

BI Norwegian School of Management – Thesis

Master of Science – Political Economy

A politician who's quitting has already quit.

Last period effects on political shirking in Stortinget.

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Abstract

This paper is my master thesis in political economy. It starts with an analysis of political shirking in the last term by way of literature review. It shows the different variables affecting shirking and how they are analysed in the literature. It tries to predict their effect in the Norwegian Storting and to say something about what an empirical analysis might find.

Next, it explains how I have made an empirical study of last period effects on political shirking in Stortinget, describing the methodology and data.

Lastly, in the analysis, I find traces of last period political shirking in the attendance in committee meetings, but also find that expenses decrease and there is no significant loss in work per NOK.

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I hope this paper inspires others to keep up this research in Norway, it is needed to keep the politicians on their toes.

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Chapter 1

Introduction

There is an overriding sentiment that politicians should not only be one of us, they should perhaps conform to a higher standard than what is expected of any of us. They are not only of the people, but supposedly chosen by the people. We want our politicians to follow the will of the people. Thus, it is important to be able to focus not only on the work the collective body of a parliament or congress does, but to keep tabs on the individual politicians and the work they do for our tax money. They are after all the agents to our principals.

Whenever the systems fail to discipline the politicians they have the opportunity to act in a way not in the interest of the electorate, to shirk their responsibility.

No matter how much we expect from our representatives, we must face that even they are rational and subject to self-regarding preferences. If we are to believe the public choice theory, when the reins are let go, they do whatever suits them the most, not limited by the electorate.

This paper will approach shirking from both a theoretical and an empirical view, and try to investigate last period effects in Stortinget.

1.1 Background

The Norwegian Storting (Stortinget), is the legislative body in Norway. For the period in question, it was a quasi-bicameral legislative¹, but for all intents and purposes of this paper, it is a unicameral system.

Stortinget has existed since 1814, but it was only in 1871 they started having

¹It is no longer, due to a constitutional reform.

annual sessions. In 1884 they moved to parliamentarism as a system of government, meaning that the government is chosen from and responsible to the legislative body

The 169 representatives are currently divided into twelve standing committees. A representative can only be member of one committee. The division is done jointly by the represented parties' leadership.

Each representative gets a salary from Stortinget. The accounting practices changed in 2006 to a system where the expenses are grouped by party, but that has no effect on this paper. In addition to a salary, there is a per diem payment with two levels. A low level for those who live in Oslo or the immediate vicinity, and a high level for those residing outside.

The representatives to Stortinget are elected in a proportional representation system with 19 electoral districts, each with a number of representatives semi proportional to the population in each district.

The parties have local assemblies in each district which nominate a list of candidates before each election. The number of seats a party gets from a district is the number of representatives on that list who are elected, from the top down. In addition, substitute representatives are elected from the subsequently listed. These step in if a regular representative is in government, sick, abroad or for some other reason cannot fulfil his obligations.

Most parties have the lists assembled quite early in the election year, often within the first two months. This is done in order to settle any disputes that may arise before the deadline of March 31st.

1.2 What do I want to find out?

In this paper I am going study shirking in the last period in Stortinget. I will show, through an empirical statistical analysis, whether shirking is prevalent, using data from Stortinget's accounts and committee protocols as the dependent variables. The analysis will uncover patterns in the work and expense variables, linking them to an array of traits separating the individual politician.

After a discussion of the wide spectre of existing measures for political shirking, a specific and narrow use of the term shirking is chosen for the purposes of this thesis. Using this narrow sense term for shirking, I will compare my findings to studies from other political systems and see what kind of similarities and differences

there may be.

Finally I will try to give some advise on how to minimise shirking in Stortinget, and how to better measure it in later studies.

1.3 Why is this study relevant?

This study is mainly based on the theory of a study done on the British parliament by Besley & Larcinese (2005). If politicians have the chance, they will act in their self interest. Hence, they will shirk their responsibilities when they are not restricted by the threat of electoral defeat.

As I will show, Besley & Larcinese find very little shirking in the British system, and one may conjecture that there should not be more or less shirking in the Norwegian system, as both systems are parliamentarian. However, there is a major difference in that the British electoral system is majoritarian and the Norwegian one, as mentioned earlier, is proportional. To my knowledge, this is the first study of its kind in a proportional representation framework.

This study, although using excellent data from Stortinget, has a few structural limitations. Firstly, the accounts are not public record, and thus have to be made anonymous for use in a statistical setting. I lose the anecdotal evidence so beautifully used by Besley & Larcinese.

Also, even though the committee protocols are very good, they can gain immensely from having a standard format and being digital. It is clearly a limitation that there are several opportunities for human error.

However, it is important to stress that although there are some limitations, within the dataset, the access to data has been excellent, and this paper is only the beginning of the possibilities such a dataset can produce.

Chapter 2

Theoretical review

As a part of the Principal-Agent theories, the literature on political shirking is quite extensive, beginning with the early economic theories and moving up through several empirical tests. Barro (1973) is the seminal model of political shirking. A main assumption is that

the division of interest arises because the public officeholder is assumed to act to advance his own interests, and these interests do not coincide automatically with those of his constituents(Barro 1973, p. 22).

According to Barro (1973) this is less of a problem if there are more restrictions in place to prevent shirking. Most important of these restrictions is the wish for re-election. However, in a politician's final term, there are no incentives from re-election, and the politician stands quite free to pursue own interests rather than follow the will of the electorate.

There have been few empirical studies on political shirking outside the US, and none that I could find in Norway. In this chapter I will therefore make a survey of the historical and current literature on causes of last periode effects on political shirking. The question posed in this chapter is twofold. Under what conditions does one expect to see last period political shirking, and are those conditions present in the Norwegian Storting?

First I will go through the general theory, define political shirking and lay out different theories that explains political shirking. Next I will do a quick summary on what the different studies say about a 'last period effect'. Lastly I will discuss their theories relevance to the situation in the Norwegian Storting, and try to make a prediction on whether one will expect to see political shirking in an empirical study.

2.1 Political shirking

So what is political shirking? The term may seem unclear to some. Lott (1987) defines it as "...the degree a politician's actions deviate from the wishes of his constituents." (Lott 1987, p. 169) This is a clear and useful definition which is the one I will use for this paper. Lott (1990) also adds to the definition that members of the US Congress shirk by "consuming leisure on the job" (Carey 1994, p. 7). In other words, does less work for the same, or more, pay.

Figlio (2000) adds something interesting to the standard definition of shirking. He states that

Shirking is not necessarily bad, though, as this definition does not distinguish between on-the-job consumption and behavior that may be in the best interests of the nation but not in the interests of a specific constituency (Figlio 2000, p. 281).

For instance reaching compromises that may increase general national security but devastate a town due to the relocation of a military installation.

This leads to a question. When is a politician shirking? Is it when he doesn't follow the will of his entire geographic constituency or only the part of his constituency who voted for him? Fenno said in his 1978 paper that "It is [his re-election constituency] that the congressman counts on for support, and it is [them] that the congressman must serve" (Bender & Lott 1996, p. 85). Bender & Lott (1996) go on to argue that in order to properly account for shirking, one needs to look at what the electorate constituency wants, not the geographic constituency. This, they say, gives an explanation to why US senators from the same state vote differently.

2.1.1 Ideologue vs. non-ideologue

Lott (1987) focuses on representatives as ideologues or non-ideologues, with the effect that "... ideology can prevent rather than cause opportunistic behavior" (Lott 1987, p. 169). He draws an analogy to the market. He says that politicians are "search goods" (p. 170) to which voters get information "prepurchase" (p. 170). They vote in politicians with the same ideology as themselves, making sure that even opportunistic politicians will vote in their favor. By aligning the preferences

of the elected officials with their own, voters minimise the risk of the underlying agent problem.

His study shows that there is a difference in voting differently and simply voting less. It finds that in the US congress, representatives vote less if they do not face re-election, but the pattern is unchanged.

Politicians always vote for their ideological beliefs, but those who face re-election do so with more fervor since both the politician and the voter value the politician's actions (Lott 1987, p. 183).

The non-ideologues have mainly been perceived to simply vote less, not differently, when shirking their responsibilities (Bender & Lott 1996). In this thesis, shirking in the narrow sense is just that, doing less work for the same, or more, pay I will come back to this point.

2.1.2 Sorting

The sorting-mechanism is an interesting one in view of political shirking. Lott & Reed (1989) construct a theoretical model suggesting, like with ideologues, that "voters are forward-looking, basing their re-election decisions on what they think politicians will do in the next period." (Lott & Reed 1989, p. 82)

The basic premise is that there will be little shirking "even when the cost of shirking in terms of foregone future votes is low," simply because shirking would lead to a reduction in the utility of the politician. Interestingly they conclude that "There would be no last period problem and politicians would be able to make credible commitments." (Lott & Reed 1989, p. 87)

This mechanism, however, is imperfect. Zupan (1990) finds that due to imperfect information among the constituents, representatives have some wiggleroom when deciding policies. Carey (1994) even argues that sorting may take several terms to work, and that even if it works,

...those representatives who make it to retirement [...] will merely be those for whom the opportunity costs of good agency were lowest. Their last term incentive will still be to shirk (Carey 1994, p. 6).

2.1.3 Brand name and political capital

The third mechanism to affect possible last-period shirking is reputation. Seeking a job after being a representative, both public office or private employment, can be a reason for keeping your brand name clear.

