

Portfolio Saliency and Ministerial Turnover: Dynamics in Scandinavian Post-War Cabinets

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Abstract

Why do certain ministers remain in post for years while others have their time in office cut short? Drawing on the broader literature on portfolio allocation, this article argues that the saliency of individual portfolios shapes ministerial turnover. Our main argument is that ministerial dismissals are less likely to occur the higher the saliency attributed to the ministerial portfolio, since ministers appointed to important posts are more likely to have been through extensive screening before appointment. Importantly, we also posit that the effect of portfolio salience is conditioned by government approval ratings: when government ratings are on the decline, prime ministers are less likely to reshuffle or fire important ministers than when approval ratings are improving. To test these claims we apply Cox proportional hazards models to a new data set on ministerial turnover in Scandinavia during the post-war period. The results strongly support the proposition that portfolio saliency matters for ministerial survival, and that this effect is moderated by government popularity.

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Introduction

The stability of governments is regarded as a key component of ‘good governance’ and the determinants of cabinet duration have therefore been extensively debated in the literature (for an overview see Warwick 1994). In recent years, a number of studies have also started to focus on stability *within* cabinets, asking why certain ministers remain in post for a long time while other ministers are moved to different posts or dismissed (see e.g., Dewan and Dowding 2005). Cabinet reshuffles have been explained using a principal-agent framework, where the principal, the prime minister, delegates power to individual cabinet ministers (the agents) (see e.g. Indriðason and Kam 2008). Studies have shown that certain types of cabinets, such as coalition governments, are less likely to produce ministerial turnover, due to the fact that the prime minister is constrained by coalition partners when making personnel decisions (see Budge 1985; see e.g. Huber & Martinez-Gallardo 2008). In this paper, we build on this literature asking why some cabinet ministers remain in office longer than others.

Our main argument is that the survival of a minister depends crucially on the importance of the portfolio that he or she holds: the higher the saliency of the portfolio, the more likely a minister is to remain in post. Based on principal-agent theory, we argue that the prime minister is more careful when screening potential candidates for important offices, and this in turn reduces the likelihood of adverse selection, which should decrease the need to perform cabinet reshuffles ex-post as a control mechanism (Huber and Martinez-Gallardo 2008). The argument also builds on the broader literature on portfolio allocation, which has highlighted the importance of considering the saliency of ministerial portfolios when analysing portfolio allocation (see Warwick and Druckman 2006; Bäck, Debus and Dumont 2011).

Importantly, we also extend the existing literature by arguing that that the effect of portfolio salience on ministerial survival is conditioned by the political and economic context. Prime ministers are expected to be more risk adverse when their approval ratings are

declining and economic conditions are worsening, and consequently they are less likely to take on the “heavyweights” in government in a cabinet reshuffle. In contrast, when government popularity is high, the salience of the portfolio will matter less to ministerial survival, since prime ministers can afford to lose prominent ministers.

To evaluate these hypotheses we carry out a comparative analysis of ministerial turnover in three Scandinavian countries, Denmark, Norway and Sweden, during the post-war period, using an event history approach to modelling the survival of individual ministers. The results support the proposition that portfolio saliency matters for ministerial turnover, and that this effect is conditioned by government popularity: ministers holding important posts are less likely to be terminated from their posts and the importance of their portfolio is particularly important for their survival chances when government popularity is declining. Hence, we find support for the previously untested argument that the role of portfolio saliency is dependent on how the government as a whole is performing.

Ministerial turnover

In the vast majority of parliamentary democracies, prime ministers have the formal power to hire and fire cabinet ministers at will, subject only to the ultimate need to maintain the confidence of the legislature. But cabinet reshuffles and ministerial dismissal may carry considerable cost for the prime minister, such as a reduction in the cabinet’s administrative capacity, a risk of upsetting a carefully negotiated equilibrium within a coalition government, the alienation of prominent colleagues within the prime minister’s party or a coalition party, and the risk of signalling discontinuity and turmoil to the public.

So why are prime ministers willing to take such risks? Several explanations have been advanced in the literature. Prime ministers may use ministerial dismissals and reshuffles as strategic devices to pin the blame for policy failure or scandals on individual ministers (Dewan and Dowding 2005); to increase government popularity among voters (Dewan and

Dowding 2005; Kam and Indriðason 2005); to fend off intra-party rivals (Kam and Indriðason 2005); and to recruit talent and competence into the cabinet (Huber and Martinez-Gallardo 2008; Kam and Indriðason 2005). All of these considerations – and many more – are plausible reasons for why prime ministers use their power to dismiss cabinet ministers. But while prime ministers may have good reasons for reshuffles and dismissals, their ability and incentives to do so vary across contexts.

The literature on ministerial turnover relies on principal-agent theory and takes its starting point in the so called ‘parliamentary chain of delegation’, which suggests that power-relationships in a parliamentary democracy can be described as a chain, where citizens are in a first step delegating power to representatives, who in turn delegate power to a cabinet and a prime minister, who delegates power to cabinet ministers (see e.g. Strøm 2003). The focus is on the third step in this chain, where the prime minister is seen as the principal delegating power to the individual ministers as department heads.

Two kinds of delegation problems are likely to threaten the prime minister’s policy efficacy as well as his position within government. First, the prime minister faces a problem of adverse selection because at the time of appointment, the prime minister does not have complete information about a minister’s abilities to run a department effectively or about his or her policy preferences. Second, moral hazard problems can arise because ‘all ministers have motive and opportunity to use their portfolios in a manner that runs against the prime minister’s interests’ (Indriðason and Kam 2008: 624). For example, ministers can become too aligned with their portfolio and the sectoral interests associated with it (Bäck et al. forthcoming). While ministerial drift can occur in any system, one reason specific to coalition systems is that ministers adhere to individual parties and their interests rather than to the collective goals of the coalition (Müller and Meyer 2010).

