

When Women Run Again

Re-Candidacy Rates in the Norwegian Parliament

1921 - 2021

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Abstract

Research on gendered patterns of political representation has grown drastically over the last couple of decades. At the same time, the existing research and literature on this field has primarily focused on the numbers of male and female MPs and the barriers to run for election (Schwindt-Bayer 2005; Norris 2006). However, ensuring that women are represented on equal footing with men requires more than just their presence in parliaments. Some studies indicate that gendered dynamics of political institutions might make women leave politics earlier and at higher rates than men. If women MPs have higher turnover rates than their men colleagues, they will have smaller political influence and power. This thesis therefore aims to empirically investigate whether there are indeed gendered differences in politicians' choice to run again as electoral candidates in order to fill a research gap on female representation.

By investigating the research in the field of political careers and re-candidacy, and by building a theoretical framework based on Stein Rokkan's threshold theory, I develop three conditional hypotheses about gender differences in re-candidacy rates. Utilizing logistical regression models, the master's thesis provides evidence that re-candidacy varies between genders. I find that there is a negative effect of being a female candidate on the probability of re-running. The negative effect of being female stays significant at the 1% significance level even when controlling for time trends, incumbency, list ranking and with including fixed effects on district and political party.

Still, findings also show that the gender differences in the probability of re-running decrease over time and has now, towards the beginning of the second decade of the 2000s, become insignificant. Furthermore, the observed gender differences are mostly driven by unsuccessful candidates. Unsuccessful meaning candidates that loose elections. In this pool, unsuccessful men are significantly more likely than unsuccessful women to re-run for election. The gender differences between male and female candidates disappear when comparing incumbents' probability to run again.

Forord

For fem år siden tok jeg valget om å studere Sammenlignende Politikk ved Universitetet i Bergen. De to siste årene har helt klart vært de mest krevende, men allikevel de fineste årene av min studietid. Sistnevnte på bakgrunn av den fine gjengen på Sofie Lindstrøms hus. Så takk for alle de sene kveldene på Sofie, de morsomme (og mindre morsomme) pensum-memesene, utallige middager på spesial, nerdete samtaler og alt inni mellom.

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Eller ... Kanskje ikke?

Det får briste, eller bære.

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Chapter 1: Introduction

“The idea of political representation is at the heart of democratic political systems. (...) Differences over its meaning are substantive and suggest several competing ways of applying the term” (Norris and Lovenduski 1993, 373).

Gender and Politics research has become an important sub-field in social sciences over the last couple of decades. At the same time, the existing research on this field has primarily focused on explaining variation in the shares of male and female members of Parliament (MPs) and the barriers for women to decide to run for election (Schwindt-Bayer and Mishler 2005; Norris 2006). Moreover, the literature focuses on the causal relationship between the shares of elected women and turnover rates rather than the gendered composition of those who can preserve their seats in parliaments (Arceneaux 2001). Some studies suggest that gendered dynamics of political institutions make it more difficult for women to pursue their political careers in the same way then men do. For example, women tend to be subject to higher rates of political violence (Håkansson 2021), and the difficulty to reconcile a political role with care responsibilities may make women’s decisions for this career path particularly difficult. However, if women leave politics earlier and at higher rates than men, they will, on average, have smaller political influence and power.

While some studies on re-election rates exist, the focus is almost exclusively on measuring incumbency advantages, and few consider gender differences (Wardt et al. 2020). An emerging strand of research has started to investigate politics as a career, and its gendered shape (Goddard 2021; Taflaga and Kerby 2020). One crucial question is whether women politicians are able – and willing - to build a consistent political career in the same way as their male peers. One indicator for this is politicians’ decision to re-run for election.

The objective of this master’s thesis is to add to the emerging research field on gender and political careers by investigating gender variations in re-candidacy in the Norwegian parliamentary elections between 1921 and 2021.

The Norwegian parliament has been experiencing an increased share of female MPs in recent decades; reaching 40% of women parliamentarians ahead of most liberal democracies in Western Europe. Countries where the descriptive representation of women has (almost) reached parity, like the Scandinavian states, are ideal settings to explore under what conditions women politicians can substantially influence agenda setting and policy making.

The goal of this thesis is consequently to explore whether there are systematic gender differences between Norwegian politicians' probability to re-run for election. I seek to contribute to the growing research into political careers and re-candidacy by adding and emphasizing the correlation between gender and re-running rates in my analysis. This focus is motivated by a growing body of literature that recognizes the importance of re-candidacy and the various factors affecting political power (e.g., Marino and Diodati 2017; Cirone, Cox, and Fiva 2021).

The thesis' focus is motivated by the idea that gendered patterns of political careers, rather than the sheer number of women represented, will have consequences for democratic legitimacy and effective governance (Arnesen and Peters 2018). Being a more experienced politician may also lead to more powerful positions and thus being able to more effectively influence political decision making (Allen 2021; Goddard 2021).

Recent studies shows that women's political careers tend to end quicker than men's (Wängnerud 2015). Focusing on gender gaps in re-election, most studies find that, today, women incumbents have the same chances of being re-elected as men (Wilson, Ringe, and van Thomme 2016; Meserve, Pemstein, and Bernhard 2020). At the same time, some studies however hint to women being less willing to pay the cost of political activity. Women politicians are more often subject to harassment and political violence (Håkansson 2021) and they are portrayed differently by the media (Van der Pas and Aaldering 2020). Also, parties may be less willing to re-nominate female incumbents due to gender-based discrimination and male power networks (Bjarnegård 2013). Therefore, this thesis focuses on assessing whether gender matters for politicians' probability to re-run for election and, if so, how it does.

Consequently, the research question reads out as follows:

Do politicians' re-candidacy rates vary by gender?

And, if they do, which factors condition the size of gender gaps in re-candidacy over time?

1.1 Theory

The thesis looks at a period of a 100 years of parliamentary elections in Norway and, therefore, many significant changes in Norwegian parliamentary history. Increases in women's employment and stepwise progresses in societal gender equality are hypothesized to importantly impact on the conditions under which women could and would be politically active. In the thesis' theory chapter, I draw on Stein Rokkan's (1970) threshold model and adapted it to explain women's entry into the parliament and their access to political power with inspiration from Anne-Hilde Nagel (1995) and Nina C Raaum (1995).

1.2 Empirical strategy

The thesis focuses on the case of Norway to test hypotheses about the factors leading to gender inequality in re-candidacy rates. Norway is one of the most gender-equal countries in the world, it has had a female prime minister for a considerable period, and Norwegian parties were among the first to establish norms about gender-equal candidate nomination procedures. Norway is thus a case where we would least expect systematic gender differences in re-candidacy rates. If the hypothesis is proven in Norway, it may be reasonable to claim that this is also the case in several other Western democracies.

Examining re-running rather than re-winning, or just winning, distinguishes this study from similar studies. Others have focused on re-election, where few or none have examined the gender difference in re-running. To my knowledge, this is the only study (of what has been published) that examines these conditions in the Norwegian parliament.

My analyses build on a dataset with 42,493 observations of candidates running for Norwegian parliamentary elections between 1921 and 2021. The data for this study were collected in the period between November 2021 and February 2022. During this period, a panel data set was compiled that has observations clustered by year, district, party, and candidate. The basis for the panel data is Fiva and Smith's (2019) dataset created in context with other studies. I later added variables such as: re-running and re-winning as well as several other control variables¹. The data is conditional, which in this context means that all clusters follow individual candidates. Candidates can be repeatedly observed over time and are nested within parties and districts. The observations take the form of candidate-selection and are not independent of each other.

The dependent variable – Re-run – is a dichotomous variable measured as 1 (0) if the candidate has (not) run in the preceding election. I use multivariate logistic regression models to answer the research questions.

I focus the analysis on three explanatory variables the main of which is, as the research question suggests, gender. In addition, I calculate interaction effects of gender and the variables “year” and “incumbency” in order to estimate whether gender effects are conditional on time trends and/or candidates’ incumbency status. This is motivated by the idea that both individuals’ political status as well as progressing societal gender equality may condition the size of gender gaps in re-candidacy rates. Furthermore, I control for the rank candidates are placed on and for systematic differences in re-candidacy rates between districts and parties by including fixed effects for the district and the party variables.

1.3 Findings

I find that there is a negative effect of being a female candidate on the probability of re-running. The negative effect of being female stays significant at the 1% significance level even when controlling for time trends, incumbency, list ranking and with fixed effects on district and political party. However, findings also show that the gender differences in the probability of

¹ See table 1 in Chapter 5 for a complete overview

re-running decrease over time and has now, towards the beginning of the second decade of the 2000s, become insignificant. Furthermore, the observed gender differences are mostly driven by unsuccessful candidates. Unsuccessful meaning candidates that loose elections. In this pool, unsuccessful men are significantly more likely than unsuccessful women to re-run for election. The gender differences between male and female candidates disappear when comparing incumbents' (candidates that have won elections) probability to run again.

1.4 Structure of the thesis

Chapter 2 is based on previous research on political careers and re-candidacy that is considered relevant to the thesis' research questions. An attempt has been made to show the range of the research, both in terms of findings and assumptions, and empirical cases. Several of the articles are based on data that does not originate from countries similar to Norway.

My theoretical framework and hypotheses are presented in **Chapter 3**. First, the concept of “re-candidacy” is explained, a third chapter is based on the literary review and explains why we can assume gender differences in re-running rates over time. The time trend is explained using Stein Rokkan's threshold theory. Further, I utilized scholarly work to formulate three conditional hypotheses that is later tested using logistic regression models.

Chapter 4 delivers an overview of Norwegian parliamentary history from 1921-2021. The chapter begins with the Norwegian state's electoral systems, the role of parties in elections, and general historical development. With a particular emphasis on women's entry into politics. However, women's entry into politics is not the highest focus as the theory chapter explains the macro-historical developments of women in parliament. The master's thesis does not have a particular focus on recruitment. Nevertheless, "supply" and "demand" in recruitment are included in **Chapter 4** to form a background. It is considered essential to understand how parties choose candidates and what assessments are made in the parties to comprehend the scope of the research question beyond incumbents.

Chapter 5 explain and justify the methods used to test the hypotheses, describes the data collection process and present the variables used in the analysis. **Chapter 5** also deals with justification for running a logistic regression analysis, why I use this method, and how I carried it out in R. The analysis, **Chapter 6**, is divided into two parts and carried out an explorative analysis plotted by gender. The second part presented the regression results, and figures for substantial interpretation of the results.

In **Chapter 7**, I have discussed the analysis results in the light of the hypotheses with a focus on the theoretical framework and previous research. The limitation of the analysis is also discussed in the seventh chapter of the master's thesis. Finally, a conclusion takes place. **Chapter 8** answered the research question, explained the contribution, and presented proposals for further research.

Chapter 2: Literature Review on Political Careers and Re-Candidacy

This chapter contains a literary review on gender and political careers. I specifically review previous work on re-candidacy and potential explanatory factors for different re-running rates of male and female politicians.

The literature review aims to form a basis for the theoretical caption, which further presents the hypotheses. There is little research on re-candidacy as a concept. Nevertheless, it is possible to find general literature on involuntary exit, gender differences in political careers, ambitions, and challenges for politicians. The forthcoming section, therefore, contains a wealth of literature from various branches of literature. Empirically, it spreads across all parts of the world. In other words, there is little focus on Norway and Scandinavia due to a lack of literature.

What do we know so far? A significantly large share of research carried out on political careers and female politicians comes from the American perspective. Both in terms of cases, but also theoretical arguments based on a reality that is not suitable to compare with the Norwegian context. Finding research in this field is therefore a challenge. The presence of women, and other minorities, in political institutions, has been an important part of the research agenda for many decades. This research has mainly focused on the factors affecting women's *entry* into politics.

Some researchers point to stereotypes and others to electoral systems and political parties. At the same time, others have focused on different measures to include women, most notably, gender quota regulations (Dahlerup 2007).

The thesis does not focus on gender quotas as such, but one aspect with the introduction of gender quotas is however interesting: there are major differences between the political parties. Norway has a closed list system where the party elite determines the gender distribution, the order and the "structure of the lists". Much of the power is consequently with the party elite.

2.1 Political Careers

When writing about political careers and career politicians, it is crucial to consider who enters politics and why. A newly published article in the *Annual Review of Political Science* by Saad Gulzar with the name “*Who Enters Politics and Why?*” (2021) asks this exact question. He expresses that members of parliament are one of the most significant agents of change in modern democracies. However, Gulzar points out that even though they are extremely important, there has been close to no empirical studies of who decides to enter politics, and why.

Members of parliament that belong in “out-groups” can be women, lower educated, or minorities in general. Suppose this group suffers from constantly being newly elected. In that case, one could argue that they will struggle more than the “in-group” (higher educated, men, or visible majorities) to receive higher positions and obtain re-candidacy (Wardt et al. 2020).

Based on this argument, the out-group will also suffer more than the in-group in building a political career. Findings regarding seniority systems in Norway and studies on young delegates can, and probably does, mean that younger representatives or newcomers will struggle more to be re-elected than those who are not. Newcomers in parliament face a set of challenges after being elected to office (Puwar 2004; Barnes 2014). Research suggests that “(...) younger men and women may have more energy to enter politics (...)” (Fox and Lawless 2005, 647). Fox and Lawless also emphasize that young delegates are more likely than older delegates to express interest in a political career and thereby re-run or even run for election (Fox and Lawless 2005, 647).

Bruno Marino and Nicola Martocchia Diodati (2017) question whether if certain groups hold a seat in parliament for fewer periods than others, it can have negative consequences for those defined as out-groups.

Winning an election and becoming an MP is one thing; however, being re-elected and building a career through securing your seat over more extended periods is another. Suppose a politician is, as Bruno Marino and Nicola Martocchia Diodati claim, masters of their fate. Politicians will have a self-interest in building relations, obtaining power, and building alliances to ensure policy changes and serve as critical actors on behalf of their group (Childs and Krook 2008).

A recent study by Fox and Lawless finds that women carry lower levels of political ambition compared to men. When studying possible political candidates, 56% of the men implied considering a political career, as compared to 41% of women in the same group (Fox and Lawless 2010, 321). This evidence is equivocal in terms of the impact of gender. Other research has found that gender have little to no effect on candidate ambition (Dolan and Shah 2020). This may indicate that it is not women's own choice not to run for re-election.

Cipullo (2021, 1) investigate the impact of voter support on the representation of women in the United States and Italy. He shows that women are less likely to win elections in the first place, and that the gender gap in the probability of being elected has a long-lasting effect on political career trajectories. His findings also suggest that one of the reasons that a limited number of women reach the top in politics is that they face more hurdles at the beginning of their political careers.

Saha and Weeks (2022, 779) ask if ambitious women are punished in politics and argue that "(...) women candidates who are perceived to be ambitious are more likely to face social backlash". The Fox and Lawless (2010) study analyze women candidates' internal ambition, and a candidate's personal choice to run for election and build a political career. Saha and Weeks (2022, 780) deals with the way that others view an candidates drive.

The effect of power-seeking intentions on backlash against women in political office has been examined in two experimental studies. Okimoto and Brescoll (2010) examine the stereotype-based social costs women may face as a result of entering politics. The perception that a candidate seeks power could lead to negative social consequences for female politicians but not for male politicians.

According to Saha and Weeks (2022, 785) mothers may be seen as more ambitious compared to fathers for adding responsibility to their schedule, and "choose" a public and political life. They point out that the observed difference between fathers and mothers may have to do with mothers generally becoming less political engaged as they have children.

They then build on R. Campbell and Childs (2014) and claim that the opposite could also be true. Campbell and Childs conducted a survey in 2013, which found that 28% of male MPs in

the UK are childless compared to 45% of female MPs. The result resonates that female MPs in top political positions are generally less likely to have children.

The event of having a child in Scandinavia constructs a long-run gender gap in wages of about 20 – 30 percent. Women tend to experience this decline in income, while men do not. Fiva and King (2022) use extensive administrative data from Norway and find that women to a larger extent than men drop out of politics after having their first child.

They also show evidence for other consequences of parenthood. Mainly that the long-term effects on political careers are different. Fiva and King (2022) use this evidence and propose that motherhood might explain why fewer women than men are represented at high levels of the political hierarchy in Norwegian local politics.

The evidence shows that women at the top of the political hierarchy in Norway have fewer children than men in the same position (Fiva and King 2022, 2). The main analysis where they investigate the long-term consequences of having a child document that “(...) the probability of winning a seat in the subsequent election falls almost twice as much for women compared to men in the same situation (with children). These effects remain strong and statistically significant several election periods into the future” (Fiva and King 2022, 2). They thereby display that “(...) parenthood can be a crucial barrier to the political careers of women, even if they are already inside the political sphere” (Fiva and King 2022, 29).

The usage of gender quotas influences the number of women, and the rank of women on the electoral lists. Traditionally, the leftist parties have been more open to the use of gender quotas, compared to the right-wing. This is also the case historically, left wing parties have been more inclusive of women both in terms policy and on electoral lists. Accordingly, political parties are the key gatekeepers in candidate selection (Murray 2010).

Kjaer and Krook (2019) examines the relationship between voter bias and elite bias in Danish municipal elections. The Danish elections municipal elections use open lists where the parties construct a list and citizens rearrange the list order when voting. They use data from local

elections in 2009 and find greater evidence for elite bias against women, compared to voter bias.

There has been a critical shift in the study of women's descriptive representation (the share of women), in other fields. One of them being studies on women in peace negotiations. Peacebuilding research has gone from "counting women" to "making women count" (Paffenholz 2018, 170).

Kroeber and Hüffelmann (2021) study gender inequality in ministerial selection processes in 27 European countries between 1990 and 2018 utilizing the European Representative Democracy Data Archive. They find positive results for female politicians in Norway. Even though women's total representation in political institutions in western democracies has increased over the last couple of decades, it still seems like building a career and gaining political capital is a struggle.