Lott (1990) does an empirical analysis of this hypothesis and finds that if running for other office, the voting rates go down substantially, which he explains with campaigning etc.. However, he also finds that other retiring politicians vote "significantly less in their last period" (Lott 1990, Section IV)¹ and

Shirking is reduced or eliminated only when both the retiring congressmen and their offspring continue to be involved in politics after the congressmen leave office. (Lott 1990, Section IV)

In other words, the only time brand name matters in removing a last term effect, is if both the representative and his 'child' are running for other office.

Besley & Case (1995) also suggest political capital as a force keeping political shirking at bay, since political capital does not lose its value when the last term is up. However, they find that the effect is very low.

2.1.4 Pensions and party control

Carey (1994) suggests pensions as a possible solution to preventing last term shirking. He refers to the general framework laid out by Becker and Stigler in 1974 in which an employee who behaves gets a pension 'bonus' for resisting temptations to shirk. Barro (1973) also suggests that political parties can enforce a pension system to avoid representatives drifting away from the party line.

In this case I am not necessarily talking of pensions in the traditional sense, but also a way of parties to exert influence over a politician's later career. This form of party control interfering with any last period effects is suggested in the article by Besley & Case (1995). They suggest that a party could have control of future options for the candidate.

Alesina & Spear (1987) suggest, in their "overlapping generations model of electoral competition", how "intergenerational transfers can enforce policies which are beneficial for the 'party' [...] in the long run." (Alesina & Spear 1987, 24).

¹Lott (1990) is not in its original format and page numbers cannot be assigned to citations.

They interpret the 'transfers' in two ways, either straight cash transfers, or the gaining of positions of power with the younger party members paying dues to the older.

Helland & Sørensen (2008) extend this model to explicitly involve public positions after retiring. They suggest that the parties can motivate working by controlling sought after positions.

Carey (1994) uses Lott's (1990) study on the effect of future office and children's office-seeking to lay out a suggestion that there can be some sort of pension plan directly linked up to future careers. Carey (1994) also shows that the representatives aspiring to other office tend to move more towards the party line when voting in the last period than do retirees. All of which are good examples of transfers rewarded by the party to the politicians in the spirit of Alesina & Spear (1987) and Helland & Sørensen (2008).

2.1.5 Term limits

Besley & Case (1995) do an empirical analysis of US state governors. In it they differentiate between states with term limits and those without. They provide a proposition to check.

If two terms are allowed, then incumbents who give higher first-term payoffs to voters are more likely to be retained to serve a second term. Those in their last term put in less effort and give lower payoffs to voters, on average, compared with their first term in office. (Besley & Case 1995, p. 773)

Their study focuses on policies rather than voting, removing 'leisure-consumption' as a factor in shirking. This is an easier way of measuring individual shirking, as the data is more accessible. However, it is more applicable on governors than on members of congress.

They find that term limits have a strong effect on shirking. When facing term-limits, sales tax is higher, income tax is higher, government expenditure is higher, and state minimum wages are lower.

In summary, term limits do appear to affect policy choices. We view this as consistent with a model where incumbents care about building political reputations when they can run again for office.(Besley & Case 1995, p. 780)

As an interesting sidenote, there seems to be little or no difference in economic growth due to term limits. They only seem to generate a fiscal cycle (Besley & Case 1995). This somewhat opposes the theory that term limits can create more frequent last periods and thus increase the total level of shirking.

Tien (2001) on the other hand, finds that there is a negative effect from term limits in members of the US House of Representatives.

Members forced to retire by term limits are in a similar situation as members who decide to retire voluntarily. Neither of them are constrained by the electorate (Tien 2001, p. 127).

2.1.6 Political affiliation

Carey (1994) points to a study by John Lott where he suggests that political markets are self-correcting. If voters see policy as being too liberal, they vote for a conservative candidate. Carey (1994) does not seem to agree with Lott.

If political markets were entirely self-correcting, however, voters would act [...] only with regard to their attitude toward overall policy outputs. But I know that representatives consider the implications of their own specific votes on prospects for re-election[...]. Self-correcting markets, then, cannot render irrelevant the issue of shirking for constituent-representative relationships. (Carey 1994, p. 3)

That liberals and conservatives shirk differently may come as little surprise. Besley & Case (1995) find that democratic governors tend to spend more per capita, whereas republican governors tend to lower taxes more when facing a term limit. In other words, their policies become more ideologically extreme compared to the policies carried out in previous terms.

2.1.7 Marginality of seats

It is logical to think that whether a representative sits safely or not, has an effect on him doing his job. Besley & Larcinese (2005) use a measure of marginality to measure how safe the seat is, to control for in their analysis, as a "proxy for contestability" (Besley & Larcinese 2005, 12).

2.1.8 Other institutional effects

The study by Besley & Case (1995) differs from the other studies. They model the executive branch of government, not the legislative. That leads to the proposition that there could be an effect in having a legislative branch as a watchdog for the electorate.

There is an interesting observation to be made when analysing members of the US House of Representatives. They have 2-year terms, the shortest of any elected official at the federal level in the US. According to Tien (2001), the intention was to keep the politicians on their toes as a new election always is around the corner. This, however, would not affect a last term.

One can, as Sutter (1998) does, argue for a form of constitutional constraints on shirking. He argues that electoral control can be substituted with constitutional control to restrain the politicians' possibility to shirk in any given term. This, like having short terms, does not seem to help against any specific effects in the last period. One of the major problems with putting constitutional constraints on shirking, is simply the issue of incomplete contracts. Including every possible event in a contract or in legislation, is simply unattainable. Thus, preventing last period shirking fully is impossible in this respect.

2.2 Last period effect?

Most of the literature seems to show that there in fact is a last period effect in the American system. Lott (1987), Lott & Reed (1989), find that there is not a change in voting pattern, but there is less voting. Zupan (1990) shows to an earlier study he did with Joe Kalt and proposes that there is a timing bias in the analyses by Lott et al. Through both a qualitative and a quantitative analysis, he tries to determine if that is the case, and how to deal with it. He finds that in a two-year term, there is significantly more shirking in the latter session, and this pattern is much clearer in retirees and those seeking other offices. However, he does not find that the total level of shirking is any higher among those in their final term than the rest.

Vanbeek (1991) tries to solve this time bias with a continuous variable on when the congressmen announce their retirement. This still confirms the findings of Lott (1987) and Lott & Reed (1989): that the congressmen do not change their voting

pattern if they are about to retire.

By analysing a seven-year dataset and using a strict test for retirement, Tien (2001) finds that there is shirking by retiring members in the US House of Representatives. They are "less responsive to their constituents than members running for re-election," (Tien 2001, p. 125) and "in essence, voluntary retirements have undesirable effects on representation[...]." (Tien 2001, p. 127)

US governors seem to show clear last period political shirking, especially when facing a term limit (Besley & Case 1995). They systematically have different policies in non-last periods and last periods.

The main study done outside the US is a study on the British Members of Parliament by Besley & Larcinese (2005). They find that the effect of retirement on the cost per vote is very small. They in fact only find a significant effect in "other" expenses like "computer equipment, stationary and postage" (Besley & Larcinese 2005). It is interesting to note that the study by Besley & Larcinese only use number of votes cast by individual representatives and not what each MP votes as measure of shirking. Their measure, like the measure used in this thesis, is more along the lines of the non-ideologues of Bender & Lott (1996)

2.2.1 Lamé duck period

Jenkins & Nokken (2007) describe a phenomenon in the US congress where congressmen who have not been re-elected, no matter if they ran for the seat or not, are still for a short while in congress. At the extreme, they describe a session of congress in the 1880s where as many as 52,2% of House members were such "lamé ducks" (Jenkins & Nokken 2007, 5).

If anything can be considered a last period, the lamé duck period certainly can. Not only are the politicians aware of a final period, any work they would do to have themselves or another favoured candidate elected is certainly over, since the election is already held. They are literally free to do whatever they want without considering their electorate. In fact, even though other effects, such as building brand name and gaining political capital, are still in effect, if these effects are counter to the electorate, they may be prioritised.

Rothenberg & Sanders (2000) describe just such an occasion in their analysis of the impeachment vote of Bill Clinton. About 10% of the congress repre-

sented districts to which "their connection [...] had been severed." (Rothenberg & Sanders 2000, 524). Because of this they could vote as they wanted themselves, not considering their electorate.

In accordance with the finds of Tien (2001), Rothenberg & Sanders (2000) find that lame-duck Republicans in pro-Clinton districts were less in line with their home district and voted in favor of impeachment.

2.3 Stortinget

The Norwegian Storting is an interesting case, as it is virtually uncovered in the shirking literature. It differs highly from the US congressional system in that, like the UK Parliament, it is a parliamentary system of government, and it differs from both the US and the UK system in that it is a system of proportional representation.

2.3.1 Shirking in the wide sense

I have just shown that shirking in the wide sense, not doing one's job, can be many things. Different researchers have used different measures depending on what theory is relevant and what data is available.

In Stortinget, shirking in the wide sense can occur, and although not the main focus of the empirical analysis, a theoretical run through is appropriate.

Ideology and sorting

In a system of proportional representation, as opposed to majoritarian systems, one often has less personification of one's representatives. Simply the fact that a voter in Norway picks a party's list to vote for, and not a specific candidate is a sign of this. It may be a lot harder for the individual voter to sort in the way suggested by Lott & Reed (1989).

On the other hand, a candidate has to go through a nomination process within the party which is quite easy to influence.

A few people who are unhappy about their party's list can have a big impact at poorly attended local meetings. (Matthews & Valen 1999, p. 75-76)

That way there can be sorting on specific issues, making the candidates ideological compatible with the electorate. That way Lott & Reed's (1989) arguments can fit in the Norwegian system as well, one may see less shirking due to sorting behavior by the voters.

