policy autonomy uses a measure of not just repeated, but largely *politically imposed* structural reform, this chapter in particular suggests that if political superiors value the independent functioning of some of their organizations, they should carefully evaluate the structural reforms they impose on these organizations.

On the one hand, one could suggest that repeated reform may thus form a viable control and sanctioning option for politicians (Carpenter, 1996), although one could simultaneously point to the unintended change-related side-effects observed here and elsewhere, such as defensive silence, change cynicism, stress and absenteeism as reasons to use this strategy only as a measure of last resort. On the other hand, one can point to the reasons that politicians imbue some organizations with a given level of formal autonomy in the first place, such as fostering impartiality, credible commitment or a semi-autonomous position to enhance an organization's ability to conduct its own management or interact with its stakeholders (e.g. Rothstein & Teorell, 2008). If one of these grounds is relevant to an agency, this would form an argument to actively maintain a given level of organizational autonomy (Kleizen & Verhoest, forthcoming), as reforming the organization too frequently could entail unintentionally reducing the perceived autonomy of the organization, potentially to the detriment of factors such as impartiality. This is an important point of attention for organizations that require a given degree of autonomy due to the nature of their tasks, as it may be argued that law enforcement, inspectorates, central banks, some advisory agencies and public companies

are all examples of organizations where too much political influence is often considered undesirable.

These results tie into the final chapter of this section, which combines inductive and deductive approaches to examine how senior managers themselves experienced the change trajectories of the organizations they manage (Søderberg, 2006). Perhaps the most salient theme emerging from the interview data was that of the divergence in perceptions on self-initiated versus politically imposed change. Where change was to some degree perceived as self-initiated, senior managers perceived the content of these reforms to be positive for the organization, while seeing employee resistance to reform as an important but surmountable challenge (Hargreaves, 2004). Where change was perceived as unilaterally imposed by the political principals, discontinuous with the organization's earlier (change) trajectory and radical in nature, perceptions were markedly more negative. In these cases, senior managers are often left frustrated and they feel that the content would negatively affect the organization's ability to execute its tasks (Hargreaves, 2004; Boon & Verhoest, 2018). Interesting was that reforms that were formally imposed, but still involved senior managers in their design were often experienced relatively positively, despite being similarly radical in nature. This observation was previously made by Hargreaves (2004) in the context of teachers and governmental-imposed reforms, but thus also seems generalizable to senior managers in the public sector.

Combining the insights from all three chapters of this section, a perspective on change emerges that spans beyond the immediate boundaries of public organizations. In the private management literature, reform is normally considered to be internally developed, often due to constraints imposed by the external environment (e.g. Shimizu, 2007). In the public sector, one can argue that this distinction between what is internal and what is external to an organization is more blurred, as public sectors can be seen as holdings of interlinked organizations with a top-level of political leadership (see e.g. Van Dorp, 2018), with the latter sometimes translating environmental impulses into politically imposed reform (Zito, 2015). This causes elements of public organization's reform

trajectories to emerge from beyond the organization's boundaries (Nieuwenkamp, 2001 152).

Theories of leadership have to account for this difference between public and private sectors. The public sector's interwoven nature implies that public senior managers are not necessarily change owners that can rationally apply leadership styles that may benefit the implementation of change, such as transformational leadership (Van der Voet, 2014). Instead, when faced with politically imposed reform, they are sometimes as much the subjects of change as their employees are (Nieuwenkamp, 2001 152). Accordingly, imposed reform is likely to bring about many of the detrimental side-effects of change on the senior manager level that organizational psychology and management research have uncovered on the employee level. As senior managers are indispensable to the implementation of imposed reforms, uncovering whether this translates into an altered efficacy in senior manager's ability to foster support for the organizational change that was imposed on them is an important avenue for further research.

8.1.4. Main research question: how do sequences of organizational change affect public sector organizations, in particular in terms of detrimental side-effects?

Although change is undoubtedly necessary for organizations to adapt (Rochet et al., 2008), our results suggest that structural reforms can become a double-edged sword, with repeated structural reform having a variety of detrimental side-effects on the organization. These effects were observed in areas ranging from individual attitudes to organizational autonomy. A consistent finding in the dissertation was that when structural reform accumulate or become discontinuous with one another, they may generate detrimental side-effects beyond those we would expect from single structural reform events. Thus, while many existing studies address the impact of structural reform events as isolated reform events, our results suggest that this perspective is somewhat reductionist, as the attitudes and perceptions developed during previous structural reform may feed into attitudes towards new structural reforms (Wanous et al., 2000; Bordia et al., 2011), while the organization may have only partially recovered from the disruption of previous reform events. In chapter 7, it was moreover observed that changes may

sometimes oppose the earlier change trajectory of the organization, causing a change to be perceived more negatively. Thus, a first aspect of the answer to our main research question is that repeated change, in particular when frequent, intensive and discontinuous, is more likely to cause detrimental effects for individuals and the organization than single organizational changes – and that the sequencing of change thus matters for the management of organizations. These findings have important implications for further research, as they provide a potential solution to inconsistent findings on e.g. burnout and related health complaints. If differences between the findings of studies are explained by their neglect to incorporate the lasting impact of previous changes, studying only the impact of the latest change that an organization has encountered may be a too narrow perspective.

A second aspect of answering the main research question concerns the types of effects that an organization may expect following a sequence of multiple structural reform. On this point, the research presented here can only offer a partial answer, although some new perspectives are added to the literature. As mentioned in the answers to the sub-questions, evidence is found for negative effects on team- and innovation-oriented cultures, positive effects on defensive silence, negative effects on perceptions of strategic policy autonomy and positive effects on weight placed on political signals. Furthermore, qualitative evidence is presented that politically imposed structural reform may be received differently than internally developed changes. While inevitably only the tip of the iceberg due to time and data constraints (see for a meta-analysis of other studied effects e.g. Oreg et al., 2011), our results add to other work on e.g. stress and change commitment that side-effects of repeated organizational change may be found in unexpected corners. Long-term sequences of change may affect variables that develop over the long-term, such as organizational culture. Similarly, while perhaps at face value an unlikely candidate, repeated change may affect variables that public administration scholars are particularly interested in. This includes the autonomy of public sector organizations and the interaction between public organizations and their political principals, strongly implying that the psychological and organizational-level side-effects of structural reform are not topics that should be ignored by public administration scholars.

A third aspect of the answer to our main question lies in the impact of repeated structural reform on employees of public sector organizations. While employee well-being and mental health following structural reform is not a topic often discussed in public administration, repeated public sector reform seems to be a variable that could have a profound effect on civil servants. Anecdotally this is supported by news articles on the reform fatigue existing in organizations such as the NHS, Dutch Tax Service or the Belgian military (NOS, 2016; Orr, 2007; De Vriendt, 2015). In the dissertation, such reports are supported by results on heightened defensive silence and negatively affected team-oriented cultures, which suggest that the psychological safety of the workplace may deteriorate substantially following long sequences of intensive reform. Moreover, side-projects conducted by the authors of the chapters in this thesis extend these insights to the impact of repeated reform on absenteeism and change skepticism on turnover intent (Wynen et al., 2019a; Boon et al, forthcoming). This complements research by other (often private sector) teams and suggests that levels of stress and discontent may become so severe that individuals begin to exhibit various forms of withdrawal behavior.

Fourth, many of the effects found in this thesis are likely unintended detrimental consequences of repeated structural reform, as many reforms were likely intended to produce opposite effects. For instance, the team-oriented cultures paper finds for both the 2013 and 2003 samples that repeated structural reform negatively influences team-oriented cultures. The timing of these samples is interesting: during 2003 a government-wide reform towards greater usage of the NPM doctrine was starting up. These reforms were *inter alia* intended to increase agencies' management space to manage, without being stifled by political leadership. The 2013 sample was conducted during an era of joint-up-government, where horizontal projects and autonomous team-oriented organizational sub-units became an important aspect in public governance. Both waves of structural reforms were thus directly or indirectly concerned with allowing civil servants to perform their tasks in a suitable organizational environment. Nevertheless, it seems that for both 2003 and 2013, reform sequences that were often (partially) intended to achieve such an environment instead had a negative effect on the degree to which that environment was team-oriented. Simultaneously, it needs to be emphasized that this does not mean that an individual change would not contribute to team-orientations.

Simultaneously, it seems that long reform sequences may sometimes produce counterproductive results, unintentionally inhibiting the goals of some of these reforms.

A fifth and final aspect of the answer to the main research question concerns the underlying mechanisms through which the effects observed in chapters 3-8 are generated. In chapter 2, it was mentioned that we mainly draw on threat-rigidity theory, organizational disruption and the dichotomy between self-initiated and imposed change (Staw et al., 1981; Shah, 2000; Hargreaves, 2004). In the course of the thesis project, it was possible to generate some insights regarding threat-rigidity effects and self-initiated versus imposed change (although data limitations meant that the disruption mechanism unfortunately remains unmeasured). As mentioned in the answer to sub-question 1, the levels of defensive silence studied across organizations with varying change histories offers a proxy for some aspects of threat-rigidity theory, as the threat-rigidity effect implies organizations becoming more rigid, increasing pressure for uniformity and increasing the (perceived) risk of sanctioning for deviating from the norm (Bommer & Jalajas, 1999; Olsen & Sexton, 2009). Thus, while threat-rigidity provides a plausible theoretical mechanism underlying the effects generated by sequences of structural reform, our limited ability to measure this effect implies that further research is needed to validate its occurrence following change, as well as its exacerbation following the introduction of additional changes.

More evidence is offered regarding the perceptions of the relationship between public organizations and their political superiors. In our qualitative chapter, we find that reform perceived as unilaterally imposed is often perceived relatively negatively (Elston, 2014), while reforms in which the senior manager is at least involved in the (political) decision-making process are often perceived relatively positively (Hargreaves, 2004). This suggests that when reform is repeatedly imposed on the organization, it is relatively likely to be interpreted as a threat and a negative signal, causing managers to perceive themselves to be curtailed in their decision-making. Thus, I would argue that the frustration and negative perceptions observed in chapter 9 form an initial step in the micro-level causal chain that makes senior managers confronted with repeated imposed (structural) reform likely to perceive lower levels of strategic policy autonomy than their

more stable counterparts. Despite the thesis offering more elaborate evidence for this mechanism, further research into other steps of the causal chain seems necessary, for instance considering how negatively received imposed structural reform generates perceptions of control.

8.2. Implications for practitioners

The value of this thesis and similar research on the detrimental side-effects of (sequences of) structural reform lies in its potential use as a diagnostic tool. Hopefully, it will allow policy-makers and managers to gain additional insight into the potential problems that may emerge after long-term and/or intensive structural reform trajectories and to adjust the future trajectory of the organization accordingly. In this context, a first insight relevant for practitioners is that the internal detrimental side-effects of structural reform are manifold, and many of them may be unexpected. This thesis and its related side-projects lay bare some of these consequences. In addition to the effects on defensive silence and team- and innovation-oriented culture discussed here, our side-projects also suggest the occurrence of heightened absenteeism rates (Wynen et al., 2019a) and reductions in support for innovative work behavior (Wynen et al., 2019b). These findings complement earlier results of contributions on repeated structural reform, which for instance indicate that repeated structural reform causes heightened levels of stress (Allen et al., 2001), reduced commitment to change (Rafferty & Restubog, 2010), heightened cynicism regarding the motivations of change (Wanous et al., 2000) and heightened voluntary turnover rates (Rafferty & Restubog, 2010).

Before implementing new structural reforms, it thus seems advisable for change managers to evaluate the current state of the organization in terms of employee mental health, turnover and absenteeism rates and general levels of turmoil, in particular if the organization has recently emerged from a long-term and/or negatively perceived structural reform trajectory (Wanous et al., 2000). Where organizations possess their own internal survey instruments, questions on rates of change and readiness for change could be added to assess whether employees consider the organization to be changing too

swiftly. Organizations without such instruments should still check other indicators of detrimental reform side-effects, such as absenteeism rates, as these may provide at least a rough picture of the mental health of employees (Wynen et al., 2019a). Where concerns exist regarding rates of change, these could be verified through e.g. interviews with employees on the desirability of further change initiatives.

I would argue that such investigations are important to conduct in addition to general change management strategies such as establishing participatory change trajectories, explaining the need for change and ensuring some level of autonomy in the implementation of changes. Such general change management strategies, while offering a vital tool to mitigate the impact of new change initiatives, often see the management of a change initiative as something that can occur in a vacuum, disregarding the earlier change history of the organization. Such an exclusive focus on current reforms is exceedingly dangerous, however, as employees may for instance have already become cynical regarding the motives of management (Wanous et al., 2000) and prone to withholding their opinions following earlier changes that were negatively received (Bommer & Jalajas, 1999). A new change that disregards information on the organization's earlier change history may in some cases thus be poised to fail, despite management's best intentions and (change management) efforts. This suggests that senior managers should evaluate the risk of their change management efforts coming across as disingenuous (even if the *actual* intentions are benevolent, they may still be *perceived* at other levels to be malignant) and adjust their communication accordingly (see also Bordia et al., 2011). For instance, over-optimistically presenting the desirability and expected outcomes of a new change to employees following strongly negative experiences with previous reforms may do more harm than good, with employees interpreting the newly communicated material as additional evidence of the unreliability of management (Harris & Ogbonna, 2002).

Practitioners and policy-makers should furthermore be wary of bringing organizations into states of repetitive reform syndrome, i.e. a state in which reforms are introduced continuously, causing employees to see no end to the reform trajectory (Rafferty & Griffin, 2006) and causing turmoil to be constant (Pollitt, 2007). Our research

suggests that theoretical and qualitative contributions on this syndrome can be confirmed through quantitative research, and that higher rates and longer sequences of structural reform are usually related to increased levels of detrimental side-effects. Our chapters on team- and innovation-oriented culture indicate that increases in the amount of structural reforms experienced by organizations may warp the culture of an organization over the long-term, suggesting that even slowly changing organizational processes are affected when reforms are imposed too frequently for too long. The trap for practitioners is that they are likely to notice such issues with e.g. the organization's culture, potentially causing them to introduce a new radical change to correct these issues. In organizations already in a state of repetitive reform syndrome, introducing new radical change may be adding oil to a fire, gradually causing attempts at combating the organization's decline to exacerbate change-related detrimental side-effects (Bordia et al., 2011). Thus, efforts to turn around the organization may in some cases ironically contribute to that decline, entering the organization into a vicious reform cycle. Although solving this paradox is beyond the empirical scope of this paper, it may be argued that – if possible – providing the organization with a degree of stability and time to recuperate from previous changes may be helpful. If reform is needed in the short-term, it should likely remain limited and/or should primarily include changes that are perceived as legitimate by employees. Strongly discontinuous and drastic changes may be counterproductive at this stage and should be avoided if at all possible.

This raises an additional point regarding the relationship between politics and administrations. The qualitative research conducted in chapter 8 indicates that politically imposed reform, in particular when imposed without participation of the organization and when the reform is in tension with the direction preferred by the organization, can be substantially frustrating for senior managers. Conversely, if senior managers are capable of shaping their own reform trajectories or capable of influencing the direction of the organization in cooperation with political superiors, they often feel more positive regarding the change's content and its effects on the organization (Hargreaves, 2004). Similarly, the results of chapter 6 indicate that when confronted with repeated structural reform, senior managers perceive less strategic policy autonomy, while civil servants throughout public organizations are more inclined to devote weight to political signals.

