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The Making of Political Generations: Party Preferences and National Governments across Western Democracies

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Abstract

Party preferences vary substantially from cohort to cohort. Using the theory of government-driven political socialization, we argue that partisan generational effects are influenced by the national government in power during a cohort's impressionable young adult years. Tilley (2002) explored this 'making of political generations' in the British context. In order to rigorously test the influence of the incumbent government on young voters' party preferences and whether this impression has a lasting effect, it is however indispensable to expand the number of cases to other party and electoral systems. We argue that in coalition governments it is more difficult for a voter to hold a specific party accountable. New electors could develop partisan sentiments for either of the parties in power. We therefore contrast the 'making of partisans' to the possibility of the 'making of ideologues' who are influenced by the ideological position of a government rather than the parties in power. We assess this hypothesis in four established Western democracies characterized by a variety of party and electoral systems using the Eurobarometer (1970-2002), the European Social Survey (2002-2008), and the US General Social Survey (1972-2008). Hierarchical models including information on incumbent government characteristics during a voter's formative years are used to explain the variation in generational political preferences.

Keywords: Party preferences; cohort analysis; political socialization; party systems; mixed generalized linear modeling.

Introduction¹

Already in the 1960s and 1970s scholars observed that a substantial amount of variation exists between the party preferences of different age groups (Campbell et al. 1960; Converse 1969, 1976). Older US citizens were found to be more supportive of the Republican Party whereas younger people preferred the Democratic Party. Two explanatory mechanisms were provided: a.) the observed age differences could be the result of citizens becoming more conservative as they aged, or b.) older cohorts were simply more inclined to prefer the Republican Party because they were socialized in a different socio-political context than younger generations. At the same time it was acknowledged that separating the two effects empirically was a difficult task.

Using the theory of government-driven socialization, James Tilley (2002, 2003) argues that generational differences in party preferences are influenced by the national government in power during the period in which a cohort reaches the legal voting age. As an example, those US citizens that came of age at a time in which the Democratic Party was in power will have a positive bias towards this party throughout their lives. Because the parties that hold executive power usually vary with time in democracies, different cohorts will develop different party preferences. Applying non-parametric generalized additive modeling to explore the ‘making of political generations’, Tilley (2002) convincingly shows that in Great Britain there is variation in party preferences of cohorts in spite of any age or period effects. Moreover, the observed trends seem to confirm the hypothesis of government-driven socialization. The method applied does, however, not allow to empirically test the mechanisms through which the cohort differences are expected to arise.

This paper aims to add to the literature on the development of party preferences in several ways. Building on Tilley’s work, firstly, we work towards gauging the extent to which the political setting at the time of a cohort’s impressionable young adult years explains partisan generational effects. We do so by applying mixed generalized linear modeling to account for the nested structure of such an age, period, and cohort (APC) study. This method allows to assess the extent to which the mechanisms of the government-driven socialization theory hold.

In order to rigorously test the impact of the incumbent government on young citizens’ party preferences and the lasting effect of these influences, it is moreover necessary to extend the number of cases to other party and electoral systems. Therefore, we assess the government-driven socialization theory in a comparative setting. We argue that the development of political generations will follow a somewhat different mechanism in multi-party systems than in two party-systems for two reasons.

First, coalition governments in multi-party systems make it more difficult for electors to assign responsibility to a specific party. Based on the idea of bounded partisanship, new members of the electorate may develop a preference for any of the parties in power. Rather than parties, we therefore assume ideology to play an important role in the devel-

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opment of political generations in multi-party settings. Parties, secondly, while keeping the same name or label change their policy positions frequently. As part of coalition bargaining processes we expect that such changes are more common in multi-party systems. Because it is more difficult to keep track of the position of each of the different parties, citizens may therefore establish a preference for an ideology rather than a specific party. Summarizing, we elaborate on the government-driven socialization hypothesis by contrasting cohorts that develop a partisan bias based on a specific party being in power or on a certain ideology represented in the national government.

Studying the formation and stability of party preferences over the life span is particularly relevant in light of the observation that young citizens have less stable party preferences and turnout patterns than older voters (Alwin and Krosnick 1991; Topf 1995). Adolescents and young adults grow into older citizens. As older generations are being replaced by younger cohorts, understanding the way party preferences are established during the formative years thus provides us a preview of the future working of democracy. Moreover, grasping the origin of party preferences is important in order to understand how vote choices are established and change through time.

Our results show that the mechanisms underlying the government-driven socialization theory work – somewhat surprisingly – least well in two-party systems which we study by looking at the United States and Great Britain. Parties hardly benefit from being in power during a cohorts' formative years. With the exception of the US Democratic Party, the ideological position of a government, in line with our hypothesis, plays no role for the formation of partisan generational effects. The opposite is true for the multi-party systems in Germany and the Netherlands. Ideology explains the making of political generations better than party labels do. Although parties in power as citizens come of age do significantly affect the partisan preferences of cohorts, they sometimes suffer rather than benefit from being in power. Overall, it seems that the mechanisms through which incumbent governments affect cohort's party predispositions are more complicated than first meets the eye.

Political socialization, political learning and political generations

While there is an ongoing debate as to whether political attitudes and behavior are stable over the life span or not, both strands of literature acknowledge the importance of the impressionable or formative years between childhood and adolescence (see e.g. Braungart and Braungart 1986; Strate et al. 1989; Jankowski and Strate 1995; Highton and Wolfinger 2001; Plutzer 2002; Franklin 2004 and Neundorf, Smets and García Albacete 2009 for a discussion). Young citizens, it is believed, are not yet set in their political ways and, therefore, are more easily influenced by external factors (Alwin and Krosnick 1991; Flanagan and Sherrod 1998; Sears and Levy 2003).