In the same article Kroeber and Hüffelmann (2021, 2) argue "(...) that female ministers have to serve longer in less prestigious executive positions before getting to the top." And "(...) gather exceptionally high levels of experience compared with their male colleagues." This may signal that the length of a political career is more crucial for a female politician, than for a male politician when seeking high political influence.

Corinna Kroeber and Joanna Hüffelmann analysis disclose that the Nordic countries have the highest number of women in prominent political positions. They argue that numerous of the female ministers is assigned to feminine portfolios, and thereby male ministers to masculine portfolios. Female portfolios being ministry of education, health, equality, culture, and male portfolios being ministry of finance, labor, agriculture and so on.

Beckwith (2015, 722) writes that women gain confidence for party leadership positions when the men in the party are not "sufficient" and formulates the following "Two conditions create an opening for a woman's rise to party leadership: (1) a scandal or major electoral failure that removes a male party leader and his leadership team (removal); and (2) the candidacy deferral of quality male leader candidates in conditions of uncertainty (deferral)." An empirical example

is the recent inauguration of Swedish Magdalena Andersson as Sweden's first female Prime Minister. She became prime minister after Stefan Löfven withdrew after a no-confidence motion against him as prime minister in the middle of the parliamentary term.

Also, she emphasizes that fewer women hold leadership positions and that women therefore have led their parties to fewer electoral defeats. The same goes for women that hold cabinet positions, fewer women will be caught in electoral or political crises. One of the major structural differences between men and women members of Parliament is their unbalanced representation in leadership positions and in cabinet positions.

Generally, women party elites are less powerful and prominent in government and are thereby less likely to be impacted by election losses or policy failures. Because of male MPs positions and numerical representation, male political elites are therefore more likely to be removed by crisis than their female counterparts (Beckwith 2015, 725).

O'Brien et al. (2015) provide an empirical analysis of female leader's effect on women's nomination to high-prestige portfolios and the proportion of women for ministerial posts. In doing so, they provide two competing hypotheses linking the two. Firstly, the shutting-the-door hypotheses that suggest that the presence of female leaders in nonleft governments result in the nomination of fewer women to high prestige portfolios. On the counterally, they present the letting-down-the-ladder hypotheses. This hypothesis implies that female prime ministers in left governments are associated with women's increased appointments.

Evidence is found that supports the shutting-the-door hypotheses. Furthermore, the female leaders in advanced parliamentary democracies sometimes shut the door behind them. The findings in based on 206 cabinets from 1980 to 2015. A female-led coalition party or a female prime minister is associated with fewer female ministers than exclusively male-led left governments. A male-dominated left-wing government is thus fruitful for women ministers. This may be related to the fact that voters on the left side of the road are often concerned with broad representation and that it is thus strategic for men to appoint female ministers. Female

prime ministers or coalition party leaders are no more likely to appoint women to high-prestige posts than their male-dominated counterparts (O'Brien et al. 2015, 712).

2.2 Re-candidacy

Suppose women's opportunity to preserve their seats in parliament is lower than men's. In that case, one could find the explanation by investigating "who they are", hence previous experience within the political sphere if the presumption that women's political careers end quicker than men's, the effect of holding office over more extended periods of time, being a minister could negatively affect women's opportunity to perceive re-candidacy and positively affect men's opportunity to perceive re-candidacy.

Mona Lena Krook and Diana O'Brien (2012) study variation in women's access to ministerial power. They construct a measure called the Gender Power Score, "which differentially weights cabinet positions based on women's numbers and the gender and prestige of the ministries to which they are assigned" (Krook and Brien 2012, 840) They find that political variables, such as political system, form of government and degree of legislative control, rather than social factors impact the gender parity in cabinets (Krook and O'Brien 2012, 843).

Perceived that men, at a general level, holds more political experience than women. These claims might suggest that the seniority system, as Cirone, Cox, and Fiva (2021, 234) define it, "(...) methods of selection that prioritize prior experience holding political office" are crucial for re-candidacy.

Additional research focuses on women's behavior in political institutions and how MPs fill their mandate (Vanlangenakker, Wauters, and Maddens 2013; Krook 2010). The research on representative and descriptive representation is, in other words, massive. Vanlangenakker, Wauters, and Maddens sums up these three strands of research in their article *Pushed toward the exit? How Female MPs leave parliament* (2013) by expressing: "(...) we know how women gain seats in parliament, the factors that facilitate their entry, and the circumstances that

stimulate or hinder their representational activities. However, we know little about the factors that lead them to vacate their seats” (Vanlangenakker, Wauters and Maddens 2013, 63).

Similarly, Mark Smerk (2022) plead that female politicians in the first place is less likely to become parliamentary candidates., and when they do probable to be given duties and assignments that are of “secondary” importance. The numerical representation is insufficient for succeeding in reaching gender equality in politics. A rich literature explains and investigate what one can categorize as the “sticky floor” or “glass ceiling” hypothesis stating that people from underrepresented groups may suffer more than the majority in career paths.

Contrarily, the “leaky pipeline” hypothesis led to believe that individuals from these underrepresented groups face more challenges than others in every stage of their career path (Nowacki 2022). The “sticky floor” and “leaky pipeline” hypothesis is formerly meant to describe women in STEM (Science, technology, engineering, and mathematics).

Tobias Nowacki, a PhD student from Stanford University, argues that these hypotheses can be utilized when studying the probability of re-election in political office. He states that the “concerns about unequal representation will persist” if the pipeline stay leaky. In this context, leaky pipelines point to women’s (lack of) political careers. The hypothesis points to, once elected, that female officeholders still are less likely to win re-election (Nowacki 2022, 1).

When studying the (in)voluntary exit of women from European parliaments, Vanlangenakker, Wauters, and Maddens (2013) found that when parties put women on the lists essentially because they are women, rather than their abilities or career progression, they were easily replaceable by other women. When reasoning the importance of studying what they call outflowing, they enhance (...) women’s ability to build expertise and a power base (Vanlangenakker, Wauters, and Maddens 2013).

They argue that building expertise and a powerbase is crucial for the functioning of women in parliament, and for securing women’s re-election. These findings support my assertion that the lack of re-candidacy amongst women might have consequences for democratic legitimacy and effective governance (Arnesen and Peters 2018).

Two Swedish scholars named Josefina Erikson and Cecilia Josefsson recently published an article titled “*The Parliament as a Gendered Workplace: How to Research Legislators’ (UN)Equal Opportunities to Represent*” (2022). They introduce a *gendered workplace approach* that can be utilized when studying the gendered nature of Parliaments. The framework consists of five dimensions. These are “(1) the organization of work, (2) tasks and assignments, (3) leadership, (4) infrastructure and (5) interaction between MPs” (Erikson and Josefsson 2020, 20).

These five dimensions are based on institutional constraints. They argue that such constraints are crucial for women and other minorities to be able to represent their political interests. To understand the extent of constraints, they use Dahlerup (2006) and add that “we must go beyond the substantive representation of women MPs, that is, women’s impact upon policy content and output” (Erikson and Josefsson 2022, 31). Furthermore, “Greater attention should instead be directed to the possibilities women MPs have to act as elected representatives on equal terms with their male colleagues” (Erikson and Josefsson 2022).

Various other studies indicate that parliaments can be observed as “gendered organizations”, meaning that their internal mechanisms are gendered (the five dimensions). In a previous article Erikson and Josefsson (2018) approach gender and political representation from a workplace angle. They base their study on a survey done in the Swedish parliament stating that female MPS experience higher levels of anxiety, are subject to more negative treatment and overall experience more pressure than their male counterparts (2018, 197).

Female MPs have held more than 40% of the seats in the Swedish parliament for more than two decades, but their study show that female legislators don’t have equal opportunities to carry out their parliamentary duties as elected officials. These factors strengthen the argument stating that staying in office is more of a scuffle for women, than men.

To date, several studies have investigated the correlation between experience and power in political institutions. One of these studies is carried out by Peter Allen in his article “*Experience, Knowledge, and Political Representation*” (2021). He finds evidence suggesting that

experienced politicians have more powerful positions and thus can influence political decision-making more effectively (Allen 2021).

MPs are masters of their fate and try to explain Members of Parliament (MPs) re-candidacy in the case of Italy in the period between 1987 and 2013. The dispute is that career trajectories of MPs are a long-standing research topic in political science and that scholars mainly have put their focus on the determinants of getting elected and not the deterrent for staying in political office over several terms and periods.

Marino and Diodati define re-candidacy as "(...) all of the MPs elected in a legislature, and not simply those who have been renominated by the same party in whose list they have been elected" (Marino and Diodati 2017, 1). Research on re-candidacy is generally marginal, and not many scholars have succeeded in establishing a framework for investigating MPs careers.

Marino and Diodati (2017) start from the assumption that MPs are masters of their fate and that politicians are actors who will try to get re-elected to reach a different set of goals. In other words, MPs are goal-seeking individuals with a personal interest in re-election and thus re-candidacy.

Marino and Diodati (2017) continue by claiming that MPs might obtain re-candidacy based on two factors. Explicitly by behaving a particular way when in office (i.e., supporting the party when in disagreement, sticking to one's party, or even switching political party). Alternatively, by taking advantage of previous political experience within the political sphere.

Up until now, some studies have revealed a correlation between women's position in politics and gender power balance in Norwegian municipalities. Janneke Van Der Ros, Vergard Johansen and Ingrid Guldvik (2010) conducted a study on continuing male dominance in local political leadership in Norwegian municipalities. The authors introduced a concept on gender power balance building on Stein Rokkan's theory on power and mobilization.

The theory presents four thresholds that must be overthrown for a complete political integration of new citizen groups, initially workers, in developing democracy in Western Europe and the United States. The authors state that several researchers have used this threshold model to

describe women's participation in parliamentary politics (Van der Ros, Johansen, and Guldvik 2010, 224; Nagel 1995).

By using historical work done by Anne-Hilde Nagel they present the Norwegian women's struggle from the 18th century until today, using the four phases of Rokkan. This historical review is important for the thesis and will be explained in more detail in the thesis' empirical chapter, Chapter 4 "The Norwegian Context".

Several other aspects in the article by Janneke Van Der Ros, Vegard Johansen and Ingrid Guldvik (2010) are noteworthy. Firstly, they make a statement on the transfer from representation to integration in the political system. In a gender-fair and pluralistic democracy, the demand for representation of diversity between and within groups must be politically recognized in two ways.

The first is the recognition of the status of group members as participants on equal terms in social life and as equal citizens. Group members (for example, people with disabilities) consist of both women and men, which may have internally contradictory and mutually divergent interests. This recognition is expressed in the representation of the women and men of the groups. *Secondly*, the recognition means that the women and men of the groups have equal value in being integrated into the political leadership (Van der Ros, Johansen, and Guldvik 2010, 227)

Another noteworthy element they highlight is the meaning of opportunity structures. They are looking for structural explanations for variations in women's access to local political leadership positions. Furthermore, they build on previous studies of national variations in democratization by taking as a starting point contextual factor. In the early 1960s, Rokkan and Valen commented on gender differences in access to political positions (Rokkan and Valen 1962).

They attributed that cultural conditions and traditional perceptions about women's position in society empirically vary by region and degree of urbanization (Van der Ros, Johansen, and Guldvik 2010, 229). In a more (post-) modern language, what these researchers found could be regional variations in institutionalized cultural value patterns around gender and leadership,

i.e., that men are the norm and are considered better suited as political leaders than women (Van Der Ros, Johansen and Guldvik 2010, 229).

As stated before, political parties are often referred to as the real “gatekeepers” to elected office (Norris and Lovenduski 1995). Parties differ in the proportions of women they send to parliament, the number they nominate and where they rank the women on the list (Caul 1999, 81). In a Norwegian context, this is particularly relevant since the state operates with a closed list system, meaning voters cannot change the pre-determined order on the election ballots.

The party elite have a very strong influence on which candidates are elected in closed list systems (Slegten and Heyndels 2021, 315). When individuals seek access to political positions in Norway, they must gain the trust of the political parties that carry out the electoral lists. Miki Caul says that “parties vary substantially in the proportion of women they send to parliament” (Caul 1999, 79).

Chiru and Popescu (2017) analyze the link between ranking on closed list in PR nomination and candidate characteristics in Romania. The study is motivated by research that generally considers closed lists to be beneficial for women MPs. Plentiful of the research on election results shows that voters have more bias than political parties when it comes to women’s placement on the ballots.

Romania stands out in this context, because even though they have closed lists, there are few female members of parliament. They thus problematize the supposed positive effect closed lists have on the proportionality of women and men in parliaments based on the assumed gender bias among Romanian parties (Chiru and Popescu 2017, 66).

By creating formal rules that require a certain percentage of female candidates, parties can increase the number of female candidates, and thus decrease gender bias among the candidate selectors. A mandatory percentage of women or a recommended percentage of women can be used as direct action by the political parties. In addition, it is a recognition that gender under-representation is a problem, and that gender quotas or goals demonstrate a willingness to act to rectify the situation for women (Caul 1999, 83).

In his article *Institutional Variables Affecting Female Representation in National Legislatures: The Case of Norway* (1993) Richard Matland finds evidence for a rapid and robust effect of the implementation of gender quotas by the Norwegian Labour party in 1983. The Labour party endorsed that at least 40% of the candidates should be female. It was merely a guideline for nominating conventions but had an enormous effect on the gender balance. In 1981, women made up around 33 percent of the delegation, compared to the 1989 delegation consisting of 51 percent female candidates (Matland 1993, 749).

In this way, the Labor Party became the starting point for implementing rules for representation. In the Nordic region, Norway is also where gender quotas are most widespread in the political parties, both in terms of quotas in the party organization and the parties' electoral lists (Bergqvist 1999). Today, only the Conservatives and the Progress Party, the largest Norwegian parties, have not adopted gender quotas.

Chapter 3: Theory and Hypotheses

Previous research, taken together, has established a basis to research and investigate women's probability of running for re-election. The literature utilized in this thesis has so far shown that there are significant differences between men and women in all stages of the political ladder. In summary, the following is consistent in the selected literature: a) difficulties when entering the political arena, b) the possibilities a MP has to act out their political interest, c) the importance of experience, d) regional differences and e) that women drop out of politics more than men.

The third chapter of this thesis builds on the literary review and lays out an explanation on why we can assume gender differences in re-running rates over time. I utilize scholarly work to formulate hypothesis that is later tested using a logistic regression analysis. To my knowledge, this thesis is the first scholarly work set up to investigate gendered patterns of re-running rates in the Norwegian parliament. I am specifically interested how gender gaps in re-candidacy have changed over time; and how the impact of other explanatory factors is subject to time trends.

The purpose of this chapter is also to present theoretical explanations of women's position in politics. Thus, it does not seek causal explanation, but to frame and explain a macro historical development through empirically describing the expansion of rights using Rokkan's thresholds theory.

Therefore, it is reasonable to assume that there are also gender differences in re-candidacy rates. Based on the scholarly work, the differences in re-candidacy may lead to differences in the ability to build a political career and, in its extension, affect policy.

It is not my goal with this thesis to investigate the effect of gender differences in re-candidacy when it comes to policy outputs but to prove that there are significant differences between men's and women's political careers. If proven in a gender-equal country such as Norway, it may be reasonable to claim that this is also the case in several other western democracies. To further explain and test these assumptions it is necessary to lay out some theoretical groundwork and conceptualize the meaning of re-candidacy for this thesis.

3.1 The concept of re-candidacy

To put it in a simple way, candidacy refers to the state of being a political candidate. Re-candidacy thereby mean being a candidate over more than one term. To “obtain” candidacy a candidate must run for election. Re-candidacy means that a *candidate re-run for election*. The dataset and this thesis in general follow each individual elected representative in a period of 100 years. Some researchers consider that there is re-candidacy when a candidate runs for election from the same party, where others define it as “(...) the fact that an MP runs again for a legislative office, regardless of the party list in which he/she runs” (Marino and Martocchia Diodati 2017). This thesis follows the latter.

One could argue that re-candidacy equals candidacy in assumed consequences for policy. Meaning that a candidates experience in parliament don’t disturb their ability to fill their mandate. This thesis opposes the latter argument and argue that re-candidacy *can determine a successful political career and thereby a candidate’s power and ability to fill their mandate as members of parliament*. To Furter explain and visualize the argument a figure has been made.

Each grey box picture one term in the Norwegian Storting. For each term the distribution of seats stays in a 50/50 balance between the two sexes. The male and female candidate won the first election, but the female MP did not re-run for election. Both the female and male candidate serve terms in parliament. Nevertheless, the female MPs are plural and thus symbolize *individual candidacies*, where the male candidate achieve five *re-candidacies*.

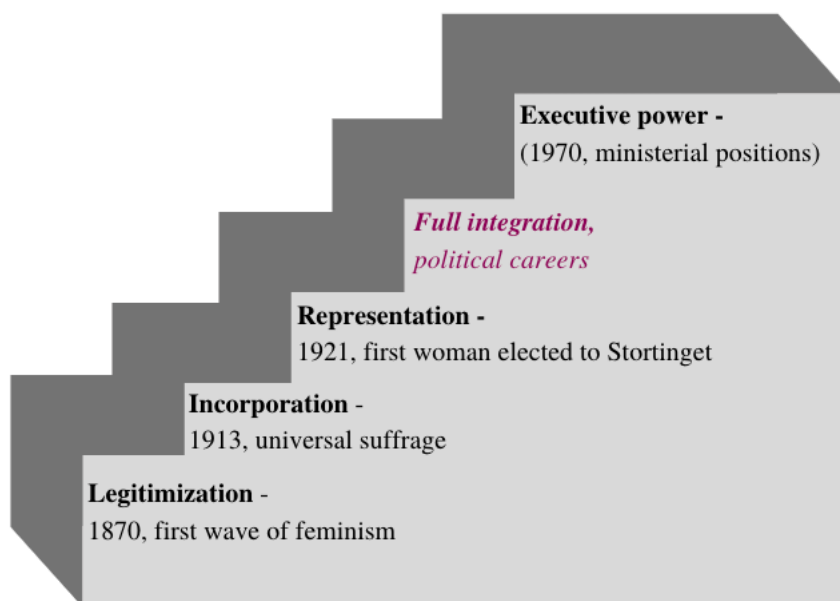
Figure 1: Candidacy in Parliament



3.2 The four thresholds: Female parliamentary representation

Rokkan claimed that a growing political movement must exceed four thresholds before becoming a full-fledged political participant in a democratic state. Through historical and sociological analyzes of the Nordic region, Rokkan (1970) has concluded that mobilizing groups must cross four institutional thresholds in the parliamentary system to be fully incorporated. The four thresholds for participation are legitimization, incorporation, representation, and executive power. Each threshold symbolizes an institutional barrier. Rokkan launched his model in 1970 to theoretically describe the inclusion of workers in European parliaments. The model contains four thresholds that describe phases from feebleness to power. The decisive threshold for Rokkan was executive power: when the workers were elected to government positions.