According to principal-agent theory, there are several ways to mitigate the threat of agency loss (Strøm et al. 2010). A distinction is usually made between *ex ante* mechanisms, that

apply before power is delegated (efforts to sort out good agents), and *ex post* mechanisms which represent ways to contain agency loss after delegation. Parliamentary democracies often lack *ex post* mechanisms providing credible oversight, while the *ex ante* control mechanism of screening and selecting candidates plays a central role for aligning the preferences of the candidates for key political offices (Strøm 2003), a screening which is often assumed to be performed by centralized and cohesive political parties (cf. Müller 2000). Dismissals of ‘bad’ ministers or rematching of portfolio and talent serve to mitigate problems of adverse selection *ex post* (e.g. Huber & Martinez-Gallardo 2008), but reshuffling ministers and portfolios can also be seen as an instrument to deal with moral hazard problems. For example, Indriðason and Kam (2008) argue that since it is difficult for the prime minister even in single-party cabinets to detect ‘large’ policy departures from the party platform by a minister, the prime minister has to ‘manipulate the political environment’ to make it less attractive for the minister to engage in self-interested behaviour (Indriðason and Kam 2008: 624–5). One way of doing so is to reshuffle ministers frequently since such policy departures in ‘their’ department will benefit another minister after a reshuffle.

Previous empirical research has shown that certain features of the individual minister, of the portfolio he or she holds, of the cabinet, and of the political context significantly influence ministerial turnover (see e.g. Berlinski et al. 2007; Huber and Martinez-Gallardo 2008). One of the most robust results in the empirical literature on ministerial turnover is that cabinet reshuffles are more frequent when the prime minister enjoys more freedom in relation to other ministers, party factions and coalition parties. Huber and Martinez-Gallardo (2008), for example, show in their analysis of turnover in 19 countries, that cabinet reshuffles are more likely in single-party cabinets than in coalition cabinets, where the prime minister is constrained by his or her partners. Using data from five Westminster parliamentary systems, Kam and Indriðason (2005) find that prime ministers employ reshuffles to retain power in the face of both intra-party and electoral challenges to their leadership. This research not only

looks at how the political environment affects ministerial turnover, but is also preoccupied with the organizational underpinnings of ministerial turnover. They find evidence that the way in which the cabinet is organized is directly responsible for the survival of ministers. Moreover, Kam and Indriðason (2005) find that changes in public opinion have an impact on the survival of ministers. Their evidence suggests, perhaps surprisingly, that when a government is experiencing declining public support, the prime minister will be less prone to fire ministers, whereas a decline in the approval ratings of the prime minister conditional on an increasing support for the prime minister's party has the opposite effect. In their study of ministerial resignations in Britain, Dewan and Dowding (2005) also look at the relationship between public opinion and ministerial resignations. They argue that dismissal can have a corrective effect on government popularity. In this paper, we focus on the impact of portfolio saliency on ministerial survival and to what extent it is conditioned by the political and economic context.

Portfolio saliency and ministerial turnover

We know from previous studies that the nature of the ministry influences the minister's chances of remaining in office. In their study of British ministers, Berlinski, Dewan and Dowding (2007) have argued that ministerial rank increases a minister's capacity to survive, with full cabinet members having the lowest hazard rates in their post-war sample. Huber and Martinez-Gallardo (2008), who analyse the duration of ministers in key portfolios in 19 parliamentary democracies over the post-war period, find that the importance of portfolios matters: looking at the two most important portfolios in each country (as ranked in the Laver and Hunt 1992 survey), they find that ministers holding these posts are less likely to be reshuffled. Huber and Martinez-Gallardo (2008: 172) present a clear theoretical argument as to why we should expect less reshuffling in more salient portfolios based on principal-agent theory, focusing on the problem of adverse selection and the difficulty for the prime minister

to select ‘good agents’. Their argument is based on the assumption that the prime minister in some situations and settings has greater incentives to screen potential ministers, and that more scrutiny at the time of appointment implies that ‘better agents’ are chosen. When better ministerial appointments are made, the need for reorganization in the cabinet is reduced and the likelihood of cabinet reshuffles decreases. Huber and Martinez-Gallardo (2008: 172) connect the importance of portfolios to this ‘screening’ argument by suggesting that ministers who have the greatest potential to influence policy, i.e. those who hold ‘portfolios that are most central to the government’s policy agenda’ (most often the ministers of Finance and Foreign Affairs according to the authors), are more likely to be carefully screened at the time of appointment. Hence, due to careful screening of these candidates, the problem of adverse selection is mitigated and the need for cabinet reshuffles decreases.

Several other arguments can also be presented that support this hypothesized effect of portfolio saliency on cabinet reshuffles. For example, the prime minister may be more constrained when it comes to dismissing or demoting untouchable political ‘heavyweights’, who are likely to hold the most important posts in the cabinet.¹ A Minister of Finance is likely to be more difficult to dismiss, or even demote, than a Minister of Culture. A government may also use the less prestigious portfolios to test new and young ministers’ readiness for ministerial tenure. If it turns out that they are not capable, it is less problematic for a government to lose a Minister of Culture than a Minister of Finance. Hence, this would also suggest that there is a lower likelihood of reshuffles the higher the salience attributed to the

portfolios.² It should be noted that studies focusing only on Westminster systems like Indridason and Kam (2008: 624) argue that a different logic for portfolio saliency may be in place. In their study of ministerial turnover in Britain and Australia they present arguments in for cabinet ministers having their own policy interests and are seen as “natural rivals to the PM – because the former has the leadership while many of the latter want it”. Hence, ministers holding important posts may be clear “rivals” to the PM, which may suggest in their

view that they are more likely to be reshuffled or “fired” by the PM. Another reason why important ministers may be more, rather than less, likely to be removed from their post is that they may be more prone to policy drift, for example because they have a stronger position in their party and in the cabinet. In this study of three parliamentary system we follow Huber and Martinez-Gallardo (2008) and hypothesize that~~We simply hypothesize that:~~

H1: The higher the saliency of a ministerial post, the lower the likelihood that the minister will resign or be dismissed from this post before the end of the government.