In a system of proportional representation one could consider it to be shirking not to vote for the party line, but the party line is often decided by the parliamentary group. If one decides shirking is voting against one's home electorate, is it everyone who voted for the party, or just the fraction for each candidate who is the relevant group? These issues are very hard to define in this system.

Political capital, 'pensions' and party control

In Norway, there are several ways the parties, and even Stortinget as a plenary body can reward 'intergenerational transfers' in the sense of public positions after quitting, willingly or not, from Stortinget.

One example is the position of county commissioner, fylkesmann, which long has been a post "reserved" for retiring members. In fact, out of the 90 fylkesmenn instated in the period 1945-1996, only 24 have not been retiring politicians (regjeringen.no 1997). In addition there are several positions available to the discretion of the government, which may be rewarded to loyal party members if the party is in position.

Ideally one would use the database from the Population Registration Office² to check employment after ended career in Stortinget. I have not done so, mostly due to capacity restraints, and trying to gather such a list for all the representatives outside this database would create comparison problems, as salaries and other more objective comparable items would not be available.

Term limits and political affiliation

There are no term limits in Stortinget. A study on shirking in the last period could therefore be interesting. On one hand Besley & Case (1995) find that there is a difference in policy between terms, but on the other hand they also find that in the longer terms, term limits make no difference. The only problem would be to find grounds for comparison. One would have to try to compare it with a parliamentary

²Folkeregisteret

proportional representation system with term limits.

To show which party one belongs to can give life to thoughts based on stereotypes. It is hard to predict how this could affect shirking in Stortinget. It would be interesting to see if there is the same pattern as Besley & Case (1995) find, that conservatives become more conservative and liberals become more liberal in their final term. In a multiparty system this can have some interesting effects. Do for instance agrarians become more agrarian or christian democrats become more christian?

Marginality of seats

There are several measures of marginality of seats. In Stortinget, one proxy for contestability could be a list ranking variable. One could say that the further down on the nomination list you are, the more contested your seat is. But, there is a problem in using such a variable. It is very hard to know to which extent a party knows the list composition beforehand, thus a seat is only more or less contested in the few months between nomination and election day.³

Other institutional effects

There aren't many institutional effects in Norway to prevent last period shirking, but some may certainly exist. Since very little is written on it, one would have to do a survey of some kind to see if there are some institutions based on habitual patterns or some formal or informal institutions that encourage or prevent shirking in the last term, or in any previous term for that matter.

2.3.2 Shirking in the narrow sense

In the empirical part of this project, I will be studying shirking from a quite specific angle. Using the theories of Lott (1990) and Besley & Larcinese (2005) I will be focusing on consumption of leisure versus constituency services.

Constituency services

The job of an elected representative is to produce what Besley & Larcinese (2005) refer to as constituency services. Promoting policies beneficial to the constituency.

³The lame duck variable could be considered a crude measure of seat marginality, as a lame duck representative has a very low, if any, probability of keeping the seat.

Producing constituency services in Norway have two levels. Firstly, there is a responsibility to the electorate, the people who voted you in. Secondly, and this is where the Norwegian system differs from the US and UK systems, there is a responsibility to the nominating assemblies. Producing constituency services means to a larger degree following the party line than it does in the other studies.

Consumption of leisure

As Besley & Larcinese (2005) show, British Members of Parliament (MPs), have the possibility of shirking their responsibility and consuming leisure on the job.

In Norway, there are three main ways of consuming leisure. Firstly, since a representative may travel as much as he likes domestically, he may do so to an extent that may interfere with his job while the taxpayers take the bill.

Secondly, there are several expenses paid for the representatives by the taxpayers that the representatives have control over. For instance, there are certain ICT-expenses like mobile phone and computer and internet access. Also, there are expenses linked to travelling such as hotel rooms, taxi vs. public transport that are easily controlled.

Thirdly, the representative can simply produce less constituency services. To do other things than working as a representative in Stortinget is to consume leisure.

Expenses and work

Now, it is clear that in order to produce the constituency services, there are certain expenses involved, which are paid by taxes. In Stortinget, these expenses may vary between representatives without being considered shirking.

Firstly, there is rule based variation. Some representatives have a higher salary due to positions like committee chair and president. Some have a higher per diem payment because their home is not in the immediate surroundings of Oslo.

Secondly, there is the choice based variation. Here are travel and ICT costs the main part. It is of course clear that a representative has to travel, he has to call and have access to the internet, in order to be a good representative for his home district and party. Each politician works differently, but the interesting question is 'are there *unwanted* variations in the work or expense pattern. Does one find decreased work for a given amount of expenses, or an increase in expenses for a given amount of

Table 2.1: Nomination dates.

Party	Nominations	
	2001	2005
Progress party (FrP)	Jan-Feb 2001	Nov 2004-Jan 2005
Conservative party (H)	N/A	Oct.-Nov. 2004
Christian Democratic Party (KrF)	Mostly Nov.-Dec. 2000	Mostly Nov.-Dec. 2004
Liberal Party(V)	Oct. 2000-Feb. 2001	Oct 2004-Feb 2005
Agrarian Party(SP)	N/A	Nov.-Dec. 2004
Labour Party(A)	N/A	Nov-Dec 2004
Socialist Left Party(SV)	N/A	Dec. 2004-Feb. 2005

work in the last period? These scenarios, or a combination of the two, means the public is getting less for their money. This is specifically the narrow sense shirking I am studying in this thesis.

2.3.3 Lame duck period

In Stortinget, one may make the argument that a representative who has been nominated at a list ranking where it is not likely to be elected, or even has not been nominated at all, is a 'lame duck' for the remainder of the term. In this case it is not only the electorate, but the party who has 'thrown' the politician.

Compared to the US system, the Norwegian lame duck period is substantially longer. While the official date of turning in a nomination list is by March 31st (lovdata.no 2008), most parties decide quite a while ahead. As shown in table 2.1,⁴ it is not an unreasonable assumption to use the period from January to election day as the lame duck period.

2.4 Predictions

From the literature, one can expect to see some form of shirking in almost any political system. It seems like one can prevent some shirking, but it seems hard to remove it completely. There are big differences in the results of the many empirical

⁴All dates are approximates based on limited access to data.

studies on shirking. They can to some degree be explained by the use of different measures. If one uses the methodology of Besley & Larcinese (2005) on Stortinget, measuring shirking as consuming leisure on the job is certainly attainable. On the other hand it would be significantly harder to measure shirking in Stortinget as defined by Lott (1987), as ideological divergence from the electorate.

As mentioned, the electorate is hard to define in a proportional representation system. Even if you could define it, there would be a problem of defining ideological divergence in a system where party lists are voted for, not individual ballots. One could imagine a situation where the national party line and the local interests are diverging and due to the nomination system, a representative is responsible both to the party and to the local constituency.

Some of the factors deterring shirking are certainly present in the Norwegian system, whereas others are not. Elections are maybe the main deterrents, present in all democratic systems, but much of the financial openness forced upon representatives in the US and British systems is not present in the Norwegian one. Some factors may be unique to the Norwegian system and may never have been studied before, like the nomination process with local party assemblies. For such reasons it is hard to say a priori what the empirical study will find.

Of shirking in the wide sense, and from a purely systematic approach I would predict that there is no more or less systematic shirking in the Norwegian system than in the UK system due to their many similarities.

However, since shirking is measured somewhat differently, some difference in the results one may expect. I think we will see some variation in the work and spending patterns in the last period. The controls in Stortinget are not strong enough to discourage shirking.

Using the theory of rational behaviour, it is fair to say that if there is no marked difference in the last period representatives. If they act the same as the non-last period ones, at least the lame ducks should skew from the path of the non-lame ducks. They should work less per taxed NOK they spend.

Chapter 3

Methodology

Before starting the analysis, I need to clarify the research method used in this project. How have I selected the units, define the measures, clarify the measures of the variables and describe the data.

3.1 Selection

The selection in my analysis is quite simple. I will be looking at all expences and committee work for all politicians who served in Stortinget in the two periods 1997-2001 and 2001-2005. I have been gathering data from the accounting division of Stortinget and from committee protocols from Stortinget's archive section. This is not sampling, as my 'sample' consists of the entire population.

However, the dataset has systematically been cut, as parts of the data is irrelevant for use in the analysis. All substitute representatives who have not been permanent replacements for representatives in government are cut and all July, August, and most Septembers are cut due to vacation. We are left with permanently meeting representatives in all their working months.

3.2 Measures

Unfortunately, working and shirking do not come as simple to read variables in any database. In order to wheigh these effects, I have to define simple, understandable measures, and I have to be able to measure them accordingly.

3.2.1 Definitions

As mentioned in the theory chapter, the definition of shirking takes two main forms. Lott (1987) defines shirking as voting differently than the electorate wants, focusing on the skewness aspects. I have defined shirking in a more narrow sense, along the lines of Lott (1990) and Besley & Larcinese (2005).

'Consuming leisure on the job' is in this case measured as increasing expenses or working less. This is shirking in the sense of producing less constituency services for the taxpayers' money.

The main reasoning behind this decision is twofold. Firstly, in a proportional representation system it is much less clear to whom the politician is accountable. If following the logic of Bender & Lott (1996) one could argue that each politician is only accountable to the group voting for the respective parties in each electoral district. Stretching that logic even further, he is only accountable to the specific group of voters responsible for getting the specific votes required to get him elected. Using a wide approach to shirking could simply become too vague and problematic.