Figure 2: Rokkan's Four thresholds (extended version)



Note: The last threshold “executive power” emphasizes ministerial positions from 1970. This is based on Raaum's use of model. This master's thesis argues that executive power is more than the ministerial positions Norwegian female politicians received in the 1970s. Executive power also involves political careers and the ability and capacity to build political capital.

My main theoretical argument builds on Rokkan's four thresholds and tries to argue for a "fifth" threshold (full integration) in Rokkan's theory. If the assumption is proved to be correct, I suggest that there should be added an additional threshold to Rokkan's thresholds.

This assumption is based on the existing literature and my analysis, i.e., the perceived lack of re-running rates among women, and recent research indicating that women to a lesser extent than men build and have long political careers.

After Rokkan's model was adopted to describe women's representation in politics, others have also argued that four steps are insufficient. Work by Nina C Raaum (2001, 161) suggests that it may be more appropriate to say that women must cross five and not four thresholds. She argues that women, unlike men, must go through two stages of legitimation: one in advance of the right to vote before 1913 and one in advance of political representation and decision-making power before the 1970s. Women did not enter the political decision-making bodies until the new women's movement demanded representation on the political agenda in the latter half of the 1960s.

Based on Rokkan's model, one can describe the gender differences in a new fifth threshold that must be surpassed for full equality (executive power) in politics. It also supports my argument that exclusively analyzing numerical representation only supports the previous thresholds, that have been reached in Norwegian politics. The inspiration is taken from Raaum who previously have used the thresholds to explain Nordic women's political participation (Nagel 1995). Researchers like Van der Ros, Johansen, and Guldvik (2010) also applied the theory when exploring women's path to leader positions in Norwegian municipalities.

Because the thesis has an exploratory design, I do not intend to test this theory but to examine whether the four thresholds are sufficient to conclude that a movement is fully integrated into the political system. If we compare the political sphere in the 70s and 80s with the actuality today, it may require more experience to achieve political power. Politics and the existence of elite politicians that are becoming more skilled, and it is more common now than before to have long political careers.

Rokkan's first threshold (1) *legitimation* is about gaining access to the public space with its interests. It is crucial to have the opportunity to organize and express disapproval of those in power. The legitimation was largely about putting women's new demands for political equality on the agenda. It was not until the middle of the 19th century, during the first wave of feminism, that the women's cause gained greater scope and support in the public sphere and was gradually followed up by the Storting (Nagel 1995, 95).

The years between 1895-1934 represent significant changes in Norwegian society. Primarily, political debates and party formations marked the years before 1895. What characterizes the entire period is the emergence of the welfare state with an incipient state of public health work. The period is otherwise characterized by urbanization, industrialization and economic growth, population pressure, and emigration.

Women demanded to gain a spot in the public sphere to create acceptance for women as political actors and legitimize the women's cause. Raaum (2001) writes that the women's movement used different strategies. Some of them were collective organization, influencing public opinion and alliances with progressive men. To time the exceedance of the first threshold, we must go to 1884/1885 when the first women's organization and women's suffrage organization were established.

The second threshold is (2) *incorporation*. According to Rokkan, lowering the voting threshold will lead to a growing public debate and race to set up organizations to gain support and consolidate political identity (Nagel 1995, 66). In this thesis, the incorporation phase is connected to the extension of the right to vote in 1913, when commonplace women were given suffrage.

With the introduction of parliamentarism in 1884, the political system change became a fact. In women's politics, radical and moderate wings were formed (Nærbøvik 1999, 164). Nevertheless, one issue in particular that characterized the work of the women's movement up until 1913 was the demand for the right to vote for women.

When the right to vote was made universal in Norway, it was after decades with debates with step-by-step reforms from 1884 for both women and men. It was debated for 30 years. From

the first proposal was submitted in 1886 to the final decision in 1913, the matter was up in the Storting every other year. The constitutional conservatism was strong in Norway, which probably made the process slower. There were also assumptions that women's suffrage was unnatural and would lead to homosexuality (Nagel 1995, 62 – 65).

In addition to the fight for suffrage, many female activists were active in the debate on morality and sexual double standards. They worked to strengthen women's rights in marriage and professional life. After introducing women's suffrage in 1913, we saw tendencies toward greater political divisions within the women's movement. Despite disagreements on several political issues, the struggle for equality in working life and children's rights was defining for the period after 1913. The most intense topic was the discussion on contraception and abortion, which created significant conflicts in the women's movement in the 1920s and 1930s (Nærbøvik 1999, 164).

A common feature with all the Nordic countries is that women, compared with men, faced particularly strong barriers at the last two thresholds: *representation and executive power* (Raaum 2006, 34). *The third threshold (3)* was exceeded in Norway in 1921, when the first female permanent representative was elected to the Storting.

The 10% rule, which provide by law women must make up at least 10% of the parliament, was not exceeded until 1973. The late mobilization in Norway before 1970, and the subsequent rapid development after 1973 can be explained by structural and political factors. Nina C. Raaum points out that Norway in the post-war period was regarded as a “housewife country”. It was not until the 1970s that there was a strong growth in employment rates among women (Raaum 1999, 35).

The fourth threshold is *(4) executive power*. This threshold applies to full integration meaning that the parliamentary force could be transformed into a direct influence on public decision-making processes through participation in the executive bodies. This includes access to the office of Minister of State (Nagel 1995, 70-71). Exceeding the fourth threshold of entry into the executive branch was remarkably rapid, according to Nina C Raaum. After the 1973 election, women received 20% of the government posts, and in 1981, the Nordic region's first female prime minister: Gro Harlem Brundtland, was appointed.

A few years later, in 1986, Brundtland created the "women's government," which is often referred to as a world sensation. Since 1986, the proportion of women in the Norwegian parliament has never been below 42 percent. The composition of men and women in the executive branch relates to the 1988 Gender Equality Act, which has obliged the authorities to ensure at least 40 percent representation of both men and women in the appointment of unelected public boards and councils, including the government. In parliament, it was, and still is, the parties that make the list that determines the composition of women and men.

If there are significant differences between men and women in re-running rates, one can argue that a fifth additional step must be added *in-between* representation and executive power: to be able to reach executive power, a group need not only be (numerically) represented in the executive branch, but accumulate political capital over several legislatures (i.e., re-run).

This thesis thereby argues that a threshold is missing in Rokkan's model viewed from today's perspective. Regardless of the Brundtland women's government, there are many indications that points to women not being as incorporated into the political system as their fellow male colleagues. **Figure 2** is a visualization of Rokkan's four phases for mobilization. A phase has been added, so the model consists of five phases. The loaded phase is re-running. The argument is that re-running is decisive for obtaining executive power.

The literature tells us that executive power is conditioned by political careers, and thereby re-running. Rokkan argued that all the thresholds had to be crossed for full integration. I then argue that it is not sufficient when the model is recycled to describe women's involvement in parliamentary politics.

As it looks in **Figure 2**, the model is, as mentioned, derived from work done by Nagel and Raaum. Since then, several have criticized their work, arguing that the model is too mechanical. One of these is Siim (1994) argues that changes in the culture of political institutions and women's participation and attitudes are not accounted for in the redefined model.

Nina C Raaum (2001, 161) herself has also argued that there are missing thresholds in the original model. She has written that it may be more appropriate to say that women must pass five and not four thresholds. By this, she means that women, unlike men, must go through two

stages of legitimation: one in advance of the right to vote before 1913 and one in advance of political representation and decision-making power before the 1970s. However, I argue that the fifth threshold, as shown in **Figure 2**, has not yet been passed. To pass the last threshold, women must have the same opportunities to build political careers, i.e., little to no gender gap in re-running rates.

Women did not enter the political decision-making bodies until the new women's movement demanded representation on the political agenda in the latter half of the 1960s. In this thesis, it is also argued that women must pass five thresholds.

3.2 Hypotheses

By utilizing and reframing Rokkan's Threshold model this chapter has so far argued that differences in re-candidacy may lead to differences in the ability to build a political career and, in its extension, affect policy. Several factors can influence re-running rates. As stated, my assumptions are that women have more difficulties when entering the political arena, their ability to act out their political interest is lower than men' and the importance of experience (to minimize the gender gap).

The questions that form the basis for the hypotheses are: What are the characteristics of the candidates running for re-election? Would the female MPs run for re-election if they were men? Does party or district magnitude have an effect? And is there a historical development in line with Rokkan's model? These questions are based on my theoretical assumptions and previous research.

On the basis that the thesis has an exploratory design, it is crucial to investigate whether there are gender differences in re-running rates at all. Based on the literature the thesis has reviewed, it can be argued that there are gender biases in all stages of the political career.

The first hypothesis accordingly tests whether the Norwegian parliament is characterized by "leaky pipelines", i.e., that women to a greater extent than men do not run for re-election. This assumption is also based on recent research that focuses on women dropping out of politics more than men do. This trend may have several explanatory factors ranging from political

violence to opportunity structures. Studies has also found a correlation between motherhood and political ambition. When becoming and MP you are expected to stay nearby the parliament causing less time with family. This might affect women more than men.

In terms of how the gender gap in re-candidacy, I therefore expect that:

H1: *Female politicians are less likely to re-run for election compared to male politicians. [this implies: all else held equal]*

The effect gender has on re-running can be reduced by political experience and socialization. One can even argue that if a candidate has previously been a representative in the Storting, the gender differences will be reduced and possibly fade away. This assumes that knowing “the rules of the game”, and inclusion in the workplace have a positive effect on re-running.

Simultaneously, the likelihood for re-election will be higher for incumbents, which may lead to a higher willingness to run again particularly among women, who may else be more risk averse. This hypothesis is also relevant when it comes to the gender variable. If women are constantly junior politicians, meaning newly elected, their ability to build a career is also lower.

The characteristic of running as an incumbent is considered a *reinforcing effect*. The effect of gender could be reduced when comparing re-running rates between incumbents. The idea behind that is that having served in the Storting lets men and women create political capital; leading to a greater likelihood for an individual to become a career politician.

The next hypothesis therefore reads as follows:

H1a: *Gender differences in re-running rates decrease when candidates have won the previous election (i.e., run as incumbents).*

As previously mentioned, I am specifically interested how gender gaps in re-candidacy have changed over time. It is assumed that there is a backlog in the representation of women in the Storting, like the Swedish Parliament in the 1980s (Wägnerud and Oskarson 1995, 89). The politicians who were representatives in the Swedish Riksdag in the 1980s grew up between 1930 and 1960. What characterized this period, in general, was that women were less active and engaged in politics than men.

Since Norwegian women did not become part of the labor force before the 1970s - 1980s, the same can be expected in Norway. At the same time, the welfare state was established after World War II, which means a rapid development of daycare for children and other women-friendly policies that indicate more equality in general. Tax-funded public services have enabled the state to take over some of the traditional tasks traditionally carried out by women, such as caring for children and the elderly. As a result of these public services, women have been able to participate more in society, both in terms of public service (such as volunteering and politics) and as workers.

It is thus assumed that the Storting, and with-it political careers, will reflect the society in general.

H1b: *The positive effect of time on the likelihood to re-run is greater for female candidates than for male candidates*

The literature and other trends suggest that women have difficulties entering the political arena. The possibilities MP has to act out their political interest differs between men and women. It also stresses the importance of experience and that women drop out of politics more than men.

The theory chapter has built on these assumptions and placed them in Stein Rokkan's Threshold Theory after inspiration from Nagel (1995) and Raaum (1999). It has been argued that a fifth step must be added to the model if one uses Rokkan's threshold theory to explain parliamentary

inclusion. The model is used to theoretically explain the inclusion of women in parliaments and assess what the inclusion of a new group means. Based on Rokkan's Threshold Model and literature, three hypotheses have been formulated, tested in the thesis using logistic regression analysis.

Chapter 4: The Norwegian context

This chapter provides an overview of Norwegian parliamentary history from 1921-2021. The chapter begins openly with the Norwegian state's electoral systems, the role of parties in elections, and general historical development. With a particular emphasis on women's entry into politics. However, women's entry into politics will not be the topmost focus as the theory chapter explains the macro-historical development of women in parliament.

This master's thesis does not focus on recruitment as such, but rather what occurs after a candidate is elected to parliament. Nevertheless, it is important to understand how candidates become members of parliament. *This thesis is after all concerning politicians, consequently one need to recognize the context in which they become politicians: The Norwegian Parliament.*

To fully understand the Norwegian context, it is crucial to be aware of the general pattern theories on party democracies provide. The first part of this chapter focuses on election systems and its consequences for representation. The second part stress the role of the political parties and thereby the process of candidate selection.

What portrays Norwegian democracy? Norwegian democracy are frequently characterized by state friendliness and institutional centralization (Østerud and Selle 2006, 26). Namely, it is the state, rather than religious institutions, local community organizations and the market that has been the main agent for social and economic reforms. The state has also been the most essential participant in the making of the system for corporative economic planning and lastly the Norwegian welfare scheme (Østerud and Selle 2006, 26).

The Norwegian Gender Equality Act of 1978 was designed to improve the position of women in society. As Norway's first female prime minister in 1986, Gro Harlem Brundtland appointed a cabinet that had 44 percent female ministers, and the number of women in parliament has steadily increased since the 1960s. The proportion of female parliamentarians lingers around

40 percent, while that of female cabinet ministers lingers below 50 percent. Since 2013, Norway has had a female prime minister and recently several ministers and party leaders have been females.

Norway therefore stands out as a country with several role models and well-developed opportunities for the advancement of gender equality in comparison to other countries (Kolltveit 2022, 114). The Norwegian Parliament should therefore be considered as having gender-equitable representation in comparison with other states in terms of "descriptive representation." Furthermore, Norway is commonly acknowledged as a gender egalitarian society (Teigen and Skjeie 2017, 125).

As formerly declared, many point the existence of the gender egalitarian society to the social democratic welfare state. Tax-funded public services have enabled the state to take over some of the traditional tasks traditionally carried out by women, such as caring for children and the elderly. As a result of these public services, women have been able to participate more in society, both in terms of public service (such as volunteering and politics) and as workers.

Norway is usually classified at the top of numerous international indexes measuring gender equality. This trend in classification is occasionally described as the Nordic Model of Gender Equality. The model describes the nordic countries as societys that combine high levels of paid work and participation in political life (Segaard, Kjaer, and Saglie 2022, 7). The state as an agent for social reforms can also be transferred to the inclusion of women. Giving women the opportunity to take part in the workforce by introducing affordable daycare, and maternal (and parental leave) leave is all viewed as "female-friendly policies" and should, to some extent, result in fair opportunity structures.

The next parts of this chapter will provide a wide-ranging summary over the "technical" sides with how party and elections systems either preclude or enable women to run for, and thereby re-run for election.

4.1 Elections and Female Members of parliament

Norway has held regular elections for over 200 years and is thus an old and established democracy. This thesis has a scope of 26 parliamentary elections. Since the 1921 election, Norway has undergone several electoral reforms.

Electoral formula and electoral system are not directly apart of the master's thesis, but it is still important to have an overview of which systems exists and how it affects women in politics. To explain the various electoral systems, I use Christensen (2002) note based on the Election Law Committee, which submitted its recommendation on proposals for changes to the Norwegian electoral system in January 2001.

Plurality systems was replaced by proportional representation systems in 1920. Simultaneously, a closed list system for candidate nomination was introduced. PR systems using the d'Hondt method for converting votes into seats was used in 8 elections (1921-1949). The district borders were redrawn in 1952, at the same time d'Hondt was replaced by a modified Sainte-Laguë formula. The last major change happened in 1988, with the introduction of adjustment seats (Fiva and Smith 2017, 2)

It is common to distinguish between two rough categories of electoral systems. Those who seek to achieve proportional representation, and those who do not. There is thus a sharp distinction between majority elections and proportional representation elections (Christensen 2002, 8). Norway operates with a proportional electoral system in its national elections.

Dag Arne Christensen (2002) explain that ratio selection has proportional representation as the main principle. The purpose is to ensure a certain correspondence between a party's number of votes and the same party's share of the seats. The main rule is that a party must be represented in parliament with the almost exact proportion of votes that the party has received. Most European countries, including Norway, use proportional electoral systems, the exceptions being

the United Kingdom and France. This does not mean that one is dealing with similar electoral systems. The variation is significant (Christensen 2002, 11).

Proportional electoral systems vary primarily along two dimensions. *First*, one tries to find the best possible match between the number of votes and the number of seats. The *second*-dimension concerns whether the voters can choose between individual candidates and choosing between different parties or lists.

The latter forms the basis for two subgroups of electoral arrangements: list elections and preference elections. Most countries prioritize the first, the list system (Christensen 2002). In a pure list system, it is the party, and not the voters, who have control over the ranking of the candidates. In Norway, a list system is used where the lists are closed. This means that voters cannot change the order of candidates and that one, therefore, primarily votes for the party and not individual candidates.