Together, these results suggest that active internal change planning and management in organizations alone may be insufficient, as politically imposed reform provides another source for public organization's change trajectories, with its own side-effects on the organization. These results suggest that actively considering the costs and benefits of administrative reform at the political level and engaging in at least some consultation of the organization would be beneficial. This could not only benefit the organization's long-term stability, but could – given our results on defensive silence and absenteeism – also be helpful in maintaining the mental health and job satisfaction of the thousands of civil servants that politically imposed reform can affect. One way to foster greater due diligence in reforming organizations in the political arena would be a greater emphasis of advisory bodies on communicating managerial risks of certain plans to the political level. A second way to achieve this would be a greater focus of ministerial and cabinet-level employees on the potential managerial problems produced by certain reforms. Finally, political-level actors should avoid sudden (e.g. post-election) announcements of major structural reforms taken without prior consultation with the organization whenever reasonably possible, as these may eventually do more harm than good.

8.3. Methodological limitations and avenues for further research

Given that the research presented here is one of the first systematic forays into the area of repeated organizational change, and the first project on detrimental reform side-effects to use databases of structural reforms of dozens of public organizations, it is almost inevitable that there are still some methodological caveats that will have to be addressed in the future. A first important limitation of the quantitative chapters is a reliance on regression methods threatened by endogeneity issues. While databases such as the BSAD and NSAD provide innovative and objective data on structural reforms, as well as an answer to the common method bias often inherent in studies using self-report indicators of experienced organizational change (Jakobsen & Jensen, 2015), their

coverage of respectively the Belgian region of Flanders and Norway meant that only survey data gathered in these territories was linkable to reform data. Moreover, as the survey data available to us in these territories was cross-sectional in nature and did not offer opportunities for e.g. instrumental variable regressions or difference-in-difference approaches (Hill et al., 282; 408), addressing endogeneity was limited to correct model specification. Future advances in the area should where possible take this issue into account, for instance through surveys that generate panel structure data-sets in states where databases such as the BSAD and NSAD exist.

On a related note, data availability problems meant that two of the three mechanisms underlying the various chapters – i.e. threat-rigidity theory and disruption – remained either completely theoretical or indirectly inferred. To some extent, defensive silence (see chapter 3) can serve as a proxy for the risk-averse tendencies and pressures for uniformity predicted by threat-rigidity theory (Staw et al., 1981; Bommer & Jalajas, 1999), although it is largely an inferable outcome of threat-rigidity and although threat-rigidity theory predicts a host of other effects that could unfortunately not be incorporated in our designs. Moreover, disruptions in resources, operations and social structures could not be tested, forcing us to rely on insights in the extant literature and assume the relevance of the process. In this context, it is notable that processes such as social disruption through the severing of social ties itself remain hardly tested in the extant literature (see Shah, 2000), suggesting a need for further effort to ascertain the validity of the mechanisms discussed in this thesis. Future work on repeated change should thus incorporate variables related to threat-rigidity, such as uncertainty, stress, centralization, formalization and scanning behavior, or variables related to disruption such as amount of social ties, strength of social ties, etc. The disruption perspective in particular suggests that social network analysis may be a viable albeit underutilized approach, aside from Shah's (2000) and Bulder et al.'s (1996) contributions.

Furthermore, the quantitative chapters in large part relied on indicators of structural reform history which are based on a number of assumptions. For instance, the sigmoid indicator introduced in chapter 6 assumes that reforms have a substantial impact for the first few years, after which their impact declines swiftly in a decay process that

can be modelled through an s-curve. Several assumptions thus underpin this indicator: 1) an assumption on the initial strength of the reform, 2) an assumption on the slow decay in initial years, 3) an assumption on quicker decay in roughly years 3-5 and 4) a levelling out of the decay process after the first 5 years. By shifting indicators between regression models and checking whether results remained robust we were able to alternate these assumptions, mitigating the issue to some degree. Nevertheless, this remains a relatively blunt approach to modelling reform histories, which again suggests the need for panel data as a superior approach in future studies.

Our qualitative research similarly suffered several shortcomings. On the one hand, a broad approach interviewing multiple senior managers offered an opportunity to introduce variation in change histories. Moreover, the narrative interview approach seemed to function quite well, allowing senior managers to convey their experience of organizational change, how they made sense of these changes, as well as their associated positive and/or negative perceptions of these changes, without the researcher imposing his view too strongly (Søderberg, 2006). On the other hand, the focus on senior managers implied a relatively unidimensional view into the problem of organizational change and change histories. Future studies should therefore consider incorporating narrative approaches or other styles of interpretative interviewing, while expanding the scope of the research to include multiple levels within or across organizations (potentially including political principals). Moreover, holding interviews at several points in time in reform trajectories that are likely to generate further reforms (e.g. mergers, which are often followed by culture management programs and further minor structural changes) may offer a route to include long-term reform histories while avoiding issues related to recall-bias.

In terms of future topics to investigate, the study of repeated structural reform is novel enough that a retest of variables found relevant in the context of single-instance reform, ranging from job satisfaction to bullying behavior, remains possible. A particularly interesting avenue for further research would concern psychosomatic complaints following repeated structural reform (Pollard, 2001). The relationship between for instance burnout syndrome and structural reform has received only limited

attention in the literature (e.g. Sablonnière et al., 2012). However, given our result that structural reform histories may accumulate and linger within repeatedly changed organizations, we may expect variables such as chronic stress to start playing a health-related role in organizations in long reform trajectories. As organizations with longer structural reform histories develop less supportive cultures while variables such as uncertainty, disruption and workload are maintained at high levels within the organization, the likelihood of individuals experiencing chronic stress may increase, which could eventually contribute to the development of e.g. high blood pressure and/or burnout-related symptoms. It would be relevant to study the occurrence of such phenomena in particular in those public sector organizations that have experienced particularly severe structural reform histories, as we may expect the effects of reform history on intermediate variables such as uncertainty and cognitive stress to be particularly pronounced for these organizations (Sablonnière et al., 2012).

Another avenue of theoretically interesting research concerns the spillovers of repeated change on the private lives of employees, who may be confronted with psychologically unsafe environments that they spend 40 hours of their week in. As was mentioned in the introduction, the turmoil generated by repeated reform may result in prolonged uncertainty regarding employees' individual positions, detrimentally affect cultures and social environments and result in increased workloads. Threat-rigidity theory moreover suggests that employees' autonomy may be reduced, while the pressure for uniformity and compliance increases. Individuals sensitive to such pressures and changing work-environments may begin to take their issues home, in extreme cases affecting work-life balance and reducing overall life satisfaction not only for the employee (Helliwell & Huang, 2010), but also for his/her family members. Thus, change-related research incorporating dependent variables on spillover into lives outside the workplace, potentially accounting for individual-level predispositions to being strongly affected by negative experiences in the workplace (e.g. personality traits) would provide us with greater insight on the degree to which repeated change impacts the individual.

Finally, future research should address the topic of repeated versus single-instance change in itself. In current research, change events are often implicitly conceived

of coherent events that take place at a well-defined point in time, with their effects manifesting in roughly the same timeframe or perhaps several months later. However, it is arguable that major change events such as mergers and splits are often substantially incoherent in the sense that they are comprised of a multitude of smaller changes, stretched out over a prolonged period of time. For instance, a decision to merge two entities may be announced years before the formal merger date, with preparations and uncertainty likely marking the phase between announcement and implementation (Seo & Hill, 2005). Moreover, on the date of the formal merger, it is entirely possible that nothing actually changes in the organizations' operations for the time being, as departments often only start their operational merger months later. Each of these departmental mergers forms a sub-change of its own, with its own side-effects, issues and timeline. Furthermore, while a major structural reform may be implemented in a time-span of several years (Seo & Hill, 2005), the story is likely not finished at this stage. Our qualitative evidence contained multiple references to further change being necessary due to the path laid out by an initial change event. For instance, mergers are often followed up by culture changes to better integrate the organization. Major internal restructurings, such as shifts towards self-steering teams, are often only partially implemented. However, they are subsequently followed up by additional changes to correct issues encountered following the initial restructuring, or additional changes to achieve a more complete implementation of a principle such as self-steering. Both the heterogeneity of sub-changes taking place within one major change event and the temporal dimension of a change event (let alone the temporal dimension of multiple change events) is insufficiently taken into account in extant research. Future research could for instance consider how different effects are between sub-units within in a single entity. Moreover, longitudinal case studies could track how a single or a set of reforms affects an organization over time, as only Moore et al. (2004) currently offers evidence on this topic.

8.4. Concluding remarks

Although at face value perhaps an unlikely candidate, the research presented here and elsewhere suggests that (repeated) structural reform may substantially affect not only

organizational health, but also the lives of organizations' employees (e.g. Helliwell & Huang, 2010; Oreg et al., 2011). Upon closer examination, this is perhaps not so surprising, as many of us spend almost half of our waking lives in the workplace, while developing strong affective connections with the organization and our jobs (Conroy et al., 2017). Thus, if things (are perceived to) go wrong in the workplace, it is bound to affect employees (Conroy et al., 2017). However, the implications go further. With public administrations frequently restructuring e.g. in the wake of elections, following new management trends, due to international processes (e.g. EU accession) (Sarapuu, 2012; Nakrošis & Budraitis, 2012), and due to other, idiosyncratic reasons, it seems that some of these reforms may actually produce counterproductive results. Many of the practitioners implementing reforms may be unaware of the occurrence of these side-effects, as the prolonged effect of an organization's earlier structural reform history is easily missed when implementing a new reform. For instance, although we find support for the argument that repeated reform is likely to result in greater levels of defensive silence and absenteeism, practitioners likely miss a salient reference point of the degree to which these phenomena took place before a multi-annual series of structural reforms was implemented. Thus, they are likely to underestimate the relevance of their organization's structural reform histories in generating heightened levels of silence and/or absenteeism, which in turn hinders change management and planning efforts designed to counter the effects of these histories.

The unique dynamics of the public sector can add to these problems if structural reform is not designed and managed well at all levels, including the political level. The 2019 coalition agreement of Flanders for instance announced that 22 organizations are scheduled to undergo major structural reform in the period 2019-2024. Some of these reforms were already underway or expected, but others are new announcements. While it is not publically known whether these 22 organizations were consulted before these structural reforms were announced, it is notable that some of the organizations reformed pursuant to the 2015-2019 coalition agreement did not know about these decisions before the coalition agreement was published. While such phenomena are nearly inevitable in any democratic state as administrative reform is necessary to retain the political responsiveness of the civil service, it may also result in long sequences of structural

reform that are ultimately detrimental to not only the organization, but also the employees who work for it, and potentially even the services that it provides to citizens.

While the need to create support for change, emphasize change management trajectories and avoid resistance and cynicism towards change is familiar to many senior managers in the civil service, this positive development is to some degree undone by the often *ad hoc* nature of political decisions regarding reform, which often do not take into account the earlier structural reform history of the organization. Instead, politically imposed reform seems to be seen as a quick and appropriate fix to acute problems, with decisions often being unconcerned with unintended employee- or organizational-level side-effects. Little thought is for instance given to whether a politically imposed reform disrupts an earlier structural reform trajectory of the organization, or whether that reform may rekindle and exacerbate lingering effects from a previous event that has left its mark on employees. Thus, the interaction between the organization and the political level would ideally need to be improved, implying that the political level should more actively balance the potential gains of imposing an additional reform against not only its financial cost, but also its human and organizational cost.

References

- Abrahamson, E. (2004), Avoiding repetitive change syndrome. *MIT Sloan Management Review*, 45:2, 93
- Allen, T.D. Freeman, D.M. Russell, J.E.A. Reizenstein, R.C., Rentz, J.O. (2001). Survivor reactions to organizational downsizing: does time ease the pain?, *Journal of Occupational and Organizational Psychology*, 74:2, 145-164
- Amabile, T.M., Conti, R. (1999), Changes in the work environment for creativity during downsizing, *The Academy of Management Journal*, 42:6, 630-640
- Amiot, C.E., Terry, D.J., Jimmieson, N.L., Callan, V.J. (2006), A longitudinal investigation of coping processes during a merger: implications for job satisfaction and organizational identification, *Journal of Management*, 32:4, 552-574
- Ashford, S. J. (1988), Individual strategies for coping with stress during organizational transitions, *The Journal of Applied Behavioral Science*, 24:1, 19-36
- Arundel, , A., Casali, L., Hollanders, H. (2015), How European public sector agencies innovate: The use of bottom-up, policy-dependent and knowledge-scanning innovation methods, *Research Policy*, 44:7, 1271-1282
- Australian Public Service Commission (2017), Australian Public Service State of the service report 2016-17, retrieved on 15-3-2019 from:
<https://www.apsc.gov.au/state-service-report-2016-17>
- Axtell, C.M., Holman, D.J., Unsworth, K.L., Wall, T.D., Waterson, P.E., Harrington, E. (2000), Shopfloor innovation: facilitating the suggestion and implementation of ideas, *Journal of Occupational and Organizational Psychology*, 73:3, 265-285
- Bach, T. (2010), Policy and management autonomy of federal agencies in Germany. In *Governance of Public Sector Organizations* (pp. 89-110), London: Palgrave Macmillan

- Bach, T. (2012), The involvement of agencies in policy formulation: explaining variation in policy autonomy of federal agencies in Germany, *Policy and Society*, 31, pp.211-222
- Bach, T. (2014), The autonomy of government agencies in Germany and Norway: explaining variation in management autonomy across countries and agencies, *International Review of Administrative Sciences*, 80:2, 341-361
- Bach, T., Jann, W. (2010), Animals in the administrative zoo: Organizational change and agency autonomy in Germany, *International Review of Administrative Sciences*, 76:3, 443-468
- Bach, T., Ruffing, E. (2013), Networking for autonomy? National agencies in European networks, *Public Administration*, 91:3, 712-726
- Bach, T., Ruffing, E., Yesilkagit, K. (2015), The differential empowering effects of Europeanization on the autonomy of national agencies, *Governance*, 28:3, pp.285-304
- Bakker, A. B. (2015), A job demands–resources approach to public service motivation, *Public Administration Review*, 75:5, 723-732.
- Barnett, M., Coleman, L. (2005), Designing Policy: Interpol and the study of change in international organizations, *International Studies Quarterly*, 49:4, 593-619
- Barron, D.J. (2008), From takeover to merger: reforming administrative law in an age of agency politicization, *George Washington Law Review*, 76, 1095-1152
- Bartunek, J. M., Rynes, S. L., & Ireland, R. D. (2006), What makes management research interesting, and why does it matter?, *Academy of management Journal*, 49:1, 9-15
- Bartunek, J. M., & Seo, M. G. (2002), Qualitative research can add new meanings to quantitative research, *Journal of Organizational Behavior*, 23:2, 237-242