Secondly, using the narrow approach, it is much easier to measure attendance than voting patterns in a system of several conflict lines, some of which may be across party lines and even geography. Even if one did define the political preferences of the electorate for each politician, one would still be in the jam of deciding whether party, geographic or some other ideological line is the one to follow in order not to be shirking.

3.2.2 Measuring

Since Stortinget is based on working in committees, and attendance in committees is easily measurable, that will be my "working or shirking"-proxy.

Besley & Larcinese (2005) measure voting records. This would not be suitable for Stortinget, as there is an informal arrangement that creates extra absence. If a representative is missing from one side, then a representative from the other side is absent in order to preserve the proportions of the parliament.¹

This system, at least so far, works, and creates artificial absence from the plenary

¹This is an interesting arrangement based on a infinite-round prisoners' dilemma game. As long as all parties adhere to the arrangement, the politicians have a much greater degree of freedom to do work outside the plenary sessions. If one party breaks the agreement the system fails.

sessions and it makes them unfit as a shirking measure.

However, using the committee system is a much better measure of work. Stortinget is renowned for its working horse committees, and unlike the British system, most legislation and budget matters is thoroughly debated and decided once they enter the plenary sessions for voting. In most cases the votes may be just a formality after a long process in the committees is over.

For this reason, committee attendance is a good variable for work. Unfortunately it is a very small part of the actual job, but it is the one most reasonable to measure.

I will also be measuring individual politicians' expenses as recorded in Stortinget's accounts. Wages is a natural one. Is there a marked difference in the committee work in the last period, when wages stay the same? Do other expenses like telecommunication or auxiliary increase? Besley & Larcinese (2005) find that only expenses for ICT and auxiliary items have an effect in the last period.

3.3 Variables

In order to analyse the data collected, I have set up a simple linear regression model. This model will try to find any systematic variations in the cost of a committee meeting for the representatives.

Not unlike the analysis of Besley & Larcinese (2005) I will be using more than one regression model, outlined below, and my main focus will be on work per NOK as the dependent variable. Also, I will be studying models with expenses, ICT-costs, and attendance as the dependent variables.

In addition to the last period variable, I will be using an array of control variables divided into four main vectors: Structural, personal traits, political traits, and positions.²

$$\begin{aligned}
 Y_i^j &= \beta_0 + \beta_1 \text{Quitting}_i^k + \gamma \text{ Structural variables} \\
 &+ \xi \text{ Personal traits} + \phi \text{ Political traits} \\
 &+ \omega \text{ Positions} + \epsilon
 \end{aligned}
 \tag{3.1}$$

² j = {Expenses, ICT, attendance, Work per NOK}, i = 1, 2, ..., 11, k = {last period, lame duck}

3.3.1 Dependent variables

The dependent variable ideally would have been a compounding of every expense charged by the politicians, divided by every working hour. That is impossible, simply because it is extremely hard to compile that information into a usable dataset. Instead, they have been made into some measurable variables.

Expenses

Using Stortinget's accounts, accessing all the registered expenses on the individual level. This leaves out much of travel expenses, but still gives a good image of how expenses are divided.

In addition, there are tax-based expenses from other sources such as funnelled through the party groups and through the parliamentary groups. These expenses will not be part of my analysis.

Work

Besley & Larcinese (2005) count voting sessions attended, but because of the special set up of Stortinget, that is not fitting in this case. Therefore I will be counting the number of committee meeting missed, making a work variable from the attendance percentage. Ideally one should have had a measure of distinguishing each meeting, for instance a minute-count. Such a measure was tried in the early phases of this project, but unfortunately the data simply was not fit for this level of analysis.

Also, using committee meeting attendance as the work-variable requires a not insignificant assumption. Since there aren't really that many meetings most of the time, sometimes as few as one and even no meetings in a month, committee attendance is a very small part of the total workload for a representative. However, preparation is often costly and time consuming, thus the assumption becomes, if there is low attendance in committee meetings, they are doing less for the voters.

This assumption is not as much a stretch as it may seem at first. As mentioned earlier, in the Norwegian political system the committees are seen as 'working horse' committees, meaning that the majority of the legislation work is performed in the committees.

In this paper, work that is not directly related to being a representative is shirking. Thus campaigning and party work for instance would both be considered shirk-

ing. However, both party work and campaigning are important parts of the work. Nonetheless, it is excluded from these models and that is a weakness of the model. Ideally, I would be able to insert work patterns from the plenary assembly and the individual efforts as well. Ways of measuring a plenary session work load could be to count the number of times each representative speaks, number of bills proposed and so on. This is, however, outside the scope of this project, and not included in my analysis.

3.3.2 Independent variables

For the independent variables, I have focused on some of the same used by Besley & Larcinese (2005), but corrected to fit the available data. As mentioned earlier, the variables are divided into four main groups in addition to the last period measure.

Last period

The most interesting dummy variable is the last period one. This will be a cross sectional analysis, giving us a comparison between politicians, but in a later study a time-series could be most interesting. Besley & Larcinese (2005), in their study have defined last period as having announced retirement before the general election. That is not, however how I have defined it. Announcing retirement is less frequent in a proportional representation than in a majoritarian system. In Britain your name is either on the ballot or it is not. If it is not, then you are retiring.

In a proportional representation system, like the Norwegian one, candidates may 'retire' simply by moving down the nomination lists, still lending their name to the list. Who is to say that a decision of retirement has been made? Interviewing each candidate could be an option, but even then there could be mistakes between the actual state of mind in the period in question and how the representative remembers it. Nonetheless, I have used the last period a representative is elected, and where he is not re-elected as either a full representative or a substitute representative.

Lame duck

I have found that an interesting measure of the last period question is a 'lame duck'-period. If the representative is not re-elected as either a full time representative or as a substitute-representative, then the general assembly of the local party group

has 'thrown' or 'retired' the representative. I do not distinguish between stepping down voluntary or involuntary. As mentioned earlier, since nomination meetings are in the late part of the year before or early part of the election year, the last nine months of the term, January through September, will be a lame-duck period. A period where there are no consequences for any shirking in an electoral way.

This measure is quite crude, the question of timing, brought up by Zupan (1990) and Vanbeek (1991) is clearly an issue to be concerned with, but one that will have to be overlooked for the time being.

The lame duck variable is a dummy variable (0, 1) with 1 for the months January through September for any candidate not re-elected even as a substitute. Even though, as mentioned earlier, the official date for handing in records is by March 31st (lovdata.no 2008), most parties have their lists unofficially ready long before, thus starting the lame duck period before there is an official list available. One may even argue that the lame duck period starts even earlier.

Personal traits

Gender, age and education are the three most obvious personal traits. Gender and age are collected from www.stortinget.no's bio-pages, while education is from Hanne-Marthe Narud's dataset on retirement of representatives in Stortinget. Gender is a dummy based on 1=Male, 0=Female.

Political traits

Political traits used in the study are mainly party and geography. Both are measured as dummies. The geography dummy variable is simply to account for a higher payment for living expenses to the politicians who do not live in Oslo or the immediate surroundings. Party on the other hand, is arranged as an array of dummies with the Labour Party³ as the baseline, meaning that any coefficient shows how the dependent variable behaves when moving from the Labour Party to the party in question.

Seniority is also a political trait. After counting the number of periods each representative has served in, I have weighted the variable quite easily as 1 point for being a representative for each previous period, and one half point for being a substitute representative. As any weighting based on attendance as a substitute is

³Det Norske Arbeiderparti

impossible for the periods before the periods studied in this project, I found it a simple and convenient weighting.

Positions

Positions are dummies for party leader, president or vice-president (VP) of Stortinget. Also, the position in the committees, chair, second chair, secretary/third chair,⁴ are important positions that may affect the work-variable. All of these positions are gathered from www.stortinget.no. Committee chair and president and VP are important because they have a higher salary.

To separate between positions of higher salaries and those of high status but no higher salaries, there is a dummy for having a 'low' salary, high status position. There is also a dummy for whether a representative's party is in government or opposition.

3.4 Data

The alpha and omega of any good research project is good data. In many ways I have excellent data. But, as one often says, nothing is perfect. Where Besley & Larcinese (2005) only had data from three years, I have data from eight years, 96 months, divided into about 11000 person-months. On the other hand, where British MPs have by law independent accounts, the Norwegian Storting 'only' have to follow regular accounting standards as applied to any business. Ticket expenses for travelling, for instance are not individually accounted for.

Also, since Stortinget's accounts are under strict confidentiality, any anecdotal evidence is impossible in this paper, unlike in the paper of Besley & Larcinese (2005) who use the British MPs accounts which are public record. There is another major problem with this difference. Any income indirectly earned, such as the value of housing provided by Stortinget, payments by parties, stockholdings or other income sources are not available.

⁴The third chair changed title between the two periods in question and will be referred to as the old title, committee secretary.

3.4.1 Data collection

The data collection for this project has been quite time consuming. It has mainly been through four sources.

Firstly, Stortinget's accounting department and their accounts have been the source for the fiscal data. The data was highly available, easily accessible, and quite extensive. The only data not available, which may have given an even better analysis, were the travel costs for each representative, they were simply not available for the specific period. The fiscal data have been divided into salary, living expenses, travels and ICT/telephony. Salary is the general salary that only varies a little based on position in Stortinget, for instance Stortinget's president has a somewhat higher salary.

Secondly, Stortinget's archive and their committee meeting records have been the source of the work-data and the largest part of this project. The meetings have been coded into number of meetings pr month for the committee and how many each representative has missed. These records, although extensive, have been less than optimal. Going into this project, I was hoping for a minute count for each representative for each committee, but that was not available. Also, due to different ways of recording the meetings, number of cases discussed did not give a proper comparison of work effort. However, number of meetings and the roll call was available for almost all the 12 standing committees for both periods.