As shown in the literature review, PR elections systems are in comparison with majority systems viewed as positive for women's representation in parliament. Increased representation of women is the most significant change in Storting's social composition after World War II. The first woman in the Storting was the women's rights activist and teacher Anna Rogstad. She met as a deputy representative for the Liberal Left in 1911. In 1921, the architect Karen Platou from the Conservative Party was elected as the first woman as an ordinary representative.

The proportion of women in the Storting did not increase significantly until 1945. The development accelerated in earnest in the 1970s. Since the late 1980s, women have made up between 36 and 40 percent of the representatives in the Storting (Allern, Karlsen, and Narud 2019, 213).

Women gained relatively few of the leading positions in the Storting between 1945 and 1969. After the 1970s, this increased and reached its peak during Gro Harlem Brundtland's "women's government" in 1986. In this government, women accounted to nearly 50 per cent of the cabinet posts (Heidar 2005, 812). For a long time, all parliamentary leaders were men.

The first woman to lead a party group was Hanna Kvanmo, from the Socialist Left Party, in 1977. In 1981, Gro Harlem Brundtland became parliamentary leader of the Labor Party. Since then, the number of female parliamentary leaders remained at a stable low level throughout the 1980s and 1990s. In the 2000s, the situation changed. From 2005, four out of seven leaders were women, and the proportion of parliamentary leaders has thus exceeded the general proportion of women in the Storting (Allern, Karlsen, and Narud 2019, 235). In other words, the position of women is more robust in the leadership of the parties' parliamentary groups, than in the formal hierarchy of the National Assembly.

The Norwegian electoral system operates with closed-lists national elections, meaning that the political parties are authorized to design the electoral list on the ballot. Political parties thereby have monopoly on the nomination of candidates to the voters (Dahlerup and Niskanen 2011, 69). The nomination processes are mostly decentralized, meaning that the political parties trust their local party organizations in each fylke (district/constituency) to make a list of candidates for the elections (Marsh 1988). It is also the parties that decide if a candidate is placed on a traditionally safe seat or in a weaker position on the ballots.

Hellevik and Skard (1985) has formulated concepts specifying the distinctive spots on electoral lists. The two researchers argue that the lists can be divided into different groups based on the likelihood of being elected. These groups are “(...) “election places” (for certain winners), “competition places” (for those that may be elected, if the party improves its share of the vote) and “decoration places” (those expected to lose)” (Dahlerup and Niskanen 2011, 69).

If one wish to increase or decrease the number of candidates from a certain group in the parliament, the political parties are in charge. When explaining the “sudden” change in numerical representation of women in the in the 1970s, Torild Skar and Hela Hernes state that

“(…) the increase in female representation (...) is due to action of the political parties, not the voters. The parties have recognized that there is now a risk that poor female representation among their candidates can influence the voters' choice of party” (Skard and Hernes 2018, 79).

The probability of being elected is thus larger for those who are in the safe seats, in the “election places”, and lowest among the “decoration places”. Likewise, running for re-election could also have a positive effect on list placement (Dahlerup and Niskanen 2011, 70).

As stated in the introduction and briefly shown in the paragraph above, political parties and thereby the state is a strong actor in the Norwegian democratic development. Political parties are also one of the variables seeking to explain the variety in re-running rates between men and women. It is therefore necessary to give brief presentation of the principal agents, specifically the political parties.

4.2 Women and political parties

Part 4.1 of this chapter has given an overview of Norway's electoral system and its consequences. As mentioned, in this great sphere of politicians, politics, and elections, it is crucial to emphasize recruitment to understand the *path to a political career*. A political party's approach to candidate selection is integral to what they stand for and what they do (Butler, Penniman, and Ranney 1981, 103).

In this thesis, what is most central about political parties is their role as agents, and thus the nominations as part of the political recruitment process. This part of the chapter deals with women and political parties and, thus, perspectives on party democracy in relation to representation.

The Norwegian state is defined as a centralized power that has thus been a one of the driving forces for reforms. The same "logic" can be applied to the relation between the political parties and *share of seats* between different groups in parliament. The argument stating this connection builds on Norway having a party-centered system.

Having a party-centered system means that politics in general are centered around the political parties', rather than individual candidates. Political parties recruit political representatives and

mobilize voters for elections. The parties are hence the “bone marrow” of the representative democracy. At the same time, the political parties are independent organizations that engage and educate members in the internal party democracy (Heidar and Raaum 1995, 165).

Most Norwegian parties have introduced voluntary electoral quotas. Except for the Progress Party and the Greens. When Norway introduced gender quotas in the 1980s, women already occupied up to 30% of the seats in parliament.

Scholars describe the introduction as a "critical act" by a significant minority of women to ensure more women in the parliaments and consolidate women's representation. One can label the introduction of gender quotas in politics as a "fast track" to equal representation (Dahlerup and Freidenvall 2005, 27)

The general perception is that women's representation will not increase to some historical requirement, which means active measures are required to increase representation. The quota strategy is also based on a belief that formal and informal discrimination exists against women, often referred to as the glass ceiling. This explanation is based on the fact that it is not the women's will to run for election but that the "system" works against them. There will thus be no natural development where the gender differences will decrease. The opposite of this understanding is the incremental track. This understanding is based on the belief that the gender gap will level out, even if it takes decades (Dahlerup and Freidenvall 2005, 28).

On a par with other Nordic countries, Norway also started with the "Nordic five-party model" consisting of a Conservative, a Liberal, an Agrarian, a Social Democratic, and a Communist party. These parties vary in electoral support and prominence, plus they account for most of the votes in Norway together (Knutsen 2017, 45).

The five-party model has become somewhat less significant as new parties have emerged. One of these parties is the Green Party. Norwegian politics otherwise very by consensus and may have fainter ideological differences than similar parties in other countries. The consensus-based development can be linked to the emergence of the welfare state, and that all parties are, to some extent, in favor of it. Party politics was far more divided back in 1921.

Norway experienced an early formation of a stronger Christian party than other Christian parties in the Nordic countries. There has permanently been a "pure" socialist left party present in the Norwegian party system, namely the socialist left party/ the socialist people's party. The progress party, the radical right, is also stable and significant. Furthermore, the Agrarian party has not been powerful in Norway, which may surprise as Norway has long been characterized as an agricultural society (Knutson 2017, 70).

4.3 Supply and Demand in Norwegian Political Parties

Candidate selection “influences the balance of power within the party, determines the composition of parliaments, and impacts on the behavior of legislators” (Hazan and Rahat 2010, 3). Kjaer and Kosiara-Pedersen (2019) uses Norris and Lovenduski’s recruitment ladder in their article on an alternative hourglass pattern showing that there is a higher share of women candidates than women among party members in Denmark. The five groups in the latter are voters, party members, applicants, candidates and then MPs (Kjaer and Kosiara-Pedersen 2019, 300).

A candidate's probability of winning depends on the interaction of his or her decisions, his or her party's decisions, and the decisions of the voters: voters choose among candidates who decide to run and who have been supported by his or her party.

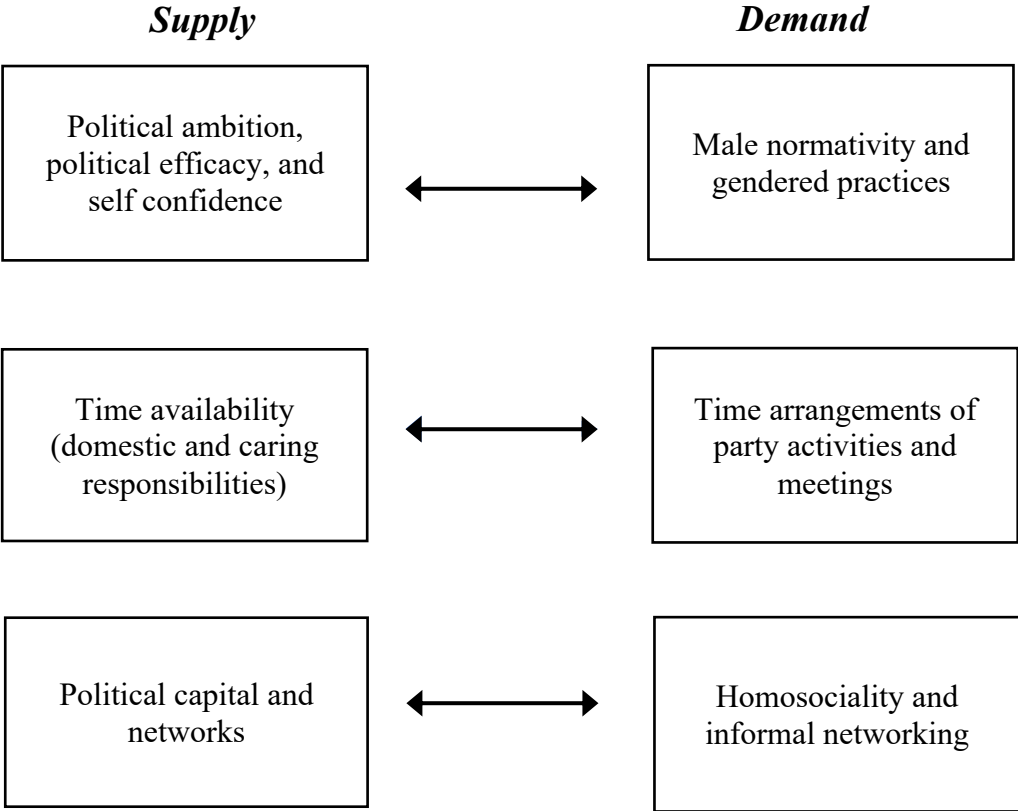
The authors state that “The extent to which members come forward as candidates is determined by the interaction between individuals and parties” (Kjaer and Kosiara-Pedersen 2019, 302). Kjaer and Kosiara-Pedersen (2019) uses the example of feedback effects between “supply” and “demand” in political parties when recruitment and cite Verge (2015) in doing so.

Verge (2015, 754) asks if there is a lack of women wishing to run for political office or that the party selectors’ are disinterested in selecting female candidates. *Supply* is thereby the pool of party members aspiring to be political candidates, and their characteristics. *Demand* is what the political party demand from their members when recruiting. The relationship between supply

and demand largely depends on the party, and what role the political party takes on. Generally speaking, Norwegian parties are more concerned with gender balance than for instance their danish counterparts (Segaard, Kjaer, and Saglie 2022, 1).

A candidate's probability of winning depends on the interaction of his or her decisions, his or her party's decisions, and the decisions of the voters: voters choose among candidates who decide to run and who have been supported by his or her party.

Figure 3. Feedback effects in political party participation (Verge 2015, 756)



Given the circumstance, political parties do, in general, follow a broad range of gendered norms. These norms are informal rules which can create unfair rules of the game between men and women. The norms expect women to behave differently than men, and if they appear ambitious, confident, etc., it can lead to a form of backlash. In a new study, researchers at the University of Oslo follow youth politicians over time to look at careers in the context of their political ambitions.

An early finding is that there are apparent gender differences in the type of political positions that youth politicians want in the future. Women want elected positions as prime minister, mayor, and local politicians to a *lesser extent* than their male counterparts. On the other hand, they do not find gender differences when it comes to appointed positions as party secretary and political adviser (Kolltveit 2022).

The Norwegian state has set the framework for women to participate actively in working life by introducing women-friendly policies. The goal of these is also to ensure women's leisure. In the second part of the feedback effect model, we see an arrow between time availability and time arrangements. One would think that participating actively in a political party would be entirely possible for a woman in Norway.

In a survey done in Agder, women said that "matters" at home were not taken care of unless they took care of them themselves and that the men had to be asked to do particular tasks if they were to be done. As the researchers saw it, this helped to attach mothers to their home and it had a demotivating effect on spending time "outside," for example, in politics (Magnussen and Svarstad 2013, 30).

It should be emphasized that this survey was conducted in Agder. Agder is one of the most religious districts in Norway and has a lesser degree of gender equality than elsewhere. Nevertheless, it is reasonable to assume that the division of domestic labor between men and women elsewhere in the country is similar. If it is the case that women are less "out" than men, they will not have the same opportunity to build up political capital, as the last part of Verge's

model emphasizes. Another thing that can have an effect on the opportunity to build political capital is a political career—something this thesis analyzes in more detail.

In summary, the model argues that the political parties (or at least their members) demand male normativity, active participation in party activities and meeting and informal networking. Norway is one of the few countries where women (traditionally) have been better represented in parliament, i.e., the nation-state, than in Norwegian municipalities. The state as a centralized power has thus been a driving force for equality.

On the other hand, the women's movement has also focused on increasing representation in national authorities, and maybe more so than in local communities. It may also be the case that women have put pressure on and within the political parties. The parties' response has maybe had a more significant impact nationally than locally. As noted in the first part of this chapter, Norway applies proportional representation election systems with closed lists in their parliamentary elections.

Parties can hence increase the number of female candidates by creating formal rules that require a certain percentage of female candidates. An objective (a recommendation for the percentage of women) or a quota (a mandatory percentage of women) can be used as direct action. Gender quotas or targets indicate a willingness to act to address under-representation of women, as well as a recognition that it is a problem. The thesis is not interested in the effect of the introduction of gender quotas.

However, if parties introduce gender quotas, it would be reasonable to assume that they consider gender equality as important. Therefore, which party the MP represent can be decisive for re-running rates. Such measures can also tell something about the culture of the political parties and whether they are concerned with safeguarding female MPs.

To implement representation rules, the Labor Party became the starting point. As a Nordic country, Norway has the highest prevalence of gender quotas in its political parties, both in the party organization and its electoral lists (Christensen 1999). Today, only the Conservatives and the Progress Party, two of the largest Norwegian parties, do not have gender quotas.

Party lists are so influenced by the principle of group presentation. The goal of a political party is ultimately to win elections. If a party wants to win elections, it may be beneficial to have a proportional list with regard to gender.

As a result, Norway therefore provides as a “least likely” case for finding gendered differences in re-candidacy rates.

Chapter 5: Data, Coding & Methods

This chapter aims to explain and justify the methods used to test the hypotheses, describe the data collection processes and present the variables used in the analysis. Academic work exists only in the context of a researcher's choices, and all the steps in a design must be adequately justified. The first part of this chapter explains and presents the data collection process. Further, the variables used in the analysis are operationalized and presented.

Here, a table is first demonstrated that clearly shows the relationship between theory (previous research), names of variables, and their operationalization. I describe the dependent variables: re-running. Then the independent variable is described: politicians' gender and lastly control variables a, b, c, and why I control for these. The last part of Chapter 5 deals with the premise for running a logistic regression analysis, why I use this method, and how I carried it out in R.

5.1 Data collection

The objective of this master's thesis is to investigate if politicians' re-candidacy rates vary by gender. I have no previous experience with collecting data, and thus spent more time than others might do. The use of time was also characterized by the lack of data in this field and the fact that no one had made a connection between election lists, and members of parliament beforehand. The data in this thesis is drawn from three main sources: a dataset made by Jon H. Fiva and Daniel M. Smith (2019 version), the politician's archive by SIKT and Stortinget's website.

The Fiva and Smith (2019) dataset was first introduced in 2013. A newer version was published in 2019 and it featured all candidates running for parliamentary elections from 1906 to 2017. My analysis is based on data from 1921 to 2021. The dataset initially included candidates' gender, party, age, occupation, and geographic ties, the number of times the candidate had run for election (count), the number of times the candidate had won the election (count), first year they run for elections and last time they run for election.

The Fiva and Smith dataset shaped the foundation for what since has formed the database for this thesis. The dataset is available on Fiva's webpage. The next step was to hand code the candidates running for, and winning elections in 2021. This process had consequences for elections back to the 1980s, since many candidates have run for elections ever since. It did not cover any variables for which exact parliamentary elections the candidate had won, nor variables for re-running and re-winning. When all the data was collected, I coded two variables in R "re-run" and "re-win".

The overview of who became members of parliament in 2021 was relatively easy to find, with a few exceptions: MPs elected for the first time in 2021 were not added to the Storting's website. Fortunately, SIKT had this information in its archive.

Nevertheless, they did not have a single file in which these two were linked. Therefore, I received two large excel files that I later merged with the excel file I had before with Fiva and Smith's data. The first file included every person running for elections from 1921 to 2021, and the second file included MPs from 1921 to 2021. I thus created a dataset with a "connection" between lists and elected representatives with help from SIKT, the only one of its kind after my knowledge. The dataset includes everyone who has run for and won elections in Norway in the last 100 years.

5.1.2 Dataset and data wrangling

The dataset is a panel dataset that has observations clustered by year, district, party, and candidate. Before I cleaned the dataset and removed everyone who had never won an election, it had an N of about 75,000 units. Today, the dataset has an N 42,439 units. The analysis is also limited to parties that are still competing for the Storting today.

As a consequence, we lack some years and observations, but the dataset is still large, and it makes the results easier to interpret and to compare. This is because several candidates run from all districts, and in several elections. There were also some missing values, especially in the

period from 1921 to 1945. During the same period, women had a very small share of the seats, it is therefore not considered as a substantial weakness in the analysis.

5.2.3 Validity and Reliability Concerns

Validity and reliability are two criteria that help ensure the integrity of data. According to Grønmo (2016, 241), validity refers to the extent to which measured data explain a phenomenon. Validity can be separated into two different parts: specifically internal and external validity. External validity refers to the challenge of generalization to a larger population (Campbell and Russo 2001).

In this thesis, generalization to a larger population beyond Norwegian parliamentary representatives is unnecessary. In other words, it is not a goal to generalize the findings to other countries. Still, based on the available data, one might argue that the phenomenon of gender differences in re-candidacy may be prominent, especially in other Nordic countries.

On the other hand, reliability refers to the consistency and reproducibility of the data (Grønmo 2016, 240). If one wishes to replicate my research, one needs to hand-code variables for which parliamentary elections the candidate has won and variables for re-running and re-winning. All data sources are available through the Fiva and Smith dataset and SIKT.

5.2 Variables

In addition to using the variables below, there are also fixed effects on political party (party affiliation) and district magnitude.

