Intergenerational transmission of political party affiliation∗

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Abstract

We investigate the intergenerational transmission of political party affiliation by using Swedish register data including all nominated politicians for the years 1982 to 2014. First, we demonstrate that there is a strong link between individuals and their parents concerning choice of political party affiliation. We also find that the intergenerational transmission is not only present between parents and children, but also existent over the generations and across siblings. Our second aim is to investigate the mechanisms behind this result, which we do by first discussing two hypotheses: A socialization pathway and a materialistic pathway. We then bring these hypotheses to the data and find that the socialization explanation seems to matter more for explaining the intergenerational transmission.

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1 Introduction

Individuals are affected by the context in which they grow up, where the family is expected to play a central role. A person’s political participation and political engagement is likely to increase if he or she has a parent that has been nominated to political office. The impact is probable to be twofold; an individual whose father or mother is a politician for a specific political party is both more likely to be overall more politically active, but also specifically more inclined to sympathize with the political party in question. Although parents are important characters, they do not act as the solitary source of influence. There is a dynamic process taking place during a person’s childhood where one is also affected by the opinions, believes and demands of other people in close proximity, such as siblings and the extended family.

In political science, one often occurring argument is that democratic deliberation is important in order to reach an enlightened decision. The argument in itself should be evaluated and not the messenger of the argument. A strong intergenerational transmission of political party affiliation between parents and their children could thus be seen as problematic, given that it could be interpreted as individuals are not master of their own beliefs but instead (deterministically) formed by earlier generations. From a point of view that encourage deliberation, this could be seen as an obstacle if party choice should not be path-dependent but instead based on an individual assessment of the political arguments. Another explanation for why children and parents may hold similar political views is because of an intergenerational link with regards to materialistic factors meaning that they also have similar political demands. A society where political beliefs are strongly influenced by materialistic inheritance over the generations is however also problematic if the ideal is that each person should individually be the principal determinate of his or her success and political conviction.

Although we have theoretical reasons to believe that there is a transmission taking place within the family with regards to political party affiliation, it is important to study the matter empirically. The earlier empirical literature has provided us with important insights but is above all based on older survey data. Our main purpose in this paper is instead to investigate intergenerational transmission of political party affiliation within the family by using Swedish register data from more recent years. Swedish data is particularly suitable for addressing these questions because there exits registers which provides information on extended family connections which in turn may be linked to other registers with information on political candidacy, place of residence and labor market outcomes. Above all,

As Huddy, Sears and Levy (2013) point out, deliberation is also a form of information dissemination. Full information in turn is an important underpinning in the rational choice approach to politics. People need to have information in order to maximize their utility.
registers have the advantage of being population based and more accurate than surveys. There is a large and growing literature in political science, sociology and economics studying intergenerational transmissions in terms of income, human capital and wealth beyond the immediate family and this paper thus continues in this tradition, but with a political science focus: political candidacy.

Political party affiliation in this paper is going to be defined as running for a political party in a general elections. We investigate this both in the context of the immediate family, but we also investigate the intergenerational transmission taking siblings and the extended family into account. The next question we pose is how one may explain intergenerational transmission of political affiliation. Which mechanisms are in play? By connecting the empirical analysis to the underlying theoretical mechanisms, our paper contributes to the existing literature, which has, with a few exceptions, been highly empirical. We are going to highlight two main theoretical mechanisms that we have chosen to denote as the socialization pathway and the materialistic pathway. The notion that an individual is socialized into political affiliation emphasizes discussions at home as the main transmission mechanism. The materialistic view on the other hand is more connected to a rational choice and political economics approach to politics where individuals are utility maximizers where their demands depend on their material standard, which in turn could be intergenerationally transmitted. We are going to discuss these theoretical predictions one at the time and then bring the predictions to the data.

1.1 Earlier literature

The literature analyzing how political affiliations are transmitted is vast and almost exclusively empirical (see Jennings, 2007, for a review). The literature review in this section will therefore focus on the empirical findings and we return to the underlying theoretical arguments in the theoretical framework section. The main focus of this earlier empirical literature has, at least indirectly, been on the socialization aspect within the family.\textsuperscript{2}

Jennings and Niemi (1968) was one of the first papers that investigated this intergenerational transmission. They used American survey data, from a sample consisting of high school students and their parents, and found mixed results with regards to the transmission of political values. Party identification seems however to be transmitted from parents to child. Jennings, Stoker and Bowers (2009) ex-

\textsuperscript{2}In recent years, political scientists have also analyzed whether genetic factors play a role and found support for this (Alford, Funk and Hibbing, 2005, Settle, Dawes and Fowler, 2009, Oskarsson et al., 2014, Hatemi et al., 2014, Cesarini, Johannesson and Oskarsson, 2014, Oskarsson, Dawes and Lindgren, 2018). The genetic pathway may be discussed in light of a materialistic explanation where genetics provides the foundation for income formation of the life-cycle, an argument we return to in the theoretical section below. 1
panded on this analysis by including additional cohorts. An important conclusion is that the transmission of opinions for a given topic is dependent on other contexts at the time of the survey. The authors also find that the transmission is larger in families with strong political commitment. Tedin (1974) points out that parents’ salience over an issue is dependent on the intergenerational transmission of their beliefs to their children, but also how correctly the child perceives the attitudes of his or her parents. Beck and Jennings (1975) apply an analysis with three generations. They use a survey data set consisting of high school students which was complemented with interviews concerning parents’ and grandparents’ stated political affiliation. One interesting conclusion is that fathers’ political affiliation seemed to be the dominating source of political socialization in the parent–grandparent generation but that in the child–parent generation, both parents had almost an equal impact on the political affiliation of their children when parents disagree. Beck and Jennings (1991) focus instead on how parental transmission of political beliefs has changed over time and find that the intergenerational transmission became lower at times of the general anti-authoritativeness movements during the 1960’s and 1970’s and that children originating from highly Republican or highly Democratic families were mostly affected by the general trends against authoritativeness. Westholm (1991) studies Sweden just as we do, but in his case with survey data from first half of the 1980’s including political opinions among parents and their children. His study shows, among many other things, that there is an intergenerational connection between parents’ political views and their children’s.

Later studies have emphasized the importance of the institutional setting when studying intergenerational transmission. Percheron and Jennings (1981) point out that France is divided by a right and a left dimension instead of a party dimension in comparison to the United States. The authors perform their analysis with cross-country survey data which support their view that the intergenerational transmission either takes place as a party affiliation or as a left–right dimension but not explicitly as a party identification transmission. Westholm and Niemi (1992) revisits these results by also adding Sweden and Finland to the data set and argues that the conclusion of an opposite relationship between a left–right transmission and political party identification does not apply to these Nordic countries. Jennings (1984) also engage in a cross-country analysis and study the transmission of a right-left dimension, but also a materialistic-postmaterialistic dimension and an authority-antiauthority dimension. He find that the transmission is primarily present in the left-right dimension.3

Glass, Bengtson and Dunham (1986) relates transmission from parents to their children with age and status. Luskin, McIver and Carmines (1989) study the connection between intergenerational linkage and different political issues. Ventura (2001) shows by making use of data from Israel that the intergenerational correlation between parents and their children is higher when considering political blocs instead of political parties separately.

3 Glass, Bengtson and Dunham (1986).
These earlier papers use survey data in their measures of political attitudes and party identification, meaning that authors focus on stated party preferences. The focus in our paper is instead to focus on revealed party preferences, since we have access to register data regarding nominated politicians. There are pros and cons connected to both approaches. Our approach has the advantage of using a more objective measure of political affiliation. Being nominated or elected for a party is a clearer signal of political conviction than stating in a survey that you prefer a specific party. We also have the advantage of using population wide data for all politicians in Sweden for a given time period. We may not however focus on a more fine-grained analysis with regards to political preferences but instead settle on using political party affiliation as a catch-all measure. The main disadvantage of using surveys is that people may not necessarily state their true preferences, and that parents and their children may influence each other when answering the same survey. There is also self-selection into generational surveys, where the propensity to answer may be correlated with how close the parents and children are in terms of beliefs (Connell, 1972). We do however also have a selection problem in this paper concerning who is becoming a politician and we return to this issue in the theoretical framework section.