Moreover, we also expect that government popularity matters, both directly and indirectly, in determining the fates of individual ministers. Building on the literature on government popularity we can specify the circumstances under which we can expect portfolio saliency to matter most for ministerial turnover. For example, Dewan and Dowding (2005: 46) argue that when a government’s popularity declines due to some crisis or ‘problem in the government machinery (...) the government as a whole can pin blame on individual ministers and deflect criticism and subsequent falls in popularity by sanctioning or removing the minister concerned’. Hence, the prime minister may have an incentive to dismiss individual ministers when government approval ratings are going down. Conversely, we expect that a government experiencing an increase in popularity will be less likely to organize reshuffles or dismiss ministers, and hence the survival chances of individual ministers are greater.

H2: The greater the decline in government popularity, the lower the likelihood that a minister will remain in post; the greater the increase in government popularity, the higher the chances a minister will remain in post.

The argument that government popularity has an impact on ministerial turnover is relatively well-established (e.g. Kam and Indridason 2005; Dewan and Dowding 2005). What has been neglected in the literature is the degree to which government popularity conditions the

relationship between economic factors, portfolio saliency and ministerial turnover. We expect government popularity not only to have a direct effect on the level of ministerial turnover, but also to condition the impact of portfolio saliency and economic conditions on the likelihood of any individual minister staying in office.

Our basic argument is that when times are tough for the government, prime ministers will be more risk-adverse than when the things are going well. They are therefore less likely to risk dismissing or reshuffling potential ‘heavyweights’ in their cabinet, with all the upheaval that this may bring about. Attempts to oust the incumbent prime minister are more likely when government popularity is on the decline, and prime ministers therefore want to keep potential rivals on their side.

Following the argument made by Huber and Martinez-Gallardo (2008) about the screening of potential candidates for ministerial office, we would also expect that the ministers who are holding high saliency portfolios are the ‘good’ ones, that is, ministers who perform well. The prime minister is less inclined to risk losing such ministers, especially when the survival chances of the government as a whole is in jeopardy. Here we can also draw on the more recent literature on ministerial turnover, which has tried to gauge the performance of individual ministers by measuring the number of ‘resignation calls’. Berlinski, Dewan and Dowding (2010) show that a minister’s hazard rate increases sharply after the first individual call for resignation, that is, when individual performance is poor. When government popularity is rising, however, we expect that the prime minister is more likely to take the opportunity to dismiss some prominent ministers, for example to fend off inter- or intra-party rivals. Based on these arguments, we therefore present a conditional hypothesis:

H3: The impact of portfolio saliency on the likelihood of a minister remaining in office is greater when the popularity of the government is declining than when it is increasing.

Another indicator of government performance is economic performance. It is well-established in the literature on vote and popularity (VP) functions that economic indicators are linked to government popularity (Nannestad and Paldam 1997, 2002). We here focus on two important economic indicators; unemployment and the consumer price index (CPI). Given the importance of the economy for the electorate (see e.g. Nannestad and Paldam 1997, 2002; Stevenson 2002; Duch and Stevenson 2008), we also expect it to influence prime ministers' decisions on whether to dismiss ministers or reshuffle the cabinet. During good economic times, we would expect a government to be less prone to ministerial termination, whereas prime ministers will be more tempted to end the careers of certain ministers when times are bad, to be able to shift the blame to individual ministers and to enhance specific competences in the cabinet. Specifically, we hypothesize that:

H4: The greater the increase in unemployment and/or inflation, the higher the likelihood that ministers will resign.

However, the above hypothesis only informs us about one part of the relationship that we are interested in. In line with our argument concerning government popularity, we also expect the economic context to condition the impact of portfolio saliency on ministerial survival. That is, we expect when times are tough for a cabinet (in terms of approval ratings or economic circumstances), important ministers are less likely to be fired or demoted since the prime minister cannot afford to lose such ministers. Hence, while reshuffles during such times are more likely as prime ministers will seek to show leadership and effectiveness, they will tend to involve the less important ministers in the cabinet as they are easier to fire and demote. This leads to our final hypothesis.

H5: The impact of portfolio saliency on the likelihood of a minister remaining in office is greater when unemployment rises and/or inflation increases.

Methods and data

To test these propositions, we rely on a most similar systems design, using data from Denmark, Norway and Sweden. These Scandinavian countries have very similar political and economic systems. They are all stable constitutional monarchies with unicameral legislatures and proportional electoral systems. To varying degrees their executives are dominated by coalition governments and minority governments (Hobolt and Karp 2010). While the prime minister have certain privileges, which will be discussed in further detail below, cabinets in Scandinavia are collectively ruled. Hence, in all our cases there is a collective responsibility for the actions taken by the government (Strøm 1994:47; Bergman 2000:172; Christensen 1984; Andeweg 2000: 385). Scandinavian countries thus in many ways represent an ideal case for a “most similar systems design”. This enables us to pool cross-national and cross-temporal data in order to isolate the effect of our independent variables – portfolio saliency, government popularity and economic conditions – and identify systematic factors that explain ministerial turnover.

Before proceeding to the analysis of ministerial turnover in Scandinavia, we should note some important differences between the countries. In Norway, the prime minister cannot call an early election. Consequently, if the government experiences a vote of no-confidence, a new government has to be formed without an election.³ The consequence of this institutional setting is that we would expect the Norwegian prime minister to be less responsive to changes in internal and external pressures. On the one hand, s/he cannot take advantage of rising polls by capitalizing potential gains, but on the other hand the prime minister will not suffer huge losses unless a scandal happens close to election time. In Sweden, there is also a requirement that elections are held within a fixed four-year interval, but the prime minister does have the power to call an early election.⁴ In Denmark, the prime minister can also call an early election and most Danish prime ministers make use of their right to dissolve parliament and call an early election (Damgaard 2000: 253-258). When an election has been held the constitution

stipulates that a new election is called within four years. The Danish prime ministers thus have more discretionary powers than their counterparts in Sweden and Norway. Despite these differences, we argue that the systems are sufficiently similar for us to examine ministerial resignation in a pooled sample of these three countries to be able to say something more general about the mechanisms that influence ministerial turnover in Scandinavia, and in Western parliamentary democracies more generally.