Observing the regularity and continuity of individuals' patterns of political behavior over time, already in the 1950s Hyman (1959) drew attention to the need of studying processes of early political socialization. He defined political socialization as an individual's "learning of social patterns corresponding to his societal position as mediated through various agencies of society" (Hyman 1959: 25). Such agencies can be diverse: families,

peers, schools, mass media, political parties, NGOs, the military and even governments. The mechanism through which socialization affects political attitudes and behavior is not just one of political learning, however. The socialization model also assumes that citizens participate in politics because family, friends, political parties, etc. mobilize them to do so.

Building on the work of Campbell et al. (1960); Converse (1976) and Glenn (1976), James Tilley (see Tilley 2002 and also Tilley 2003; Tilley and Evans forthcoming 2011) has researched the impact of government-driven socialization experiences on the making of political generations with a bias towards certain party. The idea is straightforward: the government that is in power as a citizen comes of age will leave a lasting imprint on a given cohort or generation. Parties in government have more exposure in the political discourse, get more media attention and have a larger influence on the political agenda. In sum they are likely to get noticed more easily. Especially young citizens are thought to be influenced by such external factors as they are still in the process of developing patterns of political attitudes and behavior. Therefore, e.g. those UK citizens that reached the minimum voting age when Labour was in power are believed to develop a positive bias towards this party that lasts even as cohorts grow older and the socio-political context changes. Jennings explains the processes through which political generations are formed as follows:

“Young adulthood is the time of identity formation. It is at this age that political history can have a critical impact on a cohort’s political make-up in a direct, experiential fashion. (...) The political significance of the crystallization process lies in the content of that which is crystallizing, the social, political, and historical materials that are being worked over and experienced by the young during these formative years. For it is this content that colors the cohort. If the color differs appreciably from that attached to past cohorts, we have the **making of a political generation** (emphasis added)”(Jennings 1989: p. 347).

Two coinciding mechanisms help to explain why cohorts differ from one another in terms of party preferences. As mentioned above, young citizens are firstly more ‘impressionable’ meaning that their partisanship is more susceptible to the political context than that of older people. Secondly, partisan preferences formed during young adulthood are considered to last over time. Both processes are embedded in the political learning approach to the development of political attitudes over the life span. The political learning model assumes that people learn political habits in the early stages of their adult life and that past behavior predicts present behavior (Green and Shachar 2000; Kanazawa 2000; Bendor, Diermeier and Ting 2003; Gerber, Green and Shachar 2003; Fowler 2006; Aldrich, Taylor and Wood 2007).

Plutzer (2002: 44) explains the political learning perspective with the example of someone aged forty with a higher than average income. Based on this information we would expect this person to have a higher than average involvement in politics. What happens if a couple of years later this person loses her high-income job and has to take on one that will earn her an average wage? If political involvement is a habit acquired in young adulthood, then a change in income is not likely to influence this person’s level of political involvement. Extending the same argument to partisanship, partisan preferences acquired at a young age are not expected to vary greatly over the life span.

Applying non-parametric regression models, Tilley (2002) finds evidence for the government-driven socialization hypothesis in the United Kingdom. While seemingly convincing, the test has face validity only as the models applied do not allow to assess the mechanisms that drive the socialization process. Moreover, in order to thoroughly test the influence of the incumbent government on young voters' partisanship and its stability over time it is necessary to expand the number of cases to different party and electoral systems. In the next section we assess the extent to which the influence of the incumbent government on young voters' partisanship can be expected to work in a similar fashion in different systemic settings.

The Making of Political Generations in Various Party Systems

The idea that the decision to participate in politics is a by-product of the political system in which citizens live, is one that is prevalent in the study of electoral behavior. Especially in cross-national research of voting behavior, the political-institutional context has proven a strong indicator of variation in levels and modes of political behavior (see, for example, Blais and Dobrzynska 1998; Gray and Caul 2000; Norris 2002; Blais, Massicotte and Dobrzynska 2003; Franklin 2004; Blais 2007). In the United Kingdom, where Tilley validated his hypothesis of government-driven political socialization, votes are turned into seats according to a majoritarian electoral system. Implementing the first past the post system, the candidate receiving the plurality of the votes in a constituency wins a seat in parliament. This feature of the electoral system has a number of consequences for the party system that are relevant in light of the discussion on the development of political generations.

Given that in the United Kingdom only one candidate can win per electoral district, parties will a.) generally put forward only one (strong) candidate and b.) only run in constituencies where the party has a fair chance of winning an election. As a result of these different elements, the United Kingdom just like other countries with a majoritarian electoral system has a (quasi) two-party system. Under proportional electoral systems districts are, however, much more likely to be competitive with multiple members running for office. This leads parties to have a higher incentive to campaign and mobilize people in all districts (Blais 2006: p. 113; Geys 2006: p. 651; Evans 2004: p. 157). Countries with proportional electoral systems thus generally have more parties than majoritarian systems (Norris 2002: p. 69; Blais 2006: p. 118).

Both types of party systems have their advantages and disadvantages. Due to the smaller number of parties majoritarian electoral systems are considered to be easier to understand for voters. The more parties there are, the higher the number of options a voter will have, the more likely it is that a voter will find a party she can identify with, and the more parties will mobilize citizens to turn out and vote. On the other hand, fractionalization leads to complexity and increased information costs. Also, chances of the formation of coalition governments is higher in proportional systems, which in its turn decreases the chances that the party of one's choice will be in government or will be able to implement its policies (Blais 2006: p. 118; Geys 2006: p. 649-650; Evans 2004: p. 158-159).