Table 1: Operationalization of Variables

Theory	Variables	Operationalization
<i>Dependent Variable</i> (outcome):		
Political Careers	Re- Running	Dummy: 1 = YES 0 = NO
Re-candidacy		
<i>Independent Variables</i> (predictor):		
Research question	Female	Dummy: 1 = YES 0 = NO
Historical development	Election Year	Continuous: 1921 – 2021
Motivation and/or political capital	Incumbent	Dummy: 1 = YES 0 = NO
<i>Control Variables:</i>		
Competition	Ballot list placement	1 – 10

5.2.1 Dependent variable

As stated in the introduction unlike similar studies, this study examines re-running instead of re-winning or simply winning. Others have examined re-election, where few or none have considered gender differences in re-running. The dependent variable – Re-run – is a yes / no question measured as 1 or 0. A candidate receives a “1” on this value, when (s)he ran for election in the election before. Candidates who did not run in the preceding election are given the value “0”. The dependent variable is coded as a factor.

5.2.2 Independent Variables

I use three explanatory variables, the first of which is, as the research question suggests, gender. In addition, I use the variables “election year” and “incumbent” as independent variables. Both of these are interacted with candidate gender in order to test my hypotheses 1a and 1b. They will also be tested without the gender variable, to test if these variables explain the differences in re-running rates *better* than gender. The “year” variable intends to measure how the histological development for women in politics over the last 100 years has impacted gender differences in re-running. It is reasonable to assume that women candidate's propensity to re-run has changed over time, and maybe more so than men.

Incumbent measures whether a candidate has won the preceding election, i.e., runs as an incumbent. Most of the candidates running for elections never win an actual election and as explained above, I assume that incumbency is a particularly important motive to run for election again. This assumption is based on literature

5.2.3 Control Variables

I control for candidate's “rank” on the electoral list and have additionally included two fixed effects² in the models: party and district. They are both factor variables which means that we

² To review «party fixed effects» and «district fixed effects». Please see Figure x the appendix.

get an exact estimate per category. For instance, that the probability for re-run is higher or lower than for candidates of the reference category. They are added to ensure that the results in the model are control for any effects related to candidates' party affiliation and the district they run in.

For example, one could imagine that re-running is more probable in parties who are powerful in certain districts and whose candidates are therefore more likely to expect winning a seat. by party and district size. The rank - variable was added to improve the internal validity of the thesis by limiting the influence of confounding variables. It is the political parties that control the ranking systems. While the rank obviously influences whether a candidate is elected or not, it may also be an indication to what extent the candidate is aspiring a political career or simply a "list filler" – and, thereby, also the probability of re-running.

5.3 Logistic regression

The analysis aims to examine whether there is a *correlation* between a candidate being female and her probability of re-running for election. Put differently: Would the female MPs re-run to a greater extent if they were male MPs?

The dependent variable (re-run) is dichotomous while there are both categorical and continuous predictors. The properties of the variables are the main argument for performing a logistic regression. Lewis-Beck, Bryman and Liao (2003) also state that:

“(...) estimating models with dichotomous dependent variables often requires the use of nonlinear techniques because linear models (such as ordinary least squares) may be unrealistic on a theoretical level and produce inefficient or inconsistent results.” (Lewis-Beck, Bryman, and Liao 2003, 262)

Logistic regression is used to predict a binary outcome based on set of independent variables. The data is binary when the output of the dependent variable is dichotomous or categorical (“yes” or “no”). In this case, the outcomes are re-candidacy or not re- candidacy. It is often used in medical research where the outcome is not sick or not sick. But now regular in many other fields (Fritz and Berger 2015, 271).

Like linear regression, logistic regression estimates give coefficients for the constant term, and each of the included independent variables. Also, the interpretation of the coefficients is not as evident as in ordinary regression. The dependent variable is not the probability of having the value 1 on the dependent variable as in probability regression, but the logarithm of the odds of having the value 1. The constant (b_0) shows the average logit when all the independent variables in the model have the value 0.

A Binary Logit model can be transcribed as:

$$\Pr(y = 1 | x) = \frac{\exp(\alpha + \beta x)}{1 + \exp(\alpha + \beta x)}$$

This equation supposes that ε (error term) is logistically distributed with $\text{Var}(\varepsilon) = \pi^2/3$. Because the dependent variable is unobservable in the binary regression model, $\text{Var}(\varepsilon)$ must be supposed. Probability value is assumed unaffected by the $\text{Var}(\varepsilon)$ value. If the supposed variance is changed, the distribution will spread differently, but not in proportion to the threshold (0 and 1) (Stock and Watson 2020, 413).

The other coefficients (b_1 - b_n) show how much the logit or log-odds change when independent variables increase by one unit in value and the other independent variables are kept constant. In addition to providing a measure of how relevant an independent variable is (the coefficient size), logistic regression also tells us the direction of the relationship (positive or negative).

A positive sign implies a positive correlation. With a higher value of the independent variable, the odds and therefore the probability / proportion increase. A negative sign indicates a negative correlation. A higher value of the independent variable decreases the odds, and consequently the probability / percentage (Stock and Watson 2020, 413).

Logistic regression is also a good method for mapping or finding out if a phenomenon exists. I am not interested in explanatory factors in this round, but this analysis could form the basis for further qualitative research where one can interview representatives and examine whether my theoretical assumptions based on working conditions and gender differences are significant at an individual level.

5.3.1 Tests and assumptions

5.3.1.1 Multicollinearity

Collinearity is when two variables are so strongly correlated that it becomes needless to use both. Suppose one includes two variables that measure almost precisely the same or two variables where one has such a significant correlation with or causal effect on the other that they, in practice, measure the same. In that case, one cannot rely on the results from the regression analysis.

When the combination of independent variables explains/correlates extensively with one of the variables that it becomes superfluous, this is called multicollinearity. Multicollinearity can cause the regression coefficient's standard error to be high. Multicollinearity can also make the model unstable because small changes in the model can significantly impact the results.

To determine if you have multicollinearity challenges in the models, you can calculate the Variance Inflation Factor (VIF). VIF is a measure of multicollinearity. If the VIF values are below 5, we do not have a problem; it is also good to look at the average VIF. If all the variables in the model have VIF below 5, the average value may still be high due to the correlation

between several independent variables. In weaker models, such as logistic regression models, values above 2,5 might be viewed as problematic (Senaviratna and Cooray 2019, 3).

Table 2: VIF Values

	GVIF	DF	GVIF ^{^(1/(2*Df))}
Female	<i>1.116712</i>	1	<i>1.056746</i>
Party	<i>1.477539</i>	1	<i>1.215541</i>
Incumbent	<i>1.005597</i>	1	<i>1.002795</i>
Rank	<i>1.158721</i>	1	<i>1.076439</i>
District	<i>1.379995</i>	40	<i>1.004034</i>
Party	<i>1.269080</i>	8	<i>1.015005</i>

5.3.1.2 Correlation vs Causality

Statistical methods allow for testing hypotheses about correlation but can rarely reveal causality. Hypotheses are also often generated from more than one underlying mechanism (Kittel 2006, 666). Thus, one cannot be sure that other mechanisms can have greater explanatory power on the dependent variable. Statistical methods also exclude other contextual factors beyond those encoded in the dataset (George and Bennett 2005, 21-22).

Contextual factors in this master's thesis can be legislative changes, lobbying from the women's movement, international events, or, for example, power struggles within the political parties. The contextual factors allow for the inclusion of a large number of control variables to omit some external explanations. However, even with the inclusion of these, researchers can never be sure that the answers the analysis provide a reflection of the reality it analyzes.

It is thus vital to be open about and understand that research, to a large extent, only exists within the framework of itself. Nevertheless, this does not preclude that the statistics in this thesis, to a greater or lesser extent, can show and explain some of the variations in the analysis.

5.3.2 Why the use of Logistic Regression Models?

The logistical analysis in this thesis cannot explain why or why not women have different political careers than men because the data is not based on surveys or personal experiences.

The data is only based on the number of women and men in national elections. On the other hand, this analysis can confirm or disprove the theoretical assumptions that there are differences based on gender in re-election rates. Optimally, this master's thesis should use a mixed-method and facilitate the use of qualitative data. Correspondingly, the observations are not independent from each other due to the panel structure and single outliers can consequently impact the results over-proportionally.

The choice of logistic regressions depends mainly on the structure of the data. In this case, the dependent variable is dichotomous. As mentioned, it is measured with 0 and 1. The choice then naturally falls on a method adapted to dichotomous dependent variables. The results from the analysis were sufficient, and it was thus unnecessary to use a more sophisticated method. From my point of view, the aptitude and ability to disseminate research is crucial. GLM is also a choice based on the research modeling, and the goal was to provide results most individuals can understand.

The choice of the method also depends on what one wants to investigate. Prior to the start of this project, it was uncertain whether there were gender differences in re-running rates. It was, therefore, crucial to choose a method that fits an experimental design. As mentioned, this logistical regression does not explain why a phenomenon occurs but can say something about whether the phenomenon exists. This analysis can confirm or disprove the theoretical assumptions that there are differences based on gender in re-election rates.

The thesis could use other methods to create a whole circle, i.e., explain and prove the phenomenon. Optimally, this master's thesis should use a mixed method and facilitate the use of qualitative data. Correspondingly, the observations are not independent of each other because the panel structure and single outliers can consequently impact the results over-proportionally.

The thesis could have applied multilevel modeling to answer the research question. Multilevel data tends to result from nested data (Peugh 2010, 85). In this particular thesis, those would-be candidates, parties, districts, and national level.

In summary, this chapter has presented arguments that the research design is sufficient within the framework of the master's thesis. It has been shown and argued that logistical regression is suitable for answering the research question based on the structure of the data. The chapter has also described data collection, assessed various statistical tests, and discussed correlation and causality. The variables are otherwise presented in tables and in text, were the theoretical foundation, operationalization, and measurement level have become well-defined.

Chapter 6: Analysis

Chapter 6 is divided into two parts. The first part being the explorative analysis. The explorative analysis provides plots where the dependent variable (re-running) is plotted by gender. It is attractive to know something about the general trends in re-candidacy before showing the results and adding independent – and control variables. The second part presents the regression results, and figures for substantial interpretation of the results.

As mentioned in the chapter above, is the dependent variable not the probability of having the value 1 on the dependent variable as in probability regression, but the logarithm of the odds of having the value 1. It is thus easier to interpret and understand the results through figures, rather than through a standard presentation of the regression models.

When trying to test a hypothesis, the crucial case is often referred to as a *least likely*. Here, the relationship between X (gender) and Y (re-run rates/re-candidacy) holds even if the background factors Z (gender quotas, norms, democratic development etc.) suggest otherwise (Gerring and Cojocaru 2016, 404). In the case of Norway, "otherwise" would suggest that there are no significant gender differences in re-running rates

6.1 Explorative analysis

This section contains an explorative analysis where of the data and some first descriptive correlations. The plots are made to create an overview of gendered patterns in Norwegian elections. The visualization of the data was done before the regression analysis to consider predictors for differences in re-running rates, and also to make sure that gendered differences were in fact a phenomenon.

Table 3: Descriptive Statistics

Variable	N	Mean	Std. Dev.	Min	Pctl. 25	Pctl. 75	Max
Year	42493	1982.34	27.762	1921	1965	2005	2021
Party	42493						
... dna	7258	17.1%					
... frp	3467	8.2%					
... h	5346	12.6%					
... krf	4678	11 %					
... mdg	1959	4.6%					
... r	3172	7.5%					
... sp	5623	13.2%					
... sv	4180	9.8%					
... v	6810	16 %					
Rank	42493	7.682	4.717	1	4	11	26
Female	42493						
... 0	27787	65.4%					
... 1	14706	34.6%					
Candappear	40500	2.61	1.958	1	1	4	50
Elected	42489						
... 0	39471	92.9%					
... 1	3018	7.1%					
Candwin	40500	0.445	1.283	0	0	0	10
Re-run	42493						
... 0	25841	60.8%					
... 1	16652	39.2%					
Incumbent	42493						
... 0	40104	94.4%					
... 1	2389	5.6%					

The descriptive statistics summarize the variables used in the analysis; it is imperative to note the value of the parties. Furthermore, the median to "rank" shows that most candidates are between 7th and eighth place on the lists. Furthermore, Table 3 shows that 34.6% of the candidates in the dataset are women and 65.4% of the candidates are men. "candappear" shows how many times single candidates appear in the dataset. This variable shows the spread in how many times the candidates have run in elections, where the one with the most elections behind them has run 50 times. Most of those who run for elections, "elected," loose elections. Only 7.1% of candidates win the elections they run for. "re-run" is also relatively common, with a value of 39.2%. The last variable, "incumbent," also shows that most of the candidates in the dataset run as incumbents.

Figure 4: Number of Candidates by Sex and Number of Appearances in the Dataset

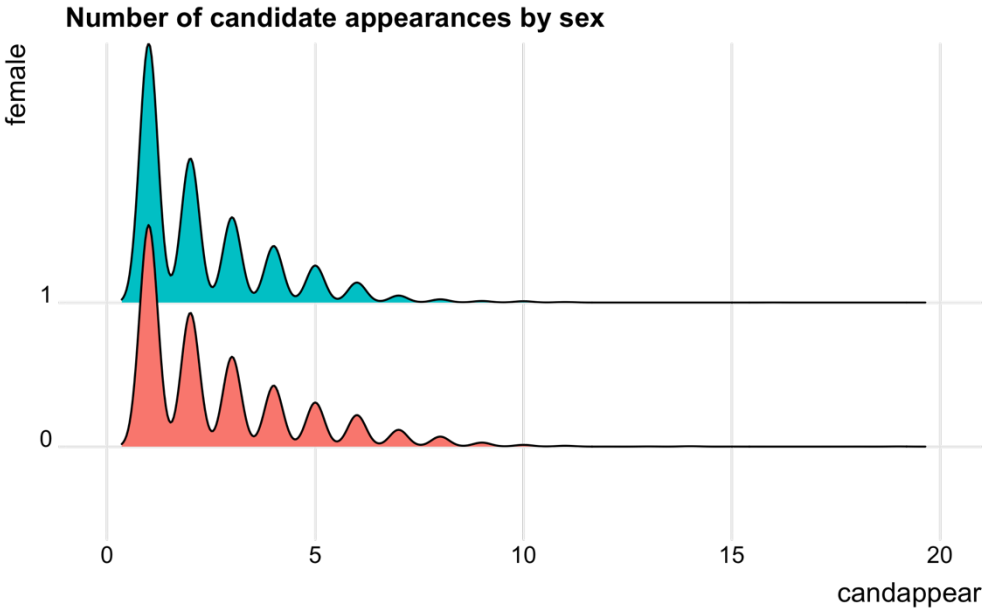
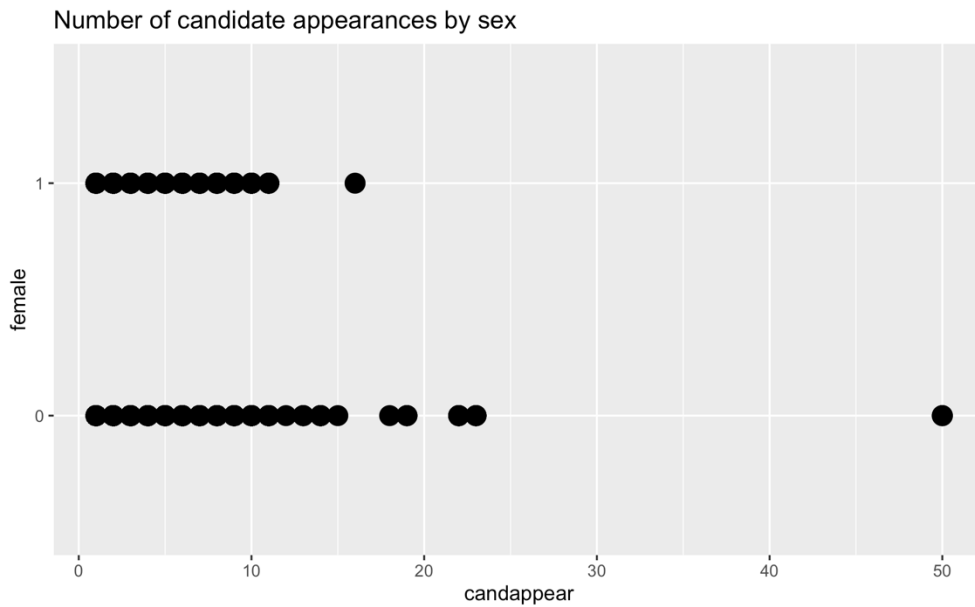


Figure 4 and **Figure 5** show the number of candidates' appearances in the dataset by gender. Firstly, one can observe that there are more men than women. Secondly, many of the candidates appear only one time in the dataset: with the second largest group appearing less than ten times. There are some few outliers, all of whom are men running more than 10 times over the observed period.

Figure 5: Number of Candidates by Sex and Number of Appearances in the Dataset



So far one can state that there are more men than women running for election by visualizing the number of candidates in the dataset. The two next figures (**Figure 6** and **Figure 7**) display the count and proportion of re-running candidates by sex. **As can be seen**, female candidates re-run to a smaller extent than their male counterparts, even when taking into account their lower proportions of candidates in the dataset.