Thridly, the education information comes from a dataset collected by Hanne Marthe Narud at the Institute of Political Science at the University of Oslo (Narud 2008).

Fourthly, all the information not gathered from any of the other three comes from www.stortinget.no, the official website of Stortinget. Gender, home district, party, positions, and more comes from the representative records on this website.

3.4.2 Data format

The data comes in person-month units. Expenses per month, number of meetings per month and so on. All together there are about 18000 available cases. As mentioned, when excluding substitutes, months with no work, and representatives getting paid in months they were no longer representatives, I have at at most 11257

units⁵.

The committee work data have been assembled through several people, lastly through my own work, and are thus most subject to human error.

3.5 Statistics

Using a statistics software package, I will mostly be using ordinary least squares (OLS) regression analysis. But not until going through the data with descriptive statistics for means, standard deviations, and correlations.

There are many problems with using OLS-regression, but it is a simple and stable method of estimating a model. In this case it could have been appropriate to use panel data or time series type regressions, but that is beyond the scope of this project.

3.6 Conclusion

By now, the analysis in the next chapter, with its strength and weaknesses, should be quite understandable after this run through of the methodology used. There are few, if any, leaps of faith and the models should all be straight forward.

⁵See table 4.1 on page 28

Chapter 4

Analysis

The analysis, as mentioned in the previous chapter, starts out with four basic models. These four use committee attendance, expenses, ICT-costs, and 'work per NOK' as the dependent variables in each model.

This chapter will be going through the models, starting with a baseline, and then expanding on each model through the theories presented earlier and noticing the changes in the results from a statistical point of view. But first, some descriptive statistics.

4.1 Descriptive statistics and correlations

Before starting the analysis, I take a quick look at the data. Using the descriptive statistics I am going to try to provide an image of the average representative to the Norwegian Storting and show the variation within the group.

4.1.1 Descriptives

Table 4.1 on page 28 contains descriptive statistics for the most important variables. I have divided the table into six columns: The means¹ for all the observations, just the ones in the last period, just the ones not in the last period, just the lame ducks and just the one who are not lame ducks, respectively.

Also the table is divided in sections for the dependent variables, personal traits, political traits, and positions.

¹Standard deviations in parentheses

Table 4.1: Descriptive statistics

	Total	Last Period	Not LP	Lame Duck	Not LD
Expenses	52020,41 (7953,80)	52292,03 (8299,58)	51903,17 (7797,42)	59593,32 (6385,35)	51821,58 (7893,78)
Attendance	0,8 (0,25)	0,79 (0,26)	0,81 (0,25)	0,74 (0,30)	0,80 (0,25)
Work per NOK·10K	0,94 (1,42)	0,96 (2,38)	0,93 (0,66)	0,61 (0,34)	0,95 (1,44)
ICT-costs	1286,61 (2302,49)	1285,91 (2497,93)	1286,91 (2212,97)	1920,26 (4730,74)	1269,97 (2200,96)
Travel costs	1535,01 (3794,32)	1511,54 (3689,81)	1545,14 (3838,74)	1913,37 (3177,30)	1525,07 (3808,79)
No. of meetings	5,69 (2,91)	5,53 (2,85)	5,76 (2,94)	4,89 (2,08)	5,71 (2,93)
Meetings missed	1,07 (1,41)	1,11 (1,47)	1,06 (1,39)	1,3 (1,51)	1,07 (1,41)
Age	48,58 (9,83)	52,12 (10,01)	47,05 (9,34)	53,27 (10,93)	48,45 (9,77)
Gender	0,64 (0,48)	0,68 (0,47)	0,62 (0,49)	0,69 (0,46)	0,63 (0,48)
Geography	0,87 (0,34)	0,88 (0,32)	0,86 (0,35)	0,74 (0,44)	0,87 (0,34)
Education	2,68 (0,48)	2,62 (0,51)	2,7 (0,47)	2,65 (0,52)	2,68 (0,48)
Seniority	2,34 (1,32)	2,75 (1,49)	2,16 (1,20)	2,66 (1,23)	2,33 (1,32)
Last period	0,31 (0,46)	1 (0,00)	0 (0,00)	1 (0,00)	0,29 (0,45)
Lame Duck	0,03 (0,16)	0,08 (0,28)	0 (0,00)	1 (0,00)	0,00 (0,00)
Party leader	0,03 (0,17)	0,01 (0,07)	0,04 (0,19)	0 (0,00)	0,03 (0,17)
Committee leader	0,07 (0,26)	0,04 (0,21)	0,08 (0,27)	0,04 (0,20)	0,07 (0,26)
Com, 2nd leader	0,06 (0,23)	0,03 (0,16)	0,07 (0,26)	0,04 (0,20)	0,06 (0,24)
Com, secretary	0,07 (0,26)	0,07 (0,26)	0,07 (0,26)	0,06 (0,24)	0,07 (0,26)
Pres, or VP	0,01 (0,10)	0,03 (0,18)	0 (0,00)	0,02 (0,14)	0,01 (0,10)
Ruling party	0,27 (0,44)	0,3 (0,46)	0,26 (0,44)	0,4 (0,49)	0,26 (0,44)
N	111257	3394	7863	288	10969

Mean values, standard deviation in parentheses.

The average paid expense for a month is 52020 NOK. There is some backpay and deduction of pay in certain months, but using a large number of datapoints should limit the extent of any skewedness of the mean.

I notice, however, that last period and lame duck seem to have higher expenses. There may be a time bias, as the salaries increase over time, and at least the lame ducks are only in the last months of each period. Last period, should not be as affected by the time bias, given that there are an equal number of last periods in each period. When studying the numbers, this seems true.

Out of the 52020 expenses, about 45130 is wages, 4081 in per diem payment², 1535 in travel expenses,³ and 1286 in ICT-expenses. ICT-costs seem to spike in the lame duck period, corresponding with the results of Besley & Larcinese (2005), and the same goes for the travel costs.

The average representative is supposed to attend between 5 and 6 committee meetings per month⁴ and misses about one per month, or an attendance percentage of 80%. But, attendance seems down in the last period and for lame ducks. Only slightly, about 6 percentage points, but still there seems to be a decrease. Of course there are corresponding changes in work per NOK.

Interestingly, the number of meetings decrease slightly in the lame duck period, but that could be due to the fact that everyone wants to be campaigning rather than being at committee meetings during the last months of an elected period. More interesting, the number of meetings go down in the last period, if only slightly. That could be a sign of endogeneity in the committee membership, meaning that a representative who knows he is in the last period, will choose a committee with fewer meetings as a way of shirking.

Last periods and lame ducks tend, naturally corresponding, to be about five years older than the average representative, who is about 48 years.

Even though there are more men than women in Stortinget, there seem to be even more men leaving, leading to an equalizing trend at least for the two periods in question.

It seems there are comparatively more representatives in Oslo leaving than outside Oslo. Also it seems the ones leaving are lower educated than the ones staying.

²not in table 4.1

³Excluding tickets, hotel rooms and anything paid by Stortinget in advance.

⁴Only counting months with meetings, October through June and sometimes September.

Which may follow from them being older.

The ones leaving have been in Stortinget longer than the ones staying, and they generally seem to not be in positions of power. They do however seem to belong to the ruling party. The last statistic may be a bit bias due to a ruling party having more substitute representatives in Stortinget who may not have been re-elected, it is not easy to know.

A measure of shirking not included in this paper may be the active seeking away from positions with larger work loads. If such is the case, as with choice of committee, the positions variable would be endogenous.

To summarise, there seems to be last period and lame duck effects, both in the expenses and work. It will be interesting to see if the effects are significant and even if they are still present after controlling for the other effects.

4.1.2 Correlations

Just like the descriptive statistics, one can learn a lot about one's data from making a simple correlation matrix. Using Pearson correlations, I find that there may be some interesting differences between the Norwegian politicians studied in this project, and the British ones studied by Besley & Larcinese (2005).

Studying these trends in the correlation matrix in table 4.2 shows us some interesting facts, but first I can try to predict some of them.

Dependent variables

I can try to predict how the the dependent variables correlate with the independent variables. For instance, it is natural that expenses should correlate with time, as the salary increases over time. Also, one expects inflation to affect the other costs as well. ICT may be the exception, as ICT-costs generally have diminished the last 10-15 years.

I could have used a deflator coefficient to adjust the salaries to the general price and wage increases. However, as all the salaries are equally increasing, and as I am using a continuous time variable, any effect on salary increases will be controlled for. I could have used a variable for salary adjustment, which happen every other year, but a continuous time variable would also solve problems like change in ICT prices and other time effects.

One would not expect work load to change much over time, so a low correlation coefficient is natural, same goes for percentage of meetings missed. Also, since expenses should vary and work load should not, cost per meeting should also vary over time.

According to the theory, there should be some correlation between the dependent variables and the last period variable, or at least the lame duck variable. If the results mirror the ones from the UK, the main correlation should be between last period and ICT-costs.

Since cost per meeting is based on the two other dependent variables, it is natural that it has some correlation with the two, but there should not be much correlation between work and expenses. If my dataset was more complete, it would be natural that for instance travel costs, including air fare, could correlate with work load if there are many official trips abroad or if there are many regional projects going on. Unfortunately those effects are left out.

Studying the correlation matrix, expenses correlate quite highly and statistically significantly⁵ with time. Work load does not seem to correlate much with time, but there is a very slight, but statistically significant, negative (-0.072) correlation between attendance and time. In other words, shirking seems to increase slightly over time.