Apart from the political socialization literature, our paper is also linked to the literature on political dynasties and family connections. Dal Bó, Dal Bó and Snyder (2009) demonstrated that children of U.S. congressmen tend to run and be elected to the same congressional seat as their parents and that this intergenerational effect is strong in comparison to other professions. Querubín (2016) also finds evidence of a dynastic long-term effect by showing in a regression discontinuity framework that the probability of being elected to office in the Philippines increases if a relative (narrowly) wins an election. The existence of a dynastic aspect in politics have further been demonstrated in Japan (Asako et al., 2015), India (Chandra, 2016), the U.S. (Feinstein, 2010) and Ireland (Smith and Martin, 2017). Fiva and Smith (2018) show that there is an incumbency advantage in Norway, which has a closed-list proportional representation system, but they find no evidence that this in turn yields a higher probability that a family member wins an election. Neither does Van Coppenolle (2017) find any evidence of a dynastic effect of having a relative serving in the UK House of Commons for a longer period of time. Although our paper is somewhat related to the dynasty literature given that we also study the family and the extended family, our purpose is not to focus on how political offices are inherited but instead on partisan affiliation in a broader sense.

\[4\text{Cruz, Labonne and Querubín (2017) concluded by using data from the Philippines that family networks and especially centrality within these networks are important explanatory factors for vote share for a candidate.}\]
2 Theoretical framework

We are going to focus on two potential theoretical channels through which the transmission of political party affiliation may be mediated: 1) a socialization pathway and 2) a materialistic pathway. These two pathways originate from two different theoretical traditions. The socialization pathway has been presented verbally in previous literature whereas the materialistic pathway originates from a very standard rational choice (political economics) framework. We present both these pathways in words here in the main text, but the reader finds a formalized version of the materialistic pathway in the online appendix. We address the selection issues below when we discuss the materialistic pathway because these may be highlighted in a pedagogical way within the rational choice reasoning. These empirical selection issues are however also present when testing the socialization pathway.

2.1 The socialization pathway

Beginning with the socialization pathway, this was indirectly the starting point in many of the empirical papers that we previously discussed in the literature section. The core idea is that discussions at home with parents and relatives function as a socialization treatment. If a parent is a convinced liberal, it is more likely that the child is also more liberal simply because children spend so much time together with their parents and parents act as role models. As we indicated in the literature review, most papers that have studied intergenerational transmission of political affiliations are empirical and the exact theoretical foundation in these papers is rarely explicit. The theory is mostly concerned with when the transmission is taking place (Sears and Brown, 2013). Does the socialization process start already at birth, or is an individual particularly susceptible during another time in life?  

A central idea within the socialization pathway has been that political views are crystallized as a person ages, meaning that views and perceptions are more susceptible to change at a younger age (Campbell et al., 1980, chapter 7, Krosnick and Alwin, 1989). Given that a person spend most of the time together with his or her parents at a young age, it is natural to assume that parents plays an important role for political socialization (McIntosh, Hart and Youniss, 2007, Hagevi, 2011). It has also been demonstrated by Fox and Lawless (2005) that people growing up in a politicized environment possess a higher nascent political ambition and thus a higher propensity to run for office as an adult.\(^5\)

A similar, yet distinct, socialization explanation is that an individual is particularly influenced by parents and peers during the impressionable years and not at

\(^5\)The gender gap with regards to political ambition has been demonstrated to be substantial where women for example experience less encouragement from parents (Fox and Lawless, 2014). This might be a result of the fact that women are underrepresented in elected office world wide.
a young age. The exact definition of when the impressionable years start and end is debated, but late adolescence and early adulthood is usually considered when discussing this period in life. According to this hypothesis, a person is for the first time placed in a socialization context where politics is an important part at the same time as the individual is defining him or herself as an independent individual. The argument is that the political views formed during this period have a persistent effect on adult political beliefs (Manheim, 1952, Sears, 1975, Sears and Brown, 2013).

In brief, it seems like there are somewhat conflicting views on when a person is mostly influenced although both explanation highlights political socialization. The two views are thus connected and may be interpreted in light of parental influence. Clearly parents are important for the crystallization hypothesis, but even the impressionable year hypothesis is indirectly based on parental selection. A child that grows up in a particular neighborhood will go to school with a subset of children whose parents are likely to be similar to his or her own parents. It is also likely that political discussions initiated at home continue with peers. Socialization thus reinforces itself through different pathways where parents play an important role (Andolina et al., 2003). When an individual reaches the impressionable years, he or she is put in a context together with peers based on predisposed characteristics of the parents. It is likely that this context provides similar views as that of the parents during childhood.

To summarize this discussion, the socialization pathways emphasize the parents’ political beliefs. These beliefs are either directly transmitted or indirectly due to sorting into socialization contexts during the impressionable years. The focus in our paper is however not to distinguish between the crystallization hypothesis and the impressionable years hypothesis, but instead contrast this with the materialistic pathway that we discuss in the next subsection.

Before we continue, it is worth highlighting some implications of the socialization pathway. Given that parents’ active presence is of the essence in this pathway, the absence of a parent – for example because of death or divorce – would then yield a lower parental transmission of political affiliation. According to the socialization pathway, children need to spend time with their parents. Also the impressionable years subhypothesis rests indirectly on this necessity. If the child lives only with one parents, it is likely that sorting into neighborhoods and schools is going to be based on the characteristics of this parent and not primarily the other parents that the child do not live with. We summarize the discussion on this subsection in one empirical testable prediction:

**Empirical testable statement 1:** The intergenerational transmission of political affiliation is less pronounced when a child did not live with the politically
2.2  The materialistic pathway

In contrast to the socialization view stands the materialistic pathway. This theoretical explanation emphasizes that political demands are driven by economic conditions and the reason why parent and their children have similar political demands is because they share a similar materialistic standard. In this subsection we discuss the underpinning of this materialistic pathway words. In the appendix, we sketch a more formalized rational choice framework which underlies the reasoning here in the main text. We do not create a theoretical model where we solve for equilibria and our theoretical reasoning is mostly modifications of earlier theoretical work. In particular, the simple theoretical framework follows chapter 1, 2 and 5 in Persson and Tabellini (2000)\(^6\) but is extended to take into account intergenerational aspects.

Let us picture that individuals demand two things. They want to consume goods and services and they also want the public sphere to provide them with a certain degree of redistribution and public goods. In order to buy goods and services, the individual needs an income, but a certain share of the income is paid in taxes which are used to finance redistribution and public good provision. A person with a high income thus has a better opportunity to consume more and is also less dependent on redistribution through public means. An individual with a relative higher income will therefore demand less redistribution and vice versa.

The second question is what determines the income of the individual. It is natural to hypothesize that the income of an individual in one generation is dependent on the income of his or her parents. This may be because the two individuals share a genetic component or because the social environment during childhood provides different opportunities for future income development. Second, the income also depends on an individual component that is not linked to the parents. The educational system may be one such aspect where education has historically been a public mean to equalize the opportunity of individuals from different socio-economic backgrounds. The importance of these two different factors varies between individuals, but in general, the higher the parental income, the higher income of the individual.

These two theoretical sub-hypotheses, namely that individuals with relatively higher incomes demands less redistribution and that income is intergenerationally

\(^6\)See also Hagevi (2015) chapter 6 for a discussion about the materialistic pathway (or economics and voter choice) with an emphasis on Sweden
transmitted, are two cornerstones of the materialistic pathway. They are also easily linked to political party choice. Right-wing parties favor, in general, lower taxes and less redistribution whereas left-wing parties favor higher taxes and a higher degree of redistribution.\textsuperscript{7} High income earners are therefore more likely to prefer right-wing political parties to a higher degree than low income earners.

In democracies, the actual vote choice of a given individual is not public information. There is simply no register available with information regarding party choice.\textsuperscript{8} What we do observe however is the political affiliation of those running for political office and our empirical analysis will be focused around these individuals.