- Bellou, V. (2006), Psychological contract assessment after a major organizational change: The case of mergers and acquisitions, *Employee Relations*, 29(1), 68-88.
- Bezes, P., Jeannot, G. (2017), Autonomy and managerial reforms in Europe: let or make public managers manage?, *Public Administration*, DOI: 10.1111/padm.12361
- Boin, R. A. (1996), De recalcitrante organisatie 'Leadership in administration' van Philip Selznick, *Bestuurskunde*, 3, 145-155
- Boin, R.A., Otten, M.H.P. (1996), Beyond the crisis window for reform: some ramifications for implementation, *Journal of Contingencies and Crisis Management*, 4:3, 149-161
- Boon, J., & Verhoest, K. (2018), By design or by drift: how, where, and why HRM activities are organized in the public sector, *Review of Public Personnel Administration*, 38:1, 110-134
- Bommer, M., Jalajas, D.S. (1999), The threat of organizational downsizing on the innovative propensity of R&D professionals, *R&D Management*, 29:1, 27-34
- Bordia, P., Hobman, E., Jones, E., Gallois, C., & Callan, V. J. (2004), Uncertainty during organizational change: Types, consequences, and management strategies, *Journal of business and psychology*, 18:4, 507-532
- Bordia, P., Restubog, S. L. D., Jimmieson, N. L., & Irmer, B. E. (2011), Haunted by the past: Effects of poor change management history on employee attitudes and turnover, *Group & Organization Management*, 36:2, 191-222
- Borins, S. (1998), *Innovating with integrity: How local heroes are transforming American government*, Washington, DC: Georgetown University Press
- Borins, S. (2001), Encouraging innovation in the public sector, *Journal of Intellectual Capital*, 2:3, 310-319

- Borins, S. (2002), Leadership and innovation in the public sector, *Leadership & Organizational Development Journal*, 23:8, 467-476
- Bouckaert, G., Van Dooren, W. (2003), Performance measurement and management in public sector organizations, in: Boivard, T., Löffler, E. (eds.), *Public Management and governance*, London: Routledge
- Boyne, G.A., Meier, K.J. (2009), Environmental turbulence, organizational stability and public service performance, *Administration and Society*, 40:8, pp.799-824
- Brown, S.L., Eisenhardt, K.M. (1997), The art of continuous change: linking complexity theory and time-paced evolution in relentlessly shifting organizations, *Administrative Science Quarterly*, 42:1, 1-34
- Bryson, J.M., Ackerman, F., Eden, C. (2007), Putting the resource-based view of strategy and distinctive competencies to work in public organizations, *Public Administration Review*, 67:4, 702-717
- Bulder, B., Leeuw, F., & Flap, H. (1996), Networks and evaluating public-sector reforms, *Evaluation*, 2:3, 261-276.
- Bumgarner, J., Newswander, C.B. (2012), Governing alone and with partners: presidential governance in a post-NPM environment, *Administration & Society*, 44:5, 546-570
- Busuioc, M. (2009), Accountability, control and independence: the case of European agencies, *European Law Journal*, 15:5, 599-615
- Busuioc, M., Curtin, D., Groenleer, D. (2011), Agency growth between autonomy and accountability: the European Police Office as a 'living institution', *Journal of European Public Policy*, 18:6, 848-867
- Callan, V.J., Gallois, C., Mayhew, M.G., Grice, T.A., Tluchowska, M., Boyce, R. (2007), Restructuring the multi-professional organization: professional identity and adjustment to change in a public hospital, *Journal of Health & Human Services*, 29:4, 448-477

- Cameron, K. S., Kim, M. U., & Whetten, D. A. (1987), Organizational effects of decline and turbulence, *Administrative Science Quarterly*, 32:2, 222-240.
- Capano, G. (2003), Administrative traditions and policy change: when policy paradigms matter. The case of Italian administrative reform during the 1990s, *Public Administration*, 81:4, 781-801
- Carpenter, D. P. (1996). Adaptive signal processing, hierarchy, and budgetary control in federal regulation. *American Political Science Review*, 90:2, 283-302
- Carpenter, D.P. (2004), The political economy of FDA drug review: processing, politics, and lessons for policy, *Health Affairs*, 23:1, 52-63
- Carpenter, D.P. (2010), Reputation and power: organizational image and pharmaceutical regulation at the FDA, Princeton, Oxford: Princeton University Press
- Carpenter, D.P., Krause, G.A. (2012), Reputation and Public Administration, *Public Administration Review*, 72:1, 26-32
- Carter, H. (2013, July 10), Has the NHS contracted change fatigue from political interference? Many in the NHS are used for political point scoring, or accidental own goals by successive governments, *The Guardian*, retrieved from: <https://www.theguardian.com/healthcare-network/2013/jul/10/nhs-change-fatigue-political-interference>
- Carroll, G. R., & Delacroix, J. (1982), Organizational mortality in the newspaper industries of Argentina and Ireland: An ecological approach, *Administrative science quarterly*, 27:2, 169-198.
- Chatman, J. A., & O'Reilly, C. A. (2016), Paradigm lost: Reinvigorating the study of organizational culture, *Research in Organizational Behavior*, 36, 199-224
- Chiu, R.K. (2003), Ethical judgment and whistleblowing intention: examining the moderating role of locus of control, *Journal of Business Ethics*, 43:1-2, 65-74

- Christensen, T. (2012), Post-NPM and changing public governance, *Meiji Journal of Political Science and Economics*, 1, 1-11
- Christensen, T., Fimreite, A.L., Lægreid, P. (2014), Joined-up government for welfare administration reform in Norway, *Public Organization Review*, 14:4, 439-456
- Christensen, T., & Lægreid, P. (2007), Regulatory agencies—The challenges of balancing agency autonomy and political control, *Governance*, 20:3, 499-520.
- Christensen, T., & Lægreid, P. (2008), The challenge of coordination in central government organizations: the Norwegian case, *Public organization review*, 8:2, 97.
- Christensen, T., & Lægreid, P. (2011), Democracy and administrative policy: contrasting elements of New Public Management (NPM) and post-NPM, *European Political Science Review*, 3:1, 125-146.
- Christensen, T., Lægreid, P. (2010), Increased complexity in public organizations – the challenges of combining NPM and post-NPM, in: Lægreid, P., Verhoest, K.: *Governance of Public Sector Organizations*, Houndmills: Palgrave MacMillan
- Clinton, M. E., & Guest, D. E. (2014), Psychological contract breach and voluntary turnover: Testing a multiple mediation model, *Journal of occupational and organizational psychology*, 87:1, 200-207.
- Conroy, S., Henle, C. A., Shore, L., & Stelman, S. (2017), Where there is light, there is dark: A review of the detrimental outcomes of high organizational identification, *Journal of organizational behavior*, 38:2, 184-203.
- Corley, K. G. (2004), Defined by our strategy or our culture? Hierarchical differences in perceptions of organizational identity and change, *Human relations*, 57:9, 1145-1177.
- Conway, N., Kiefer, T., Hartley, J., & Briner, R. B. (2014), Doing more with less? Employee reactions to psychological contract breach via target similarity or

- spillover during public sector organizational change, *British Journal of Management*, 25:4, 737-754.
- Costello, A. B., & Osborne, J. (2005), Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis, *Practical assessment, research, and evaluation*, 10:1, 7.
- Crawford, L.H., Helm, J. (2009), Government and governance: the value of project management in the public sector, *Project Management Journal*, 40:1, 73-87
- D'Aunno, T., Sutton, R.I. (1992), The responses of drug abuse treatment organizations to financial adversity: a partial test of the threat-rigidity thesis, *Journal of Management*, 18:1, 117-131
- Daly, A.J., Der-Martirosian, C., Ong-Dean, C., Park, V., Wishard-Guerra, A. (2011), Leading under sanction: Principals' perceptions of threat rigidity, efficacy and leadership in underperforming schools, *Leadership and Policy in Schools*, 10:2, 171-206
- Damanpour, F. (1991), Organizational innovation: a meta-analysis of effects of determinants and moderators, *Academy of Management Journal*, 34:3, 555-590
- Damanpour, F., Gopalakrishnan, S. (1998), Theories of organizational structure and innovation adoption: the role of environmental change, *Journal of Engineering and Technology Management*, 15:1, 1-24
- Damanpour, F., Schneider, M. (2009), Characteristics of innovation and innovation adoption in public organizations: assessing the role of managers, *Journal of Public Administration Research and Theory*, 19:3, 495-522
- Damanpour, F., Szabat, K.A., Evan, W.M. (1989), The relationship between types of innovation and organizational performance, *Journal of Management Studies*, 26:6, pp.587-601
- Dan, S. (2014), The effects of agency reform in Europe: A review of the evidence, *Public Policy and Administration*, 29(3), 221-240.

- Dan, S., Pollitt, C. (2015), NPM can work: an optimistic review of the impact of new public management reforms in central and eastern Europe, *Public Management Review*, 17:9, 1305-1332
- De Graaf, G. (2010), A report on reporting: why peers report integrity and law violations in public organizations, *Public Administration Review*, 70:5, 767-779
- De Jong, T., Wiezer, N., de Weerd, M., Nielsen, K., Mattila-Holappa, P., & Mockało, Z. (2016), The impact of restructuring on employee well-being: a systematic review of longitudinal studies, *Work & Stress*, 30:1, 91-114
- De Vriendt, S. (2015, March 30), Mensen bij Defensie zijn hervormingsmoe, *Het Nieuwsblad*, retrieved from: <https://www.theguardian.com/healthcare-network/2013/jul/10/nhs-change-fatigue-political-interference>
- De Vries, H.A., Bekkers, V.J.J.M., Tummers, L.G. (2016), Innovation in the public sector: a systematic review and future research agenda, *Public Administration*, 94:1, 146-166
- De Vries, M.S. (2013), Reform fatigue: the effects of reorganizations on public sector employees, retrieved on 27-01-2016 from: http://www.nispa.org/files/conferences/speeches/201304191553120.nispa%202013%0De%20Vries%20Reform_fatigue.pdf
- Department of Public Governance and the Chancellery (2017), *Witboek 'Open en wendbare overheid'*, Brussels: Department of Public Governance and the Chancellery
- DiMaggio, P.J., Powell, W.W. (1983), The iron cage revisited: institutional isomorphism and collective rationality in organizational fields, *American Sociological Review*, 48:2, 147-160
- Dommett, K., Skelcher, C. (2014), Opening the black box of administrative reform: a strategic-relational analysis of agency responses to termination threats, *International Public Management Journal*, 17:4, 540-563

- Dommett, K., & Flinders, M. (2015), The politics of quangocide, *Policy & Politics*, 43:1, 3-25.
- Dorabjee, S., Lumley, C.E., Cartwright, S. (1998), Culture, innovation and successful development of new medicines – an exploratory study of the pharmaceutical industry, *Leadership & Organization Development Journal*, 19:4, 199-210
- Dutton, J.E. (1986), The processing of crisis and non-crisis strategic issues, *Journal of Management Studies*, 23:5, 501-517
- Egeberg, M., Trondal, J. (2009)a, National agencies in the European administrative space: government driven, Commission driven or networked?, *Public Administration*, 87:4, 779-790
- Egeberg, M., Trondal, J. (2009)b, Political leadership and bureaucratic autonomy: effects of agencification, *Public Administration*, 22:4, 673-688
- Elston, T. (2014), Not so ‘arm’s length’: reinterpreting agencies in UK central government, *Public Administration*, 92:2, 458-476
- Enns-Jedenastik, L. (2015), Credibility versus control: agency independence and partisan influence in the regulatory state, *Comparative Political Studies*, 48:7, 823-853
- Enns-Jedenastik, L. (2016)a, Do parties matter in delegation? Partisan preferences and the creation of regulatory agencies in Europe, *Regulation & Governance*, 10, 193-210
- Enns-Jedenastik, L. (2016)b, The politicization of regulatory agencies: between partisan influence and formal independence, *Journal of Public Administration Research and Theory*, 26:3, 507-518
- Erdogan, B., Liden, R.C., Kraimer, M.L. (2006), Justice and leader-member exchange: the moderating role of organizational culture, *The Academy of Management Journal*, 49:2, 395-406

- Esty, D.C. (2006), Good governance at the supranational scale: globalizing administrative law, *The Yale Law Journal*, 115, 1493-1562
- Falk, A., Kosfeld, M. (2006), The hidden costs of control, *The American Economic Review*, 96:5, pp.1611-1630
- Farjoun, M., Starbuck, W.H. (2005), Synopsis: NASA, the CAIB Report, and the Columbia Disaster, in: Starbuck, W.H., Farjoun, M. (eds.), *Organization at the limit: Lessons from the Columbia Disaster*, Malden: Blackwell Publishing, 1-18
- Fedele, P., Galli, D., & Ongaro, E. (2007), Disaggregation, autonomy and re-regulation, contractualism: Public agencies in Italy (1992–2005), *Public Management Review*, 9:4, 557-585
- Flinders, M., Buller, J. (2006), Depoliticisation: principles, tactics and tools, *British Politics*, 1:3, 293-318
- Flemish Government (2019), *Vlaams Regeerakkoord: verdere stappen richting 1 statuut en nieuwe fusies*, retrieved from:
<https://overheid.vlaanderen.be/nieuws/vlaams-regeerakkoord-verdere-stappen-richting-1-statuut-en-nieuwe-fusies>
- Flinders, M., Dommett, K., & Tonkiss, K. (2014), Bonfires and barbecues: coalition governance and the politics of quango reform, *Contemporary British History*, 28:1, 56-80
- Frambach, R.T., Schillewaert, N. (2002), Organizational innovation adoption: a multi-level framework of determinants and opportunities for future research, *Journal of Business Research*, 55:2, 163-176
- Gainer, B., Padanyi, P. (2005), The relationship between market-oriented activities and market-oriented culture: implications for the development of market orientation in nonprofit service organizations, *Journal of Business Research*, 58, 854-862

- Garcia, D., & Gluesing, J. C. (2013), Qualitative research methods in international organizational change research, *Journal of Organizational Change Management*, 26:2, 423-444
- Gibbons, D. E., (2004), Friendship and advice networks in the context of changing professional values, *Administrative Science Quarterly*, 49:2, 238-262
- Gilardi, F. (2002), Policy credibility and delegation to independent regulatory agencies: a comparative empirical analysis, *Journal of European Public Policy*, 9:6, 873-893
- Glomseth, R., Gottschalk, P., & Solli-Saether, H. (2007), Occupational culture as determinant of knowledge sharing and performance in police investigations, *International journal of the sociology of law*, 35:2, 96-107
- Goodson, I. F. (2001), Social histories of educational change, *Journal of Educational Change*, 2:1, 45-63
- Government Accountability Office (2009), *Government performance: strategies for building a results-oriented and collaborative culture in the federal government*, retrieved on 06-07-2019 from: <https://www.gao.gov/products/GAO-09-1011T>
- Greasley, S. & Hanretty, C. (2014), Credibility and agency termination under parliamentarism, *Journal of Public Administration Research and Theory*, 26:1, 159-173
- Grimmelikhuijsen, S., Jilke, S., Olsen, A. L., & Tummers, L. (2017), Behavioral public administration: Combining insights from public administration and psychology, *Public Administration Review*, 77:1, 45-56
- Greve, H. R. (2011), Positional rigidity: Low performance and resource acquisition in large and small firms, *Strategic Management Journal*, 32:1, 103-114
- Greve, C., Ejersbo, N. (2016), Reform context and status, in: Greve, C., Læg Reid, P., Rykkja, L.H. (eds.) *Nordic Administrative Reforms: Lessons for Public Management*, Springer