The last period variable only slightly seems to correlate with attendance, with a correlation coefficient at only -0.037 , but being statistically significantly different than zero. The expenses have almost no correlation with last period, and it is not statistically significant. However, looking at the lame duck variable, the last months of the last period, the correlation coefficients increase slightly from simply being last period, and they become statistically significant. When running controlled regressions it will be interesting to see what kind of results I can see, using the two different variables.

Independent variables

Having independent variables correlate too much could cause collinearity problems. To avoid such problems, two variables that are theoretically and statistically too similar cannot be in the analysis at the same time.

⁵Pearson's r , significance with $\alpha = 0.01$

An example of this problem is the relationship between birth date and age, both of which are available in the dataset. They have a correlation coefficient very close to -1, as they not only are closely linked, but firmly based on the exact same information and varying at exactly the same rate between cases. It would be statistically unsound to have both be a part of a statistical analysis.

An example of two variables theoretically connected, but not so much statistically connected is the relationship between last period and lame duck. The last period is the entire four years before not being re-elected, whereas the lame duck is only the last few months. They have a correlation of only 0.246, but are none the less theoretically too similar to be used in the same analysis.

There does not seem to be any major problems caused by correlation between the independent variables.

4.2 Regression analysis

I am now ready to start the regression analysis. I have made some expectations and found some interesting information about the distributions through the descriptive statistics and looked at some interesting correlations.

Basically, the regression analysis checks for correlation between the dependent and independent variables, controlling for the other independent variables, thus isolating the individual effects.

4.2.1 Expenses

First, I will study at the expenses, and how they are affected by the independent variables. Will expenses increase or decrease in a last period setting. According to the theory, they should increase. But Besley & Larcinese (2005) for instance found that only ICT-costs actually had a statistically significant increase in the last period.

Baseline model

The baseline models⁶ for the regression equation are quite simple. It is basically just the dependent variable and one independent variable. I will be using both the

⁶1 and 3 in table 4.3

Table 4.3: Regression estimation table

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Dependent:	Expenses	Expenses	Expenses	Expenses	ICT-costs	ICT-costs
Quit variable:	Last Period	Last Period	Lame Duck	Lame Duck	Last Period	Lame Duck
(Constant)	52094 (0.000)	-4828192 (0.000)	51930 (0.000)	-4874307 (0.000)	-324667 (0.000)	-323734 (0.000)
Quit variable	379 (0.025)	-180 (0.177)	7874 (0.000)	-1370 (0.000)	-44 (0.436)	86 (0.574)
Month (Time)		24.3 (0.000)		24.6 (0.000)	1.63 (0.000)	1.62 (0.000)
Age		0.22 (0.001)		0.23 (0.000)	-0.09 (0.000)	-0.10 (0.000)
Gender		594 (0.000)		600 (0.000)	334 (0.000)	353 (0.000)
Geography		4755 (0.000)		4691 (0.000)	-173 (0.023)	-181 (0.016)
Education		-1120 (0.000)		-1140 (0.000)	-155 (0.005)	-133 (0.014)
Seniority		-281 (0.000)		-298 (0.000)	19 (0.379)	19 (0.330)
FrP		-38 (0.830)		-59 (0.737)	-8 (0.915)	-13 (0.862)
H		-22 (0.896)		-46 (0.783)	-238 (0.001)	-259 (0.000)
KrF		405 (0.036)		370 (0.053)	-103 (0.211)	-109 (0.181)
V		-991 (0.058)		-1123 (0.028)	443 (0.047)	399 (0.067)
SP		291 (0.242)		275 (0.263)	-264 (0.013)	-279 (0.008)
SV		155 (0.468)		170 (0.416)	-292 (0.001)	-291 (0.001)
Committee chair		1077 (0.000)		1004 (0.000)	280 (0.002)	270 (0.002)
Com. 2nd chair		-689 (0.005)		-662 (0.006)	-188 (0.071)	-190 (0.066)
Com. Secretary		0.91 (0.997)		3 (0.987)	213 (0.022)	175 (0.047)
Pres./VP		-1639 (0.003)		-1654 (0.002)	-404 (0.082)	-436 (0.057)
R Square	0.001	0.504	0.026	0.503	0.043	0.044
Adj. R Square	0	0.503	0.026	0.502	0.041	0.042
N	9913	9913	9913	9913	9681	9913

last period and the lame duck variables for all the dependent variables

$$\text{Expenses} = \beta_0 + \beta_1 \text{Last period} + \varepsilon$$

$$\text{Expenses} = \beta_0 + \beta_1 \text{Lame duck} + \varepsilon$$

For the expense variable it seems there is some, but very little straight effect from the last period. But it is not a very good model, as the R^2 of 0.001 shows, suggesting that the model only explains about 0.1% of the variation in the Expenses. However, when using the the lame duck variable, the model tightens up a bit. The last period variable has an estimated coefficient of 379 and is statistically significant,⁷ while the lame duck variable has a larger estimated coefficient of 7874 and is more statistically significant.⁸

Expanding the model

The baseline model, although pointing us in a certain direction, is not really all that useful in itself. To add to it, I have a simple structural variable like time, in this case month, and the variables describing personal traits, political traits and positions. Specifically, age, gender, education, seniority, geography, the party array of dummies⁹, and the array of position dummies.

$$\text{Expenses} = \beta_0 + \beta_1 \text{Last period} + \gamma \text{ control variables} + \varepsilon$$

$$\text{Expenses} = \beta_0 + \beta_1 \text{Lame duck} + \gamma \text{ control variables} + \varepsilon$$

The adding of these variables removes a time-effect and the effects of the individual traits from the last period and lame duck variables. In my equations this small operation has had quite an effect though. As we see from models 2 and 4 in table 4.3, not only do the last period and lame duck effects severely diminish, but the they both also change direction. So what we see from the coefficients, is that controlling for other effects, both the last months and it seems, the last period, of a representative's career, he has less expenses. The last period effect goes against the theory.

There can be many reasons for this. Campaigning finances may come from other sources than from Stortinget, travelling can be a major effect that I simply do

⁷ $\alpha = 0.05$

⁸ $\alpha = 0.01$

⁹not including the Labour Party as the baseline dummy

not have in my dataset, or the last period effect could be that if they do not care, they do not spend money either.

As predicted in the correlations, there is a positive significant¹⁰ effect on expenses over time.

After expanding the model, I find interesting effects. For instance, the effect of gender on expenses is small, but statistically significant.¹¹ Men seem to have higher expenses than women. Representatives from the Christian Democrats (KrF) seem to have higher expenses than the other parties. Representatives from the Liberal Party (Venstre), however, seem to be using the least money.

Being a committee chair increases expenses, which can be attributed to having somewhat higher salaries, and having been longer in Stortinget seems to have a negative effect on expenses.

These models seem quite good, and account for about 50% of the variation in the expenses, a significant increase from the baseline models.

4.2.2 ICT-costs

To see if there are effects lost in the total expenses. I look into the ICT-costs separately. Although this category is relatively small, they represent a much greater part of the variation than for the general wages.

The ICT-costs, mainly covering telephony and other communication expenses is an expense item to a large degree controlled by the representatives themselves. Also, it was the one category highlighted by Besley & Larcinese (2005) as one with last period effects. It may be interesting to see if there are such effects here.

When studying the regression coefficients for models 5 and 6 in table 4.3, there seems to be only a very small, not statistically significant, negative effect on the ICT-costs from the last period. It seems the ICT-costs decrease in the last period generally, but not significantly different from zero. In the lame duck period, the trend is small and positive, but not significantly different from zero here either.

Considering these models only explain about 4% of the variation in the costs, these numbers give a pointer towards certain trends, but do not explain very much. Unfortunately, a simple t-test reveals that neither the last period nor lame duck

¹⁰ $\alpha = 0.01$

¹¹ $\alpha = 0.01$

coefficients are statistically significant, meaning that although the trends may be pulling in different directions. I cannot say with any real certainty that the effect is different from zero.

What seems to be of great importance in the ICT-expenses, are the positions in the committees or in parliament. Committee chairs and secretaries tend to use more, while being president or vice-president of Stortinget has a clear and statistically significant negative effect of more than 400 NOK.

Quite surprisingly there is a clear positive effect¹² from gender. Men tend to use considerably more than women on ICT, fulfilling the stereotype of the tech-friendly man, or killing the stereotype of the chattering woman.

The stereotype of the technology savvy youngster also seems not to be relevant, as there is a statistically significant negative effect on the ICT-costs from age. Representatives from close to Oslo tend to use more than those from far away from Oslo.

The higher educated tend to use slightly less, and there is no significant effect from seniority.

4.2.3 Attendance

The next interesting dependent variable is work. Here I control the effect described in the US by Bender & Lott (1996) for non-idealistic politicians, and in the UK by Besley & Larcinese (2005) shirking by working less. This opposed to shirking in the wide sense, including skewing of stands. I cannot, in my dataset, control for skewing of stands, I can however, run regressions on their workload.