Figure 6: Gender gaps in re-running, count

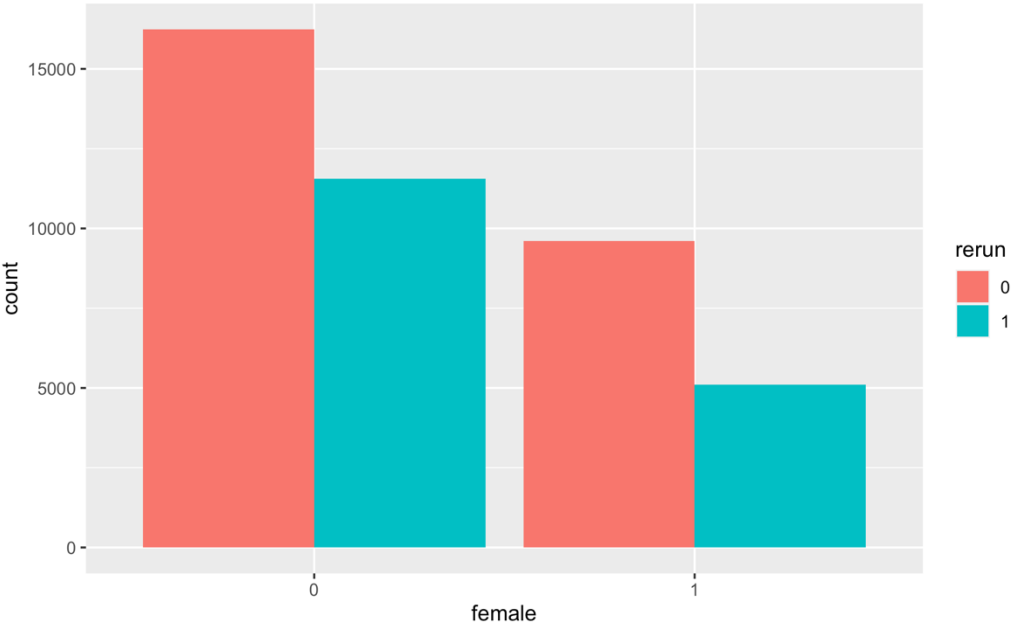


Figure 7: Gender Gaps in Re-Running, each bar representing 100%

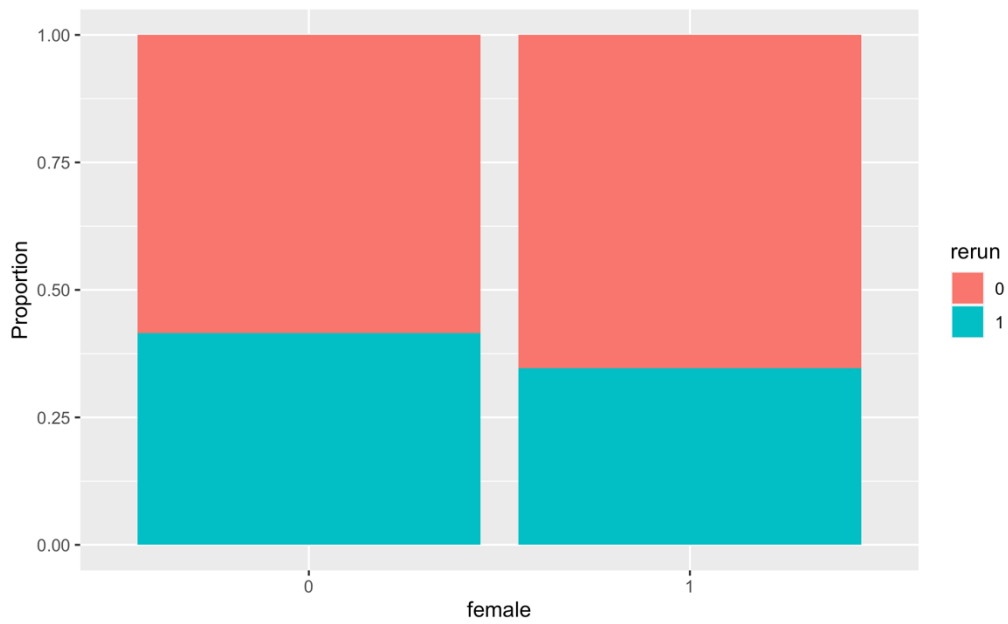
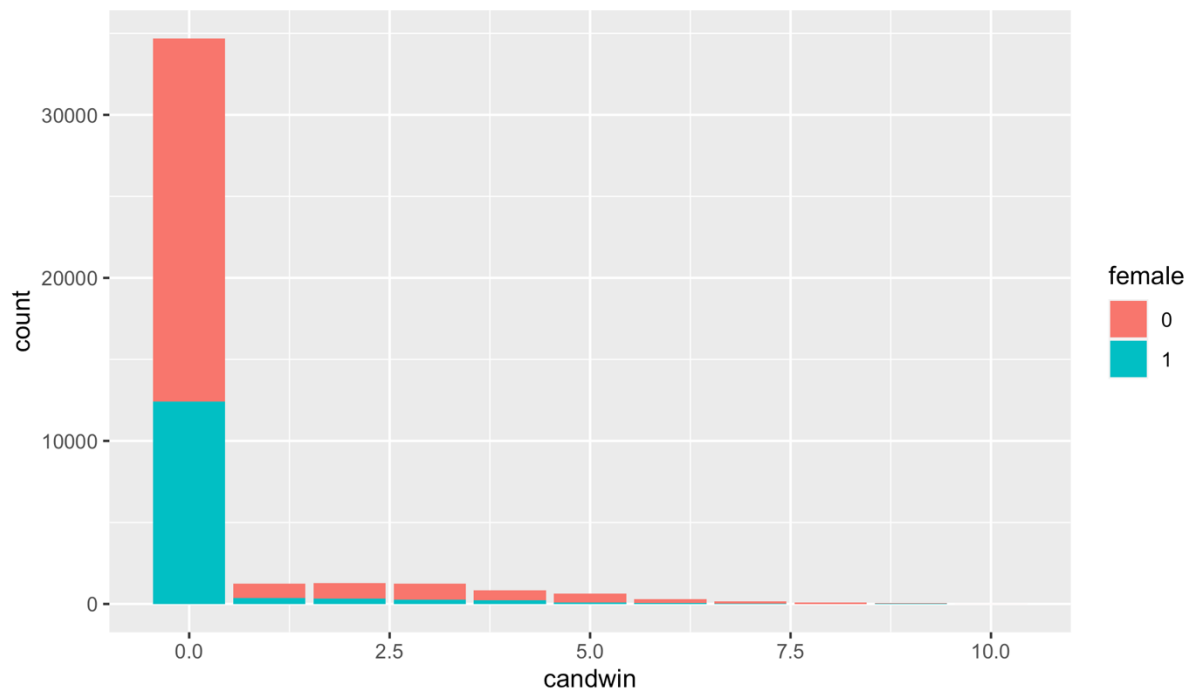


Figure 8: Gender gaps of winning the election



Most candidates that run for election aspire to be a representative, but very few of them actually win elections. **Figure 8** shows the number of won elections per candidate. The trend is similar to the trend of running. There are generally more men than women winning elections. In the same way as the previous figures, the spread here is also between 0 and 10.

The figure shows that most candidates running for election never or rarely win elections. It also shows a difference between the female and male candidates. The posts get lower the further up in the victories one comes. Looking closely, it seems to be primarily only men with more than six victories. However, it is essential to emphasize that the figures are based on data dating back to 1921 and that one primarily knows and can assume that women had few or no periods in the Storting before the 1940s. The figure is thus not necessarily a realistic picture of the situation for women today but a visualization of parliamentary careers over the last 100 years.

In summary, the explorative analysis shows that there are gender differences in (1) how many women vs men run for election, (2) how many men and women re- run for election, and (3) that a few of the candidates who run for an election, win. Based on these figures, it can be stated that women are underrepresented in all steps of the political ladder, from running, to re-running and lastly winning elections. The question is whether these differences are significant when adding the predictor and the control variables.

6.2 Logistic Regression Results

The goal of this part of the chapter is to make a foundation for the discussion of the three hypotheses presented in the theory chapter. The discussion takes place in the seventh chapter of the thesis.

The coefficients are not estimated using the least-squares method but by probability maximization in logistic regression analysis, i.e., a logit conversion of the dependent variable. The technique used to find the values of the coefficients with the highest probability has created the results in the sample. The predicted probabilities in the following figures lie between 1 and 0. The relationship between X and Y will therefore have an s-shaped curve where the effects of X are most substantial at medium probability. The independent variable varies with how likely the different outcomes were on the independent variable in the first place.

Model 4 has the interaction effect of female and election year, additionally the last model (5) also include female interacted with incumbency. When using logistic regression models, it is important to be aware of the differences between coefficients and predicted probabilities. In order to compare models and measure their goodness of fit, log likelihood is used along with the Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC).

Table 4 shows the logistic regression coefficients, and not the predicted probabilities. The first model is a bivariate model adjusted for political party, district, and ballot list placement. In model 2, election year is added. Model 3 includes whether a candidate runs as incumbent, i.e., has won the previous election. Interaction effects are added in the two last models.

Table 4: Logistic regression models

	Model 1	Model 2	Model 3	Model 4	Model 5
Female	-0.225 *** (0.022)	-0.292 *** (0.023)	-0.240 *** (0.024)	-8.497 *** (2.009)	-8.482 *** (2.010)
Year		0.005 *** (0.000)	0.004 *** (0.000)	0.003 *** (0.001)	0.003 *** (0.001)
Incumbent			4.161 *** (0.148)	4.163 *** (0.148)	4.063 *** (0.165)
Female*Year				0.004 *** (0.001)	0.004 *** (0.001)
Female*Incumbent					0.441 (0.376)
Rank	-0.119 *** (0.002)	-0.122 *** (0.002)	-0.102 *** (0.003)	-0.101 *** (0.003)	-0.101 *** (0.003)
District fixed effects	YES	YES	YES	YES	YES
Party fixed effects	YES	YES	YES	YES	YES
AIC	53629.936	53525.151	50558.374	50543.368	50543.875
BIC	54071.448	53975.320	51017.200	51010.851	51020.015
Log Likelihood	-26763.968	-26710.576	-25226.187	-25217.684	-25216.937
Deviance	53527.936	53421.151	50452.374	50435.368	50433.875
Num. obs.	42493	42493	42493	42493	42493

Note: *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

There are various attractive findings that needs to be examined. Often, the coefficients of logistic regression models are presented as predicted probabilities in plots for easier interpretation. The results of the logistic regression models are presented in **Table 4**, and by plots. I plotted the results to extract the marginal effects and to see how they change when including more control variables. Table 4 will therefore briefly be summarized before the results are interpreted in more detail using plots for better dissemination. The next section also includes a review and discussion of the five models in order before they are compared in consideration or their goodness of fit.

6.2.1 Model 1

The first model is a bivariate model that mainly tries to measure the isolated effect of being a woman on re-running. All models are checked for ballot list placement, as this is important to get a correct representation. Compared to placing candidates in safe and unsafe ballot list spots. So, it is those with a fair chance of actually winning who strike out. There are also fixed effects on district magnitude and party.

AIC and BIC have relatively high numbers, which is not unusual with a model that contains over 42.493 observations. Log Likelihood is also exceptionally low, which in turn can be explained by the number of observations. The correlation between being a women and re-running is negative, and highly significant. Seen in the light of the thesis' theoretical assumptions that women, to a lesser extent than men, running for re-election, this is still the case.

6.2.2 Model 2

The second model includes a continuous variable “year” and is thereby the first over time model. The correlation is positive, but very minor (0.005). It can therefore be assumed that it has become more common to run for re-election in recent years. The re-running trend can be explained by politics as a career choice. The effect of ballot list placement remains approximately the same, and states that the further up on the list a candidate are, the greater probability aimed at running for re-election.

The measurements for the model: AIC, BIC and Log Likelihood reduces slightly. A reduction of AIC and BIC suggest that the model has a better fit with the data. Otherwise, the number of observations does not decrease, and the effect of gender becomes stronger. All variables are still highly significant at with the P- Value 0.01. The effect of gender slightly changes when adding “year” to the model. The effect is still negative and highly significant

6.2.3 Model 3

The third model includes the variable “incumbent”, which is a dichotomous variable measure if the candidate was elected in the previous election. The effect is positive, and highly significant, which leads us to deem that winning elections increases the probability to re-run for election ($e^{4.161} = 64.135$). The effect of gender decreases slightly, but the correlation is still highly significant and negative. The effect of election year remains unchanged. AIC, BIC, and Log Likelihood continue to decline as new variables are introduced. The number of observations stay equal to the other models.

6.2.4 Model 4

The fourth model includes a multiplicative interaction term (female*year) in the equation, the effect is positive suggesting that the time change was more significant for female than for male candidates. A positive interaction effect between two variables means that the increase of one (female), will increase the significance effect of the other (year). The second variable, year, can be positive or negative but if the effect of year is negative, will its effect be more negative with an increase in “female”. Both election year, and won preceding election keeps its high significance, and so thus ballot list placement. While doing so the AIC and BIC as well as the Log likelihood decreases. The variable measuring “female” on “re-running” stays negative, highly significant, and increases ($e^{-8.479} = 0.000$).

6.2.5 Model 5

The fifth and last model, model five, includes yet another multiplicative term (female*incumbent) in the equation. Note that this interaction effect is the only variable that is not significant in its results. As a consequence, the rest of the variables remain unaffected, and

the results are equal in model five as in model 4. There is a slight decrease in the BIC measurement ($\approx + 9.2$). AIC and Log Likelihood is roughly unchanged when adding female* incumbent.

6.3 Plotted Findings

The following plots shows the predicted probability of presence for each individual candidate in dataset on the y-axis, and one of the independent variables on the x-axis.

The predicted probability is based on the full logistic regression model because this model has the lowest values of Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC). The plots are thus accounted for all interactions

Figure 9: Gender Gaps in Predicted probabilities for Re-Running

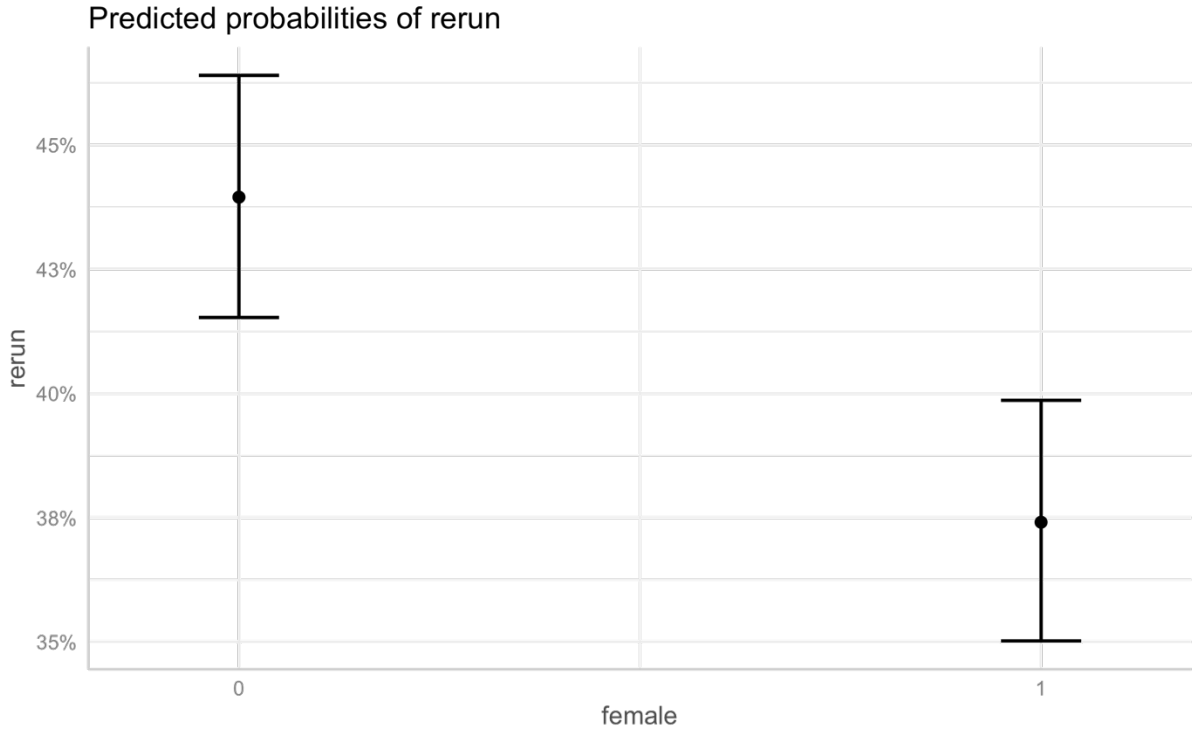


Figure 9 demonstrate the predicted probability for male candidates (0) and female candidates (1) re-running for election within a 95% coefficient interval. The standard deviation is prominent, but minimal. The plot shows that there are gender differences in re-running rates between female candidates and male candidates. The difference between women and men can be attributed to about 7 percentage points. Again, it must be noted that the data behind these plots cover every candidate who has run for election in the years from 1921-2021. Figure 9,

therefore, shows historical statistics which do not necessarily reflect political careers for women in Norway today. Nevertheless, it is interesting to prove that women, female politicians, have had shorter periods than men in the Norwegian parliament.