- Greve, C., Lægreid P., Rykkja, L.H. (2016), The Nordic model revisited, in: Greve, C., Lægreid P., Rykkja, L.H. (eds.): Nordic administrative reforms: lessons for public management, London: Palgrave Macmillan
- Groenleer, M. (2009), The autonomy of European Union agencies: a comparative study of institutional development, dissertation, Delft: Eburon
- Groleau, D., Young, A., & Kirmayer, L. J. (2006), The McGill Illness Narrative Interview (MINI): an interview schedule to elicit meanings and modes of reasoning related to illness experience, *Transcultural psychiatry*, 43:4, 671-691
- Grønlie, T., Flo, Y. (2009), Sentraladministrasjonens historie etter 1945 (The history of central government after 1945), Bergen: Fagbokforlaget
- Grunberg, L., Moore, S., Greenberg, E.S. (2008), The changing workplace and its effects: a longitudinal examination of employee responses at a large company, *The Journal of Applied Behavioral Science*, 44:2, 215-236
- Grunberg, L., Moore, S., Greenberg, E.S., Sikora, P. (2018), The changing workplace and its effects: a longitudinal examination of employee responses at a large company, *The Journal of Applied Behavioral Science*, forthcoming (early view, DOI: 10.1177/0021886307312771)
- Habermas, J. (1973), *Legitimation crisis*, Boston: Beacon Press
- Hacker, J.S. (2004), Dismantling the health care state? Political Institutions, public policies and the comparative politics of health reform, *British Journal of Political Science*, 34:4, 693-724
- Hajnal, G. (2012), Studying dynamics of government agencies: conceptual and methodological results of a Hungarian organizational mapping exercise, *International Journal of Public Administration*, 35:12, 832-843
- Haque, S. (2000), Significance of accountability under the new approach to public governance, *International Review of Administrative Sciences*, 66, 599-617

- Hardiman, N., MacCarthaigh, M. (2010), Organising for growth: Irish State Administration 1958-2008, *The Economic and Social Review*, 41:3, 367-393
- Hardiman, N., & Scott, C. (2012), Ordering things: The Irish state administration database, *Irish Political Studies*, 27:1, 1-22.
- Hargreaves, A. (2004), Inclusive and exclusive educational change: Emotional responses of teachers and implications for leadership, *School Leadership & Management*, 24:3, 287-309.
- Harris, L.C., Ogbonna E. (1999), Developing a market oriented culture: a critical evaluation, *Journal of Management Studies*, 36:2, 177-196
- Harris, L.C., Ogbonna, E. (2002), The unintended consequences of culture interventions; a study of unexpected outcomes, *British Journal of Management*, 13, 31-4.
- 't Hart, P. T., & Wille, A. (2006), Ministers and top officials in the dutch core executive: Living together, growing apart?, *Public Administration*, 84:1, 121-146.
- Hassan, S. (2015), The importance of ethical leadership and personal control in promoting improvement-centered voice among government employees, *Journal of Public Administration Research and Theory*, 25:3, 697-719
- Helliwell, J. F., & Huang, H. (2010), How's the job? Well-being and social capital in the workplace, *ILR Review*, 63:2, 205-227
- Hernes, T. (2005), Four ideal-type organizational responses to New Public Management reforms and some consequences, *International Review of Administrative Sciences*, 71:1, 5-17
- Het Nieuwsblad (2009, September 13), Luchtmachtbasis Bierset gaat dicht, retrieved from: https://www.nieuwsblad.be/cnt/dmf20090913_015

- Hetland, H., Sandal, G. (2003), Transformational leadership in Norway: outcomes and personality correlates, *European Journal of Work and Organizational Psychology*, 12:2, 147-170
- Hill, R.C., Griffiths, W.E., Lim, G.C. (2011), *Principles of Econometrics*, Hoboken: John Wiley & Sons, Inc.
- Hofstede, G. (1980), *Cultures and organizations*, London: McGraw-Hill
- Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. (1990), Measuring organizational cultures: A qualitative and quantitative study across twenty cases, *Administrative science quarterly*, 286-316.
- Hogan, S.J., Coote, L.V. (2014), Organizational culture, innovation, and performance: a test of Schein's model, *Journal of Business Research*, 67:8, 1609-1621
- Hood, C. (1991), A public management for all seasons?, *Public Administration*, 69:1, 3-19
- Hood, C. (2000), Paradoxes of public-sector managerialism, old public management and public service bargains, *International public management journal*, 3:1, 1-22
- Hood, C., Lodge, M. (2008), *The politics of public service bargains*, Oxford: Oxford University Press
- Holten, A. L., & Brenner, S. O. (2015), Leadership style and the process of organizational change, *Leadership & Organization Development Journal*, 36:1, 2-16
- Hull, F.M., Hage, J. (1982), Organizing for innovation: Beyond the Burns and Stalker's organic type, *Sociology*, 16:4, 564-577
- Iverson, R. D. (1996), Employee acceptance of organizational change: the role of organizational commitment, *International Journal of Human Resource Management*, 7:1, 122-149.

- Jain, A.K. (2015), An interpersonal perspective to study silence in Indian organizations: investigation of dimensionality and development of measures, *Personnel Review*, 44:6, 1010-1036
- Jakobsen, M., & Jensen, R. (2015), Common method bias in public management studies, *International Public Management Journal*, 18:1, 3-30
- Jaworski, B.J., Kohli, A.K. (1993), Market orientation: antecedents and consequences, *Journal of Marketing*, 57:3, 53-70
- Jeong, S.H., Harrison, D.A. (2017), Glass breaking, strategy making, and value creating: meta-analytic outcomes of women as CEOs and TMT members, *Academy of Management Journal*, 60:4, 1219-1252
- Jimmieson, N. L., Terry, D. J., & Callan, V. J. (2004), A longitudinal study of employee adaptation to organizational change: the role of change-related information and change-related self-efficacy, *Journal of occupational health psychology*, 9:1, 11
- Joaquin, M.E. (2009), Bureaucratic adaptation and the politics of multiple principals in policy implementation, *The American Review of Public Administration*, 39:3, 246-268
- Jones, L., Watson, B., Hobman, E., Bordia, P., Gallois, C., & Callan, V. J. (2008), Employee perceptions of organizational change: impact of hierarchical level, *Leadership & Organization Development Journal*, 29:4, 294-316.
- Jordana, J., Levi-Faur, D., Fernández i Marin, X. (2011), The global diffusion of regulatory agencies: channels of transfer and stages of diffusion, *Comparative Political Studies*, 44:10, 1-27
- Kavanagh, M. H., & Ashkanasy, N. M. (2006), The impact of leadership and change management strategy on organizational culture and individual acceptance of change during a merger, *British journal of management*, 17, S81-S103.
- Kaufman, H. (1976), *Are government agencies immortal*, Brookings Institution, DC.

- Kickert, W.J.M. (2001), Public management of hybrid organizations: governance of quasi-autonomous executive agencies, *International Public Management Journal*, 4:2, 135-150
- Kickert, W.J.M. (2010), Managing emergent and complex change: the case of Dutch agencification, *International Review of Administrative Sciences*, 76:3, 489-515
- Kiewitz, C., Restubog, S.L.D., Shoss, M.K., Garcia, P.R.J., Tang, R.L. (2016), Suffering in silence: investigating the role of fear in the relationship between abusive supervision and defensive silence, *Journal of Applied Psychology*, 101:5, 731-742
- Kim, S.E., Chang, G.W. (2009), An empirical analysis of innovativeness in government: findings and implications, *International Review of Administrative Sciences*, 75:2, 293-310
- Kim, T., Cable, D.M., Kim, S. (2005), Socialization tactics, employee proactivity and person-organization fit, *Journal of Applied Psychology*, 90:2, 232-241
- Kittel, B. (2006), A crazy methodology? On the limits of macro-quantitative social science research, *International sociology*, 21(5), 647-677
- Kleizen, B., Verhoest, K., Wynen, J. (2018), Structural reform histories and perceptions of organizational autonomy: do senior managers perceive less strategic policy autonomy when faced with frequent and intense restructuring, *Public Administration*, 96:2, 349-367
- Kontoghiorghes, C., Awbrey, S.M., Feurig, P.L. (2005), Examining the relationship between learning organization characteristics and change adaptation, innovation, and organizational performance, *Human Resource Development Quarterly*, 16:2, 185-212
- Korinek, R.L., Veit, S. (2015), Only good fences keep good neighbours! The institutionalization of ministry-agency relationships at the science-policy nexus in German food safety policy, *Public Administration*, 93:1, 103-120

- Krause, G.A. (2003), Agency risk propensities involving the demand for bureaucratic discretion, in: Krause, G.A., Meier, K.J. (eds.), *Politics, policy and organizations: Frontiers in the scientific study of bureaucracy*, Ann Arbor, MI: University of Michigan University Press
- Læg Reid, P., Rolland, V.W., Roness, P.G., Ågotnes, J. (2010), The structural anatomy of the Norwegian state: increased specialization or a pendulum shift?, in: Læg Reid, P., Verhoest, K. (eds.), *Governance of Public Sector Organizations*, London: Palgrave Macmillan, 21-43
- Læg Reid, P., Roness P.G., Rubecksen K. (2012), Norway, in: Verhoest K., Van Thiel S., Bouckaert G., Læg Reid P. (eds.), *Government agencies : practices and lessons from 30 countries*, Basingstoke: Palgrave Macmillan, 234-244
- Læg Reid, P., Roness, P. G., & Rubecksen, K. (2006), Autonomy and control in the Norwegian civil service: Does agency form matter, *Autonomy and regulation: Coping with agencies in the modern state*, 235-267
- Læg Reid, P., Roness, P.G., Verhoest, K. (2011), Explaining the innovative culture and activities of state agencies, *Organization Studies*, 32:10, pp.1321-1347
- Lapsley, I. (2009), New Public Management: the cruellest invention of the human spirit? *ABACUS*, 45:1, doi: 10.1111/j.1467-6281.2009.00275.x
- Lazarus, R. S., & Folkman, S. (1984), *Stress, appraisal, and coping*, Springer publishing company
- Laughlin, R.C. (1991), Environmental disturbances and organizational transitions and transformations: some alternative models, *Organization Studies*, 12:2, 209-232
- Lavrijssen, S., & Ottow, A. (2012), Independent supervisory authorities: a fragile concept, *Legal issues of Economic integration*, 39:4, 419-445
- Lewis, D. E. (2002)a, The politics of agency termination: Confronting the myth of agency immortality, *Journal of Politics*, 64:1, 89-107

- Lewis, D.E. (2002)b, Whistleblowing procedures at work: what are the implications for human resource practitioners?, *Business Ethics: a European Review*, 11:3, 202-209
- Lewis, D.E. (2004), The adverse consequences of the politics of agency design for presidential management in the United States: the relative durability of insulated agencies, *British Journal of Political Science*, 34:3, 377-404
- Lievens, F., Conway, J. M., & De Corte, W. (2008). The relative importance of task, citizenship and counterproductive performance to job performance ratings: Do rater source and team-based culture matter?. *Journal of Occupational and Organizational Psychology*, 81, 11-27
- Lines, R. (2004), Influence of participation in strategic change: resistance, organizational commitment and change goal achievement, *Journal of change management*, 4:3, 193-215
- Long, J. S. (1997), *Regression Models for Categorical and Limited Dependent Variables*, Vol.7 of *Advanced Quantitative Tools in the Social Sciences*, Thousand Oaks, CA: Sage Publications.
- Lonti, Z. (2005), How much decentralization? Managerial autonomy in the Canadian public service, *The American Review of Public Administration*, 35:2, 122-136
- MacCarthaigh, M. (2012), Mapping and understanding organizational change: Ireland 1922-2010, *International Journal of Public Administration*, 35:12, 795-807
- MacCarthaigh, M. (2014), Agency termination in Ireland: Culls and bonfires, or life after death?, *Public Administration*, 92:4, 1017-1037
- MacCarthaigh, M., Roness, P. (2012), Analyzing longitudinal continuity and change in public sector organizations, *International Journal of Public Administration*, 35:12, 773-782
- Maggetti, M. (2007), De facto independence after delegation: a fuzzy-set analysis, *Regulation and Governance*, 1:4,271-294

- Maggetti, M., Verhoest, K. (2014), Unexplored aspects of bureaucratic autonomy: a state of the field and ways forward, *International Review of Administrative Sciences*, 80:2, 239-256
- Majone, G. (1997)a, From the positive to the regulatory state: causes and consequences of changes in the mode of governance, *Journal of Public Policy*, 17:2, 139-167
- Majone, G. (1997)b, The new European agencies: regulation by information, *Journal of European Public Policy*, 4:2, 262-275
- Manville, G., Greatbanks, R., Wainwright, T., & Broad, M. (2016), Visual performance management in housing associations: a crisis of legitimation or the shape of things to come?, *Public Money & Management*, 36:2, 105-112
- March, J.G., Olsen, J.P. (2009), The logic of appropriateness, *ARENA Working Papers* 4,
https://www.researchgate.net/profile/Johan_Olsen3/publication/5014575_The_Logic_of_Appropriateness/links/55d2f0c808aec1b0429f03e4.pdf
- March, J.G., Olson, J.P. (1983), Organizing political life: what administrative reorganization tells us about government, *The American Political Science Review*, 77:2, 281-296
- Marks, M.L., Mirvis, P.H. (1997), Revisiting the merger syndrome: dealing with stress, *Mergers and Acquisitions*, 31:6, 21-27
- Martins, E.C., Treblanche, F. (2003), Building organizational culture that stimulates creativity and innovation, *European Journal of Innovation Management*, 6:1, 64-74
- McMurray, R. (2007), Our reforms, our partnerships, same problems: the chronic case of the English NHS, *Public Money and Management*, 27:1, 77-82
- Meyerson, D., Martin, J. (1987), Culture change: an integration of three different views, *Journal of Management*, 24:6, 623-647