Given the differences between majoritarian and proportional electoral systems we can

clearly not expect government driven socialization experiences to work in exactly the same way in different electoral and party systems. In majoritarian systems, generally, one party leads the government. For those coming of age it is therefore easy to identify the leading party. With a coalition government in power the allocation of responsibility is much less clearly spelled out, making it more difficult to hold a specific party accountable. New electors could develop partisan sentiments for either of the parties in power.

Rather than forming a positive bias towards a certain party, we argue that during coalition governments it is more likely that young cohorts will form a positive bias towards a certain ideology. If for example a left coalition government is in power during a voter's first steps in the political arena, the important impression is not the Social Democratic or the Green party but rather the dominant left political discourse. We therefore propose to expand Tilley's (2002) work on political generations by contrasting the 'making of partisans' to the possibility of the 'making of ideologues'. This hypothesis finds its roots in the literature on bounded partisanship in which it is argued that most voters have a limited choice set when they are asked to express a preference choosing from a list of parties. This implies that there is no 'party menu' from which individuals choose freely every time they are surveyed. Many citizens will move between parties on one side of the ideological spectrum – but almost never to the competing camp (Clarke and Suzuki 1994; Zuckerman and Kroh 2006; Zuckerman, Dasovic and Fitzgerald 2007; Neundorf, Stegmueller and Scotto forthcoming). We argue that a similar logic applies when it comes to government-driven socialization. Summarizing, we hypothesize that in countries where coalition governments are the norm cohorts or generations are biased by the ideology of the government rather than the parties in power as is expected to be the case in a two-party system.

Hypotheses 1a: In two-party systems the party in power during one's first voting experience profits from a lasting positive bias among this particular cohort, while the ideological position of the party is expected to play an inferior role in the making of political generations.

Hypotheses 1b: In multi-party systems the ideological position of the government in power during one's first voting experience has a lasting positive effect on this particular cohort. Parties are expected to play a less prominent role in the making of political generations.

To give an example of hypothesis 1a, if the Democratic party was in government during the time a US citizen reached the legal voting age, this should have a lasting positive effect on support for the Democrats and a lasting negative effect on voting for the Republican Party. In this case of hypothesis 1b, the more leftist the ideological position of a (coalition) government during a voter's first electoral experience, the more likely she is to have positive bias to vote for left parties as opposed to right-leaning parties.

We also consider the length parties were in power important for the development of political generations. The longer the period of exposure, the longer the socialization experience and more likely it is that a positive bias towards a party in power or a specific ideology can be developed. If, for example, a government is in power less than a year – as still happens every once in a while in the Netherlands – we do not expect this cabinet

to have lasting impact on young voters. On the contrary, the political turmoil would rather prevent the formation of political generations.

Hypotheses 2: The longer a voter was exposed to the government in power, the stronger the cohort effect.

Interaction effects between parties in power and length of exposure on the one hand and between ideological position of the government and length of exposure on the other, allow us to assess the extent to which exposure to a particular government party or government ideology has an additive positive or negative effect on the making of political generations. Through the various interaction terms possible party differences can, moreover, be brought to light.

In this respect it is also important to note that we expect new smaller parties entering the electoral arena to impact newer cohorts only (Tilley and Evans forthcoming). This applies particularly to multi-party systems that facilitate the emergence of new parties because thresholds to win seats in parliament are lower. Older cohorts should be far less inclined to vote for such newly entered parties as they were not yet available on the party choice menu of these citizens. Hence, because older citizens were not socialized with these newer parties they will most likely neglect them as credible options in later life.

Empirical Analysis

Case Selection

We choose two typical cases each to represent a two-party and a multi-party system. The United States are a well established democracy of only two parties, both of which regularly switch between a role in opposition and holding executive power. Also Great Britain is typically considered a two-party system with the Labour and Conservative party sharing power. Only in the 2010 election a third party – the Liberal Democrats – was able to break this two-party dominance by forcing the Conservatives into a coalition government. This change in the party system is however not considered in the empirical analyses presented below as data is not yet available.

We further choose the Netherlands and West Germany as prototypical cases to represent multi-party systems characterized by coalition governments.² In proportional systems it is easier for new parties to enter the political landscape. Both countries saw the emergence of new parties during the period under investigation here. In the Netherlands, the *Democrats 66* (Democraten 66) was founded in 1966 as a new progressive, social-liberal party led by intellectuals. They entered the parliament in 1967 and were part of a coalition government the first time in 1973. Germany was more or less a three-party system until the *Green party* (today: Bündnis 90/Die Grünen) emerged from envi-

²East Germans are excluded from the analyses, as the question of generational differences is of a different nature than proposed here. Older cohorts consistently grew up under a socialist regime and we therefore do not expect any variation in the ‘making of political generations’, as they are shaped by changes in the incumbent government during the formative years.

ronmental and peace activist groups in the 1970s. They first were elected to the parliament in 1983 and entered a coalition in a national government with the Social Democrats (SPD) for the first time in 1998.

The entrance of these new parties sheds a very interesting light onto the question of the ‘making of political generations’, as it provides us with two parties that some people did not get to know during their formative years. On the other hand, the generation that came of age in the 1970s and 1980s saw the rise of these new parties. Based on the theory of political generations, one would expect that the older cohorts should remain relatively skeptical towards these new parties as they were not on the choice-menu when these cohorts came of age and hence were not socialized into supporting these parties (Tilley and Evans forthcoming).