The model

As the dependent variable, I am using the percentage of meetings attended. Simply dividing the number of meetings attended by the total numbers of meetings in a committee gives us the number of meetings attended. As mentioned earlier, I would ideally have number of minutes as the variable, but it was simply not available. Number of cases per meeting could also have been acceptable, but since there was mostly no way to know how long each case was discussed it could have created even greater differences where none were, than just using the meetings, and was

¹²Statistically significant $\alpha = 0.01$

Table 4.4: Regression estimation table 2

	Model 7	Model 8	Model 9	Model 10
Dependent	Attendance	Attendance	$\frac{\text{Work}}{\text{NOK}}$ 10000	$\frac{\text{Work}}{\text{NOK}}$ 10000
Quit Variable	Last Period	Lame Duck	Last period	Lame Duck
(Constant)	0.9 (0.000)	0.871 (0.000)	90.518 (0.000)	90.371 (0.000)
Quit variable	-0.097 (0.008)	-0.098 (0.475)	0.025 (0.113)	-0.006 (0.883)
Month (Time)			-4.53E-04 (0.000)	-4.52E-04 (0.000)
Period	-0.034 (0.000)	-0.037 (0.000)		
Meetings			0.168 (0.000)	0.168 (0.000)
Expenses	-2.39E-06 (0.000)	-1.80E-06 (0.000)		
Expenses*Quit	1.36E-06 (0.046)	6.98E-07 (0.759)		
Age	1.62E-05 (0.000)	1.46E-05 (0.000)	2.93E-06 (0.701)	6.64E-06 (0.367)
Gender	-0.016 (0.002)	-0.012 (0.018)	-0.057 (0.000)	-0.052 (0.000)
Geography	-0.018 (0.025)	-0.02 (0.015)	-0.074 (0.000)	-0.073 (0.000)
Education	-0.011 (0.068)	-0.01 (0.095)	0.044 (0.004)	0.040 (0.006)
Seniority	-0.014 (0.000)	-0.014 (0.000)	-0.008 (0.203)	-0.007 (0.255)
FrP	0.031 (0.000)	0.027 (0.001)	0.004 (0.853)	0.005 (0.806)
H	0.068 (0.000)	0.058 (0.000)	0.046 (0.050)	0.045 (0.046)
KrF	0.066 (0.000)	0.058 (0.000)	0.028 (0.324)	0.028 (0.311)
V	0.105 (0.000)	0.072 (0.002)	0.088 (0.157)	0.102 (0.089)
SP	0.088 (0.000)	0.078 (0.000)	0.021 (0.484)	0.026 (0.362)
SV	0.033 (0.000)	0.034 (0.000)	-0.013 (0.593)	-0.009 (0.726)

Table 4.5: Regression estimation table 2 cont.

	Model 7	Model 8	Model 9	Model 10
Dependent	Attendance	Attendance	Work NOK 10000	Work NOK 10000
Quit Variable	Last Period	Lame Duck	Last period	Lame Duck
Committee chair	0.076 (0.000)	0.084 (0.000)	0.04 (0.109)	0.035 (0.149)
Com. 2nd chair	0.041 (0.000)	0.045 (0.000)	0.036 (0.206)	0.031 (0.259)
Com. secretary	0.034 (0.000)	0.025 (0.006)	0.018 (0.484)	0.001 (0.970)
Pres. or VP	-0.079 (0.001)	-0.095 (0.000)	-0.088 (0.163)	-0.076 (0.219)
Party Leader	-0.243 (0.000)	-0.23 (0.000)		
High status low pay			-0.205 (0.000)	-0.214 (0.000)
Governing party	-0.024 (0.007)	-0.019 (0.034)	-0.039 (0.095)	-0.034 (0.129)
Energy and the environment	-0.058 (0.000)	-0.059 (0.000)		
Finance	0.092 (0.000)	0.098 (0.000)		
Family, Cultural and Administration Affairs	0.021 (0.090)	0.024 (0.041)		
Defense	0.072 (0.000)	0.069 (0.000)		
Justice	-0.019 (0.139)	-0.019 (0.138)		
Scrutiny and Constitutional Affairs	0.034 (0.013)	0.028 (0.035)		
Education, Research and Church Affairs	0.211 (0.000)	0.211 (0.000)		
Business and Industry	0.002 (0.855)	0.002 (0.831)		
Transport and Communications	0.016 (0.171)	0.02 (0.073)		
Labour and Social Affairs	0.051 (0.000)	0.054 (0.000)		
Foreign Affairs	-0.109 (0.000)	-0.11 (0.000)		
R Square	0.15	0.15	0.406	0.412
Adj. R Square	0.147	0.148	0.405	0.410
N	99655	9886	9681	9913

thus decided against.

The definition of attendance is quite simply not present. Hence, if a representative was in the committee protocol marked as absent, or not marked as present, he is not in attendance. Partial attendance counts as attended. It is very hard to know the accuracy of each protocol, but the attendance record at least seemed to be of high quality. As a non-disclosure agreement is signed, I shall not discuss any particulars of the protocols further.

I can however say that, these data are very good in the sense that they do capture an important part of the workload of a representative. As mentioned earlier, Stortinget has been described as having working-horse committees which do most of the work on legislation and budget matters. Also, the data does have fewer accuracy problems than much of the expense data. Especially the travel data.

In addition, the american studies have focused on the work, not the spending, as shirking. For a comparison of last period effects across systems, this variable is very important.

The results

When it came to the expenses, there were very small effects, if any, from the last period and lame duck variables. In this model there are some interesting developments. Firstly, there is a clear, theoretically supported, and statistically significant last period effect on attendance. The last period variable accounts for about 9.7 percentage points less attendance in the committee meetings. The lame duck has about the same coefficient, but fails on the t-test, it is not statistically significant.

Secondly, the expanded expense models¹³ explained about 50% of the variation in the expenses. This one only accounts for about 15% of the variation in attendance. Also, the residuals are skewed. Both of these are signs that there are important, systematic variables not in my model that may explain variation in attendance.

Thirdly, compared with the coefficients in the analysis of the total expenses, I see some interesting trends. When men had higher expenses than women, it also seems women have better attendance than men. In addition, representatives who live far from Oslo, who have higher expenses as part of the per diem system, have

¹³Models 2 and 4 in table 4.3

slightly lower attendance. All observations are within statistical significance.

The last interesting observation is that committee leaders, who are paid more, seem to have a slightly higher attendance of about 9 percentage points, while the president or VP of Stortinget have slightly lower attendance.

There could be some sort of conscience effect in the attendance, meaning that if a representative has higher expenses, maybe he would feel obligated to go to the meetings. By adding the expenses to the array of independent variables, I can control for just such an effect. It seems that this effect is in fact negative, meaning that the higher your expenses, the less you go to the meetings.

Also, I controlled for the expense effect for those in the last period and lame duck period respectively. The effects were even smaller, but positive. In the last period the expense effect turned, but halved, and in the lame duck completely disappeared, not reaching statistical significance.

4.2.4 Work per NOK

First I looked at the expenses per month per representative, then I looked at the work effort per month per representative. Now I am going to combine them.

The model

The model is similar to the other models I have used in my analysis. In order to handle representatives with zero attendance in a single month, I use $\frac{\text{Attendance}}{\text{Expenses}}$ or the percent attendance divided by the total expenses to find the number of units of work per NOK. For purely practical reasons, the attendance being between zero and one and costs being in the 40000+ range, I multiply the variable by 10000

This model has the ability to uncover shirking, even if the shirkers try to hide. A politician going to fewer meetings and spending more will receive as low scores on the dependent variable as those going to almost no meetings, but keeping the expenses at the same level.

One would expect, according to the theory, to have a negative coefficient on the lame duck and last period variables. In the last period, as shirking increases, the number of work units per NOK decreases.

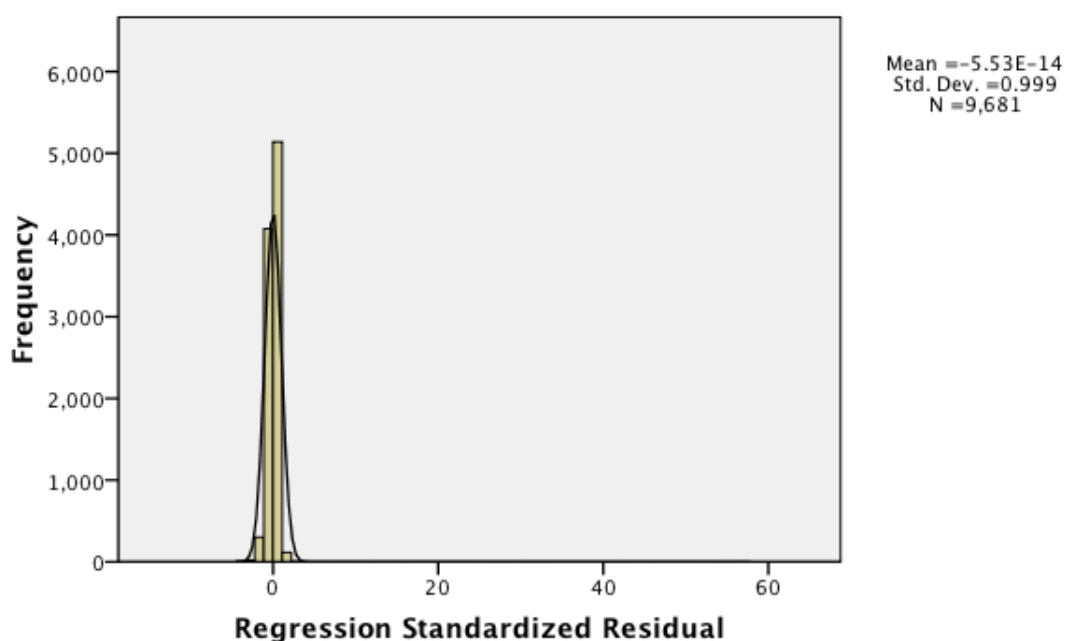


Figure 4.1: Residual histogram for work per NOK

The results

The first observation I make is that, similar to the results of Besley & Larcinese (2005), there seems to be no statistical significant last period effect. There is a slight positive direction for the last period coefficient, and an even slighter negative effect for the lame duck coefficient, but a simple t-test shows that the last period is quite close to, but the lame duck is far from statistical significant.