- Milliken, F.J., Morrison, E.W., Hewlin, P.F. (2003), An exploratory study of employee silence: issues that employees don't communicate upward and why, *Journal of Management Studies*, 40:6, 1453-1475
- Mintzberg, H. (1983), *Structure in fives: designing effective organizations*, Englewood Cliffs, NJ: Prentice Hall Inc.
- Mishra, A.K. (1996), Organizational responses to crisis: the centrality of trust, in: Kramer, R.M., Tyler, T., *Trust in Organizations*, Newbury Park, CA: Sage, 261-287
- Moore, S., Grunberg, L., Greenberg, E.S. (2004), Repeated downsizing contact: the effects of similar and dissimilar layoff experiences on work and well-being outcomes, *Journal of Occupational Health Psychology*, 9:3, 247-257
- Moorhead, G., R. Ference, & C. P. Neck. (1991), Group Decision Fiascoes Continue: Space Shuttle Challenger and a Revised Groupthink Framework, *Human Relations*, 44:6, 539-550
- Montano, D. (2019), A Systemic Organizational Change Model in Occupational Health Management, *Journal of Change Management*, 19:3, 183-200
- Morrison, E.W. (2011), Employee voice behavior: integration and directions for future research, *Academy of Management Annals*, 5:1, 373-412
- Morrison, E. W., & Milliken, F. J. (2003), Speaking up, remaining silent: The dynamics of voice and silence in organizations, *Journal of Management Studies*, 40:6, 1353-1358
- Moynihan, D.P. (2006), Ambiguity in policy lessons: the agencification experience, *Public Administration*, 84:4, 1029-1050
- Moynihan, D.P., Pandey, S.K. (2007), The role of organizations in fostering public service motivation, *Public Administration Review*, 67:1, 40-53

- Muurlink, O., Wilkinson, A., Peetz, D., Townsend, K. (2012), Managerial autism: threat-rigidity and rigidity's threat, *British Journal of Management*, 23, S74-S87
- Mr. (2019, October 22), Onrust over angstcultuur bij Rechtbank Noord-Nederland, retrieved from: <https://www.mr-online.nl/onrust-over-angstcultuur-bij-rechtbank-noord-nederland/>
- Nadler, D. A., & Tushman, M. L. (1990), Beyond the charismatic leader: Leadership and organizational change, *California management review*, 32:2, 77-97
- Nakrošis, V., & Budraitis, M. (2012), Longitudinal change in Lithuanian agencies: 1990–2010, *International Journal of Public Administration*, 35:12, 820-831.
- Nelson, A., Cooper, C.L. (1995), Uncertainty amidst change: the impact of privatization on employee job satisfaction and well-being, *Journal of Occupational and Organizational Psychology*, 68, 57-71
- Niesen, W., De Witte, H., Battistelli, A. (2014), An explanatory model of job insecurity and innovative work behavior: insights from social exchange and threat-rigidity theory, in Leka, S., Sinclair, R.R. (Eds.) *Contemporary Occupational Health Psychology: Global Perspectives on Research and Practice* (vol. 3 pp.18-34), Chichester: Wiley-Blackwell
- Nieuwenkamp, R. (2001), *De prijs van het politieke primaat: Wederzijds vertrouwen en loyaliteit in de verhouding tussen bewindspersonen en ambtelijke top*, Enschede: Universiteit Twente
- NOS (2016, June 1), *Werknemers Belastingdienst zijn reorganisatiemoe*, retrieved on 17-10-2019 from: <https://nos.nl/artikel/2108542-werknemers-belastingdienst-zijn-reorganisatiemoe.html>
- Norwegian Competition Authority (2016), *Independence of competition authorities – from design to practices*, retrieved on 17-10-2019 from: <https://konkurransetilsynet.no/wpcontent/uploads/2018/08/GF-Independence-Contribution-from-Norway.pdf>

- Nyhan, R.C. (2000), Changing the paradigm: trust and its role in public sector organizations, *American Review of Public Administration*, 30:1, 87-109
- O'Cass, A., & Ngo, L. V. (2007), Market orientation versus innovative culture: two routes to superior brand performance, *European Journal of Marketing*, 41:7/8, 868-887
- O'Reilly III, C.A., Tushman, M.L. (2004, April), The ambidextrous organization, *The Harvard Business Review*, 74-81
- O'Reilly III, C.A., Tushman, M.L. (2011), Organizational ambidexterity in action: how managers explore and exploit, *California Management Review*, 53:4, 5-22
- Orr, D. (2007, December 5), The NHS is suffering from reform fatigue, *The Independent*, retrieved from:
<https://www.independent.co.uk/voices/commentators/deborah-orr/deborah-orr-the-nhs-is-suffering-from-reform-fatigue-762828.html>
- O'Toole Jr., L.J., Meier, K.J. (2003), Plus ça change: public management, personnel stability, and organizational performance, *Journal of Public Administration Research and Theory*, 13:1, 43-64
- Ogbonna, E., & Harris, L. C. (2002), Organizational culture: a ten year, two-phase study of change in the UK food retailing sector, *Journal of Management studies*, 39:5, 673-706
- Oliver, C. (1991), Strategic responses to institutional processes, *Academy of Management Review*, 16:1, 145-179
- Olsen, B., Sexton, D. (2009), Threat rigidity, school reform, and how teachers view their work inside current education policy contexts, *American Educational Research Journal*, 46:9, 9-44
- Oreg, S. (2006). Personality, context, and resistance to organizational change. *European journal of work and organizational psychology*, 15:1, 73-101

- Oreg, S., Vakola, M., & Armenakis, A. (2011), Change recipients' reactions to organizational change: A 60-year review of quantitative studies, *The Journal of Applied Behavioral Science*, 47:4, 461-524
- Osborne, S. P. (1998), The innovative capacity of voluntary organisations: managerial challenges for local government, *Local Government Studies*, 24:1, 19-40
- Osborne, S.P., Brown, L. (2011), Innovation, public policy and public services delivery in the UK: the word that would be king?, *Public Administration*, 89:4, 1335-1350
- Ossege, C. (2015), Driven by expertise and insulation? The autonomy of European Regulatory Agencies, *Politics and Governance*, 3:1, 101-113
- Overman, S. (2019), How Creating Semiautonomous Agencies Affects Staff Satisfaction, *Public Performance & Management Review*, 1-28, <https://doi.org/10.1080/15309576.2019.1622579>
- Overman, S., Van Thiel, S., Lafarge, F. (2014), Resisting governmental control: how semi-autonomous agencies use strategic resources to challenge state coordination, *International Review of Administrative Sciences*, 80:1, 172-192
- Painter, M., Yee, W. (2010), Task matters: a structural-instrumental analysis of the autonomy of Hong Kong government bodies, *The American Review of Public Administration*, 41:4, 395-410
- Palma, P.J., Pina e Cunha, M., Lopes, M.P. (2010), The best of two worlds, *Public Management Review*, 12:5, 725-746
- Park, C. O., & Joo, J. (2010), Control over the Korean bureaucracy: A review of the NPM civil service reforms under the Roh Moo-Hyun government, *Review of Public Personnel Administration*, 30:2, 189-210
- Park, T., Shaw, J.D. (2013), Turnover rates and organizational performance: a meta-analysis, *Journal of Applied Psychology*, 98:2, 268-309

- Parry, K., Proctor-Thomson, S. (2010), Leadership, culture and performance: the case of the New Zealand public sector, *Journal of Change Management*, 3:4, 376-399
- Patterson, L.M., Markey, M.A., Somers, J.M. (2012), Multiple paths to just ends: using narrative interviews and timelines to explore health equity and homelessness, *International Journal of Qualitative Methods*, 11:2, 132-152
- Pennings, J.M. (1987), Structural contingency theory: a multivariate test, *Organization Studies*, 8:3, 223-240
- Pinder, C.C., Harlos, K.P. (2001), Employee silence: quiescence and acquiescence as responses to perceived injustice, *Research in Personnel and Human Resources Management*, 20, 331-369
- Pollard, T. M. (2001), Changes in mental well-being, blood pressure and total cholesterol levels during workplace reorganization: The impact of uncertainty, *Work & Stress*, 15:1, 14-28
- Pollitt, C. (2007), New Labour's re-disorganization: hyper-modernism and the costs of reform—a cautionary tale, *Public Management Review*, 9:4, 529–543
- Pollitt, C., Dan, S. (2011), The impacts of the New Public Management in Europe: a meta-analysis (COCOPS Work Package 1 – Deliverable 1.1)
- Premeaux, S.F., Bedeian, A.G. (2003), Breaking the silence: the moderating effects of self-monitoring in predicting speaking up in the workplace, *Journal of Management Studies*, 40:6, 1537-1561
- Quirke, B. (1995), *Communicating Change*, London: McGraw-Hill.
- Rafferty, A.E., Griffin, M.A. (2006), Perceptions of organizational change: a stress and coping perspective, *Journal of Applied Psychology*, 91:5, 1154-1162
- Rafferty, A. E., & Restubog, S. L. D. (2010), The impact of change process and context on change reactions and turnover during a merger, *Journal of Management*, 36:5, 1309-1338

- Rafferty, A.E., Restubog, S.L.D. (2017), Why do employees' perceptions of their organization's change history matter? The role of change appraisals, *Human Resource Management*, 56:3, 533-550
- Reichers, A.E., Wanous, J.P., Austin, J.T. (1997), Understanding and managing cynicism about organizational change, *Academy of Management Perspectives*, 11:1, 48-59
- Rhee, J., Dedahanov, A., Lee, D. (2014), Relationships among power distance, collectivism, punishment, and acquiescent, defensive, or prosocial silence, *Social Behavior and Personality*, 42:5, 705-720
- Roberts, P.S. (2006), FEMA and the prospects for reputation-based autonomy, *Studies in American Political Development*, 20, 57-87
- Robinson, S. L. (1996), Trust and breach of the psychological contract, *Administrative science quarterly*, 41:4, 574-599
- Robinson, S. L., & Rousseau, D. M. (1994), Violating the psychological contract: Not the exception but the norm, *Journal of organizational behavior*, 15:3, 245-259
- Robinson, S. L., & Wolfe Morrison, E. (2000), The development of psychological contract breach and violation: A longitudinal study, *Journal of organizational Behavior*, 21:5, 525-546
- Rochet, C., Keramidis, O., & Bout, L. (2008), Crisis as change strategy in public organizations, *International Review of Administrative Sciences*, 74:1, 65-77
- Rolland, V. W., & Roness, P. G. (2010), Mapping organizational units in the state: Challenges and classifications, *International Journal of Public Administration*, 33:10, 463-473
- Rolland, V.W., Roness, P.G. (2011), Mapping organizational change in the state: challenges and classifications, *International Journal of Public Administration*, 34:6, 399-409

- Rolland, V. W., & Roness, P. G. (2012), Foundings and terminations: Organizational change in the Norwegian state administration 1947–2011, *International Journal of Public Administration*, 35:12, 783-794
- Roness, P.G., Verhoest, K., Rubecksen, K., MacCarthaigh, M. (2008), Autonomy and regulation of state agencies: reinforcement, indifference or compensation, *Public Organization Review*, 8:2, 155-174
- Rothstein, B. O., & Teorell, J. A. (2008), What is quality of government? A theory of impartial government institutions, *Governance*, 21:2, 165-190
- Rousseau, D.M. (1990), Normative beliefs in fund-raising organizations: linking culture to organizational performance and individual responses, *Group & Organization Studies*, 15:4, 448-460
- Sablonnière, R. D. L., Tougas, F., Sablonnière, É. D. L., & Debrosse, R. (2012), Profound organizational change, psychological distress and burnout symptoms: The mediator role of collective relative deprivation, *Group processes & intergroup relations*, 15:6, 776-790
- Sarapuu, K. (2012), Administrative structure in times of changes: The development of Estonian ministries and government agencies 1990–2010, *International Journal of Public Administration*, 35:12, 808-819
- Schein, E. H. (1984), Culture as an environmental context for careers, *Journal of Organizational Behavior*, 5:1, 71-81
- Schein, E. H. (2000), *Organizational Culture and Leadership*, San Francisco, CA: Jossey-Bass
- Schweiger, D. M., & Denisi, A. S. (1991), Communication with employees following a merger: A longitudinal field experiment, *Academy of management journal*, 34:1, 110-135
- Scholten, M. (2014), Independence vs. accountability: proving the negative correlation, *Maastricht Journal of European and Comparative Law*, 21:1, 197-204

- Schouten, B., Bethlehem, J., Beullens, K., Kleven, O., Loosveldt, G., Luiten, A., Rutar, K., Shlomo, N., Skinner, C. (2012), Evaluating, comparing, monitoring and improving representativeness of survey response through R-indicators and partial R-indicators, *International Statistical Review*, 80:3, 382-399
- Seo, M., Hill, N.S. (2005), Understanding the human side of merger and acquisition: an integrative framework, *The Journal of Applied Behavioral Science*, 41:4, 422-443
- SERV (2019), Advies Bestuurlijke beleidsnota's 2019-2024, retrieved on 5-2-2020 from:
https://www.serv.be/sites/default/files/documenten/SERV_20191126_bestuurlijke_beleidsnota%27s_ADV.pdf
- Shah, P. P. (2000), Network destruction: The structural implications of downsizing, *Academy of Management Journal*, 43:1, 101-112.
- Shimizu, K. (2007), Prospect theory, behavioral theory, and the threat-rigidity thesis: Combinative effects on organizational decisions to divest formerly acquired units, *Academy of Management Journal*, 50:6, 1495-1514.
- Skålén, P. (2004), New public management reform and the construction of organizational identities, *International Journal of Public Sector Management*, 17:3, 251-263.
- Smullen, A., Van Thiel, S., Pollitt, C. (2001), Agentschappen en de verzelfstandigingsparadox, *B&M*, 28:4, 190-201
- Søderberg, A. M. (2006), Narrative interviewing and narrative analysis in a study of a cross-border merger, *Management International Review*, 46:4, 397-416
- Staw, B.M., Sandelands, L.E., Dutton, J.E. (1981), Threat rigidity effects in organizational: a multilevel analysis, *Administrative Science Review Quarterly*, 26:4, pp.501-524

- Steenbergen, M. R., & Jones, B. S. (2002), Modeling multilevel data structures, *American Journal of Political Science*, 46, 218-237.
- Stoker, E. (2008, August 4), 'Wees trots op je paretjes' – Rens de Groot..., *De Volkskrant*, retrieved on 5-2-2020 from: <https://www.volkskrant.nl/nieuws-achtergrond/wees-trots-op-je-paretjes~b08a50ef/?referer=https%3A%2F%2Fwww.google.com%2F>
- Stoker, J. I., Garretsen, H., & Soudis, D. (2019), Tightening the leash after a threat: A multi-level event study on leadership behavior following the financial crisis, *The Leadership Quarterly*, 30:2, 199-214
- Susskind, A. M., Miller, V. D., & Johnson, J. D. (1998), Downsizing and structural holes: Their impact on layoff survivors' perceptions of organizational chaos and openness to change, *Communication Research*, 25:1), 30-65
- Tepeci, M. (2001), The effect of personal values, organizational cultures, and person-organization fit on individual outcomes in the restaurant industry, University Park, PA: School of Hotel, Restaurant and Recreation Management, Pennsylvania State University, Doctoral Dissertation
- Terman, J. (2014), Evaluating political signals: The nature of bureaucratic response in minority preference purchasing, *The American Review of Public Administration*, 44:5, 522-549
- Thomas, R., & Davies, A. (2005), Theorizing the micro-politics of resistance: New public management and managerial identities in the UK public services, *Organization studies*, 26:5, 683-706
- Torres, L. (2004), Trajectories in public administration reforms in European Continental countries, *Australian Journal of Public Administration*, 63:3, 99-112
- Tushman, M.L., O'Reilly III, C.A. (1996), Ambidextrous organizations: managing evolutionary and revolutionary change, *California Management Review*, 38:4, 8-30