Data on ministerial turnover in Scandinavia

To analyse whether portfolio saliency, government popularity and economic conditions are important in explaining cabinet turnover, we have collected data on ministerial resignations in Denmark (1957 to 2008), Norway (1964 to 2008), and Sweden (1967 to 2008). These data were collected using a variety of sources (listed in appendix 1). The time period has been determined by the availability of monthly public opinion data on government approval.⁵

There is no consensus in the literature on how to define and operationalize ministerial turnover. Discussing cabinet reshuffles, White (2000) argues that at least two ministers have to be involved in order for a reshuffle to be a reshuffle. Alt (1975) adds a second dimension arguing that ministers have to be dismissed or re-allocated to a different portfolio within two months to be part of the same reshuffle. Kam and Indriðason (2005:329-330) apply these two criteria, altering the time span to one month. However, as we are interested in internal cabinet instability in general, rather than cabinet reshuffles in particular, we employ a somewhat different definition. In our operationalization of ministerial turnover, we include every ministerial resignation and dismissal that takes place in between government alternations (normally associated with elections). Hence, we do not take into account whether a minister resigned along with other ministers or whether a given minister was reappointed to a different portfolio just after he resigned. We have chosen this inclusive definition, because we are interested in general cabinet instability, rather than reshuffles or dismissals more specifically. Whether a minister is dismissed or allocated to a different portfolio, this event will generate

some instability within the government, and we want to examine to what extent systematic causes of cabinet instability can be identified. This more inclusive definition also allows us to more broadly analyse the personnel decisions made by the prime minister. Our operationalization, which is similar to that employed by other studies that have focused on all ministerial resignations rather than focusing exclusively on large reshuffles (see e.g., Berlinski et al. 2007; Bäck et al. forthcoming), does not distinguish between ministers resigning (allegedly) of their own will and ministers who are openly dismissed by the prime minister. An added benefit of this is that we avoid making subjective judgements of whether a ministerial move is a dismissal, a resignation, a promotion, or a lateral move.

In order to test our hypotheses, we specify a full model of ministerial turnover with the variables described in the theory section. To measure *portfolio saliency* we rely on the Druckman and Warwick (2005) expert rating, which measures the importance of different ministerial posts across Western European countries. Although this measure has the drawback that it does not vary across time, it has been shown to be an important predictor in studies of portfolio allocation (see e.g., Warwick and Druckman 2006) and portfolio saliency is generally regarded to be very stable over time.⁶

To measure *government popularity* of the government, we use answers to the poll question: “Which party would vote for if elections were held tomorrow?”. This question has been asked on a monthly basis from the beginning of the 1960s in our sample countries,⁷ and has been used extensively as a measure of government popularity (Kam and Indriðason 2005; Anderson 1995; Hobolt and Klemmensen 2008).⁸ Since vote intentions are closely associated with future election chances, these public opinion data provide us with an appropriate empirical indicator to test whether electoral uncertainty influences cabinet turnover. When a coalition government is in power we used a weighted average across governing parties, where the popularity of each party in government was weighted by the percentage of seats that party contributes to the total government seat share. Public approval ratings are also interacted with

portfolio saliency in order to evaluate the hypotheses that reshuffles of important ministers are less likely to occur when government popularity is falling.

Measuring *unemployment* and *consumer price index* we rely on monthly data from the OECD. We have taken the first difference of government popularity, unemployment and consumer price index and lagged them by one month, as we do not expect an instantaneous effect on ministerial turnover.

As control variables we include dummies distinguishing between minority and majority governments and single-party and coalition governments. We have also constructed a dummy for all ministers belonging to the same party as the prime minister in order to examine whether it is easier for a prime minister to fire a party member compared to a minister from a coalition partner. Country dummies are also included to account for country-specific effects.⁹ Finally, we have included as a control variable the time elapsed from the latest held election and a squared term of time. These variables are included in the model to control for the event that ministerial resignations are simply a function the governmental life cycle.

An event history model

To estimate the impact of public opinion on ministerial resignations we rely on event history analysis. This statistical technique has been widely used in the study of cabinet survival and is designed to estimate the effects of variables on the duration of a phenomenon. In the literature on government survival there has been a debate concerning the correct specification of the underlying hazard function, that is the rate at which termination events occur. The key question has been how to model the underlying baseline hazard function and thus whether it should be theorized as constant or rising over time (Diermeier and Stevenson 1999). Following Kam and Indriðason (2005), we rely on the Cox proportional hazard model in order to investigate the timing of ministerial dismissals. The advantage of the Cox model is that it makes no assumptions concerning the functional form of the hazard function. This

makes the model useful for our purposes, since we do not have any a priori reasons for a particular functional form (Box-Steffensmeier and Jones 2004: 49).

When using duration models the main interest is to estimate the time that elapse until an event occurs, which in our case is the termination of holding a given portfolio by a given minister. This probability is given by equation 1 which states that the probability that a minister survives until time t is given by:

$$\lambda(t; Z) = \lim_{\Delta t \rightarrow 0} \frac{P [t \leq T \leq t + \Delta t | T \geq t, Z]}{\Delta t} \quad (1)$$

where Z is the number of covariates we are interested in and t the probability that a minister survives until time t , given that he has not exited the government prior to that moment in time. Here we are interested in estimating the hazard ratio in a Cox model which is given by:

$$\lambda_i(t; Z_i) = \exp(\beta' Z_i) \lambda_0(t) \quad (2)$$

where β denotes a vector of parameters to be estimated and λ_0 is the baseline hazard function. In the Cox model, the underlying hazard function is not parameterized, entailing that we do not specify whether or not the failure process follows a particular distribution.

In the following we report the hazard ratios: a hazard ratio above 1 indicates that there is an increasing probability that we observe a failure given that the variable under consideration is increasing. A hazard ratio below 1 thus indicates that the risk involved is decreasing as the variable under consideration is increasing (Kam and Indriðason 2005: 349).