Figure 10: Gender Gaps in Predicted Probabilities of Re-Run - *Timeseries*

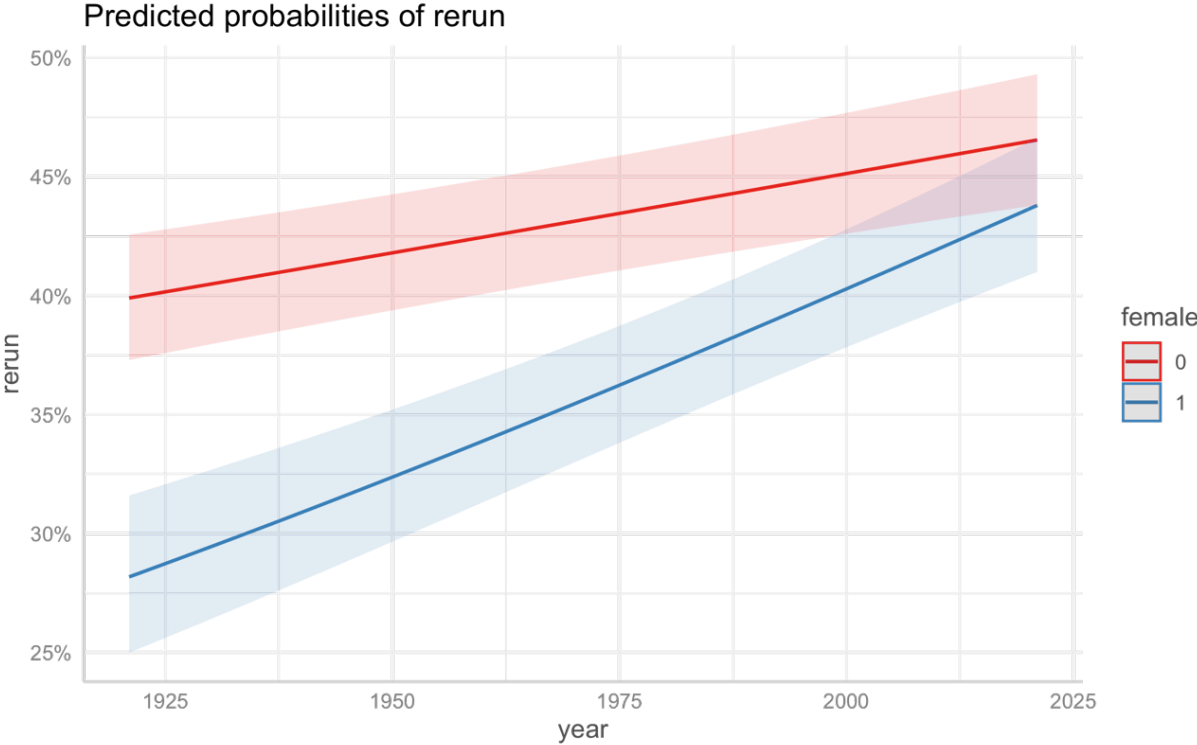


Figure 10 shows that women candidate's propensity to re-run has changed over time, and that the gap between women and men will probably disappear towards 2025. It should be noted here that the major alteration in gendered re-running rates took place in the period between 1975 and 2000 and that the gender gap in re-running only disappeared recently.

Figure 11: Gender Gap in Predicted Probabilities of Re-Election on Re-Running



Note: Figure 11 is measuring the effect of “incumbent” on re-running

Please note that female (1) is blue, and males (0) are red. The main finding in Figure 11 shows that men, to a lesser extent than women, are affected by whether they win elections. That is, if a woman loses an election, she is somewhat less likely to run for re-election. Among those who win elections, the gender differences are minimal. Winning previous elections (and thereby being a career politician) has a positive effect on the regression model, and Figure 11 shows just that. That the vast majority of the candidates who win elections run for re-election. Here it is also reasonable to include parts of the exploratory analysis and point out that fewer women, essentially, both run for and win elections. The standard deviation in this figure is satisfactory.

Figure 12: Gender Gap in Predicted Probabilities of Ballot List Placement on Re-running



As stated before, Norway has a closed list PR system, meaning that the political parties choose and make the ballot lists. Figure 12 shows that rank, list placement, affect a candidate’s decision to re-run for election. The figure shows a clear trend which indicates that the further up the list you are, i.e., if you get "safe spots," the greater the predicted probability that you will run for re-election. It also shows that gender differences are also valid in this plot if only a little.

Based on this figure, it can be observed that slightly fewer women choose to run for re-election if they end up far down the list and that these differences even out at the top. One might thus assume that there is a more negligible difference between top politicians and other politicians.

In Summary, the results show robust answers that portray internal and external validity. Through a widespread dissemination of the results, one can argue that the *analysis has shown varying differences between female and male political candidates*. The exploratory analysis showed that women has been underrepresented in Norwegian parliamentary history. In other words, fewer women both run for, re-run for, and win elections. The vast majority of the

variables in the five regression models have a high degree of significance, and each model's explanatory sway increases with the addition of new variables. Finally, the predicted probabilities have visualized the results from the regression model. The next chapter will discuss the research question in the light of the formulated hypotheses from the theory chapter.

Chapter 7: Discussion of findings

Chapter 7 will discuss the master's thesis research questions in connection with the hypotheses formulated in the theory chapter. First, the results from the analysis will be reviewed in the context of the theoretical and empirical framework. In other words, Rokkan's threshold model, elections, and electoral system, as well as political parties and list systems. Afterwards, the hypotheses will either be retained or rejected based on the discussion. Finally, the analyses' limitations will be discussed.

If there are significant differences in probability between men and women in re-running rates, one can argue that a fifth additional step must be added *in-between* representation and executive power: to be able to reach executive power, a group need not only be (numerically) represented in the executive branch, but accumulate political capital over several legislatures (i.e., re-run).

7.1 Findings

The analysis presented in the previous chapters has shown that there is a negative effect of being a female candidate on the probability of running again. The result is based on data from Norway's last 26 parliamentary elections. This finding remains significant at 1% significance level even after I checked for time trends, incumbency and rank with fixed effects on party and district. The negative effect means that fewer women than men have run for re-election in the last 100 years.

One of the latent questions in this master's thesis is what it means to ***be fully integrated into a political system***. For the case of gender differences in re-candidacy, full integration would mean that there is a gender balanced re-running rate. Alternatively, that the structure of opportunity and other institutional arrangements are fair.

The thesis has understood the term "women" as people with similar characteristics and perhaps most as a social interest group. The inclusion of women in parliament is considered a timeline

alongside Rokkan's threshold theory. The theory, or model, describes the various thresholds a group must overcome to be fully integrated in the political system as executive power.

As mentioned, this theory was first introduced to explain the inclusion of the labor movement. Others have since adopted it and used it to explain the inclusion of the women's movement and so female members of parliament. Rokkan's threshold theory makes it possible to put the research question in a larger context and discuss re-running as a modern "problem" and a historical phenomenon.

Using threshold theory, one can problematize the absence of given possibilities and justify that re-running is essential for powerful positions and thus being able to influence political decision-making more effectively. Another dispute for including Rokkan's threshold theory is that the scope of the time series data going back 100 years and that the thresholds in the model itself can explain the outcome of the dependent variable (re-run).

However, the significant differences in the probability of re-run between men and women decrease over time. By adding the "year" variable to the model, "female" continues to be significant on average. But when the results are plotted and probability becomes visible, we can see that gender differences in re-running rates become insignificant from over time.

The decline in significance confirms my assumption before the analysis that gendered differences in re-candidacy vary over time. Norway, especially before 1980, had few female representatives in the first place and few of today's welfare benefits, such as daycare, were available. The effect of gender on re-running has proved to be weaker over the years and has now, towards the beginning of the second decade of the 2000s, become insignificant.

An extensive branch of literature utilized in the literary review underlines the importance of motivation and political capital in the decision to re-run. Some scholars argue that there are gender differences in levels of political ambition, others disagree. The analysis displays that gender differences in re-running are mainly driven by unsuccessful candidates: Unsuccessful men are significantly more likely to try running again than unsuccessful women are.

This finding supports Cipullo (2021) findings in Italy and The United States when he shows that women are less likely to win elections in the first place, and that the gender gap in the probability of being elected has a long-lasting effect on political career trajectories. The effect is that women that lose elections have a lower probability of re-running compared to men. They thereby face more hurdles at the beginning of their political careers. Winning elections is thus more important for women than for men, as the effect of losing has a greater impact on women's career prospects compared to men.

Once a woman has built a career, they are more competitive than men. The finding proves that winning elections is essential for building a political career, and in particular so for women. Building a career can also impact the candidate's ability to influence policy. With experience comes self-confidence, and if women are constantly beginners, it will be more challenging to be elected representatives, especially if the male MPs have more prolonged experience.

In contrast, gender differences disappear when comparing incumbents' probability to run again. This finding might indicate that men in fact have more political ambition than women because they are more persistent in their quest for political power, when losing elections.

The result presented in the literary review resonates that female MPs in top political positions are generally less likely to have children. Which also can explain the lack of gender gap among successful candidates.

The finding goes against what is assumed in the literature review, where Saha and Weeks (2022, 779), among others, argue that female candidates who are perceived as too ambitious are punished in politics. In Norway, the opposite is true. Ambitious women differ less from men than those who are not. The explanation for the gender differences in re-running becomes insignificant in line with the degree of success. This trend can also be explained based on Norway's closed PR election systems.

If a candidate wins a seat in the Norwegian Storting, the political party is given an extra mandate. In the following nomination process, it is reasonable to assume that the same candidate will gain renewed confidence based on success from the previous election. There is, therefore, perhaps less gender bias in Norwegian parties compared with parties in other nations. Kjaer, Ulrik, and Mona Lena Krook (2019), would have agreed as their analysis of local elections in Denmark shows that there is less gender bias among the Norwegian parties, compared with the Danish ones.

The analysis and the discussion thus conclude the following according to the hypotheses:

Table 5: Summary of hypothesis

H1: Female politicians are less likely to re-run for election compared to male politicians. [this implies: all else held equal]	Retained
H1a: Gender differences in re-running rates decrease in line with time in office	Retained
H1b: The effect of time is greater for female candidates, than for male candidates	Retained

Based on the available data and despite the limitations, it can be decided that the hypotheses can be retained. Retaining the hypotheses does not imply an automatic generalization beyond the case of Norway. Nevertheless, it may be reasonable to assume that the results of similar trends can be found in other least likely cases, such as other countries in the Nordic region.

The data is available through Fiva and Smith's datasets and SIKT's databases, and it is thus possible to verify the results subject to re-run and re-win coding. The seventh chapter has also utilized the literature and theoretical framework to discuss the results.

7.2 Limitations

The study conducted in this master's thesis has some limitations. The data in the study covers the period from 1921 to 2021. It calls for 26 parliamentary elections and 100 years of parliamentary history. Having a solid database is regularly suitable for studies. It increases internal and external validity, and it is easier to state something about an entire phenomenon when the considerable information is available. On the other hand, there is a lot the data does not account for.

Firstly, the many changes in electoral systems. Since 1921, Norway has undergone several electoral reforms. Proportional representation systems replaced plurality systems in 1920. Simultaneously, a closed list system for candidate nominations was introduced.

PR systems using the d'Hondt method for converting votes into seats were used in 8 elections (1921 -1949). The district boundaries were redrawn in 1952; at the same time, d'Hondt was replaced by a modified Sainte-Laguë formula. The last significant change happened in 1988, with the introduction of adjustment seats (Fiva and Smith 2017, 2)

It has been widely discussed and presented that the parties in Norway decide the candidates, regardless of the electoral system. Some electoral systems are indeed seen as more advantageous for women, often proportional representation systems.

Among other things, Norway was chosen as a case based on the PR system. Nevertheless, it was not the objective of this study to examine the effect of the electoral system on women's likelihood of re-running.

The lack of control of historical events such as changes in the electoral system leads to the phenomenon of "re-run" being analyzed in isolation. Few social science phenomena arise or unfold in vacuum situations, and the analysis can thus be seen as somewhat artificial. The election system directly affects how candidates are elected, but not necessarily which ones are elected. I tried remedying this limitation by including fixed effects for electoral districts in all models. These effects take into account everything that is specific about a district – including differences in the electoral system.

What can affect who is elected are attitudes in general in society and civil rights. As shown through Rokkan's threshold theory, the women's movement has fought for a greater degree of female representation through systematic work. The women's movement has increased the population's awareness through literature, newspapers, and various lobbying activities that were not controlled in the analysis.

Another limitation with the analysis is that the observations in the dataset are not independent of each other, as individual candidates appear several times. Statistics assumes that you have a sample of independent observations, which means that the value of one observation does not affect the value of others. You may receive too many false positives if your statistical test includes non-independent observations.

For the data analyzed in this thesis, this means that there may be something special about individual candidates that is not captured by the co-variables in the model – for example, belonging to a politically influential family, being a 'star' within the party, etc. While an appropriate remedy for this shortcoming would have been a multilevel-model approach, I did not have access to many relevant candidate-level characteristics beyond party-affiliation.

I therefore opted to go for the relatively simpler logistic regression approach and tried to account for some non-independence between the observations by including fixed effects for parties and districts.

Chapter 8: Concluding Remarks

The aim of this study was to investigate the scope of and the conditions for gender differences in re-running rates in the Norwegian Storting.

Before tying the knot, lets repeat the research question:

Do politicians' re-candidacy rates vary by gender? And, if they do, which factors condition the size of gender gaps in re-candidacy over time?

Previous research established a basis to research and investigate women's probability of running for re-election. The literature utilized in this thesis demonstrated that there are significant differences between men and women in all stages of the political ladder. In summary, the following was consistent in selected literature: a) difficulties when entering the political arena, b) the possibilities a MP has to act out their political interest, c) the importance of experience, d) regional differences and e) that women drop out of politics more than men.

My thesis has examined the case of Norway to test hypotheses about the factors contributing to gender inequality in politics. Norway is one of the most gender-equal countries in the world and Norwegian parties were among the first to establish norms about gender-equal nomination procedures. Norway is thus a case where we would least expect systematic gender differences.

I have attempted to answer the research question and assess the hypotheses by running logistic regression models. Logistic regression is suitable for exploring correlation. Before starting the project, there was no evidence, or counterevidence for gender differences in re-candidacy. The motivation for the project was to examine the skewness of parliaments from an untraditional angle. Untraditional in the form of new perspectives on gender and politics.

Examining re-running rather than re-winning, or just winning, distinguished this study from similar studies. Others have focused on re-election, where few or none have examined the gender difference in re-running.

Throughout this thesis I have described the data collection, assessed various statistical tests, and discussed correlation and causality. The variables were presented in tables and in text, the theoretical foundation, operationalization, and measurement level became well-defined.

Overall, the results showed robust answers that portrayed internal and external validity. Taking together all evaluated evidence, we can conclude that the *analysis has shown systematic differences between female and male political candidates' probabilities to re-run*. Furthermore, the analysis has established that the size of the gender gap in re-running rates is conditional on both time and political status. The results also showed that gender differences are much smaller between incumbents.

The exploratory analysis showed that women have been underrepresented in Norwegian parliamentary history. Fewer women run for, re-run for, and win elections. The vast majority of the variables in the five regression models had a high degree of significance at the 1% significance level, and each model's explanatory sway increased with the addition of new variables.

There is indication that unsuccessful candidates primarily drive the observed gender differences. Unsuccessful, meaning candidates that loose elections. In this pool, the probability of unsuccessful men re-running for election is significantly higher than for unsuccessful women. Comparing incumbents' (candidates who have won elections) chance of running again, the gender differences between male and female candidates disappear. This may signal that the length of a political career is more crucial for a female politician than for a male politician when seeking substantial political influence.

Eventually, my master's thesis has proven that being a woman has a negative effect on the likelihood of running again. Even after controlling for time trends, incumbency, list ranking, as well as fixed effects on district and party, the negative effect of being female remains significant at the 1% significance level. However, findings have also shown that the gender differences in the probability of re-running decrease over time and has now, towards the beginning of the second decade 2000s, become insignificant.

8.1 Research Contribution

Women's political participation and representation go beyond numbers. Therefore, there is emerging literature on politics and gender researching politics as a career. Rather than simply focusing on gender differences in re-election rates, one should investigate the gendered conditions for politicians to preserve their seats in parliaments.

The objective of this study was to fill this research gap on female representation and focus more on women's *re-candidacy*, that is, the mechanism that affects women's choice to (not) run again, rather than focusing on the mechanisms behind her first election and thereby the number of women represented and its consequences for democratic legitimacy and effective governance.

The field of political careers has grown substantially in recent years, and politicians are more viewed as power-seeking individuals with their own perspectives and opinions. This master's thesis has, in this way, contributed to new ways of researching gender equality in the sphere of gender politics and power.

8.2 Suggestions for further research

Re-running is a new theoretical contribution to the field of political representation, which will be interesting to investigate in future studies. Because the master's thesis is a single case study by the Norwegian Storting, it could also have been possible to carry out surveys at the municipal level. Norway is in a particular position where the municipalities traditionally have fewer female representatives than the National Assembly.

Otherwise, a study that focuses more on the mechanisms and how one can close the gender gap could be attractive. That is, to investigate cases in a less vacuum-characterized climate. As mentioned in the introduction to my thesis, it may be reasonable to claim that this (gender differences in re-candidacy) is also the case in several other Western democracies.

Even though a lower gender gap characterizes the results for incumbents, a study on the effect of parenthood on political careers in the Storting could be fruitful. This master's thesis would build on Fiva and King's (2022) study finding that parenthood negatively affects female local politicians' career prospects even if they are experienced politicians.

This master's thesis has not presented answers to why there are gender differences in re-running. It has simply proved that factors such as time, success, and ranking can explain the gender gap (correlation). In further research, it may therefore be interesting to investigate in more detail the reasons (causality) behind why fewer women than men choose to run for re-election.

The reasons can be found in the previous research, such as hostile work environments, few role models, or leisure time. Norway has a closed PR system where the parties decide the composition of the electoral lists. The findings on gender gap in re-running can open new doors to study on recruitment processes. Especially considering the gender gap between unsuccessful candidates. One could hence further examine the internal nomination processes to understand and determine what influences candidates' choice for re-running or resignation. The method for such a study could be to conduct a more in-depth explanations by interviewing previous candidates that "ended" their political careers in the Norwegian parliament.