- Vakola, M., Bouradas, D. (2005), Antecedents and consequences of organizational silence: an empirical investigation, *Employee Relations*, 27:5, 441-458
- Valle, M. (1999), Crisis, culture and charisma: the new leader's work in public organizations, *Public Personnel Management*, 28:2, 245-257
- Van de Walle, S. (2018), Explaining variation in perceived managerial autonomy and direct politicization in European public sectors, *International Review of Administrative Sciences*, 85:4, 627-644
- Van den Berg, P. T., & Wilderom, C. P. (2004), Defining, measuring, and comparing organisational cultures, *Applied Psychology*, 53:4, 570-582
- Van der Voet, J. (2016), Change leadership and public sector organizational change: Examining the interactions of transformational leadership style and red tape, *The American Review of Public Administration*, 46:6, 660-682
- Van der Voet, J., Groeneveld, S., & Kuipers, B. S. (2014), Talking the talk or walking the walk? The leadership of planned and emergent change in a public organization, *Journal of Change Management*, 14:2, 171-191
- Van der Voet, J., Kuipers, B. S., & Groeneveld, S. (2016), Implementing change in public organizations: The relationship between leadership and affective commitment to change in a public sector context, *Public Management Review*, 18:6, 842-865
- Van Dorp, E. J. (2018), Trapped in the hierarchy: the craft of Dutch city managers, *Public Management Review*, 20:8, 1228-1245
- Van Dorp, E. J., & 't Hart, P (2019), Navigating the dichotomy: The top public servant's craft, *Public Administration*, *Public Administration*, 97:4, <https://doi.org/10.1111/padm.12600>
- Van Dyne, L. Ang, S., Botero, I.S. (2003), Conceptualizing employee silence and employee voice as multidimensional constructs, *Journal of Management Studies*, 40:6, 1359-1392

- Van Emmerik, H. I. J., & Euwema, M. C. (2008), The aftermath of organizational restructuring: Destruction of old and development of new social capital, *Journal of Managerial Psychology*, 23:7, 833-849
- Van Hootegem, A., Niesen, W., & De Witte, H. (2019), Does job insecurity hinder innovative work behaviour? A threat rigidity perspective, *Creativity and Innovation Management*, 28:1, 19-29
- Van Muijen, J. J. (1999), Organizational culture: The focus questionnaire, *European Journal of work and organizational psychology*, 8:4, 551-568
- Van Thiel, S. (2011), Chapter 3 The 'Empty Nest' Syndrome: Dutch Ministries after the Separation of Policy and Administration, in: *New steering concepts in public management* (pp. 25-40), Emerald Group Publishing Limited.
- Van Thiel, S. (2012), Comparing agencies across countries, in: Verhoest, K., Van Thiel, S., Bouckaert, G., Læg Reid, P. (eds.) *Government agencies: practices and lessons from 30 countries*, Basingstoke: Palgrave Macmillan, pp.18-26
- Van Thiel, S., Verheij, J. (2017), Het aantal zelfstandige bestuursorganen in Nederland 1993-2013, *Beleid en Maatschappij*, 44:1, 27-41
- Van Thiel, S., Yesilkagit, K. (2014), Does task matter? The effect of task on the establishment, autonomy and control of semi-autonomous agencies, *International Review of Administrative Sciences*, 80:2, 318-340
- Verhoest, K., Peters, B.G., Bouckaert, G., Verschuere, B. (2004), The study of organisational autonomy: a conceptual review, *Public Administration and Development*, 24:2, 101-118
- Verhoest, K. (2018), Agencification in Europe. In *The Palgrave handbook of public administration and management in Europe* (pp. 327-346), London: Palgrave Macmillan

- Verschuere, B. (2006), *Autonomy & control in arm's length public agencies: exploring the determinants of policy autonomy*, dissertation: Leuven: Public Governance Institute
- Verschuere, B., Barbieri, D. (2009), Investigating the 'NPM-ness' of agencies in Italy and Flanders, *Public Management Review*, 11:3, 345-373
- Vigoda-Gadot, E., Beerli, I. (2011), Change-oriented organizational citizenship behavior in public administration: the power of leadership and the cost of organizational politics, *Journal of Public Administration Research and Theory*, 22:3, 573-590
- Vis, B., van Kersbergen, K., Hylands, T. (2011), To what extent did the financial crisis intensify the pressure to reform the welfare state?, *Social Policy & Administration*, 45:4, 338-353
- Voorberg, W.H., Bekkers, V.J.J.M., Tummers, L.G. (2015), A systematic review of co-creation and co-production: embarking on the social innovation journey, *Public Management Review*, 17:9, 1333-1357
- Walker, R.M., Boyne, G.A. (2006), Public management reform and organizational performance: an empirical assessment of the U.K. Labour Government's public service improvement strategy, *Journal of Policy Analysis and Management*, 25:2, 371-393
- Walumbwa, F.O., Schaubroeck, J. (2009), Leader personality traits and employee voice behavior: mediating roles of ethical leadership and work group psychological safety, *Journal of Applied Psychology*, 94:5, 1275-1286
- Wang, Y.D., Hsieh, H.H. (2013), Organizational ethical climate, perceived organizational support, and employee silence: a cross-level investigation, *Human Relations*, 66:6, 783-802
- Wanous, J. P., Reichers, A. E., & Austin, J. T. (2000), Cynicism about organizational change: Measurement, antecedents, and correlates, *Group & Organization Management*, 25:2, 132-153

- Watson, W. E., Johnson, L., & Merritt, D. (1998), Team orientation, self-orientation, and diversity in task groups: Their connection to team performance over time, *Group & organization management*, 23:2, 161-188
- Wettenhall, R. (2005), Agencies and non-departmental public bodies: The hard and soft lenses of agencification theory, *Public Management Review*, 7:4, 615-635
- Wick, E.C., Galante, D.J., Hobson, D.B., Benson, A.R., Lee, K.H., Berenholtz, S.M., Efron, J.E., Pronovost, P.J., Wu, C.L. (2015), Organizational culture changes result in improvement in patient-centered outcomes: implementation of an integrated recovery pathway for surgical patients, *Journal of the American College of Surgeons*, 221:3, 669-677
- Wooldridge, J.M. (2002), *Econometric analysis of cross section and panel data*, Cambridge, Massachusetts & London: The MIT Press
- Wolf, E. E., & Van Dooren, W. (2018), Conflict reconsidered: The boomerang effect of depoliticization in the policy process, *Public Administration*, 96:2, 286-301
- Wright, B. E., & Pandey, S. K. (2010), Transformational leadership in the public sector: Does structure matter?, *Journal of public administration research and theory*, 20:1, 75-89
- Wynen, J., & Kleizen, B. (2019), Improving dynamics or destroying human capital? The nexus between excess turnover and performance, *Review of Managerial Science*, 13:2, 303-325
- Wynen, J., & Verhoest, K. (2015), Do NPM-type reforms lead to a cultural revolution within public sector organizations?, *Public Management Review*, 17:3, 356-379
- Wynen, J., Verhoest, K., Ongaro, E., Van Thiel, S., (2014), Innovation-oriented culture in the public sector: Do managerial autonomy and result control lead to innovation?, *Public Management Review*, 16:1, 45-66

- Wynen, J., Verhoest, K., & Kleizen, B. (2017), More reforms, less innovation? The impact of structural reform histories on innovation-oriented cultures in public organizations, *Public Management Review*, 19(8), 1142-1164.
- Wynen, J., Verhoest, K., & Kleizen, B. (2019)a, Are public organizations suffering from repetitive change injury? A panel study of the damaging effect of intense reform sequences, *Governance*, 32:4, 695-713
- Wynen, J., Boon, J., Kleizen, B., & Verhoest, K. (2019)b, How multiple organizational changes shape managerial support for innovative work behavior: Evidence from the Australian Public Service, *Review of Public Personnel Administration*, 0734371X18824388
- Yesilkagit, K. (2004), Bureaucratic autonomy, organizational culture, and habituation: politicians and independent administrative bodies in the Netherlands, *Administration & Society*, 36:5, 528-552
- Yesilkagit, K. (2011), Institutional compliance, European networks of regulation and the bureaucratic autonomy of national regulatory authorities, *Journal of European Public Policy*, 18:7, 962-979
- Yesilkagit, K., Van Thiel, S. (2008), Political Influence and Bureaucratic Autonomy, *Public Organization Review*, 8:2, 137-153
- Zito, A.R. (2015), Expertise and power: agencies operating in complex environments, *Politics and Governance*, 3:1, 73-89

Appendix 1. Note on contributors to chapters

Although several of the papers in the project were a team-based effort, care was taken to adhere to faculty regulations and common practices on the role performed by doctoral researchers in writing their dissertation. Article 19 of the additional doctoral regulation of 29-08-2018 requires that a table in an Appendix on the doctoral student's contribution to each paper is included in the dissertation, with said table being included below.²⁷ Faculty common practice furthermore stipulates that doctoral students draft roughly 4 publishable papers, of which at least one is single-authored and at least three are first-authored (the dissertation conforms to these guidelines as chapters 4 and 7 are single-authored and chapters 4, 5 and 7 are first-authored). The doctoral student is second author on two other chapters and third author on a final chapter, as a result of the team-based structure of the research. These chapters were also included in the dissertation as they (1) all featured a substantial contribution of the doctoral student that was roughly co-equal with the other authors and (2) form a coherent whole with the first- and single-authored chapters. The inclusion of these chapters is in conformance with the faculty common practice as these chapters are in excess of the minimal amount of first-authored and single-authored chapters. Three papers that featured a relatively minor contribution by the doctoral student, although published output of the same overarching research project, were not included in this dissertation. It should furthermore be noted that the doctoral student performed analyses independently in chapters 4 and 7, performed the analyses together with a supervisor in chapter 5 and contributed to the design and evaluation of the statistical analyses in chapters 2 and 6.

Chapter title ²⁸	Contribution of co-authors:
Chapter 1	Single-authored
Chapter 2 – Just keep silent... Defensive silence as a reaction to successive structural reforms	Author 1: Jan Wynen (supervisor): coordination, data-gathering and cleaning, data section, methodology, analysis, theoretical framework, reviewer responses

²⁷ See: <https://www.uantwerpen.be/en/research/phd/antwerp-doctoral-school/regulations-and-documents/>

²⁸ Note: chapters 1 and 8 were not developed as independent papers

	<p>Author 2: Bjorn Kleizen: introduction, theoretical framework, analysis, results section, discussion, conclusion, reviewer responses</p> <p>Author 3: Koen Verhoest (supervisor): introduction and idea, contribution to theory, supervision and coordination, intensive revision of all parts, reviewer responses</p> <p>Author 4: Per Læg Reid: data-gathering, supervision, Norwegian context</p> <p>Author 5: Vidar Rolland: data-gathering, data-cleaning</p>
<p>Chapter 3 – More reforms, less innovation? The impact of structural reform histories on innovation-oriented cultures in public organizations</p>	<p>Author 1: Jan Wynen (supervisor): coordination, data cleaning, data-gathering, data section, methodology, analysis, theoretical framework, reviewer responses</p> <p>Author 2: Koen Verhoest (supervisor): introduction and idea, data-gathering, supervision and coordination, contribution to framework and discussion, intensive revision of all parts, reviewer responses</p> <p>Author 3: Bjorn Kleizen: introduction, data-gathering, data-cleaning, theoretical framework, results section, discussion, conclusion, reviewer responses</p>
<p>Chapter 4 – Taking one for the team in turbulent times? How repeated structural reform may affect team-oriented cultures</p>	<p>Single-authored, statistical analysis performed by Bjorn Kleizen</p>
<p>Chapter 5 – Structural reform histories and perceptions of organizational autonomy: Do senior managers perceive less strategic policy autonomy when faced with frequent and intense restructuring?</p>	<p>Author 1: Bjorn Kleizen: lead and coordination, introduction, data-gathering, theoretical framework, data section, analysis, results section, discussion, conclusion, reviewer responses</p> <p>Author 2: Koen Verhoest (supervisor): introduction, contribution to theoretical framework, data-gathering, supervision and coordination, intensive revision of all parts, discussion, reviewer responses</p> <p>Author 3: Jan Wynen (supervisor): data cleaning, data-gathering, data section, methodology, analysis</p>
<p>Chapter 6 – Do reform histories affect the influence of administrative & political principals? A micro econometric study on Norwegian state agencies</p>	<p>Author 1: Jan Wynen (supervisor): coordination, data-gathering and cleaning, data, methodology, analysis, theoretical framework, reviewer responses</p> <p>Author 2: Bjorn Kleizen: introduction, theoretical framework, results section, analysis, discussion, conclusion, reviewer responses</p> <p>Author 3: Koen Verhoest (supervisor): introduction, contribution to theoretical framework, supervision and coordination, intensive revision of all parts, reviewer responses</p> <p>Author 4: Per Læg Reid: data-gathering, supervision, Norwegian context</p> <p>Author 5: Vidar Rolland: data-gathering, data-cleaning</p>

Chapter 7 – Senior manager perceptions of organizational change: the relevance of (dis)continuity in change trajectories and self-initiated versus imposed change	Single-authored, qualitative analysis performed by Bjorn Kleizen
Chapter 8	Single-authored

Table A.1.1. Additional information on authors' contributions to the various chapters

Appendix 2. Supplementary material chapter 2

A.2.1. Additional information on data

Organization	Idnum Organization	Used Sample (averages)		Original Sample (averages)	
		Age	Gender	Age	Gender
Statistics Norway	1155	3,96	1,42	3,66	1,43
Norwegian Competition Authority	1168	3,17	1,33	3,00	1,33
Directorate of Taxes	1193	3,60	1,31	3,47	1,47
Directorate of Norwegian Customs	1408	3,92	1,60	3,88	1,51
Financial Supervisory Authority	1535	3,74	1,32	3,75	1,44
Norwegian Government Agency for Financial Management	1616	4,29	1,41	4,00	1,49
Norwegian Maritime Directorate	2012	3,52	1,19	3,75	1,29
Norwegian Water Resources and Energy Directorate	2801	3,79	1,33	3,80	1,35
Norwegian Patent Office	2802	3,24	1,41	3,19	1,54
Norwegian Petroleum Directorate	2813	4,42	1,33	4,05	1,55
Norwegian Agency for Development Cooperation	4802	4,22	1,59	4,06	1,57
Norwegian National Security Authority (NoNSA)	5814	3,36	1,25	3,53	1,32
Directorate of Fisheries	6801	3,96	1,25	3,78	1,40
Norwegian Coastal Administration (NCA)	6802	4,12	1,29	4,10	1,27
Norwegian Board of Health Supervision	7012	4,38	1,50	4,35	1,59
Norwegian Medicines Agency	7668	3,68	1,50	3,68	1,60
Norwegian Directorate of Health (central unit)	7674	3,71	1,51	3,71	1,55
Norwegian Labour Inspection Authority	7806	4,00	1,77	3,67	1,70
Directorate of Public Roads	8801	4,16	1,34	4,04	1,39
Norwegian Communications Authority (Nkom)	8805	3,77	1,15	3,56	1,29
Norwegian Railway Inspectorate	8807	3,67	1,33	3,63	1,38
Norwegian National Rail Administration	8808	3,80	1,16	3,80	1,28
Civil Aviation Authority	8813	4,33	1,42	4,23	1,32
Directorate for building quality	9805	2,83	1,50	2,93	1,33
Norwegian Directorate of Immigration	9806	3,48	1,59	3,41	1,60
Data Inspectorate	13505	3,50	1,33	3,44	1,44
National Police Directorate	13655	3,94	1,50	3,85	1,44
Directorate for Civil Protection and Emergency Planning	13659	3,95	1,44	3,88	1,45
Norwegian Directorate for Children, Youth and Family Affairs	18603	3,73	1,59	3,56	1,64
Norwegian Food Safety Authority	19691	3,97	1,57	3,88	1,61
Norwegian Directorate for Nature Management	19804	3,81	1,13	3,76	1,29
Norwegian Agricultural Authority	19828	3,93	1,47	3,54	1,42
Climate and Pollution Agency	20501	3,39	1,61	3,58	1,58
Arts Council Norway	21522	4,00	1,63	4,00	1,64
Directorate for Cultural Heritage	21528	4,14	1,48	4,02	1,49
Norwegian Gaming Board	26611	3,33	1,50	3,56	1,56
Petroleum Safety Authority Norway	29603	4,30	1,20	4,02	1,34
Norwegian Media Authority	34604	4,13	1,38	4,17	1,50
Norwegian Directorate for Education and Training	35603	3,60	1,57	3,60	1,62
Directorate for Education and Training	38602	3,63	1,50	3,72	1,50
NAV- Directorate of Labour	38612	3,67	1,54	3,72	1,52