This means that we have a selection issue given that we only observe those who have chosen to participate as politicians. The core question is whether the political party affiliation may function as a proxy variable for underlying political demands. A person that is a nominated politician may certainly be affiliated with a political party because the individual has mapped the political demands to the political party policy platform. However, an individual may also be a politician in order to please the parents. Or, reversely, an individual may choose not to become a politician in order not to anger the parents because of political disagreement.

The choice to run for office is one of the classic themes in political economics models. In older models, politicians were exogenous and office motivated where they proposed policy platforms in line with the median voter. This is the central conclusion in the Hotelling–Downs model (Hotelling, 1929, Downs, 1957). More recent theoretical models have however endogenized the choice of becoming a politician (Osborne and Slivinski, 1996, Besley and Coate, 1997). These citizen-candidate politicians originate from the electorate where all individuals have political demands. For some individuals however, it is beneficial to also run for office in line with these political demands where the choice to run is dependent on the cost of running. In the last part of the game, those running for office and winning the election will implement a policy in line with the true political demands given that a different policy will not make it worthwhile to run for office in the first place.

If we believe in the citizen-candidate model, the individuals that we observe as running for office for a specific party are doing this because the political party is a good representation for the political demands of the candidate in question. For these candidates, we may also indirectly assess the intermediate theoretical steps in the materialistic pathway, such as individual income and the intergenerational transmission of income from the parents given that we have access to register data.

\textsuperscript{7}We acknowledge that there is more than one dimension in modern politics, but the economic conflict is still one of the most important.

\textsuperscript{8}There are of course surveys available in some cases. The problem with surveys is however that they do not normally cover the entire population and they cannot usually be linked to register data. There are also uncertainties whether individuals answer truthfully in surveys.
Let us summarize our discussion in the statement below:

**Empirical testable statement 2:** There is an intergenerational link in income between parents and their children. Those individuals with relatively higher incomes prefer right-wing political parties and those with relatively lower income prefer left-wing political parties. Because of this, there will be an intergenerational link in political party affiliation.

### 3 Institutional setting

Let us now move on and provide some basic information about the Swedish political system.

Elections in Sweden took place every third year prior to 1994 and every fourth year after that. Elections are held for seats at the municipal councils, the county councils and the national parliament on a single day. Sweden has a PR-system with closed lists where the position on a party list is important with regards to the possibility of being elected.

The Swedish political parties may be divided into two different blocs: the center-right and the center-left. The center-right bloc consists of the Moderate Party (conservatives), the Christian Democrats, the Liberal Party and the Center Party. The center-left includes the Green Party, the Social Democrats and the Left Party. In addition, there is the Sweden Democrats which is a right-wing populist party that is not normally considered part of any of the two blocs. The Sweden Democrats was a small political party for a very long time and they entered parliament in 2010, but has gained strength in recent years. Given that the Swedish political arena is clearly divided between a center-right and a center-left bloc, we will use these bloc variables in some of our empirical specifications which we further explain in the result section.

Each party has different nomination traditions. Some parties hold primary elections to fix the position on a party list before the general election. In other parties, the local party board decides on the final list. Some political parties use a combination of primary elections and board decision. While there can be fierce competition for the top positions of a ballot, it is usually not too difficult to enter a list for someone who is an active member of a political party.

In many countries, it is custom that politicians originate from the upper classes. Given our discussion concerning selection in the theoretical framework section, this would be problematic if our data sample is highly selective in terms of social background and income – especially since we are interesting in investigating the link between income and political affiliation. Dal Bò et al. (2017) investigate
the background characteristics of Swedish politicians and find that they are representative of the general population in terms of parental income and occupational background. The politicians seem however to be more intelligent in comparison to the population as a whole.\footnote{A related question to ours is whether children of politicians obtain economic favors because their parents are politicians. This issue has been investigated by \textcite{Folke2017} who actually finds that income of children is increased if the parent is becomes a top politician on the municipal level in Sweden. The authors conclude however that this finding seems to be driven by an increase in the probability that the child in question stays in the home municipality and work instead of moving to participate in higher education.}

The question is what kind of case Sweden constitutes. One the one hand, Sweden has traditionally demonstrated a significant degree of class-based voting where one is voting in accordance with one’s social background (\textcite{Oskarson2015}). Although the extent of class-based voting has decreased over time, we would still argue that it is an important factor.\footnote{Note that this argument assumes that class mobility is lower than other sources of intergenerational mobility in party affiliation. Given how strong correlations we find, this assumption may not be true.} On the other hand, Sweden has many different political parties meaning that individuals have the possibility of becoming involved in politics through different platforms, meaning that the intergenerational transmission of political affiliation at least on the political party level should be less pronounced in comparison to a political system where there are two big tent parties even if class voting exists.

\section{Data and empirical framework}

The data material originates from Swedish registers. What is unique with our data is that it contains almost the entire population meaning that we may study all politicians from the national, county and municipal level. The data set begins in 1982 which is the starting year in our study and 2014 is the last year. In addition to the data set on politicians we also have access to a multigenerational data set which enables us to link children to their parents as well as link individuals to their siblings and grandparents. This is crucial given the purpose of the paper.

Being a politician is relatively rare. In order to increase the sample size, we will therefore focus on all nominated politicians in our analysis, regardless if they were elected or not. Focusing on nominated politicians is also natural if we are interested in political affiliation and not the intergenerational inheritance of elective office. We thus choose to add nominated politicians from all three national elections in Sweden together in our empirical analysis. In those relatively rare cases where a person has been nominated for different political parties in different elections, we choose the mode political party affiliation.
We should make one clarifying note regarding terminology. We are going to refer to *individuals* in our empirical analysis which are those belonging to the last generations and that have been nominated between 1982–2014. These individuals then have *parents*, *siblings* and *grandparents* which in turn may also have been nominated between 1982–2014.\(^{11}\) This group of people are going to constitute our empirical sample where we investigate transmission of political party affiliation. In all empirical analysis, we are going to restrict the sample to those cases where the *individuals* are nominated later in time than the *parents*, *siblings or grandparents* in question given that we are interested in the transmission of political party affiliation to the individuals.

To test the socialization pathway, we need to know whether individuals grew up with their politically nominated parents. We start by counting the number of years that a child and its parents lived together between the year the child was born and the year it turned 18. Because children with separated parents are registered in our data as living with *either* their mother or father, and it is quite common that they in reality live part-time also with the other parent, we count children as living with their parents as long as they are residing within the same county (län). Because of this very broad definition, children not coded as living with one of their parents will be unlikely to meet the parent on a regular basis. Based on this number we create one variable that measures the share of these years that they lived together as well as one binary indicator for whether this share amounts to a majority of the time. As a robustness check, we also create a similar variable that is based on a smaller geographical unit.\(^{12}\)

For the materialistic pathway, we need income data, which we obtain from the LISA-register. We standardize income for each cohort for the first year after the age 33. Earlier literature has highlighted that it is problematic to use current income as a proxy for life-income (Engström and Hagen, 2017, Böhlmark and Lindquist, 2005). After 30, most individuals that have enrolled in higher education have established themselves on the labor market and we therefore choose the age of 33.

The empirical analysis for the benchmark results is very simple. We focus on the party level and calculate the share of nominated individuals that had a parent that was nominated for the same political party. We also calculate the equivalent share for grandparents and siblings in separate specifications. This descriptive analysis addresses the direct transmission from parents, siblings and grandparents.

We need however something to relate these shares to in order to assess the

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\(^{11}\)Another way to denote these *individuals* would be to call them children, since we are investigating the intergenerational transmission from parents to their children. These people are however adults when we measure the outcome variables thus making it more accurate to simply call them *individuals*.