Taking into account the political, economical and cultural development of these four established democracies, we assume a most similar system design. However, we expect variations in the electoral and party system to affect our variable of interest: generational differences in party preferences.

Data and Variables

To measure cohort differences in party support, numerous time points are needed in order to distinguish the age, period and cohort (APC) effects on political preferences. If we, for example, only look at two or three points in time it is impossible to draw any conclusions as to whether a voter holds specific attitudes because of her age, her time of growing up, or the nature of the specific period under consideration. The repeated cross-sectional survey design of the Eurobarometer (EB) and the US General Social Survey (GSS) which is conducted annually since 1972, are used to cover an exceptional long period of about 40 years. Unfortunately, no longitudinal dataset covering the same time period and including both the United States and European countries is available. We therefore have to use a separate data source for the US. The choice for the pooled Eurobarometer data set was brought forward by a preference to limit the variation in data sources. The EB included the vote intention of respondents – which is used as the dependent variable – between 1970 and 2002. In order to take the youngest cohorts into account, it was necessary to pool this data with the European Social Survey (ESS), which covers the years 2002 to 2008.³

Party preferences – our dependent variable – are measured using vote intention for major parties, which we define as those parties that have been in government. We include abstainers in the reference category of our choice models. However, a robustness test presented below considers possible differences between the inclusion and exclusion of non-voters in the analysis. Unfortunately, the other obvious measure of party preference – party identification – is hardly asked in the Eurobarometer series. While party

³The data of the Eurobarometer is publicly available online at the GESIS – Leibniz Institute for the Social Sciences (<http://zacat.gesis.org/webview/index.jsp>). The UK was only included in the EB in 1973. Vote intention was not asked in 1972. The data of the European Social Survey can be downloaded at <http://ess.nsd.uib.no/>. The cumulative data of the General Social Survey is available at <http://www.norc.uchicago.edu/GSS+Website/Download/>. Pooling these different data sets yields the following number of observations: 43,726 (Great Britain, excl. Northern Ireland); 32,855 (United States) 38,637 (West Germany); 45,508 (The Netherlands).

Table 1: Illustration of cohort measure

INDIV.	YEAR OF SURVEY	AGE	BIRTH YEAR	LEGAL VOTING AGE	COHORT	GOVERNMENTAL COHORT
A	1980	40	1940	20	1960	X
B	1980	30	1950	20	1970	Y
C	1990	50	1940	20	1960	X
D	1990	38	1952	20	1972	Y
E	2000	30	1970	20	1990	Z

identification and vote choice are obviously not identical concepts, both are used in empirical research as measures of party preferences. Already in the 1970s, Budge, Crewe and Farlie (1976) made note of the particular nature of party identification in the United States in comparison to other countries. Some years later LeDuc (1981) came to similar conclusions when researching the relationship between party identification and vote choice in four nations amongst which three that are included in this study as well: the United States, Great Britain and the Netherlands. Using individual level panel data, he found that only in the United States stable partisanship is combined with volatile voting behavior. Outside the US, however, party identification and vote choice were found to be dependent to a much larger degree. Hence, we are quite confident that using vote choice as a dependent variable instead of party identification should not bias our results too much.⁴ We will nonetheless run our analyses contrasting the results for vote intention and partisanship in the United States, as contrary to the Eurobarometer the General Social Survey allows us to do so. The results of this robustness test are discussed below and presented in Appendix IV.

As we are interested in generational differences, the most important variable in our empirical analysis is the measure of the cohort effect, which – following Tilley (2002, 2003) and Tilley and Evans (forthcoming) – is calculated by the year somebody came of age. This variable is simply the birth year plus the legal voting age. We adjusted this cohort variable to changes in enfranchisement throughout the years.⁵ Once we have established the year in which a respondent came of age, we are able to link this information to characteristics of the government in power during that time. Table 1 illustrates this cohort measurement. In this hypothetical example, we set the legal voting age to 20. Imagine five different survey respondents who were interviewed at different points in time. Despite being interviewed in different years and at different stages in their life-cycle, individuals *A* and *C* belong to the same cohort, as they were born in the same year (1940) and entered the electorate at the same time in 1960. Once we have calculated the exact year people entered the electorate, we cluster them into *governmental cohorts* depending on whether they came of age during the same legislative. In the example presented in Table 1 respondents *A* and *C* grew up under the same government *X*. Also respondents *B* and *D* belong to the same governmental cohort. Even if voter *B* is two years older than respondent *D*, they are both clustered in government *Y*. Our empirical analysis covers between 16 (Great Britain) and 22 (United States) governmental cohorts. Appendix II gives an overview of these cohorts, as well as the number of observations in each cohort

⁴Given that the surveys used in this papers are conducted outside election years as well, the dependent variable is vote intention in the next election rather than recalled vote choice.

⁵See Appendix I for a detailed list of years that the electoral suffrage was adjusted.

cluster.

As discussed above, we also take into account the length a new voter was still exposed to the same government after they reached the legal voting age. Often governments get re-elected (despite changing political leaders) and hence they remain in power beyond the first vote experience of citizens. To give an example of this point. If we assume a voter who came of age in 1979 in the US, she will be classified as a person belonging to the Carter generation. However, we control for the fact that she was only exposed one more year to this specific government, which was replaced by a 12-year Republican dominance in 1980. The generational bias in favor of the Democratic party for this respondent should be very small respectively non-existing.

Somebody who came of age in 1980 is then classified as a Reagan (first legislative) child who was exposed to the same party in government for 12 years. Hence the cohort effect and positive bias towards the Republican party should be very strong. We acknowledge that our classification of respondents into cohorts is open to debate and may sometimes be perceived as ambiguous. This should however only be the case for those that come of age directly before a party is voted out of office. Moreover, we believe that including the length of exposure to a government as an (interaction) variable controls for this circumstance.