Table A.2.1. Participating organizations

Founding events	Maintenance Events	Ending events
Regular founding	Maintenance by secession	Ending by absorption
Founding by secession	Maintenance by absorption	Ending by splitting
Founding by splitting	Change in name	Ending with a merger
Founding by a merger	Change in location	Pure disband
Founding by complex reorganization	Maintenance by reorganization	Ending by complex reorganization
Entered; new relevant entity	New line of reporting	Discharged; no longer a relevant entity
	New superior organization (horizontal movement)	
	New affiliation/administrative level	
	New superior organization and level	
	No change to units, but a change in superiors	
	Units moving into or out of integrated organizations	

For more information see <http://www.nsd.uib.no/polsys/data/en/forvaltning/internending>

Table A.2.2. Structural reforms cited in the Norwegian State Administration Database

COFOG	Description	Frequency (% of organizations)
1	General public services	14
2	Defense	4
3	Public order and safety	8
4	Economic affairs	43
5	Environmental protection	4
6	Housing and community amenities	2
7	Health	6
8	Recreation, culture and religion	6
9	Education	2
10	Social Protection	10

Table A.2.3. COFOG Coding

A.2.2. Utilized survey questions

Used survey questions for:

Dependent:

Have you, during the past year, put aside program proposals, draft laws, regulations, etc. within your area because there was controversy about these?

Have you, during the past year, failed to raise a problem / matter within your area because you assumed that there would be a dispute about it

Independents:

Age: What is your age?

Gender: Sex?

Position: What is your current job level?

Tenure: How long have you been employed in the current organization?

Startingjob: At what level was your first job in this agency central?

Rules: Are there clear rules or well-established practices regarding the performance of your work tasks?

Task: Which of the following tasks does the bulk of your work fall into?

Joboffers: Have you received any direct offers / inquiries regarding new posts during the past year?

Study abroad: Do you have education abroad for at least one year?

Language: What language do you use daily?

Importance-Loyalty: What weight do you add to each of the following considerations in carrying out your work tasks? Loyalty to the immediate superior

Importance- Professional: What weight do you add to each of the following considerations in carrying out your work tasks? Professional Considerations

Importance- Law: What weight do you add to each of the following considerations in carrying out your work tasks? Judicial proceedings, current law

Political: Are you currently, or have you been a member of any political party?

Attitude to superior: Do you want to send up a proposal you personally think is correct if you also know (or assume) that the proposal will encounter concerns of your superior?

A.2.3. Additional information analyses

Variables	(1)	(2)	(3)	(4)	(5)
Constant	3.88*** (0.04)	3.66*** (0.27)	3.58*** (0.28)	3.59*** (0.28)	3.63*** (0.29)
Individual level					
Age		0.08*** (0.02)	0.08*** (0.02)	0.07*** (0.02)	0.07*** (0.02)
Gender		0.03 (0.05)	0.04 (0.05)	0.04 (0.05)	0.04 (0.05)
Position		$\chi^2(3)=1.6$	$\chi^2(3)=1.11$	$\chi^2(3)=1.05$	$\chi^2(3)=1.34$
Tenure		$\chi^2(2)=0.89$	$\chi^2(2)=1.24$	$\chi^2(2)=1.10$	$\chi^2(2)=1.48$
Starting job		$\chi^2(4)=4.21$	$\chi^2(4)=3.67$	$\chi^2(4)=3.62$	$\chi^2(4)=3.79$
Rules		-0.07*** (0.02)	-0.07*** (0.02)	-0.07*** (0.02)	-0.07*** (0.02)
Task		$\chi^2(9)=18.48^{**}$	$\chi^2(9)=19.6^{**}$	$\chi^2(9)=18.82^{**}$	$\chi^2(9)=20.9^{**}$
Job offers		0.06 (0.05)	0.06 (0.05)	0.06 (0.05)	0.07 (0.05)
Attitude toward superiors		0.03 (0.04)	0.03 (0.04)	0.03 (0.04)	0.03 (0.04)
Studied abroad		0.02 (0.06)	0.01 (0.06)	0.00 (0.06)	0.02 (0.06)
Language		$\chi^2(3)=4.85$	$\chi^2(3)=5.69$	$\chi^2(3)=5.8$	$\chi^2(3)=5.39$
Importance of loyalty		0.00 (0.03)	0.00 (0.03)	0.00 (0.03)	0.01 (0.03)
Importance-Professional		-0.10*** (0.04)	-0.11*** (0.04)	-0.11*** (0.04)	-0.11*** (0.04)
Importance of Laws		-0.00 (0.03)	-0.00 (0.03)	-0.00 (0.03)	0.00 (0.03)
Political		-0.18*** (0.05)	-0.18*** (0.05)	-0.18*** (0.05)	-0.18*** (0.05)
Organization level					
Cofog			$\chi^2(9)=23.07^{***}$	$\chi^2(9)=25.24^{***}$	$\chi^2(9)=20.29^{**}$
Organizational age			0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)
History (1)			-0.04*** (0.01)		
History (2)				-0.05*** (0.02)	
History (3)					-0.26** (0.11)
Observations	1.049	1.049	1.049	1.049	1.049

Number of Organizations	40	40	40	40	40
Number of Years	2	2	2	2	2
LR test (conservative)	$\chi^2(2)=40.59^{***}$	$\chi^2(2)=37.74^{***}$	$\chi^2(2)=6.91^{**}$	$\chi^2(2)=6.18^{**}$	$\chi^2(2)=7.91^{**}$
Intra-class correlation	0.12				
Level-1 R ²		0.07			
Level-2 R ²			0.71	0.72	0.64

Standard errors are shown in parentheses *** p<0.01. ** p<0.05. * p<0.1

Table A.2.4. Multilevel results with crossed effects (Organization and Year). Without the structural reform 'Change of name'

Variables	Question ² 2006 2016	Mean	Sd.	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	
Defensive silence	Factor Score	3.870	0.758																								
Failed to propose an issue	46 40	4.283	0.943	(1)	1.0000																						
Failed to raise an issue	47 47_1	4.268	0.928	(2)	0.6011*	1.0000																					
Individual level N=1077																											
Age	9 53I	3.807	1.062	(3)	0.1298*	0.0846	1.0000																				
Gender	10 54	1.434	0.496	(4)	-0.0045	-0.0006	-0.1373*	1.0000																			
Position	2 2I	1.750	1.071	(5)	0.0480	0.0114	0.2092*	-0.0426	1.0000																		
Tenure	2B 6I_3	2.669	0.569	(6)	0.0482	0.0150	0.2603*	-0.0449	0.1969*	1.0000																	
Startingjob	5 5I	2.004	1.073	(7)	0.0008	-0.0430	0.1059	-0.0223	0.5308*	-0.0224	1.0000																
Rules	17 7	2.829	1.159	(8)	-0.0246	-0.1664*	-0.0125	0.0094	0.0622	0.0341	0.0775	1.0000															
Task	15 5	6.003	2.474	(9)	-0.0139	-0.0060	-0.0079	0.0020	0.0013	-0.0423	0.0350	0.0161	1.0000														
Joboffers	8A 52A	1.655	0.476	(10)	0.0422	0.0564	0.1493*	-0.0027	-0.0363	0.0551	-0.0667	-0.0363	0.0103	1.0000													
Study abroad	13 56	1.805	0.396	(11)	0.0136	0.0337	0.0429	-0.1038	0.0209	0.0642	0.0301	-0.0483	-0.0554	0.0565	1.0000												
Language	54 57	1.929	0.374	(12)	0.0198	0.0305	-0.1396*	0.0348	-0.0765	-0.0878	-0.0179	-0.0300	0.0273	0.0196	0.0074	1.0000											
Importance_loyalty	18B 18B	1.666	0.837	(13)	0.0070	-0.0423	-0.0351	-0.0311	-0.0808	-0.0254	-0.0618	0.0896	-0.0022	-0.0171	-0.0174	0.0374	1.0000										
Importance_Professional	18F 18F	1.378	0.601	(14)	-0.0791	-0.0753	-0.0253	-0.1199*	0.0803	-0.0257	0.0699	0.0727	-0.0001	-0.0468	-0.0493	-0.0301	0.0924	1.0000									
Importance_Law	18J 18J	1.499	0.852	(15)	0.0184	-0.0553	-0.0167	-0.0789	0.0113	0.0010	0.0295	0.2313*	0.1179*	-0.0447	-0.0228	0.0114	0.1649*	0.2558*	1.0000								
Political	59 62	0.291	0.454	(16)	-0.1034	-0.0947	0.0914	0.0053	0.1016	0.0268	0.0912	0.0485	0.0233	-0.0597	-0.0566	0.0661	-0.0180	-0.0146	-0.0002	1.0000							
Attitude to superior	49 43	1.500	0.615	(17)	0.0326	-0.0124	0.0471	0.0496	-0.0668	-0.0659	-0.0268	-0.0129	0.0357	0.0228	0.0042	-0.0443	-0.1170*	0.1163*	0.0696	-0.0254	1.0000						
Year		2010	4.942	(18)	0.0162	0.0849	0.1131*	0.0444	-0.2447*	-0.1243*	-0.0906	-0.1644*	0.0082	0.0125	-0.0867	0.0810	-0.0964	-0.0968	-0.1432*	0.0280	0.0009	1.0000					
Organizational level N=41 (across 2 years)																											
Individuals per organization		Min.	6																								
		Average	26,3																								
		Max.	78																								
Number of events		2.877	2.853	(19)	-0.0203	0.0016	0.0643	-0.0840	0.0335	-0.0090	-0.0770	-0.0196	-0.0180	-0.0059	-0.0433	0.0433	-0.0697	0.0373	-0.0387	-0.0098	0.0090	0.1673*	1.0000				
Linear depreciation		2.048	2.425	(20)	-0.0239	0.0039	0.0404	-0.0627	0.0051	-0.0298	-0.0625	-0.0440	-0.0280	-0.0373	-0.0781	0.0488	-0.0768	0.0322	-0.0547	0.0096	0.0341	0.2682*	0.8802*	1.0000			
Exponential depreciation		0.117	0.257	(21)	-0.0026	-0.0664	-0.0099	-0.0725	0.1236*	0.0180	0.0359	0.0143	0.0179	0.0052	0.0108	0.0391	0.0022	0.0383	0.0651	-0.0307	-0.0202	-0.1951*	0.2010*	0.1845*	1.0000		
COFOG		5.024	2.992	(22)	-0.1358*	-0.0830	-0.0842	0.1207*	-0.0387	-0.0242	0.0310	0.0824	-0.0021	-0.0137	-0.0235	-0.0508	-0.0138	0.0223	0.0011	0.0393	0.0732	-0.0484	-0.2105*	-0.0874	-0.1256*	1.0000	
Orgage		39.60	46.71	(23)	0.0900	0.0690	0.0575	-0.0931	0.0137	-0.0124	-0.1154*	-0.0028	0.0049	0.0052	0.0398	0.0190	-0.0191	0.0007	0.0260	-0.0722	-0.0171	-0.0566	0.6020*	0.4171*	-0.0289	-0.3782*	1.0000

² The surveys can be consulted online: <http://www.nsd.uib.no/polsys/StatiskeDokument/SpSkjemaDir06.html>

Table A.2.5. Full correlation matrix

Variable	SQRT		R-	
	VIF	VIF	Tolerance	Squared
Defensive silence				
(q1)	1.63	1.28	0.6148	0.3852
Defensive silence				
(q2)	1.64	1.28	0.6092	0.3908
Age	1.20	1.10	0.8299	0.1701
Gender	1.06	1.03	0.9453	0.0547
Position	1.54	1.24	0.6505	0.3495
Tenure	1.14	1.07	0.8757	0.1243
Startingjob	1.45	1.20	0.6908	0.3092
Rules	1.11	1.05	0.9031	0.0969
Task	1.02	1.01	0.9763	0.0237
Studiedabroad	1.03	1.02	0.9686	0.0314
Joboffers	1.04	1.02	0.9571	0.0429
Attitude to superior	1.07	1.03	0.9374	0.0626
Language	1.04	1.02	0.9583	0.0417
Loyalty	1.07	1.03	0.9347	0.0653
Professional	1.13	1.06	0.8844	0.1156
Procedure	1.18	1.08	0.8502	0.1498
Political engagement	1.05	1.03	0.9490	0.0510
Mean VIF	1.20			

Table A.2.6. Variance Inflation Factor

Appendix 3. Supplementary material chapter 3

A.3.1. Overview of BSAD event codes

Founding events

- 101 – pure founding (organization has no predecessors)
- 102 – founding by secession (except from bodies from other government levels)
- 104 – founding by splitting (except from bodies from other government levels)
- 106 – founding by merger (except from bodies from other government levels)
- 107 – founding by transfer from national/federal level (regionalization), including immediate merger or splitting of the organization
- 108 – founding by transfer from lower administrative level (from local/provincial to regional/federal or from regional to federal)
- 111 – founding by complex reorganization (except from bodies from other government levels)
- 112 – entered; new relevant entity (not existing in dataset before)
- 114 – founding by complex splitting
- 116 – founding by complex merger

Maintenance events

- 202 – maintenance by secession (to bodies of the same governmental level or to private sector/non-profit sector)
- 203 – maintenance by absorption (from bodies of the same governmental level or from private sector/non-profit sector)
- 204 – maintenance with secession of tasks to another governmental level
- 205 – maintenance by absorption of tasks from another governmental level
- 207 – maintenance by only change of name
- 208 – maintenance by dropping of tasks altogether
- 211 – maintenance by reorganization
- 221 – new superior organization at the same level (horizontal movement)
- 222 – new form of affiliation/legal form (including moving in or out private or non-profit sector) (with or without change of name)