\(^{12}\)These calculations are based on SAMS-areas, which are subunits within municipalities. A SAMS roughly consists of 1000 individuals.
magnitudes. We therefore also calculate for comparison 1) the expected share that two randomly drawn individuals belongs to the same political party. Here we focus on the 8 political parties in parliament and exclude various local parties that only exist in certain municipalities. 2) The share that two randomly drawn individuals belongs to the same political party, taking into account the number of candidates running between 1982–2014. This essentially takes into account that certain political parties are larger than others. 3) The share that two randomly drawn individuals belongs to the same party taking into account which municipality they were nominated in and which election year. We later turn to a regression framework in order to run robustness checks and the mechanism analyses where we explain the details below.

Worth emphasizing is that this is not a causal-effect paper. We are not highlighting one important treatment variable and then apply an identification strategy. The literature on intergenerational transmission is correlational in its nature and paints a broader picture on dependence within families. Our paper continues in this tradition and we cannot say that our estimated coefficients has a causal interpretation. Our results should instead be interpreted as the overall link with regards to political party affiliation.

5 Benchmark results

The benchmark results are presented in Table 1. Let us first discuss the transmission from parents to individuals. We restrict the sample to those nominated individuals that had one or two parents that were also nominated politicians during the time period 1982–2014. We also put the restriction that in the presence of two politician parents, they must belong to the same political party. We allow however for having other relatives that were nominated politicians during the period. The share of individuals included in such a sample specification that also had a parents belonging to the same political party is around 76% (row 1 in Table 1). If we relate this to the expected proportions that two randomly drawn candidates belongs to the same political party (row 5–7), they range from 12.5–19 %. This descriptive evidence points towards a strong transmission of political affiliation from parents to their children.

In rows 3–4 in Table 1, we turn our attention to the transmission from siblings and grandparents. In his case the sample restriction is slightly modified. Here we put a restriction that the individual had one or more siblings (row 3) or one or more grandparent (row 4) but no other relatives running for office. For comparison, we also calculate the transmission from parents under this modified sample restriction in row 2 where the individual had one or two parents nominated for office, but no other relatives. Beginning with row 2, the share of individuals that had one or
two parents nominated for the same political party is, as expected, close to the share we calculated in row 1. What is interesting is that there is a transmission from siblings and also to some degree from grandparents. For those individual that had one or two siblings that was nominated for political office but no other politician relatives, the share of individuals that ran for the same political party is around 60%. 35 % that had grandparents nominated for political office ran for the same political party as their grandparents. Both these shares are much higher than the probability that two randomly drawn candidates belongs to the same political party. It thus seems that the intra-family transmission is present even in the absence of having parents that were nominated politicians.
## Table 1: Benchmark results

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<tr>
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<th>Proportion</th>
<th>SE</th>
<th>Observations</th>
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<tbody>
<tr>
<td><strong>Main sample (every candidate with a parent politician)</strong></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Same party as parent</td>
<td>0.764</td>
<td>0.004</td>
<td>14,275</td>
</tr>
<tr>
<td><strong>Those with either parents, siblings or grand parents</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same party as parent</td>
<td>0.686</td>
<td>0.004</td>
<td>11,089</td>
</tr>
<tr>
<td>Same party as sibling</td>
<td>0.610</td>
<td>0.006</td>
<td>6,527</td>
</tr>
<tr>
<td>Same party as grand parent</td>
<td>0.347</td>
<td>0.013</td>
<td>1,264</td>
</tr>
<tr>
<td><strong>Expected proportion for candidates randomly drawn from:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eight parties of equal size</td>
<td>0.125</td>
<td></td>
<td></td>
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<tr>
<td>All candidates 1982–2014</td>
<td>0.177</td>
<td></td>
<td></td>
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<tr>
<td>Same municipality and year</td>
<td>0.190</td>
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</tbody>
</table>

The proportions refer to the share of the candidates that ran for the same party as their parent, sibling or grand parent. In the first row, the sample includes every candidate with either one or two parents who have also been nominated for one of the eight parties in the national parliament, regardless of whether any other relatives have ran for office. However, candidates are excluded if the two parents ran for different parties. In rows 2–4, the sample is restricted to those who have *either* one or more parents, siblings or grand parents that have ran for office. The last three panels show the expected proportion if candidates were randomly drawn from a pool of i) candidates distributed equally between eight parties, ii) the universe of Swedish candidates 1982–2014 (excluding parties outside national parliament), or iii) the candidates that ran in the same municipality and year as the candidates in our sample.
To conclude, parents seem to be the strongest source for political party affiliation transmission, but the direct transmission is also present for siblings and to some degree from grandparents.

In the online appendix we address potential objections towards our baseline results. This robustness discussion and analysis is primarily concerned with checking whether the intergenerational transmission is affected when focusing on individuals that are less likely to be nominated just to please their parents. The conclusion from this analysis is that the estimated transmission is still present in these robustness specifications. We also estimate the intergenerational transmission over time and conclude that it has decreased over time, but that it is still high for later years.

### 6 Mechanisms

We have now concluded that there is a strong intergenerational transmission with regards to political affiliation. How may we explain this transmission? Let us return to the empirical testable statements that we made in the theoretical section.

This analysis is going to focus on the parent-to-individual transmission. The benchmark results presented in Table 1 were purely descriptive in order to simplify interpretation. Now we have to turn to a regression framework in order to include additional variables. To mimic the specification in the last subsection, we are going to stick to the sample restriction in row 1 in Table 1 where the outcome variable SameParty equals 1 if the individual and the parent(s) were nominated for the same political party and 0 otherwise. Another way to express this share is simply to run a regression on the constant: \( \text{SameParty}_i = \alpha_i + u_i \). \( \alpha_i \) is then the share of individuals that were nominated for the same political party as their parent. Column 1 in Table 2 display this specification to facilitate comparison, which is equal to the share in the first row in Table 1.

The first theoretical statement concerned the socialization pathway. In order for the socialization pathway to have empirical support, the intergenerational correlation should be weaker if the child did not grow up with the politically nominated parent. According to the materialistic pathway, the estimated intergenerational correlation should decrease if income is included in the regression since income is expected to capture the core transmission between individual and parents.\(^\text{13}\)

\(^{13}\)The materialistic pathway also includes two intermediate steps: That there is an intergenerational correlation with regards to income and that a higher relative income increases the probability that an individual is affiliated with a center-right political party. As demonstrated in Table A3 in the appendix there is such an income correlation for our sample. In accordance with our expectations, we further find that an increase in income yields a higher probability of being nominated for the center-right bloc and vice versa in Table A3.
Table 2: Testing the two mechanisms

<table>
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<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Lived with parent (share)</td>
<td>0.425***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.042)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lived with parent (binary)</td>
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<td>0.325***</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>(0.037)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income-based prediction</td>
<td></td>
<td></td>
<td>0.291***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.050)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
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<td>0.467***</td>
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<td></td>
<td>(0.004)</td>
<td>(0.041)</td>
<td>(0.037)</td>
<td>(0.009)</td>
</tr>
</tbody>
</table>

Sample  All  All  All  All
Observations  14275  8773  8773  12649

The dependent variable is a binary indicator for whether an individual voted for the same party as their parents. The sample include candidates with either one or two parents who have also ran for office, but the candidate is excluded if the two parents ran for different parties. Children are coded as living with their parent if they reside within the same county (län). Standard errors in parentheses.

To test the socialization pathway, we begin by creating a binary indicator that for each year measures whether the individual and the parent lived together. Based on these binary indicators, we define one variable for the share of years between birth and age 18 that the individual lived together with the politician parent, and one binary variable for whether this amounts to more or less than half of the time. The results are presented in Table 2. Column 2–3 in Table 2 concerns the socialization pathway. The reader should here pay attention to how the estimated constant is altered when these variables are included in the regression. What we find is that most of the intergenerational transmission is conditioned on living with the parent and that the share of individuals that are nominated for the same political party as their parent decreases substantially if we focus on those that did not grow up in the same county as their politician parents (36.9 % for those who never lived with the parent, compared to 79.4 % of those who lived with the parent between birth and turning 18, if we trust the specification in Column 2). This yields strong empirical support for the socialization pathway, and puts an upper limit on how much of the intergenerational correlation in party affiliation that could potentially arise from a shared genetic heritage or some other factor which does not require that the parent and child live together.