Besides the party(ies) in power when a respondent came of age and the length a respondent was still exposed to a government with a similar make up, we are also interested in the ideological composition of the executive. For this measure of ideological leaning we rely on the Comparative Manifesto Project (CMP) data.⁶ The analysis presented below covers an exceptionally long period. For the United States, we include voter cohorts who came of age in 1920 and thereafter. Taking the legal voting age of 21 at that time into account, we include respondents born 1899 and later in our empirical test. Unfortunately, we can only include cohorts that came of age after 1945 for our three European cases. The Comparative Manifesto Project (CMP) data – which is used to measure the ideological leaning of a government – is only available after World War II. We hence include respondents born 1924 and later in the European models.

Results

This section discusses the results of several steps of empirical analyses. We first present simple descriptive graphs of cohort differences in vote intention. The main empirical test of government influences on the making of political generations is done in form of hierarchical modeling. In a last step several robustness tests are included.

Exploring the Cohort Effect

We first want to establish whether voters, who came of age during different governments vary in their predisposition to support one or another party. In a first step, we therefore look at the average vote intention for the major party on each side of the ideological

⁶For a discussion of the advantages and disadvantages of using the Comparative Manifesto Data to refer to party/government positions see Benoit, Laver and Mikheylov (2009).

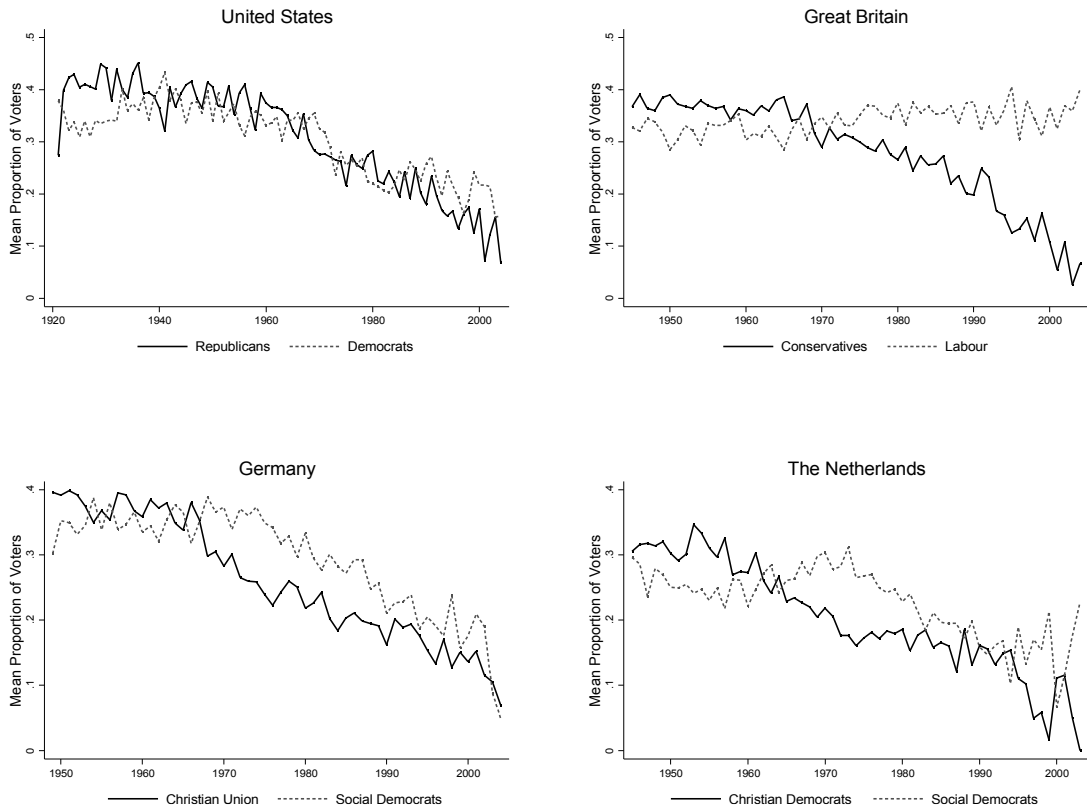


Figure 1: Mean Proportion of Voters by Coming of Age

spectrum – the conservative *or* christian party and the social democratic party. Figure 1 plots the mean proportion of voters for these parties, depending on when people were first allowed to cast a vote.⁷ If no cohort differences would exist these lines would be parallel and trend-less.⁸

However, the overall picture shows that respondents in our four countries have different probabilities to vote for one of the two major parties depending on when they were first allowed to vote. The cohort differences are quite considerable. Especially looking at the conservative/christian party vote, Figure 1 suggests those who entered the electorate more recently to be less and less likely to vote for these parties. However, this example makes the main flaw of these graphs very obvious. Age is an important factor in voting behavior. We might observe people who belong to the same cohort at different points in

⁷The plot simply averages the vote for party i (p_j) across the different cohorts c across all time points:

$$Pr(p_{j,c}) = \frac{\sum p_{j,c}}{N_c}. \text{ Cohort is thereby defined as the year a respondent reached voting age.}$$

⁸This seems to be the case regarding cohort differences and the support for the small liberal part of Germany (FDP). As the graph in Appendix III shows the mean proportion of voters is trend-less across generations. Appendix III also illustrates the mean support for the other three smaller parties in Germany and the Netherlands, which have been part of a government.

time and hence at different stages in their life. As research of the political life-cycle has shown, older voters are more likely than younger citizens to favor conservative parties. The figures presented here do not allow us to draw any conclusions about whether the observed dissimilarities are due to real cohort differences or whether they exist because of the younger age of the more recent cohorts.