References

- Allen, Peter. 2021. "Experience, Knowledge, and Political Representation." *Politics & Gender*: 1-29.
<https://doi.org/10.1017/S1743923X21000362>.
- Allern, Elin Haugsgjerd, Rune Karlsen, and Hanne Marthe Narud. 2019. "Kvinnerepresentasjon og parlamentariske posisjoner." *Tidsskrift for kjønnsforskning* 43 (3): 230-245.
<https://doi.org/10.18261/issn.1891-1781-2019-03-07>.
- Arceneaux, Kevin. 2001. "The "Gender Gap" in State Legislative Representation: New Data to Tackle an Old Question." *Political Research Quarterly* 54 (1): 143-160.
<https://doi.org/10.2307/449212>. <http://www.jstor.org/stable/449212>.
- Arnesen, Sveinung, and Yvette Peters. 2018. "The Legitimacy of Representation: How Descriptive, Formal, and Responsiveness Representation Affect the Acceptability of Political Decisions." *Comparative Political Studies* 51 (7): 868-899.
<https://doi.org/10.1177/0010414017720702>.
- Barnes, Tiffany D. 2014. "Women's Representation and Legislative Committee Appointments: The Case of the Argentine Provinces." *Revista Uruguaya de Ciencia Política* 23 (2): 135-163.
<https://www.redalyc.org/articulo.oa?id=297338131007>.
- Beckwith, Karen. 2015. "Before prime minister: Margaret Thatcher, Angela Merkel, and gendered party leadership contests." *Politics & Gender* 11 (4): 718-745.
- Bergqvist, Christina ed. 1999. *Likestilte demokratier? Kjønn og politikk i Norden*. Edited by Chrsitensen Ann-Dorte, *Kvunder i de politiske partier*. Oslo: Nordisk ministerråd.
- Bjarnegård, Elin. 2013. *Gender, informal institutions and political recruitment: Explaining male dominance in parliamentary representation*. Springer.
- Butler, David, Howard Penniman, and Austin Ranney. 1981. "Democracy at the polls: a comparative study of competitive national elections."
- Campbell, Donald, and M Jean Russo. 2001. "Fifteen validity issues affecting all measures." *Social measurement*: 131-171.
- Campbell, Rosie, and Sarah Childs. 2014. "Parents in Parliament: 'Where's Mum?'" *The Political Quarterly* 85 (4): 487-492.
- Caul, Miki. 1999. "Women's Representation in Parliament: The Role of Political Parties." *Party Politics* 5 (1): 79-98.

- <https://doi.org/10.1177/1354068899005001005>.
- Childs, Sarah, and Mona Krook, Lena. 2008. "Critical Mass Theory and Women's Political Representation." *Political Studies* 56 (3): 725-736.
<https://doi.org/10.1111/j.1467-9248.2007.00712.x>.
- Chiru, Mihail, and Marina Popescu. 2017. "The Value of Legislative Versus Electoral Experience and Gender in Explaining Candidate List Placement in Closed-List PR." *Problems of Post-Communism* 64 (2): 65-78.
<https://doi.org/10.1080/10758216.2016.1163228>.
- Christensen, Arne dag. 2002. "Hovedtyper av valgordninger. Proporsjonalitet eller politisk styring?" *Stein Rokkan senter for flerfaglige samfunnsstudier*.
<https://norceresearch.brage.unit.no/norceresearch-xmlui/bitstream/handle/1956/1416/N26-02%5b1%5d.pdf?sequence=1&isAllowed=y>.
- Cipullo, Davide. 2021. "Gender gaps in political careers: Evidence from competitive elections." *Munich Society for the Promotion of Economic Research - CESifo GmbH*: 1 - 102.
<https://www.cesifo.org/en/wp>.
- Cirone, Alexandra, Gary W Cox, and Jon H Fiva. 2021. "Seniority-based nominations and political careers." *American Political Science Review* 115 (1): 234-251.
- Dahlerup, Drude. 2007. "Electoral Gender Quotas: Between Equality of Opportunity and Equality of Result." *Representation* 43 (2): 73-92.
<https://doi.org/10.1080/00344890701363227>.
- Dahlerup , Drude, and Lenita Freidenvall 2005. "Quotas as a 'fast track' to equal representation for women." *International Feminist Journal of Politics* 7 (1): 26-48.
<https://doi.org/10.1080/1461674042000324673>.
- Dahlerup, Drude, and Kirsti Niskanen. 2011. "Women in Nordic politics—a continuing success story?" *Gender and Power in the Nordic Countries*: 59-86.
- Dolan, Julie, and Paru Shah. 2020. "She Persisted: Gender, Electoral Loss, and the Decision to Run Again." *Political Research Quarterly* 73 (4): 957-966.
<https://doi.org/10.1177/1065912920934869>.
- Erikson, Josefina, and Cecilia Josefsson. 2020. "The Parliament as a Gendered Workplace: How to Research Legislators' (UN)Equal Opportunities to Represent." *Parliamentary Affairs* 75 (1): 20-38.
<https://doi.org/10.1093/pa/gsaa049>.

- Fiva, Jon H., and Daniel M. Smith. 2017. "Norwegian parliamentary elections, 1906–2013: representation and turnout across four electoral systems." *West European Politics* 40 (6): 1373-1391.
<https://doi.org/10.1080/01402382.2017.1298016>.
- . 2019. Norwegian Parliamentary Elections, 1906-2017. <https://www.jon.fiva.no/data.htm>.
- Fiva, Jon, and Max-Emil King. 2022. "Child Penalties in Politics." *CESifo Working Paper*
<http://dx.doi.org/10.2139/ssrn.4054116>
- Fox, Richard L., and Jennifer L. Lawless. 2005. "To Run or Not to Run for Office: Explaining Nascent Political Ambition." *American Journal of Political Science* 49 (3): 642-659.
<https://doi.org/https://doi.org/10.1111/j.1540-5907.2005.00147.x>.
- . 2010. "If Only They'd Ask: Gender, Recruitment, and Political Ambition." *The Journal of Politics* 72 (2): 310-326.
<https://doi.org/10.1017/s0022381609990752>.
- Fritz, Mike, and Paul D Berger. 2015. *Improving the User Experience Through Practical Data Analytics: Gain Meaningful Insight and Increase Your Bottom Line*. Morgan Kaufmann.
- George, Alexander L, and Andrew Bennett. 2005. *Case studies and theory development in the social sciences*. mit Press.
- Gerring, John, and Lee Cojocar. 2016. "Selecting Cases for Intensive Analysis: A Diversity of Goals and Methods." *Sociological Methods & Research* 45.
<https://doi.org/10.1177/0049124116631692>.
- Goddard, Dee. 2021. "Examining the appointment of women to ministerial positions across Europe: 1970–2015." *Party Politics* 27 (4): 631-643.
<https://doi.org/10.1177/1354068819878665>.
- Grønmo, Sigmund. 2016. *Samfunnsvitenskapelige metoder (2. utg., s. 462)*. Fagbokforlaget.
- Gulzar, Saad. 2021. "Who Enters Politics and Why?" *Annual Review of Political Science* 24 (1): 253-275.
<https://doi.org/10.1146/annurev-polisci-051418-051214>.
- Hazan, Reuven Y, and Gideon Rahat. 2010. *Democracy within parties: Candidate selection methods and their political consequences*. OUP Oxford.
- Heidar, Knut. 2005. "Norwegian parties and the party system: Steadfast and changing." *West European Politics* 28 (4): 807-833.
<https://doi.org/10.1080/01402380500216757>.

- Hellevik, Ottar, and Torild Skard. 1985. *Norske kommunestyre - plass for kvinner?* . Oslo-Bergen-Stavanger-Tromsø: Universitetsforlaget
- Håkansson, Sandra. 2021. "Do Women Pay a Higher Price for Power? Gender Bias in Political Violence in Sweden." *The Journal of Politics* 83 (2): 515-531.
<https://doi.org/10.1086/709838>.
- Kittel, Bernhard. 2006. "A Crazy Methodology?: On the Limits of Macro-Quantitative Social Science Research." *International Sociology* 21 (5): 647-677.
<https://doi.org/10.1177/0268580906067835>.
- Kjaer, Ulrik, and Karina Kosiara-Pedersen. 2019. "The hourglass pattern of women's representation." *Journal of Elections, Public Opinion and Parties* 29 (3): 299-317.
<https://doi.org/10.1080/17457289.2018.1530678>.
- Kjaer, Ulrik, and Mona Lena Krook. 2019. "The blame game: analyzing gender bias in Danish local elections." *Politics, Groups, and Identities*.
- Knutsen, Oddbjørn, ed. 2017. *The Nordic models in political science : challenged, but still viable?* Bergen: Fagbokforl.
- Kolltveit, Kristoffer. 2022. "Gender and ambitions for elected and appointed political positions: insights from Norway." *European Journal of Politics and Gender* 5 (1): 109-125. <https://doi.org/10.1332/251510821x16314632442720>.
- Kroeber, Corinna, and Joanna Hüffelmann. 2021. "It's a Long Way to the Top: Women's Ministerial Career Paths." *Politics & Gender*: 1-27.
<https://doi.org/10.1017/S1743923X21000118>.
- Krook, Mona Lena. 2010. "Why Are Fewer Women than Men Elected? Gender and the Dynamics of Candidate Selection." *Political Studies Review* 8 (2): 155-168.
<https://doi.org/10.1111/j.1478-9302.2009.00185.x>.
- Krook, Mona Lena, and Diana Z. Brien. 2012. "All the President's Men? The Appointment of Female Cabinet Ministers Worldwide." *The Journal of Politics* 74 (3): 840-855.
<https://doi.org/10.1017/s0022381612000382>.
- Lewis-Beck, Michael, Alan E Bryman, and Tim Futing Liao. 2003. *The Sage encyclopedia of social science research methods*. United States of America: Sage Publications.
- Magnussen, M, and Christine Svarstad. 2013. "Kvinnens politiske interesse og deltakelse." *Prosjektrapport 5*: 2013.
- Marino, Bruno, and Nicola Martocchia Diodati. 2017. "Masters of their fate? Explaining MPs' re-candidacy in the long run: The case of Italy (1987–2013)." *Electoral Studies* 48: 1-9.

- <https://doi.org/10.1016/j.electstud.2017.05.001>.
- Marsh, Michael. 1988. *Candidate selection in comparative perspective: The secret garden of politics*. Vol. 18. SAGE Publications Limited.
- Matland, Richard E. 1993. "Institutional Variables Affecting Female Representation in National Legislatures: The Case of Norway." *The Journal of Politics* 55 (3): 737-755. <https://doi.org/10.2307/2131998>.
- Meserve, Stephen A, Daniel Pemstein, and William T Bernhard. 2020. "Gender, incumbency and party list nominations." *British Journal of Political Science* 50 (1): 1-15.
- Murray, Rainbow. 2010. *Parties, gender quotas and candidate selection in France*. Springer.
- Nagel, Anne-Hilde, ed. 1995. *Politisering av kjønn: Et historisk perspektiv* Edited by Nina C Raaum, *Kjønn og Politikk*. Oslo: Tano.
- Norris, Pippa. 2006. "The Impact of Electoral Reform on Women's Representation." *Acta Politica* 41 (2): 197-213. <https://doi.org/10.1057/palgrave.ap.5500151>.
- Norris, Pippa, and Joni Lovenduski. 1993. "'If Only More Candidates Came Forward': Supply-Side Explanations of Candidate Selection in Britain." *British Journal of Political Science* 23 (3): 373-408. <http://www.jstor.org/stable/194222>.
- . 1995. *Political recruitment: Gender, race and class in the British Parliament*. Cambridge University Press.
- Nowacki, Tobias. 2022. "The Gender Gap in Political Careers Under Proportional Representation." Working paper Political Science Stanford University https://tobiasnowacki.com/files/pr_gendergap_jmp.pdf.
- Nærbøvik, Jostein. 1999. *Norsk Historie: 1860–1914*. Oslo
- O'Brien, Diana Z, Matthew Mendez, Jordan Carr Peterson, and Jihyun Shin. 2015. "Letting down the ladder or shutting the door: Female prime ministers, party leaders, and cabinet ministers." *Politics & Gender* 11 (4): 689-717. <https://doi.org/https://doi.org/10.1017/S1743923X15000410>.
- Okimoto, T. G., and V. L. Brescoll. 2010. "The price of power: power seeking and backlash against female politicians." *Pers Soc Psychol Bull* 36 (7): 923-36. <https://doi.org/10.1177/0146167210371949>.
- Paffenholz, Thania. 2018. "Women in peace negotiations." In *Gendering diplomacy and international negotiation*, 169-191. Springer.

- Puwar, Nirmal. 2004. "Thinking About Making a Difference." *The British Journal of Politics and International Relations* 6 (1): 65-80.
<https://doi.org/10.1111/j.1467-856X.2004.00127.x>.
- Rokkan, Stein. 1970. *Citizens, Elections, Parties: Approaches to the Comparative Study of the Processes of Development*.
- Rokkan, Stein, and Henry Valen. 1962. "The mobilization of the periphery: Data on turnout, party membership and candidate recruitment in Norway." *Acta Sociologica* 6 (1): 111-152.
- Raaum, Nina C., ed. 1999. *Kvinner i Offisiell Politikk: Historiske Utviklingslinjer* Edited by Christina Berqvist, *Likestilte demokratier? Kjønn og politikk i norden* Oslo: Universitetsforlaget
- Raaum, Nina C., ed. 1995. *Politisk representasjon* Edited by Nina C. Raaum, *Kjønn og politikk*. Oslo: Tano.
- Raaum, Nina C. 2001. "Norske likestillingsparadokser? Refleksjoner over kjønn, arbeid og politikk." In *Svekket kvinnemakt*, edited by Nina Berven and Per Selle, 155-90.
- Raaum, Nina C., and Knut Heidar. 1995. "Partidemokrati i endring?" In *Kjønn og politikk*, edited by Nina C. Raaum. Oslo: Tano
- Saha, Sparsha, and Ana Catalano Weeks. 2022. "Ambitious Women: Gender and Voter Perceptions of Candidate Ambition." *Political Behavior* 44 (2): 779-805.
<https://doi.org/10.1007/s11109-020-09636-z>.
- Schwindt-Bayer, Leslie A., and William Mishler. 2005. "An Integrated Model of Women's Representation." *Journal of Politics* 67 (2): 407-428.
<https://doi.org/https://doi.org/10.1111/j.1468-2508.2005.00323.x>.
- Segaard, Signe Bock, Ulrik Kjaer, and Jo Saglie. 2022. "Why Norway has more female local councillors than Denmark: a crack in the Nordic gender equality model?" *West European Politics*: 1-24.
<https://doi.org/10.1080/01402382.2022.2050590>.
- Senaviratna, NAMR, and TMJA Cooray. 2019. "Diagnosing multicollinearity of logistic regression model." *Asian Journal of Probability and Statistics* 5 (2): 1-9.
- Siim, Birte. 1994. "Det kønnede demokrati: Kvinders medborgerskab i de skandinaviske velfærdsstater." *Institut for Historie, Internationale Studier og Samfundsforhold, Aalborg Universitet* FREIA's tekstserie Nr. 12.
<https://doi.org/10.5278/freia.14142141>.

- Skard, Torild, and Helga Hernes. 2018. "Progress for Women " *Access to Power: Cross-National Studies of Women and Elites*, edited by Cynthia Epstein and Rose Coser. London: Routledge.
- Slegten, Caroline, and Bruno Heyndels. 2021. "Sex-B(i)ased List Promotion: The Effect of Previous Electoral Performance." *Journal of Women, Politics & Policy* 42 (4): 314-331. <https://doi.org/10.1080/1554477X.2021.1955234>.
- Stock, James H, and Mark W Watson. 2020. *Introduction to econometrics*. Vol. 104. Addison Wesley Boston.
- Taflaga, Marija, and Matthew Kerby. 2020. "Who Does What Work in a Ministerial Office: Politically Appointed Staff and the Descriptive Representation of Women in Australian Political Offices, 1979–2010." *Political Studies* 68 (2): 463-485. <https://doi.org/10.1177/0032321719853459>.
- Teigen, Mari, and Hege Skjeie. 2017. "The Nordic Equality Model " In *The Nordic Models In Political Science : challenged, but still viable?* , edited by Oddbjørn Knutsen, 125-144. Oslo: Fagbokforlaget
- Van der Pas, Daphne Joanna, and Loes Aaldering. 2020. "Gender Differences in Political Media Coverage: A Meta-Analysis." *Journal of Communication* 70 (1): 114-143. <https://doi.org/10.1093/joc/jqz046>.
- Van der Ros, Janneke, Vegard Johansen, and Ingrid Guldvik. 2010. "Fra folkevalgt til utvalgt. Kjønn, makt og kjønnsmaktbalanse." *Tidsskrift for samfunnsforskning* 51 (2): 221-248. <https://doi.org/10.18261/ISSN1504-291X-2010-02-02>.
- Vanlangenakker, Ine, Bram Wauters, and Bart Maddens. 2013. "Pushed Toward the Exit? How Female MPs Leave Parliament." *Politics & Gender* 9 (01): 61-75. <https://doi.org/10.1017/s1743923x12000694>.
- Verge, Tània. 2015. "The Gender Regime of Political Parties: Feedback Effects between “Supply” and “Demand”." *Politics & Gender* 11 (4): 754-759. <https://doi.org/10.1017/S1743923X15000483>.
- Wardt, Marc, Arjen Witteloostuijn, Anthony Chambers, and Bram Wauters. 2020. "Birds of a feather flock together? The survival of underrepresented groups within parliamentary parties, 1991–2015." *European Journal of Political Research* 60 (2): 474-496. <https://doi.org/10.1111/1475-6765.12409>.
- Wilson, Steven Lloyd, Nils Ringe, and Jack van Thomme. 2016. "Policy leadership and re-election in the European Parliament." *Journal of European Public Policy* 23 (8): 1158-1179.

<https://doi.org/10.1080/13501763.2016.1186213>.

Wägnerud, Lena, and Maria Oskarson. 1995. *Kvinnor som väljare och valda: Om betydelsen av kön i svensk politik*. Sverige: Lund: Studentlitteratur

Wängnerud, Lena. 2015. "The Principles of Gender-Sensitive Parliaments." *Politics & Gender*: 174.

<https://doi.org/10.1017/S1743923X16000593>.

Østerud, Øyvind, and Per Selle. 2006. "Power and Democracy in Norway: The Transformation of Norwegian Politics 1." *Scandinavian political studies* 29 (1): 25-46.