It can be noted that the intergenerational transmission of political affiliation is
still reasonably large even if the individual in question did not live with the politician parent, as illustrated by the estimated coefficients for the constant in Column 2 and Column 3. However, we must also keep in mind that even if randomly drew pairs of politicians, 17.7 percent of them would belong to the same party (see Table 1), so the increase coming from the intergenerational transmission should not be overstated. As a robustness check, we have also based the socialization variables on SAMS instead of counties. A SAMS is a much smaller geographical unit than a county. The results are presented in Table A4 in the appendix. As expected, the constant is still decreased when the socialization pathway variables are included into the regression, but the decrease is smaller.

Column 4 concerns the materialistic pathway. We choose to run a regression where we include the probability of being nominated as the same political party as the parent given one’s position in the income distribution defined as income for the first year after the age of 33. We then take the prediction from this regression and include it in the regression. Note that this variable depends both on the income of the individual and which party the parents ran for. In contrast to column 2 and column 3, we do not see a large change in the estimated constant when we include this variable. The constant is slightly smaller, but we do not see a large drop as we did when we included the variables to test the socialization pathway. The conclusion is that income cannot explain a large share of the overall intergenerational correlation between individuals and their parents with regards to political affiliation.

7 Supplementary analysis

We have now demonstrated that there is a large intergenerational transmission between parents and individuals with regards to political party affiliation. The mechanisms behind these results seem to be more in line with the socialization pathway rather than the materialistic pathway. We also found that there is a direct transmission from siblings and grandparents.

Our data allow us however to expand from these findings by using additional information we have available in the register data which further illustrate the dependence of political party affiliation within the family.

The first thing we can do is to look at heterogeneity with regards to gender and ask ourselves whether the transmission is different from males and females and whether males and females are incorporating the political affiliation from fathers and mothers to an equal extent. The results are presented in Table A5 in the online appendix. In essence, we find that the transmission is not heterogeneous with regards to the gender of the individual. What we do find however is that having the same gender as the nominated politician parents further increase the
share of individuals running for the same political party as their parents.

The second thing we can do is to incorporate cases where parents belong to different political parties, i.e. when there is disagreement within the family. In this case, we may investigate partisan transmission where we have variation across political parties. In order to keep this part of the analysis relatively contained, we focus on the two political blocs. In this case we are essentially using the variation when different family members belong to different political blocs to estimate the parameter value for $\beta_1$.

The results are presented in Table A6. The sample in this case consists of those families where the individual, the mother and the father have all been nominated for a political party. The difference this time is that the parents can be nominated for different political blocs. First we estimate the transmission from fathers and mothers respectively for the entire sample and then for men and females separately. Overall, it seems like the mothers’ political affiliation matter much more than the fathers’ when the mother and the father disagrees, and that this finding holds for both male and female children. The result that mothers dominate when the parents disagree, but that their respective influence is more equal when the other parent is neutral, echoes the conclusions drawn in the early literature (Beck and Jennings, 1975).

8 Discussion and conclusion

Understanding how political beliefs are formed constitute one of the central themes in political science since the question addresses the fundamental issue to what degree an open debate and deliberation may affect public opinion. The focus from our part has been on the intergenerational aspects of political party transmission. While families with multiple politicians are quite rare overall, they hold electoral and career advantages (Geys and Smith, 2017, Smith and Martin, 2017) that make them extremely overrepresented among the world’s top politicians. In Sweden, approximately 40 percent of the members of parliament have a parent that previously has run for local or national office. A common criticism against the stream of Bushes, Clintons and Kennedys has been that they take up space that otherwise could had given room for candidates with new ideas and different perspectives

\[ CR_i = \beta_0 + \beta_1 \text{FamilyMembers} + e_i \]

where $CR$ stand for center-right. Given that we contain the analysis to only those political parties that are either in the center-right bloc or the center-left bloc, the results will be equal for a specification with the center-left.

\[ CR_i = \beta_0 + \beta_1 \text{FamilyMembers} + e_i \]

Otherwise, all specifications would be ran for all political parties. Even if we exclude all local parties, this still equals eight political parties in total. In this part of the analysis, we may not define a *SameBloc* variable since parents may belong to different political blocs and the whole point of the analysis is to separate the transmission from the mother and father. We thus need another regression specification. In this case we estimate $CR_i = \beta_0 + \beta_1 \text{FamilyMembers} + e_i$ where $CR$ stand for center-right. Given that we contain the analysis to only those political parties that are either in the center-right bloc or the center-left bloc, the results will be equal for a specification with the center-left.
(Pisani, 2015). Understanding to what degree and how political beliefs are formed within the context of the family is therefore of uttermost importance in order to understand the larger question of political power accumulation.

In our paper, we have applied rich register data from Sweden. The results from this empirical endeavor are that the intergenerational transmission is found to be very strong. These results might be seen as both unsurprising given that parents are likely to play an important role in a person’s life, but also as a bit troublesome since it somewhat goes against the ideal that each citizens should (rationally) take part of the political discussion and then form his or her political beliefs. The conclusion is that the intergenerational link in party politics is very strong even in a country that according to the World Value Survey is characterized as the country with the highest degree of self-expression values in the world (World Value Survey, 2018). The intergenerational link is likely to be even more pronounced in countries that has a more traditional view on family and traditions. Our paper has thus contributed in highlighting that family transmission is still important even in the era of individualism.

We have furthermore demonstrated that the intergenerational transmission is not only present between individuals and their parents, but also between individuals and their grandparents and between siblings. This indicates that transmission of political affiliation takes different pathways and reinforces itself throughout different channels in proximity to the individual.

The second aim of this paper was to connect to a theoretical discussion of how this intergenerational transmission manifests itself. We started out by first discussing a socialization explanation where discussions at home together with parents or with peers are the key drivers. We then discussed another explanation where relative difference in income is the key to understanding political demands. Because income according to this framework is inherited across the generation, so will also political affiliation. When we brought these empirical predictions to the data we found that the intergenerational transmission decreased substantially when an individual had not lived together with the politician parent in question. If the individual has had less opportunity to discuss politics at home with the politician parent, this is exactly what we would suspect according to the socialization pathway. When we tested the materialistic pathway, we did find partial support for some of its elements. Income is empirically correlated across generations and individuals with higher relative incomes are more likely to be nominated for a central-right political party. When we add all this together however, the benchmark intergenerational transmission is only marginally affected by inclusion of income. In conclusion, the materialistic pathway seems to play a much less pronounced role in explaining the intergenerational correlation in comparison to the socialization pathway.
We should highlight that an intergenerational transmission remains even when conditioning on not living with the politician parent in question. Our result may be interpreted as an upper bound for a nature transmission where our results indicate that spending time together with parents during childhood is substantially associated with a higher probability that the individual belongs to the same political party.
References


Online Appendix for “Intergenerational transmission of political party affiliation”

This document includes supplementary material in the form of an online appendix for the paper “Intergenerational transmission of political party affiliation”

The materialistic pathway: Formalized

In this subsection we present a more formalized and more extensive version of the materialistic pathway discussed in the main text. As previously explained, this rational choice framework is mostly modification of earlier standard political economics models discussed in chapters 1, 2 and 5 in Persson and Tabellini (2000) which are extended to take into account the intergenerational dimension.