It is interesting that the last period variable is small and positive, thus showing that last period shirking does not seem to be detected in this dataset.

What does seem to matter more is the new position variable. Having a high status job, that is not rewarded extra by Stortinget seems to statistically significantly affect your work per NOK negatively. Interestingly, the opposition seems to work more per NOK than the parties in position. It seems logical that the opposition has to work harder to have their policies come to life, in addition to having to perform costly controls upon the governing parties in charge the ministries.

As I showed earlier, men tend to work less and spend more than women, and thus gender affects work per NOK negatively. The same goes for living in Oslo. It tends to lead to less work per NOK. Education affects work per NOK positively and neither age nor seniority seems to be relevant.

When evaluating the models, I have mainly focused on the the R^2 statistic. The

other popular measure of model evaluation is normality of the residuals. As is clear see in figure 4.1, the residuals quite closely follow the normality parameters, but with a positive kurtosis value. Also, the R^2 statistics are fairly high at about 0.4, in other words, the models account for about 40% of the variation in the dependent variable, work per NOK, respectively.

4.3 Do the models hold up?

So far, as the models have been presented, the evaluation criteria for statistically relevant models have varied. Starting out in a steep increase, for some models, the residuals fit the normal distribution less and the R^2 statistic has become lower, but in the final model, the evaluation criteria have been strengthened.

There is little doubt that these models can be improved significantly, they are after all only models. But, as far as the available data and limited scope of this project go, it is certainly not bad.

In comparison to the model presented by Besley & Larcinese (2005), there are some differences in variables, but most of them are simply due to differences in political systems or availability of data.

Chapter 5

Findings and conclusion

So, what have I actually found out? Throughout this paper, I have studied the last period effects on spending and work patterns in Stortinget, trying to uncover shirking.

5.1 Are they shirking?

Yes, I do find traces of shirking in the results. Assuming that the threat of re-election, or at least re-nomination is a disciplining factor, and that shirking mostly does not happen in any period before the last, there seems to be some shirking in the last one.

The politicians seem to spend less money in their last period, with a steep decline in the lame duck period. I did not find the patterns described by Besley & Larcinese (2005), with ICT-costs increasing, even though these expenses are likely to be the ones most manipulatable by individual representatives. I found no significant results at all in the ICT-costs related to either the last period or the lame duck.

However, attendance is down in the last period, meaning that any shirking found, is representatives not going to committee meetings. Although on average, the last period representative seems to miss only one meeting per two months more than the other representatives, it is a statistically significant effect.

Together with the fact that there is a significant effect from expenses for the last period representatives, could mean there is a question to be asked. Do the representatives stop caring and spend less because the expenses were work related,

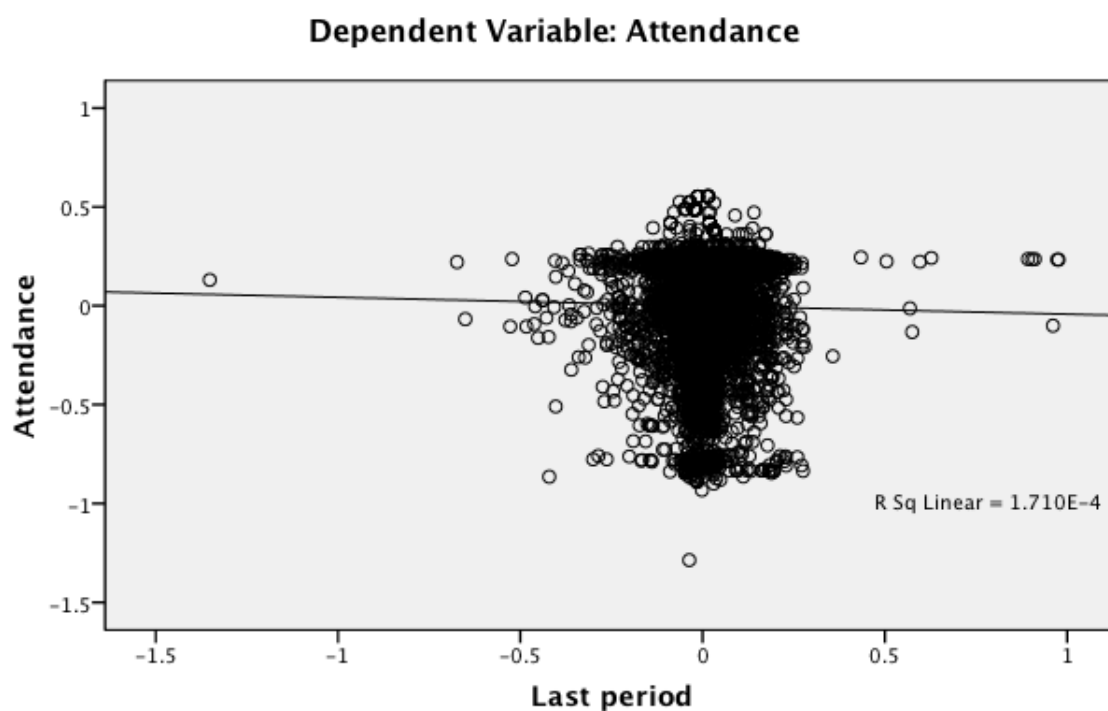


Figure 5.1: Partial regression plot

or do they have a conscience issue and spend less because they work less?

Interestingly, since the last period representatives also seem to spend less money than the rest, for work per NOK, there is no significant pattern. If anything, they work *more* per NOK in the last period.

The most prominent factor in lowering work per NOK, is unsurprisingly having a high status position like party leader, that is not rewarded with higher pay in Stortinget. It seems natural that they have duties outside Stortinget to attend to, without risking punishment by the party or electorate.

The second biggest factor in how much the representatives work per NOK, is how many meetings each committee has in total, meaning that choice of committee may account for a lot of the work load. There are two main factors that may lead to less work in a committee setting, number of meetings and attendance culture. Being in a committee with few meetings is a simple way of working less, but as reflected in the estimated coefficients for the committees on attendance, choosing the foreign affairs committee¹ is choosing a committee where attendance is low. By showing a culture for low attendance in the committee, they create an expectation of low work load. On the other hand, choosing the church, education and research committee means choosing one where attendance is high. These differences in culture between

¹Utenrikskomiteen

committees could be interesting to expand on.

5.2 Comparison

In comparison to the study done by Besley & Larcinese (2005), I have found more along the lines of the American studies than the British one. They do not consume more, but uses their time differently, producing less constituency services. Giving the interesting result of same amount per NOK, just less of both.

Since the pattern seems prevalent throughout the last period, and not just in the lame duck period, it resembles the problems adressed by Lott (1987) in the US House of representatives, that the election process lines up the politicians ideologically with the electorate, they just vote less in the last period.

As this is the first study in a proportional representation system, it will be interesting to see whether other similar projects on similar systems experience the same signs I do, or if the effects I find can be explained by a widening of this study.

5.3 How do we minimise shirking?

Following the logic of the US house of representatives, according to Tien (2001), there could be merits in having shorter terms in Stortinget. Shorter terms would necessarily lead to shorter last periods, but as Zupan (1990) finds, there is significantly more shirking in the last period for two year terms.

Another way of minimising shirking in the last period, is to follow the logic of Helland & Sørensen (2008) and have the parties take control by offering positions to non-shirking politicians. It may be a good and easy way for parties to control their representatives. It may, however, be difficult for parties not prone to government position to credibly offer such positions.

The last way, may be the least costly in a small and transparent society as Norway. Using the logic of 'sunlight is the best disinfectant,' it may be a solution to publish both the personal accounts, including travel and ICT-costs, and the attendance records for both committee and plenary sessions. A more transparent system could lead to less shirking through the brand name effect. Although it does not seem to do so in the US (Lott 1990).

The real question becomes if it is worth it. As I have shown, yes there are

traces of last period shirking, but do the people, or the non-retiring politicians view it as a problem? If terms are shorter there will be much more campaigning, and a government may not have the time to implement policies before new ones are decided. If every public posting was bait for retiring politicians, one might find that unqualified leaders are set in place simply because they did a good job in Stortinget. And finally, if the accounts or attendance records are published, one might find that the media focus on attendance or expenses will prevent politicians from doing their job properly. It is simply a question of weighing the pros and cons to find a balanced solution, and not throw the baby out with the bathwater.

5.4 Conclusion

Shirking can exist in many different forms, and I have studied one of those. In the introduction I set the goal of uncover hidden patterns in the work and expenses of representatives in Stortinget. In this, I have succeeded. I have shown that in Stortinget there are traces of on the job consumption of leisure, but that those traces are very small, and followed by a decrease in spending. It is very interesting to see that the shirking pattern resembles the American pattern more than the British one.

As this is the first study of its kind in Norway, I hope many more will follow. There are certainly many aspects which are yet to be uncovered.

In addition the purely scientific value of this study, I hope this study can lead to more openness around the representatives and their work and spending habits, in addition to the changes which have happened since the period this project studies.

5.4.1 Future research

Any future research on this field in Norway should try to incorporate the plenary sessions into their dataset to see if there is a pattern there as well. Also, it would be interesting to see an ideology variable, to see if the ideology changes in the last period, or even endogenising the committee choice variable would be a very good extension of this research. Finally, doing this research using panel data analysis, in order to uncover individual effects, would both be intriguing and useful.

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