In order to make any claims about cohort effects – which is the main focus of this research – it is essential to account for age as well as period effects. However, Glenn (2005: vii) concludes from his research that “the definitive separation of age, cohort, and period effects is not just difficult, but impossible.” Numerous attempts have been made to overcome this problem.

We usually determine a cohort or generation according to the time people were born. Measuring period effects typically implies that every year is considered to be a separate period. Usually, scholars assume that the birth cohort of an individual (C_i), at a given period t (P_t), and age at time t ($A_{i,t}$) are related as follows (Glenn 2005):

$$C_i = P_t - A_{i,t} \quad (1)$$

Starting from equation 1, the three effects cannot be identified by survey data at one point in time, since one phenomenon would completely be determined by the remaining two. We are only able to overcome this identification problem by some form of constraint and the use of longitudinal data (Glenn 2005; Scappini 2006). The focus of this paper is on cohort effects, while at the same time *controlling* for life-cycle and period effects. By pooling several surveys taken at different points in time, we can observe the changes, which occur within specific cohorts over time and compare these to the differences between life-cycle stages. As discussed above, we have pooled data ranging from 1970 to 2008, hence covering several cohorts at different points in their life-cycle.

Recent advances in social statistical analysis of age-period-cohort (APC) effects by Yang and her colleagues (Yang 2006, 2008; Yang and Land 2006, 2008; Yang et al. 2008) provide a new and innovative method to measure context effects and the making of generations. Yang proposes in her research the use of hierarchical modeling in combination with repeated cross-sectional survey design to overcome the identification problem of APC analyses. She demonstrates that the “APC identification problem is inevitable under the specification of linear models of fixed age, period, and cohort effects that are assumed to be additive” (Yang 2008: p: 212), as this ignores the multilevel structure of the data. Instead she suggests the use of random-intercept modeling as a specific case of hierarchical modeling. The next section discusses and presents the results of these models.

Measuring Government Effects on the Making of Political Generations

The purpose of this section is to test the influence of incumbent governments during a citizen’s first vote experience on the development of a partisan bias that persists despite the effects of aging and changes in the socio-political context. As the voters who came of age at roughly the same time share common influences by the specific government in power, we can assume the errors in a model explaining their political preferences to be dependent. Therefore it is necessary to account for this error-correlation by applying

random intercept models. Moreover, these cohorts are clustered within the same survey year. “Respondents are nested in, and cross-classified by, the two higher-level social contexts defined by time period and [governmental] cohort. That is, individual members of any [governmental] cohort can be interviewed in multiple replications of the survey, and individual respondents in any particular wave of the survey can be drawn from multiple [governmental] cohorts” (Yang 2008: p. 211). Hence the models presented below estimate fixed effects of age and other individual-level covariates as well as random effects of period and cohort. Once we have taken into account the nested character of the data it is possible to evaluate the influence of government-specific variables – such as which party was in power during a voter’s formative years – on the propensity to vote for a specific party. Such a mixed generalized linear model for choosing any political party can be specified as follows:⁹

$$\log\left(\frac{\pi_{ijk}}{1 - \pi_{ijk}}\right) = \alpha_{0jk} + \sum_{m=1}^M \beta_m * X_{mi} \quad (2)$$

where π is the probability of a specific vote choice of the i th respondent for $i = 1, \dots, n_{jk}$ individuals within the j th cohort for $j = 1, \dots, J$ governmental cohorts (which varies between 16 and 22 in our four cases) and the k th time period for $k = 1, \dots, K$. Further model 2 controls for m individual characteristics ($m = 1, \dots, M$) X such as age, gender, and education.¹⁰ Most importantly, the model includes a random intercept α_{0jk} , which specifies that the overall mean voting propensity varies from cohort to cohort and from period to period. We assume cohorts to be nested within time, as period effects – such as for example a party scandal – are presumed to affect all cohorts. This can be noted by the following equations:

$$\alpha_{0jk} = \delta_{00k} + \sum_{l=1}^L \beta_l * Z_{lj} + u_{0jk} \quad (3)$$

$$\delta_{00k} = \gamma_{000} + v_{00k} \quad (4)$$

where γ_{000} is the mean effect of all time periods across all governmental cohorts. δ_{00k} measures the mean effect of governments, which is allowed to vary across time. u_{0jk} denotes a government specific error term and v_{00k} a time specific error. The vector (Z) includes several ($l = 1, \dots, L$) governmental characteristics, which are further assumed to explain the lasting cohort effects on political preferences. They are divided into those measuring the parties in power, those measuring the length of government, and those accounting for the ideology of the government.

Cohort (level 2) covariates: For our theoretical argument tested here it is foremost important which party(ies) was (or were) in power and which ideology this government stood for. The ideological position of a government is measured by the scores assigned to

⁹See Snijders and Bosker (1999: p. 63-66) for a general introductory discussion of these three-level random intercept models.

¹⁰As this model does not include random slope-coefficient it is not necessary to center the individual-level explanatory variables (Snijders and Bosker 1999: p. 80-81).