Let us begin by assuming the existence of a continuum of voters, \( C = 1, 2, \ldots, N \) where voters are intergenerationally linked in a hierarchical manner, such that all voters are both a parent, \( p \), and a child, \( c \), i.e. \( \forall \ v \in C = \{p \wedge c\} \). For simplicity, assume that all children have parents and that all parents have children. Further assume that all voters, \( v \in C \), have identical utility functions regardless of being a parent or a child and that they derive utility from two types of goods: private good consumption, \( y_i \), and public good consumption, \( G \), according to the following quasi-linear utility function:

\[
U_i = y_i + f(G)
\]  

Each individual, \( i \), also faces a private budget constraint:

\[
y_i = (1 - \tau)w_i
\]
$w_i$ is private income and $\tau$ is a proportional income tax. Hence, $w_i$ differs for each individual where $w_i$ is distributed according to the cumulative distribution function $F(\bullet)$, so that $E[w_i] = \bar{w}$. The government finance public good provision solely on tax revenues where the public budget may be written as:

$$G = \tau \bar{w}$$  \hspace{1cm} (3)

The optimal level of public goods for individual, $i$, is found by first inserting the budget constraints into (1) and then take the first order condition:

$$U_i = \left(1 - \frac{G}{\bar{w}}\right) w_i + f(G)$$

$$U_i = (\bar{w} - G) \frac{w_i}{\bar{w}} + f(G)$$

$$\frac{\partial U_i}{\partial G} = -\frac{w_i}{\bar{w}} + f'(G) = 0$$

We then solve for optimal $G$:

$$\frac{w_i}{\bar{w}} = f'(G)$$

$$G^* = f^{-1}_g \frac{w_i}{\bar{w}}$$

$f^{-1}_g$ is the inverse of the function $f(\bullet)$ of the first partial derivative with respect to $G$. This means that $G^*$ is monotonically increasing in $w_i$. Also note that voters have single peaked preferences.

**Statement A1:** An individual, $i$, demands a higher degree of public good provision (and a higher tax rate) if having a lower relative income and vice versa.

Let us now focus on the link between parents and their children. A child’s income level is assumed to depend on predisposed characteristics inherited from the parent, $g^p_i$, and an exogenous variable $\varepsilon^c_i$ which is individual specific. The realizations of $g^p_i$ and $\varepsilon^c_i$ are independent events.

$$w^c_i = q(g^p_i) + \varepsilon^c_i$$
$g^i_p$ is best interpreted as all predisposed factors that is positive for future income, such that $q'(g^i_p) > 0$ and $q''(g^i_p) < 0$. This may for instance by genetic factors. Given the assumption that each parent has a child and that all children have parents, the parental wage level thus depends on predisposed characteristics from the grandparents. In essence, the wage level of the child, will depend on the wage level of the parent, but also the grandparents. The variable $\varepsilon_i$ is best interpreted as a random chock not attributed to any parental factors. An increase in any predisposed factors will thus lead to a higher income level of the child. The total intergenerational connection in income between parents and their offsprings is determined by the size of $\varepsilon_i$.\(^1\)

**Statement A2:** A child’s demand of public good provision will depend on the income level of the parents.

We have now concluded that parents’ and childrens’ demand for public good provision is connected. A high income parent is more likely to foster a high income child and both of them will demand less public good provision. In a model where political candidates are exogenous from the voters, the voters must map his or her demands to the policy platforms of the politicians. For the sake of keeping the theoretical framework simple, let us assume that there is no agency problem and that the degree of rents equals 0.

**Statement A3:** An individual with relatively high income prefers a political candidate whose policy platform consists of relatively lower spending on public goods and lower taxes and vice versa.\(^2\)

The focus of the paper is on political candidacy, meaning that we need to discuss the decision to run for office. This discussion follows the citizen-candidate model framework developed in Osborne and Slivinski (1996) and Besley and Coate (1997) in which politicians originates from the electorate. Voters and politicians are in this case not two different kind of humans; instead they have similar utility functions.

\(^1\)The variable $\varepsilon_i$ may be interpreted as various compensatory measures, such as mandatory education.

\(^2\)The attentive reader would here point out that it is never rational to vote given that the probability of being the decisive voter is extremely small (e.g. the voting paradox). Later researchers have however tried to overcome this problem by incorporating expressive utility into the voting participation choice, see Hillman (2010). Statement A3 would be in line with an explanations where individuals expressively vote in accordance with their self-interest. Continuing this line of reasoning, politicians have incentives to cater to the policy preference of the median voter (e.g. the Hotelling–Downs model), see Hotelling (1929) and Downs (1957).
Let us assume a three stage game. First, individuals decide whether to become candidates or not. Second, the voters decide and vote (strategically) in an election. Third, the winning candidate implement policy. The citizen-candidate model has multiple equilibria and many different features which we will not discuss here. Just consider the first stage of the game. Let $W_i(G)$ denote the indirect utility for individual $i$ for a given amount of public good provision. Further assume in line with the citizen-candidate model that there is a cost associated with running for office, which we denote as $\gamma_i$. Individual $i$, will then become a candidate in the first round of the game if

$$W_{c,p}^i(G^*) - W_{c,p}^i(\bar{G}) \geq \gamma_i$$

$\bar{G}$ is the default policy that is implemented if no one is running for office. This tells us that only a subset of all individuals are going to run for office. Connecting this to our earlier discussion, we reach the following statement:

**Statement A4:** If both the parent and the child find it beneficial to run for office, $W_{c,p}^i(G^*) - W_{c,p}^i(\bar{G}) \geq \gamma_i$, their chosen policy in the last stage of the game will be relatively more similar in comparison to two randomly picked candidates.

What is important to remember is that we only observe the the outcome after the first stage of the citizen-candidate model where individuals have already decided to run for office. We are hence focusing our entire analysis on those where the cost of running, $\gamma$, was low enough. According to the theoretical reasoning above, those individuals running for office do so because they want to have their preferred policy implemented. This means that they act according to their utility function and that their choice of policy platform represent their demands for taxes and public goods. Political candidacy serves as a good proxy of true political beliefs in this case.

**Assumption:** Political parties may be ranked on a ordinal scale from left to right where left-wing parties favor higher taxes and higher public good spending. Right-wing parties favor lower taxes and lower public good spending.

This assumption is uncontroversial, but important for our purpose. Although we may not observe the demands for each individual, we do observe the political affiliation in the data. In this simple framework, the political affiliation is an informative proxy for the underlying demand for redistribution, which in turn is determined by differences in income levels.
The problem is that the cost of voting may be a function of the distance between the child’s preferred policy platform and the parent’s preferred policy platform. Within the theoretical framework we have discussed here, this would equal to a difference in income which is a result of $\varepsilon_i$. In essence, we have self-selection into political candidacy where a child may decide not to run in order not to anger his or her parents (i.e. a high cost of political candidacy). Our empirical analysis will hence be constrained by the fact that we may only use political candidacy as a proxy for political demands for those who we ex-post observe as candidates.
Robustness analysis benchmark results

There are some potential concerns regarding the benchmark results which we address in this robustness section. This analysis is going to focus on the transmission between parents and individuals. The benchmark results presented in Table 1 in the main text were purely descriptive in order to simplify interpretation. Just as we did in the mechanisms section in the main text, we stick to a regression framework for this robustness analysis. Column 1 in Table A1 replicate row 1 in Table 1 in the main text in order to facilitate comparison.

It is possible that the probability of becoming nominated varies across Sweden and also between the different election years. This would be captured by the inclusion of municipal and election year fixed effect. Given that we only using one variable for $\text{SameParty}$ and we want to interpret the constant, we have instead calculated the probability of running for each political party for people living in the same municipality in the same election year. We then include the probability of running for party $A$ in a given election year when $\text{SameParty}$ equals the party $A$ and correspondingly for the other parties. The results are presented in column 2 in Table A1. The share of individuals running for the same political party as their parents is smaller when taking this baseline probability into account, but still large at 65%.

It is not uncommon in smaller municipalities where there is not much competition that political parties have difficulties filling their lists before an election. Someone could in such an institutional setting convince his or her child (if over 18 years old) to put the name in the bottom of the party list, to “fill out the slots” without risking being elected in the end. This may be beneficial for the political party since the age of the candidates are printed on the ballot, meaning that the political party can signal to the voters that they do not only consist of old people. If this is the case, the share of individuals running for the same political party as their parents calculated in the last section is not the results of an actual intergenerational transmission, but instead of strategic behavior among certain politicians that are also parents.