A central issue in event history analysis concerns the ‘censoring’ of cases where the entire event history of a unit is not observed. So-called right-censoring typically occurs because the time-frame of a study ends before the completion of survival times (see e.g., Box-

Steffensmeier and Jones 2004). Many authors also use so called ‘theoretically motivated’ censoring regimes, focusing only on ‘interesting failures’ (see e.g., Diermeier and Stevenson 1999). In our analysis, we treat all ministerial periods as censored when the minister was still in post at the time the respective government ended or an election was called, and we censor all ministerial periods where the minister died while in post.

Empirical analyses

As can be seen in table 1, we have a total number of 294 premature ministerial resignations in our dataset. It should be noted that to ensure comparability across cases, we have not included junior ministers in the analysis, although such ministers are found in Sweden and Norway.¹⁰ Due to limitations in what variables are available across time, the minimum number of premature ministerial resignations that are used in the multivariate analysis is 188 which is still a considerable number of departures.

--- Table 1 about here ---

Different types of governments also have different turnover rates. Of all ministerial resignations, 60 per cent take place in single-party governments and only 40 per cent in coalition governments, even though coalitions are the most common type of government in Scandinavia. It should also be noted that in absolute terms more ministers are dismissed in Norway (121) than in Denmark (110) or in Sweden (63). When we compare percentages of turnover – that is the number of resignations divided by the number total number of ministers, we find Denmark and Sweden to be close with a turnover percentage of 0.94 and 0.86 per cent respectively. In Norway, the turnover percentage is at 1.29 per cent. This is somewhat surprising given that the prime minister in Norway has fewer electoral incentives to dismiss ministers compared to the Danish prime minister. This could be an indication that other

factors than purely electoral incentives, such as intra-coalition politics, play a role in explaining ministerial resignations.¹¹

Illustrating the differences between the countries is also possible by presenting the Kaplan-Meier survival estimates. These are found in Figure 1. The figure nicely illustrates that despite their similarities there are important differences between the three Scandinavian countries in terms of ministerial turnover. The curves show of how the ministerial turnover is distributed across the three countries in our data. The three curves track each other closely in the initial period but after a few months a difference can be seen where Norwegian ministers have higher risk of turnover than ministers in Denmark and Sweden. The flattening out of Swedish curve after around 36 months should be interpreted with some caution as the electoral period until the mid-1990es were three years compared to four years in both Denmark and Norway. The figure illustrates what was discussed above; a higher turnover of Norwegian ministers are found compared to ministers in Denmark and Sweden.

--- Figure 1 about here ---

To test our hypotheses, we need a fully specified model of ministerial turnover, including appropriate control variables. As described above, we rely on a Cox proportional hazards model with time set as months in office and failures as resignations before that of the entire government. As we are dealing with ministers who are nested in governments we use robust standard errors. The results of the estimation of five models can be seen in Table 2 below.

--- Table 2 about here ---

The first model is a direct test of our hypothesis 1. We hypothesized that ministers with a portfolio of high salience would be less likely to leave their position in an untimely manner.

The results in model 1 suggest this is the case. The portfolio saliency variable has a hazard ratio below one and is significant. Of the remaining variables, the coalition variable shows hazard ratios below one, which are also significant in models 1 and 4, suggesting that ministers in coalition governments are less likely to leave their position before the government ends. However, the coalition government variable loses significance when government popularity is included in the model. The post-war Scandinavian case thus lends only limited support to Huber and Martinez-Gallardo's (2008) finding that coalition governments experience less turnover compared to single-party governments. But more importantly for the argument of this paper, the effect of portfolio saliency remains significant across all models. The findings thus support the hypothesis that portfolio saliency matters for ministerial turnover: ministers holding more important posts are less likely to be dismissed or demoted. This may be due to that ministers holding such posts have been put through more extensive 'screening' before appointment, because these posts are held by party heavyweights, or because the important posts are less likely to be used as 'testing ground' for newer political candidates. Regardless of the causal mechanism at work, it is clear that portfolio saliency matters for ministerial turnover. In other words the finding by Huber and Martinez-Gallardo (2008) based on only two portfolios is corroborated in this analysis with a full set of ministerial portfolios.

Model 2 also demonstrates that government popularity, i.e. support for the government parties in monthly opinion polls, has no direct significant effect on ministerial dismissals, in contrast to findings in other studies, e.g. Dewan and Dowding (2005). Hence, our findings lend no support to hypothesis 2, that is, ministers do not seem to be more likely to be dismissed when government popularity is falling. However, our results show that there are circumstances when government popularity does play a role. We hypothesized that the impact of portfolio saliency on the likelihood of a minister losing his or her position is greater when government popularity is waning. This is tested in model 3 which includes interaction

between portfolio saliency and change in government popularity. In line with our proposition the hazard ratio for this interaction is larger than one and highly significant. As can be seen, the level of significance drops slightly with the addition of more variables, but it is nevertheless fairly robust relationship across the models. The results thus corroborate our third hypothesis, indicating that high saliency ministers are less likely to be used as ‘scapegoats’ when government popularity is on the decline.

This relationship is illustrated in Figure 2 below where the two figures contrast a situation with declining government popularity (left-hand side) and one with increasing government popularity (right-hand side) with curves representing the survival rates for ministers in high salience portfolios and low salience portfolios respectively rates. The left-hand figure illustrates that ministers in important posts are safe in their post when government popularity is on the decline, whereas we can see from the right-hand figure that they face a real risk of dismissal or demotion when government popularity is on the increase. This indicates a strong conditioning effect of the political context on effect of portfolio saliency on ministerial turnover.

--- Figure 2 about here ---

Our fourth and fifth hypotheses posited that economic factors have an influence on ministerial turnover. We argued that unemployment and inflation (consumer price index) could both be important in shaping cabinet stability and in moderating the effect of portfolio saliency. In model 4 we introduce these variables as lagged with first difference and find that the higher the increase in unemployment rates, the more likely a ministerial termination is. In line with hypothesis 4, this suggest that a clear and significant relationship between ministerial resignations or dismissals and economic performance. Prime ministers change their government when unemployment is increasing. This relationship is illustrated in Figure

3 where the magnitude of the differences can be seen, with the upper curve representing a fall in unemployment, the middle curve a situation with no change in unemployment, and the lower curve an increase in unemployment. The figure illustrates the importance of unemployment for ministerial turnover. When countries experience an increase in unemployment prime ministers react fast and change the cabinet. While we find a strong direct effect of unemployment, the interaction with portfolio salience is not significant. Thus, we can reject our fifth hypothesis that economic conditions moderate the effect of portfolio salience.