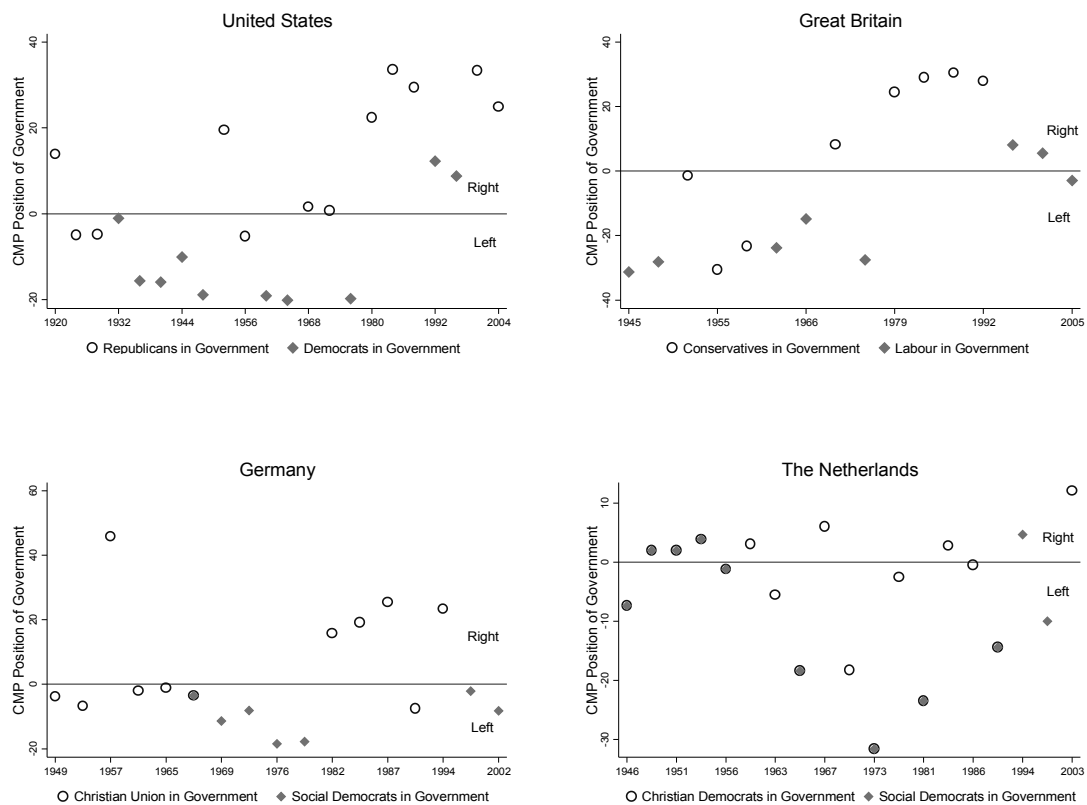


Figure 2: Ideological Positions of Governments

each party by the Comparative Manifesto Project (CMP), which are further weighted by the seat share of each party in government.¹¹ This variable ranges from -100 to +100. In order to make the interpretation of the strength of this variable easier, the CMP-position of the government was divided by 100. Hence the final variable used ranges from -1 (left) to +1 (right).

Interesting for our theoretical argument is the ideological variation of governments. As Figure 2 illustrates the same parties in power take very different ideological positions. For example, the upper left-hand figure for the United States shows the political position of presidencies. Some Republican presidents (hollow black circle) appear to have adopted a rather liberal position, while on the other hand the Clinton years were more conservative as expected from a Democratic president (grey diamonds).

This pattern can be found in all four cases. Especially the multi-party systems with their coalition governments show some very interesting governmental differences. The two major parties of Germany and the Netherlands share their power with different political parties, which can drag them to the left or right during their reign. For example, the Social Democratic party of Germany (SPD) was in a so-called Grand Coalition with

¹¹See Kim and Fordung (2001) for a more detailed account of the measurement of this variable.

the Christian Union (CDU) from late 1966 to 1969 (illustrated by the black circle with gray filling). During this time, the government had as expected a very centrist ideological position. Thereafter, the SPD was in government with the liberal party (FDP), during which time the government moved to the left, as the SPD had a bigger weight in the coalition. The FDP remained in power until 1998 even though they switched coalition partner to the CDU in 1983. During this conservative-liberal coalition the governmental position was clearly right-wing (with an exception of the 1990-reunification election). These patterns empirically confirm that the theoretical distinction between the effects of party labels and ideological positions on the making of political generations seems justified.

Furthermore, as already explained in detail above, we include the length a voter was exposed to the same party respectively ideology during her formative years, before this specific government was voted out of office.

Individual (level 1) covariates: Despite taking the governmental (level 2) variables into account the model expressed in equation 2 entails a vector on individual characteristics. These include the age of the respondent, gender and education. Not all voters are expected to react in a similar fashion to events and influences such as for example party-driven socialization experiences. More specifically, it has been argued that the way in which citizens respond to external conditions is dependent on their levels of political sophistication (see van der Brug, van der Eijk and Franklin 2007: 61 for a brief summary of the discussion). Duch, Palmer and Anderson (2000) show that politically sophisticated voters let their evaluations of the government depend on their partisan preferences to a greater extent than less sophisticated voters. Gomez and Wilson (2001) similarly find levels of political sophistication to influence the way in which citizens attribute credit and blame to a government. These findings suggest that levels of political sophistication should be controlled for in any research relating to party preferences and the allocation of responsibilities in governments. We do so by controlling for gender and education. Gender is thereby used as a proxy for political involvement, as women are still less engaged in politics than men. Further, education is considered the most important indicator of political sophistication (Converse 1964; Luskin 1990; Zaller 1992). Due to space reasons, the results of the individual-level covariates are not reported in the tables below. They do however work as expected.

Explaining the Cohort Effect

This section presents the results of the mixed generalized linear models that were introduced above. Table 2 to 5 report the parameter estimates and model fit statistics of these random intercept models. We ran separate analyses for all major political parties that have been in government in each of our four countries.