We address this concern in three different ways in Table A1. First, we focus on those individuals placed at the top half of the party list in column 3. For these positions, there should not exists candidates that are only on the list to fill out the slots for symbolic reasons. Looking at Table A1, the intergenerational correlation is very similar to the one estimated in column 1. Second, we focus specifically on those candidates that are a bit older (defined as over 30) in column 4, because we believe adults are less likely to stand on a list as a favor to their parents. The share that ran for the same political party as their parents is decreased in comparison to column 1, but still large at 50%. This decrease may also be a result of lower actual transmission when an individual becomes older. Third, we
Table A1: Robustness analysis benchmark results

<table>
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<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
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<tbody>
<tr>
<td>Constant</td>
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<td>0.700***</td>
<td>0.526***</td>
<td>0.526***</td>
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<tr>
<td></td>
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<td>(0.008)</td>
<td>(0.011)</td>
<td>(0.012)</td>
<td>(0.015)</td>
</tr>
<tr>
<td>Sample</td>
<td>All</td>
<td>All</td>
<td>Top half</td>
<td>Over 30</td>
<td>Other muni</td>
</tr>
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<td>Baseline prob.</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
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<td>Adjusted R2</td>
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<td>0.002</td>
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<td>14263</td>
<td>7454</td>
<td>7365</td>
<td>4802</td>
</tr>
</tbody>
</table>

The dependent variable is a binary indicator for whether an individual was nominated for the same party as their parents. The first column simply illustrates that when this variable is regressed on a constant, the intercept will equal the proportion presented in Table 1. In the second column, we have added a control variable for the share that ran for the same party as the parents, among all politicians who at that time lived in the same municipality as the individual of interest. The other columns use the same specification but adds one of the following sample restrictions: candidates placed at the top half of the ballot (column 3), candidates who were older than 30 the first they were nominated (column 4) or candidates that did not live in the same municipality as any of their parents the first time they were nominated (column 5). Standard errors in parentheses.

focus the sample into those who are nominated in the another municipality than the parents. The idea is that we would not expect individuals to run for office as a favor, if their parents are or have been politically active in another municipality. The results are presented in column 5. Again, the intergenerational transmission is less pronounced in comparison to column 1, but still large at 50%. The decrease in column 5 may also be a proxy for a decrease in the probability of having spent time together with the politician parent during childhood; something we discussed in the mechanism section in the main text.

We have also plotted the estimated intergenerational transmission from parents to their children for all the election years included in our analysis in Figure A1. The take-home message from this figure is that the transmission is present and high for all election years, but that the degree seems to decrease over time.
Figure A1: Benchmark intergenerational correlation over time
Supplementary analyses

In this section we present results from analyses that were not included in the main paper. These results include party-specific probabilities, additions to our mechanism analysis and a comparison between the intergenerational transmission coming from mothers and fathers, respectively.

Table A2: Results per party

<table>
<thead>
<tr>
<th></th>
<th>V</th>
<th>MP</th>
<th>S</th>
<th>C</th>
<th>FP</th>
<th>M</th>
<th>KD</th>
<th>SD</th>
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<td>V</td>
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<td>3.0</td>
<td>3.2</td>
<td>0.5</td>
<td>2.2</td>
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<tr>
<td>MP</td>
<td>6.4</td>
<td><strong>70.3</strong></td>
<td>8.1</td>
<td>2.6</td>
<td>3.2</td>
<td>6.2</td>
<td>1.7</td>
<td>1.5</td>
</tr>
<tr>
<td>S</td>
<td>7.5</td>
<td>4.3</td>
<td><strong>77.0</strong></td>
<td>2.3</td>
<td>2.5</td>
<td>3.5</td>
<td>1.2</td>
<td>1.7</td>
</tr>
<tr>
<td>C</td>
<td>1.7</td>
<td>3.3</td>
<td>4.2</td>
<td><strong>76.0</strong></td>
<td>2.7</td>
<td>6.6</td>
<td>4.1</td>
<td>1.4</td>
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<td>FP</td>
<td>3.0</td>
<td>5.8</td>
<td>6.1</td>
<td>4.3</td>
<td><strong>62.3</strong></td>
<td>10.5</td>
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<td>0.8</td>
</tr>
<tr>
<td>M</td>
<td>1.6</td>
<td>2.5</td>
<td>4.4</td>
<td>4.6</td>
<td>5.3</td>
<td><strong>75.7</strong></td>
<td>3.8</td>
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<td>KD</td>
<td>1.3</td>
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<td>3.0</td>
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<td>2.7</td>
<td>4.1</td>
<td><strong>82.7</strong></td>
<td>1.1</td>
</tr>
<tr>
<td>SD</td>
<td>3.3</td>
<td>6.6</td>
<td>11.5</td>
<td>6.6</td>
<td>1.6</td>
<td>8.2</td>
<td>0.0</td>
<td><strong>62.3</strong></td>
</tr>
</tbody>
</table>

The table shows the share of candidates who represent different parties (columns), grouped by the party that their parent represented (rows). Each row sums to 100 percent and the share who run for the same party as their parents is represented by the bold numbers along the diagonal.

Table A2 shows the share of candidates that ran for different parties, with the sample in each row defined by what party their parents represented. For example, in the first row we find every candidate whose parents ran for the left party (V). Of these politicians, 70.9 percent ran for the same party as their parents (V), 14.1 percent ran for the Social Democrats (S) and the remaining 15 percent ran for some other party.

One could expect that people are more inclined to choose the same party as their parents if the parents represented one of the larger parties. However, the differences between parties are rather small and they do not conform with differences in party size. On the contrary, the largest share that run for the same party as their parents is found in the Christian Democrats (KD), which is one of the smaller parties in our sample.
Table A3: Parent’s income, the individual’s income and the individual’s party affiliation

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std. Income father</td>
<td>0.097***</td>
<td>0.082***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. Income mother</td>
<td>0.140***</td>
<td>0.112***</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.012)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. Income</td>
<td></td>
<td></td>
<td>0.022***</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(0.004)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>0.099***</td>
<td>0.155***</td>
<td>0.128***</td>
<td>0.605***</td>
</tr>
<tr>
<td></td>
<td>(0.009)</td>
<td>(0.009)</td>
<td>(0.009)</td>
<td>(0.004)</td>
</tr>
<tr>
<td>Parents</td>
<td>Two</td>
<td>Two</td>
<td>Two</td>
<td>Two</td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.017</td>
<td>0.012</td>
<td>0.024</td>
<td>0.002</td>
</tr>
<tr>
<td>Observations</td>
<td>12623</td>
<td>13201</td>
<td>12272</td>
<td>13600</td>
</tr>
</tbody>
</table>

In the first three columns, the dependent variable is the income of the individual, and in the last column it is a binary indicator for representing one of the center-right parties.

In the mechanism section of the main paper we showed that the share who run for the same party as their parents is only marginally affected if we control for the predicted probability given the candidate’s position in the income distribution and given what party the parents represented. Here we present results for the intermediate steps. In the first three columns of Table A3, we present the results from regressing the candidate’s relative income at the age of 33 (measured in percentiles and compared to others in the same cohort) on the same measure for the candidate’s parents. In the last column we instead regress a binary indicator for representing one of the parties in the center-right bloc on the candidate’s relative income.
The results presented in Table A4 come from a similar analysis as was presented in Table 2 in the main text. The difference is that we now define a child as living together with his or her parent if they are both residing in the same SAMS area.\footnote{SAMS stands for Small Area of Market Statistics and are smaller geographical areas within municipalities in Sweden including approximately 1000 individuals.} Because this is a more narrow definition than the one used in the main paper, we here run the risk of counting some children as not living with their parent, even if they are actually living together every second week. It is therefore not surprising that we now get slightly larger constants than we did in Table 2 in the main text.
Table A5: Gender analysis

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>0.002</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>(0.010)</td>
<td>(0.010)</td>
</tr>
<tr>
<td>Mother</td>
<td>-0.021</td>
<td>-0.022</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.011)</td>
</tr>
<tr>
<td>Female × Mother</td>
<td>0.059***</td>
<td>0.055***</td>
</tr>
<tr>
<td></td>
<td>(0.016)</td>
<td>(0.016)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.740***</td>
<td>0.608***</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.011)</td>
</tr>
</tbody>
</table>

Parents | One | One | Baseline prob. | No | Yes | Adjusted R2 | 0.002 | 0.024 | Observations | 12037 | 12028

The dependent variable is a binary indicator for voting for the same party as the parents. The sample is restricted to candidates who only have one parent that has also run for office.