--- Figure 3 about here ---

Conclusion

How do we explain why some ministers remain longer in post than others? In this paper we have suggested that to answer this question, we need to take into account the saliency of ministerial portfolios, and the conditioning effect of the political context. A Minister as Finance is simply worth more than a Minister of Culture and this fact not only influences which party will control which portfolio, but also the length of ministerial tenure: ministers in important posts are more likely to stay longer in their posts than their cabinet colleagues who hold less important posts. One reason for why this is the case may be that ministers who hold more salient portfolios have been more thoroughly screened before entering cabinet, and therefore the problem of adverse selection is mitigated, reducing the need for cabinet reorganizations by the prime minister to sort out ‘bad agents’ *ex post* (Huber and Martinez-Gallardo 2008). Whether this is the mechanism at work is of course difficult to establish in a large-N analysis, but it is nonetheless clear from this study that portfolio saliency matters for ministerial turnover.

Our study of ministerial appointments in the Scandinavian cabinets during the post-war period not only shows that portfolio saliency is positively correlated with the survival of ministers. Importantly, we also find that the effect of portfolio saliency is conditioned by government popularity. We show that when government approval ratings are falling, the prime minister is less likely to fire the most important members of the cabinet, but will instead pin the blame on less important colleagues. In contrast, when governments are popular, prime ministers have the necessary leeway to force out even the more prominent ministers. While the link between government popularity and ministerial turnover has been examined by a number of scholars, e.g. Kam and Indridason (2005), Dewan and Dowding (2005) and Berlinski, Dewan and Dowding (2010), this is the first study of the conditioning the relationship of government popularity on the effect of portfolio saliency on ministerial turnover. Whether this relationship holds in other cases as well remains to be seen, however, the strong support for the relationship in this study suggests that it should be considered also in other cases to fully comprehend the impact of portfolio saliency. Moreover, we find that the economic context also matters to ministerial turnover: cabinets are more likely to be reshuffled during deteriorating economic circumstances. Changing economic conditions, however, do not appear to have a moderating effect on the importance of portfolio saliency of ministerial turnover.

In general, these findings confirm that portfolio saliency is of importance when explaining ministerial survival. More notably, they also suggest that the type of ministers the prime ministers target in reshuffles crucially depends on the popularity of the government: ministers holding important portfolios are primarily under threat when government popularity is on the increase and prime ministers can safely risk losing them. Given that the general nature the argument, there are reasons to believe that we could find a similar conditioning effect of government popularity in other parliamentary democracies. This should be tested in future studies. Future research may also want to look more closely at the role of economic

conditions in ministerial turnover. For example, one hypothesis that could be evaluated is that certain types of ministers (e.g. Minister of Finance) are only affected by certain types of economic events (e.g. rising unemployment) when the minister in charge is of a particular political 'colour' (e.g. socialist). An alternative avenue of research is to look in greater detail at the circumstances surrounding individual resignations, such as how 'calls' or 'pressure' from the media and the public influence the prime minister's choice to reshuffle the cabinet and fire certain ministers (e.g. Berlinski, Dewan and Dowding 2010), and how this may be conditioned by the importance of the portfolio.

Tables and Figures

Table 1. Months of ministerial tenure across countries

Country	No resignation	Resignation with government change	Resignation without government change	Total
Denmark	11255 (95.2%)	452 (3.8%)	110 (0.9%)	11817
Sweden	7206 (96.3%)	212 (2.8%)	63 (0.9%)	7481
Norway	8975 (95.5%)	301 (3.2%)	121 (1.3%)	9397
Total	27436	965	294	28695

Note: Data on ministerial resignations in Denmark 1957–2008, Norway 1964–2008, and Sweden 1967–2008.

Figure 1. Kaplan-Meier survival estimates across the three Scandinavian countries