- 223 – new superior organization and new form of affiliation/legal form
- 224 – maintenance by the adoption of new tasks (not existing before in any other (public) organization)
- 291 – no change to unit, but change of superior (diagonal movement at the same governmental level)

Ending events

- 303 – ending by absorption
- 304 – ending by splitting
- 306 – ending by merger
- 307 – ending by transfer to regional level (regionalization)
- 308 – ending by transfer to provincial and local administrative levels
- 309 – ending by transfer to higher administrative level (from regional to federal or from lower levels to regional/federal)
- 310 – pure disbandings/termination
- 311 – ending by complex reorganization
- 312 – discharged; no longer relevant entity
- 314 – ending by complex merger
- 316 – ending by complex splitting

A.3.2. Expected impact of a reform

We propose that different types of structural reforms have different degrees of impact on an organization, based on the characteristics of these reforms. The ‘level 3’- reforms all concern the integration or secession of sections, tasks and activities in the organization and are therefore considered to be particularly likely to cause a threat-rigidity effect. They directly – and sometimes detrimentally – alter the organization’s internal makeup and tasks and imply major changes for the employees involved. The ‘level 2’-reforms that are proposed to have a moderate effect have more diverse characteristics. A change of legal form does not necessarily entail a change in makeup or task, but it does signal a shift to other work-methods, a different relationship with the political superior, a different

accountability structure, a different level of legal/financial autonomy and a revised set of administrative and/or private law competences for the organization concerned. Conversely, the internal reorganization is capable of having a relatively strong impact on the organization's makeup, but is controlled to a greater extent by internal managers and is therefore expected to be less of an external threat than the 'level 3' -reforms. Finally, an adoption of new tasks may encumber the organization with heightened workload, but is normally not a threat to the position of current organization's members or the organization's legitimacy. The 'level 1' - category concerns structural reform events that should only produce relatively minor levels of threat perceptions in organizations. The first of the minor impact events is the shift to another ministerial portfolio, which implies a changing accountability relationship but otherwise does not change the organization. The second minor impact event, the change of name, only replaces the superficial symbols of an organization and not its core mechanics, activities, or makeup, and is therefore also expected to generate relatively low levels of threat-rigidity in the organization

A.3.3. Example Reform Trajectory

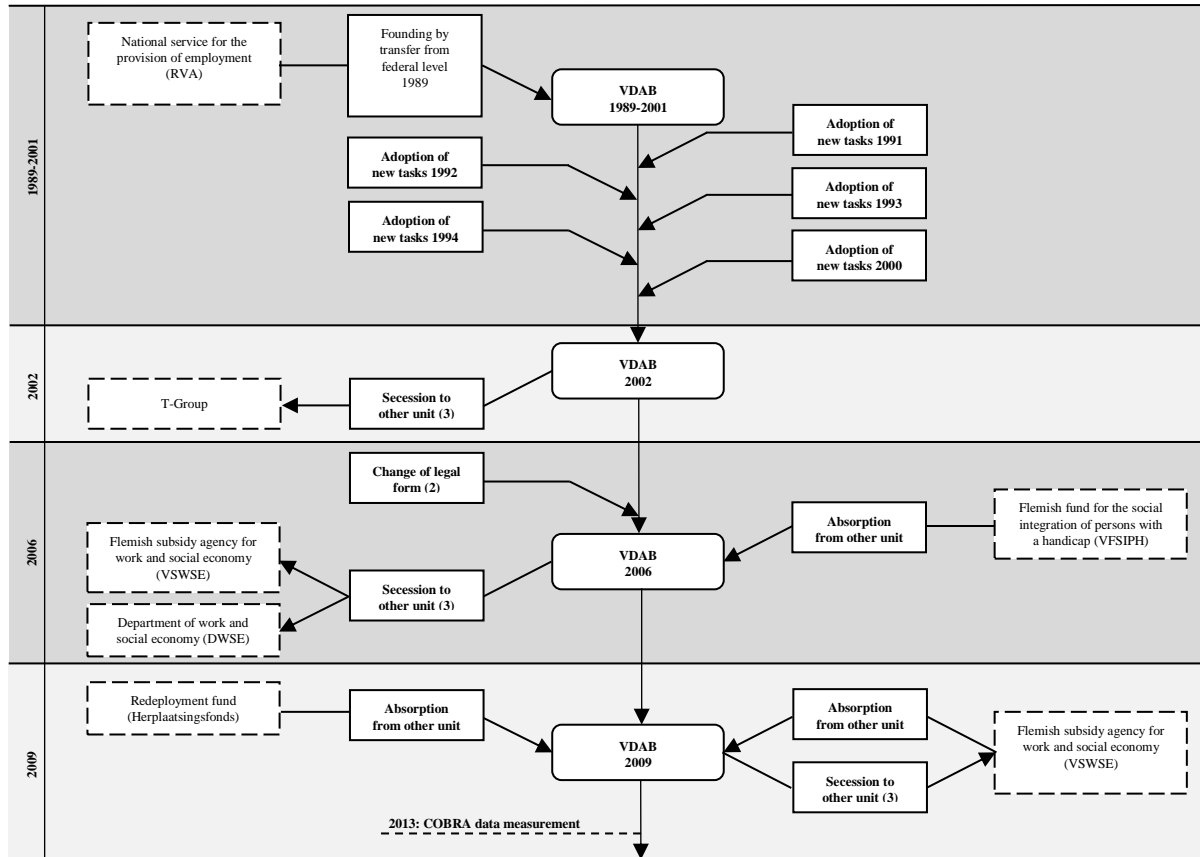


Figure A.3.1. Schematic representation of the reform history of the Flemish Service for Employment Mediation (VDAB)

Figure A.3.1. gives an example of a reform trajectory by zooming into the organisational history of structural reforms of the Flemish public sector organization Flemish Service for Job Mediation and Vocational Training ('Vlaamse Dienst voor Arbeidsbemiddeling en Beroepsopleiding' - VDAB). This agency under public law is notable in our sample as the organization with the most identified structural reform events and thus provides a good illustration of the various types of reforms that are coded in the BSAD.

The figure shows how in 1989 the organization is transferred to the Flemish level after a transfer of competences from the national level, which we regard as its founding moment. Subsequently, the VDAB adopts a number of new activities and tasks in the 1990's and in 2000. These include new competences to provide services and advice to employees of organizations through career guidance and outplacement (1991), the opening of 14 centres for lower educated and long-term unemployed persons (1992), the opening of 38 education centres (1993), the creation of an Ombudsman position for complaints against VDAB decisions (1994) and the VDAB's designation as Flemish coordinator for the career guidance and unemployment reduction elements of the European Social Fund (ESF3 funds) (2000). In 2002 the T-Group, up until that point a subunit of the VDAB responsible for the organization's commercial activities, has been split off from the VDAB and privatised.

The changes in 2006 were imposed in the context of the Flemish whole-of-government reform program dubbed "Beter Bestuurlijk Beleid" (Better Administrative Policy), which introduced many new single-purpose agencies by conducting a separation of policy execution tasks and policy development tasks according to the NPM model. In the context of these reforms, the already existing agency VDAB seceded units to the newly formed Flemish Subsidy Agency for Work and Social Economy (VSWSE) and the new Department of Work and Social Economy (DWSE), while receiving a section from the simultaneously reformed Flemish Fund for the Social Integration of Persons with a Handicap (VFSIPH). Moreover, as Beter Bestuurlijk Beleid introduced a new typology of (semi)independent agencies, the legal form of VDAB was modernized from a so-called 'institution of public interest' category B to its new analogue, an external autonomous agency under public law. In 2009 the VDAB absorbed the Redeployment

fund (Herplaatsingsfonds) in its entirety and also exchanged some personnel with the VSWSE. Due to there being a time difference between the legal imposition of the VSWSE and Redeployment Fund personnel absorptions, we regard these as separate events. Thus, the events included in the BSAD illustrate a long trajectory of various structural reforms, characterized by expansions of tasks in the VDAB's early life on the Flemish level, reforms consistent with NPM in 2002 and 2006, and a cluster of absorptions and a secession in 2009.

Appendix 4. Supplementary material chapter 4

	2003	2013
	sample	sample
Factor1	6,527704	5,504139
Factor2	2,538442	3,049918
Factor3	1,19594	1,719247
Factor4	0,682745	1,275811
Factor5	0,520939	0,999479
Factor6	0,445756	0,768313
Factor7	0,289752	0,729059
Factor8	0,259785	0,479289
Factor9	0,180034	0,39852
Factor10	0,151975	0,237145

Table A.4.1. EFA eigenvalues for 2003 and 2013 samples

	2003 sample				2013 sample			
	Factor1	Factor2	Factor3	Factor4	Factor1	Factor2	Factor3	Factor4
training is important	0,709							0,606
trust between employees	0,449				0,645			
respect for individual rights								
supporting employees		0,661						0,672
promotion in the organization				0,715		0,740		
good financial rewards		0,417		0,459		0,403		0,540
empathy with employees		0,576			0,938			
integrity		0,733						0,852
equal rewards			0,537					
honesty			0,503					0,515
cooperating with colleagues	0,731				0,791			
fair compensation			0,792			0,852		
advancement opportunities				0,770		0,861		
care for employees		0,692			0,640			
team spirit	0,863				0,866			
performance-based compensation				0,757		0,761		
keeping promises	0,552				0,539			
personal career development				0,810		0,537		0,489
team orientation					0,810			0,426
cooperating with others	0,671					0,702		

Table A.4.2.: rotated factor loadings (oblique promax(4)) for 2003 and 2013 samples, loadings <0.4 intentionally left blank, loadings in bold in the factor 1 columns are consistently >.4 over 2003 and 2013 analyses

Appendix 5. Supplementary material chapter 5

A.5.1 - Overview of BSAD event codes

Founding events

- 101 – pure founding (organization has no predecessors)
- 102 – founding by secession (except from bodies from other government levels)
- 104 – founding by splitting (except from bodies from other government levels)
- 106 – founding by merger (except from bodies from other government levels)
- 107 – founding by transfer from national/federal level (regionalization), including immediate merger or splitting of the organization
- 108 – founding by transfer from lower administrative level (from local/provincial to regional/federal or from regional to federal)
- 111 – founding by complex reorganization (except from bodies from other government levels)
- 112 – entered; new relevant entity (not existing in dataset before)
- 114 – founding by complex splitting
- 116 – founding by complex merger

Maintenance events

- 202 – maintenance by secession (to bodies of the same governmental level or to private sector/non-profit sector)
- 203 – maintenance by absorption (from bodies of the same governmental level or from private sector/non-profit sector)
- 204 – maintenance with secession of tasks to another governmental level
- 205 – maintenance by absorption of tasks from another governmental level
- 207 – maintenance by only change of name
- 208 – maintenance by dropping of tasks altogether
- 211 – maintenance by reorganization
- 221 – new superior organization at the same level (horizontal movement)
- 222 – new form of affiliation/legal form (including moving in or out private or non-profit sector) (with or without change of name)

- 223 – new superior organization and new form of affiliation/legal form
- 224 – maintenance by the adoption of new tasks (not existing before in any other (public) organization)
- 291 – no change to unit, but change of superior (diagonal movement at the same governmental level)

Ending events

- 303 – ending by absorption
- 304 – ending by splitting
- 306 – ending by merger
- 307 – ending by transfer to regional level (regionalization)
- 308 – ending by transfer to provincial and local administrative levels
- 309 – ending by transfer to higher administrative level (from regional to federal or from lower levels to regional/federal)
- 310 – pure disbandings/termination
- 311 – ending by complex reorganization
- 312 – discharged; no longer relevant entity
- 314 – ending by complex merger
- 316 – ending by complex splitting

A.5.2. OLS regression results

Variables	(1)	(2)	(3)	Robustness
	Coef	Coef	Coef	check (4) Coef
Organizational history (1)		-0.691*** (0.182)		
Organizational history (2)			-0.0775*** (0.0153)	
Organizational history (3)				-0.0712*** (0.0203)
Legal Personality	0.141 (0.301)	0.221 (0.290)	0.163 (0.279)	0.192 (0.285)
Task (Service Delivery)	-0.466 (0.292)	-0.579* (0.302)	-0.552* (0.298)	-0.554* (0.299)
Size	0.0729 (0.105)	0.0937 (0.106)	0.0984 (0.106)	0.0896 (0.105)
Organizational Age	-0.331* (0.193)	-0.362* (0.179)	-0.355* (0.180)	-0.347* (0.178)
Senior Manager Gender	0.486** (0.232)	0.422* (0.233)	0.463* (0.233)	0.451* (0.233)
Senior Manager Tenure	0.0990* (0.0491)	0.0662 (0.0462)	0.0800* (0.0443)	0.0702 (0.0474)
Senior Manager Leaving in 2013	-0.196 (0.274)	0.0435 (0.266)	-0.0245 (0.250)	0.00568 (0.265)
Constant	3.854*** (0.559)	4.088*** (0.539)	3.983*** (0.526)	4.050*** (0.539)
Observations	44	44	44	44
R ²	0.209	0.300	0.310	0.296

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table A.5.2. OLS results for perceptions of strategic policy autonomy

Appendix 6. Supplementary material chapter 6

COFOG	Description	Frequency (% of total organizations)
1	General public services	14
2	Defence	6
3	Public order and safety	3
4	Economic affairs	44
6	Housing and community amenities	3
7	Health	9
8	Recreation, culture and religion	6
9	Education	3
10	Social Protection	12

Table A.6.1 Coding of COFOG

Control variables	Question	Answer categories
Individual-level		
Age	How old are you?	1: 25-34 2: 35-44 3: 45-54 4: 55-64 5: 65 or older
Gender	What is your gender?	1: Male 2: Female
Position	What is your current classification?	1: Senior Consultant Level / Advisor 2: Office manager / advisor 3: Deputy Director / Advisor 4: Departmental Director / Advisor 5: Director or equivalent
Task	What is your primary task?	1: Wage and Personnel Management 2: Organizational development (re) organization 3: Preparation / amendment of laws, transcript 4: Budgeting 5: Other Investigation and Planning 6: Single decisions 7: Supervision, supervision, public follow-up 8: Reporting of results 9: Coordination 10: Information, communication work
Tenure	How many years have you been working for the organization?	1: less or 1 year 2: between 1 and 5 years 3: more than 5 years
Starting job	What was your starting job	1: Senior Consultant Level / Advisor 2: Office manager / advisor 3: Deputy Director / Advisor 4: Departmental Director / Advisor 5: Director or equivalent
Joboffers	Did you in the last year receive job offers?	1: Yes 2: No
Identity	To what degree do you identify yourself with your department?	1(stronlgy disagree)-5 (strongly agree)
Conflict	To what degree do you characterize your field of responsibility by agreement or disagreement?	1(stronlgy disagree)-5 (strongly agree)
Organizational-level		
Policy domain	see table 7	1-10
Organizational age	2016- birth date of the organization	Continuous

Table A.6.2. Coding scheme control variables