In the supplementary analysis section in the main paper we discussed the relative importance of mothers and fathers. Does the effect differ depending on which parent it was that ran for office? In Table A5 we regress the usual indicator for running for the same party on a binary indicator of being female, a binary indicator for have a mother that was a politician as well as the interaction between the two. We also restrict the sample to those who only have one parent that has run for office. The main take away from this regression is that the difference between mothers and fathers depends on whether the child is male or female. For men, fathers are more important (as shown by the negative coefficient for ‘Mother’), while the opposite is true for women (the sum of the coefficient for ‘Mother’ and the coefficient for the interaction term is positive).

Table A6 focuses on the rare situation that both of the parents have run in general elections, and also includes those cases when the parents represented parties on different sides of the political spectrum. Whose affiliation matters the most, when this is the case? We regress a binary indicator for representing one of the parties in center-right bloc. Judging from the regression results, it appears as if the mother’s party affiliation has a stronger effect on what choice the child makes. This result holds also when we limit the sample to male candidates.
Table A6: Who matters the most when parents do not belong to the same political party

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Center-right Mother</td>
<td>0.571***</td>
<td>0.547***</td>
<td>0.589***</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.047)</td>
<td>(0.036)</td>
</tr>
<tr>
<td>Center-right Father</td>
<td>0.343***</td>
<td>0.347***</td>
<td>0.342***</td>
</tr>
<tr>
<td></td>
<td>(0.029)</td>
<td>(0.047)</td>
<td>(0.036)</td>
</tr>
<tr>
<td>Constant</td>
<td>0.035***</td>
<td>0.053***</td>
<td>0.021*</td>
</tr>
<tr>
<td></td>
<td>(0.007)</td>
<td>(0.012)</td>
<td>(0.009)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample</th>
<th>All</th>
<th>Men</th>
<th>Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>Two</td>
<td>Two</td>
<td>Two</td>
</tr>
<tr>
<td>Adjusted R2</td>
<td>0.794</td>
<td>0.755</td>
<td>0.829</td>
</tr>
<tr>
<td>Observations</td>
<td>2514</td>
<td>1263</td>
<td>1251</td>
</tr>
</tbody>
</table>

The dependent variable is running for one of the parties in the center-right bloc.
Data availability

This paper employs data that originates from Swedish population registers. The data used is part of a larger data source and it is stored at an encrypted server where we have to log in to run our entire empirical analysis. Given that the data is on the individual level and contain very sensitive information, we are under ethical and contractual obligation not to publish this data or disseminate it to anyone else.

There are however ways to replicate our empirical findings. First of all, any researcher may order the exact same data material from Statistics Sweden (SCB). You may find additional information (in Swedish) how to proceed here: [http://www.scb.se/sv_/Vara-tjanster/Bestalla-mikrodata](http://www.scb.se/sv_/Vara-tjanster/Bestalla-mikrodata). In order to do order data, you first need to apply for and obtain permission from a Swedish Ethical Review Board. To facilitate replication we provide a complete list of all the variables that we have used in the analysis below and we also make all dofiles and Stata-logs available.

Second of all, a researcher interested in replicating our findings may come to Sweden and replicate our findings on site by using the same secured remote server system that we use. This requires that the researcher in question reach out to us beforehand given that we need to apply to an Ethical Review Board to add another researcher temporarily to the group of people allowed to process the data.

Variables used in the main analysis

Below is a list of the main variables that we used in the data analysis.

Serial number individual: Research project specific individual indicator
Serial number mother: Research project specific serial number mothers
Serial number father: Research project specific serial number fathers
Serial number siblings: Research project specific serial number siblings. One indicator each.
Serial number grandparents: Research project specific serial number grandparents. One indicator each.
First year: First year of political nomination for the individual.
First year father: First year of political nomination for the father.
First year mother: First year of political nomination for the mother.
First year sibling: First year of political nomination for the sibling(s). One variable each.
First year grandparents: First year of political nomination for the grandparent(s). One variable each.
Top half: Placed on the top half of a party list. Binary variable
Over 30: Over age 30 first time of political nomination. Binary variable
Moderate party: Indicator for being nominated for the Moderate Party. One indicator for individuals, siblings, father, mothers and grandparents in separate dummy variables.
Christian Democrats: Indicator for being nominated for the Christian Democrats. One indicator for individuals, siblings, father, mothers and grandparents in separate dummy variables.
Liberal Party: Indicator for being nominated for the Liberal Party. One indicator for individuals, siblings, father, mothers and grandparents in separate dummy variables.
Center Party: Indicator for being nominated for the Center Party. One indicator for individuals, siblings, father, mothers and grandparents in separate dummy variables.
Green Party: Indicator for being nominated for the Green Party. One indicator for individuals, siblings, father, mothers and grandparents in separate dummy variables.
Social Democrat: Indicator for being nominated for the Social Democratic Party. One indicator for individuals, siblings, father, mothers and grandparents in separate dummy variables.
Left Party: Indicator for being nominated for the Left Party. One indicator for individuals, siblings, father, mothers and grandparents in separate dummy variables.
Sweden Democrat: Indicator for being nominated for the Sweden Democrat. One indicator for individuals, siblings, father, mothers and grandparents in separate dummy variables.
Center-right individual: Dummy variable equal to 1 if individual ever nominated for the center-right bloc. This includes the Moderate party, the Christian Democrats, The Liberal Party and the Center Party.
Center-right father: Dummy variable equal to 1 if father ever nominated for the center-right bloc
Center-right mother: Dummy variable equal to 1 if mother ever nominated for the center-right bloc
Gender: 0 if male and 1 if female
Income, standardized individual: Standardized income individual for each cohort for the first year after 33
Income, standardized father: Standardized income father for each cohort for the first year after 33
Income, standardized mother: Standardized income mother for each cohort for the first year after 33
Predicted income: The probability of being nominated for one of the eight political parties in parliament conditional on the relative position in the income
distribution. One variable for each political party.

**Age at first nomination:** Age at first year the individual was nominated for political office.

**Living with politician parent dummy:** Dummy variable of living with political parent. Based on county and SAMS (two variables).

**Share years living with politician parent:** Share of years, 0–18 living with politically nominated parent. Defined as living in the same county or SAMS (two variables).

**Same party:** Variable equal to 1 if the parent and child has been nominated for the same political party and 0 otherwise. Similar variables for siblings and grandparents. One variable for each political party.

**Party Share:** The probability of being nominated for a political party in a given municipality in a given election year. One variable for each of the eight political parties in parliament.

**Big 8 Party individual:** Indicator variable for belonging to one of the eight political parties represented in the parliament. Individual.

**Big 8 Party mother:** Indicator variable for belonging to one of the eight political parties represented in the parliament. Mother.

**Big 8 Party father:** Indicator variable for belonging to one of the eight political parties represented in the parliament. Father.

**Big 8 Party sibling:** Indicator variable for belonging to one of the eight political parties represented in the parliament. Sibling.

**Big 8 Party grandparent:** Indicator variable for belonging to one of the eight political parties represented in the parliament. Grandparent.

**Big 8 Party all relatives:** Indicator variable for belonging to one of the eight political parties represented in the parliament. All relatives.

**Other party individual:** Indicator variable for belonging another party other than the eight political parties represented in the parliament. Individual.

**Other party mother:** Indicator variable for belonging another party other than the eight political parties represented in the parliament. Mother.

**Other party father:** Indicator variable for belonging another party other than the eight political parties represented in the parliament. Father.

**Other party sibling:** Indicator variable for belonging another party other than the eight political parties represented in the parliament. Sibling(s).

**Other party grandparent:** Indicator variable for belonging another party other than the eight political parties represented in the parliament. Grandparent(s).

**Any:** Indicator variable for having any mother, father, sibling, grandparent. One indicator for each.
References