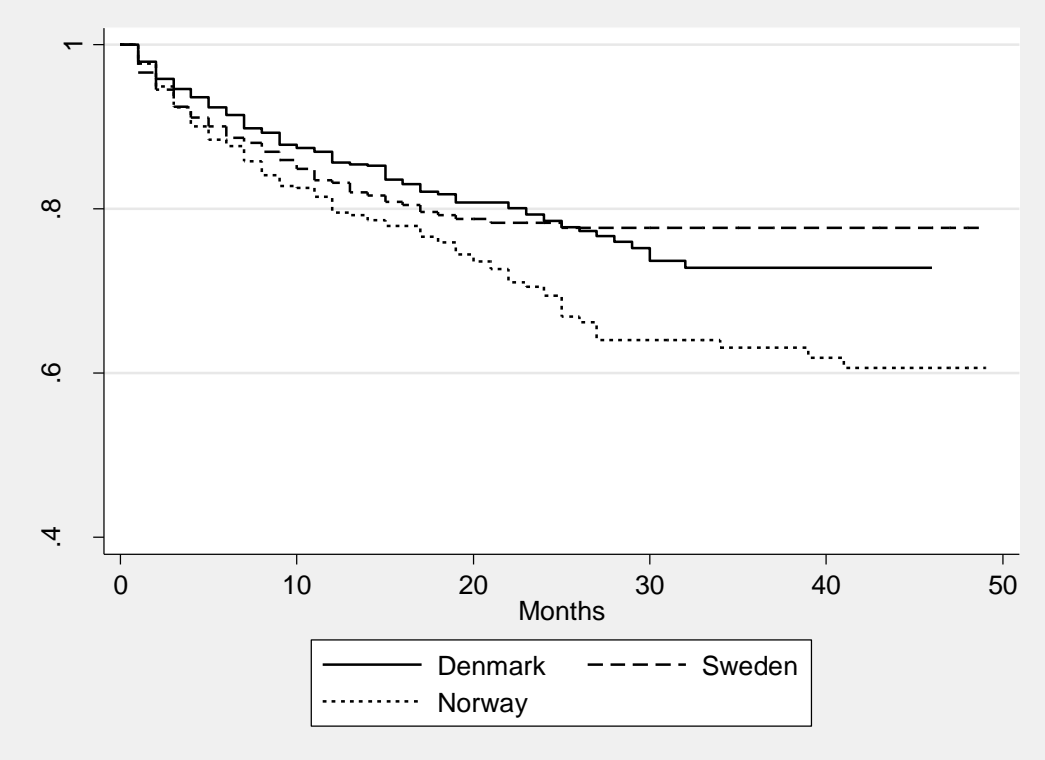
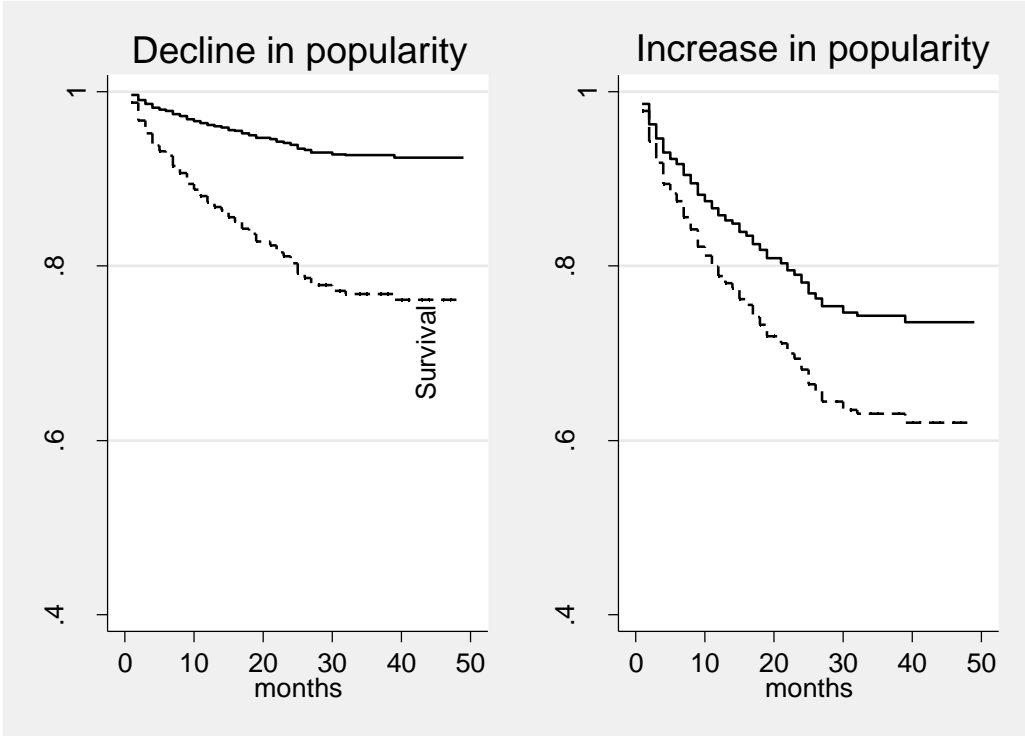


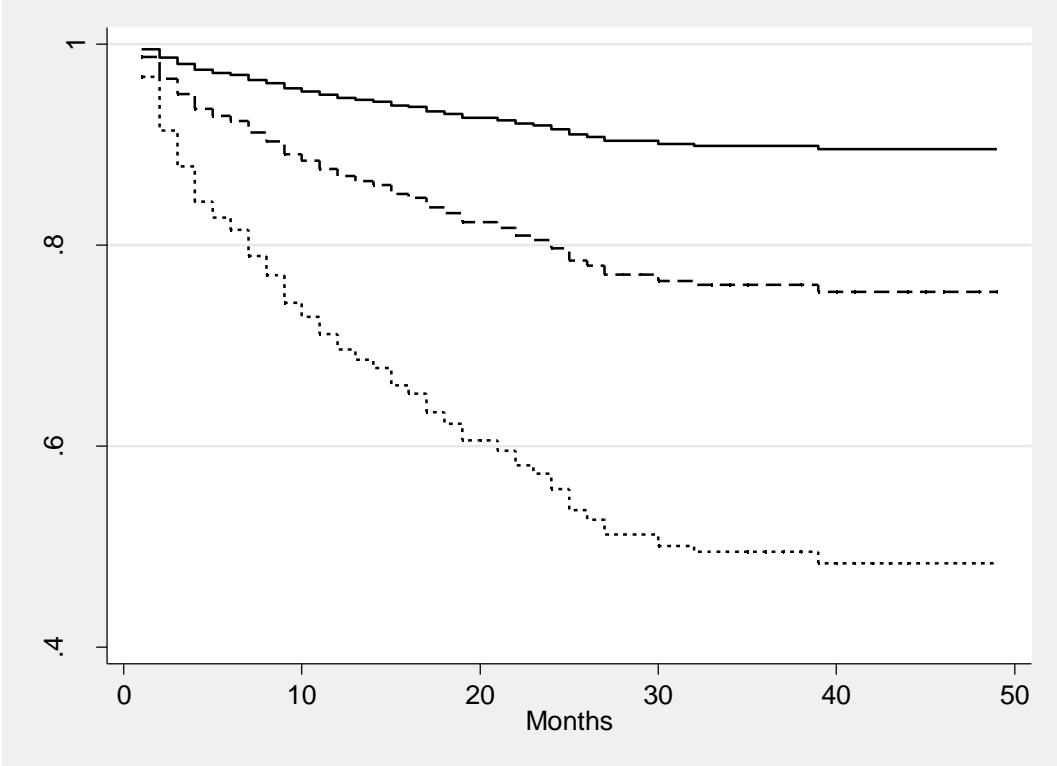
Figure 2: The conditioning effect of government popularity on portfolio salience



Note:

The left-hand graph represents a situation with declining government popularity. The bold line depicts high salience portfolios and the dotted line low salience portfolios. The right-hand graph represents a situation with increasing government popularity. The bold line depicts high salience portfolios and the dotted line low salience portfolios. All other variables are kept at their mean.

Figure 3 Survival rates for ministers across changes in unemployment



Note: The upper curve represents fall in unemployment, the middle curve no change in unemployment, and the lower curve represents increase in unemployment. All other variables are held to their mean.

Table 2. Cox regression models of ministerial turnover

	Model 1	Model 2	Model 3	Model 4	Model 5
Portfolio saliency	.66** (.09)	.64* (.11)	.62** (.11)	.59** (.08)	.59** (.10)
Δ Government popularity		1.03 (.05)	.86^ (.07)		.88 (.08)
Government status	1.07 (.32)	1.13 (.46)	1.13 (.46)	1.05 (.42)	1.08 (.54)
Coalition	.51* (.15)	.77 (.27)	.76 (.27)	.43* (.15)	.58 (.22)
Prime minister's party	1.07 (.27)	1.03 (.27)	1.03 (.27)	1.07 (.32)	.96 (.30)
Time since election	1.00 (.00)	1.00 (.00)	1.00 (.00)	1.00 (.00)	1.00 (.00)
Time since election sq	1.00 (.00)	1.00 (.00)	1.00 (.00)	1.00 (.00)	1.00 (.00)
Δ Unemployment				1.67* (.35)	2.57* (1.22)
Δ CPI				.63 (.22)	.69 (.47)
Portfolio saliency*Δ Government popularity			1.19* (.09)		1.15^ (.09)
Portfolio saliency*Δ Unemployment					.67 (.23)
Portfolio saliency*Δ CPI					.65 (.34)
Sweden	.68^ (.16)	.68 (.23)	.68 (.24)	.56* (.16)	.60 (.22)
Norway	1.26 (.27)	1.26 (.34)	1.26 (.34)	1.31 (.33)	1.28 (.38)
Log pseudo likelihood	-1982.39	-1367.73	-1365.71	-1570.67	-1173.48
N (Obs)	26054	20530	20530	20064	17355
N (Subjects)	1319	1261	1261	1125	1117
N (failures)	293	210	210	245	188

Note: Hazard ratios are reported, numbers in parentheses are robust standard errors. **p<.01, *, p<.05, ^p<.10

Appendix

Denmark:

Resignation Data:

Pedersen, Niels (1979). *Regeringer og Ministre i Danmark 1848-1979*. Copenhagen: Rigsarkivet

Website of the Danish Parliament: Regeringerne efter grundloven af 5. juni 1953

<http://www.ft.dk/>

Public Opinion:

Gallup Organization for Berlingske Tidende 1957 – 2008.

Norway:

Resignation Data:

Norwegian Data archive: Database Polsys, Statrådsarkivet.

<http://www.nsd.uib.no/>

Public Opinion:

Sipo Parti barometer 1967 - 2008

Sweden:

Resignation Data:

Departementshistoriekommitten (1990). *Att Styra Riket: Regeringskansliet 1840- 1990*. Stockholm: Allmänna Förlaget.

Regeringskansliet (2003). *Sveriges Regeringer 1840-2003*. Stockholm: Regeringskansliet.

Public Opinion:

Gallup organisation 1964- 1994

Gallup 1995–2008

<http://www.tns-gallup.no>

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NOTES

¹ This could especially be the case in coalition governments, where those heavyweights are likely to be part of the leadership of their coalition partners (Bäck et al. forthcoming).

~~² Indridason and Kam (2008: 644) present a different argument. Focusing mainly on the problem of moral hazard, they present the hypothesis, “If prime ministers use reshuffles to manage ministerial drift, portfolios in which policy deviations can have large political impacts or which are resistant to direct monitoring because of their complexity should be reshuffled more frequently than portfolios in which policy deviations are less politically significant or which are easily monitored”. Indridason and Kam (2008: 624) also argue that cabinet ministers often have their own policy interests and are “natural rivals to the PM—because the former has the leadership while many of the latter want it”. Hence, ministers holding important posts may be clear “rivals” to the PM, which may suggest that they are more likely to be reshuffled or “fired” by the PM. Another reason why important ministers may be more, rather than less, likely to be removed from their post is that they may be more prone to policy drift, for example because they have a stronger position in their party and in the cabinet.~~

³ This in fact happened in 1986 where the Willoch government was forced out of office due to not being able to secure a majority for the its budget (Narud and Strøm 2000: 186).

⁴ A limitation on this right is the rule that an early election cannot be called within three months of the preceding election (Bergman 2000: 204). An early election has only been called once in the post-war period in Sweden (see Bergman 2000: 204). Another point relevant to the Swedish case is that Sweden changed its constitution in 1970 and implemented a unicameral system. Bergman (2000: 201) argues that this had important implications for the duration of governments and thereby potentially indirectly for ministerial turnover. In order to take account of this institutional change, we have included a dummy variable indicating the shift, but this makes no significant difference to the results.

⁵ There is no difference in the results if the analysis is limited to the period 1967-2008 when data are available for all three countries.

⁶ Berlinski et al. (2007) measure saliency by distinguishing between full cabinet ministers, ministers of state, junior ministers or whips, and Huber and Martinez-Gallardo (2008: 173) specifies their variable “important portfolio” as a dummy that takes the value 1 if the minister occupied one of the two portfolios most highly ranked in Laver and Hunt (1992).

⁷ Details on the data sources can be found in the appendix.

⁸ In contrast to other studies (e.g. Kam and Indridason 2005) data on prime ministerial approval is not available for the countries examined here.

⁹ Estimating the models with random effects does not change the direction or level of significance of the coefficients. All models have also been estimated as stratified models and also here there are no significant differences to the models reported in the article.

¹⁰ In Norway, junior ministers called “Statssekretær”, in Sweden “Statssekreter”, i.e. State Secretaries, similar positions are not found in Denmark.