The models presented control for a respondent's age, gender, and level of education. Most importantly, we are interested how the socialization experience during differing national governments affected the likelihood for several generations to support one or another party. In order to compare the effect that governments that were in power had on the making of these political generations, we first estimate a model including party dummy variables for the parties that were in government during a respondents for-

mative years. These variables are further interacted with the length a new elector was still exposed to the same governmental constellation. In a second step, we estimate an ‘ideology model’ by including the CMP-score of the government in power during a respondents formative years and also interact this variable with the length of exposure.

Table 2: Random Intercept Model on Vote Intention: United States

	Democrats-Model				Republican-Model			
	(PARTY MODEL)		(IDEOLOGY)		(PARTY MODEL)		(IDEOLOGY)	
<u>Fixed Effects:</u>								
Democratic gov	0.11*	0.11 [†]			-0.03	-0.05		
Democrats * Length		0.00				0.01 [†]		
CMP position (-1 to +1)			-0.58**	-0.51*			0.10	0.00
CMP*Length				-0.02				0.04
Length Exposure		-0.01		0.00		-0.03**		-0.01**
Indiv. Covariates					<i>age, gender, education</i>			
Intercept	-2.97**	-2.96**	-2.87**	-2.86**	-0.95**	-0.92**	-0.97**	-0.99**
<u>Random Effect:</u>								
Time (s.e.)	0.19 (0.03)	0.19 (0.03)	0.18 (0.03)	0.18 (0.03)	0.38 (0.05)	0.38 (0.06)	0.37 (0.05)	0.38 (0.05)
Cohort (s.e.)	0.36 (0.02)	0.36 (0.02)	0.36 (0.02)	0.36 (0.02)	0.31 (0.02)	0.30 (0.02)	0.31 (0.02)	0.31 (0.02)
<u>LL-Ratio Test (comp. to)</u>								
L1 variables only	0.01**	0.06 [†]	0.00**	0.00**	0.28	0.00**	0.31	0.01**
No interaction		0.53		0.82		0.00**		0.01**
$\Delta(AIC_M - AIC_0)$	-4.3	-1.5	-14.7	-11.1	-0.3	-14.0	-8.1	-11.5
Obs. Level 3 (time)					27			
Obs. Level 2 (cohorts)					445			
Obs. Level 1 (indiv)					50,424			

Significance levels: [†] $p < .10$, * $p < .05$, ** $p < .01$. *Data:* General Social Survey (1972-2008).

Note: Entries are logit-coefficients estimated by a mixed generalized linear model. The AIC_0 of a model including only the individual level 1 covariates is 59,877.2 (Democrats) and 57,692.0 (Republicans). The table shows the difference of each model AIC_M to these baseline models.

First, it is worth looking at the random effects of time and most importantly generations. Both vary substantially across individuals. As the size of the standard error in comparison to the size of the cohort effect confirms in all four countries across all parties, generations differ in their propensity to support a political party. The only exception to this general observation are the supporters of the liberal party in Germany (FDP) in the third column in Table 4. No cohort differences in vote intention for this party seem to exist. This confirms the descriptive results of the average support by cohort presented in Appendix III. Further, note that the cohort differences are largest among the supporters of the smaller parties, which only entered the party systems most recently – namely the Green party in Germany and D66 in the Netherlands. This confirms the expected effect that the choice menu of available parties during one’s formative years is important in later years as well. Parties that did not exist during the first crucial voting experiences will most likely be neglected as credible options in later life.

The model fit of the analyses presented can be assessed in two different ways. Firstly, we conducted a likelihood ratio test comparing models that include the level-2 explanatory variables to the model that only controls for individual-level covariates (age, gen-

Table 3: Random Intercept Model on Vote Intention: Great Britain

	Labour-Model				Conservative-Model			
	(PARTY MODEL)		(IDEOLOGY)		(PARTY MODEL)		(IDEOLOGY)	
<u>Fixed Effects:</u>								
Labour gov	-0.02	0.09**			0.05 [†]	0.06		
Labour * Length		-0.03**				-0.02*		
CMP position (-1 to +1)			0.03	-0.17			-0.10	0.16
CMP*Length				0.03 [†]				0.01
Length Exposure		0.01*		0.01		-0.01**		-0.02**
Indiv. Covariates			<i>age, gender, education</i>					
Intercept	0.62**	0.59**	0.60**	0.58**	-3.52**	-3.36**	-3.48**	-3.41**
<u>Random Effect:</u>								
Time (s.e.)	0.22 (0.03)	0.23 (0.03)	0.22 (0.03)	0.23 (0.03)	0.39 (0.05)	0.39 (0.05)	0.39 (0.05)	0.40 (0.06)
Cohort (s.e.)	0.09 (0.02)	0.07 (0.02)	0.09 (0.02)	0.08 (0.02)	0.08 (0.03)	0.00 (0.13)	0.09 (0.03)	0.00 (0.12)
<u>LL-Ratio Test (comp. to)</u>								
L1 variables only	0.32	0.00**	0.71	0.18	0.09 [†]	0.00**	0.30	0.00**
No interaction		0.00**		0.09 [†]		0.00**		0.00*
$\Delta(AIC_M - AIC_0)$	1.0	-10.6	1.9	1.1	-0.8	-21.7	0.9	-22.0
Obs. Level 3 (time)					28			
Obs. Level 2 (cohorts)					335			
Obs. Level 1 (indiv)					46,890			

Significance levels: [†] $p < .10$, * $p < .05$, ** $p < .01$. Data: Eurobarometer (1973-2002); European Social Survey (2002-2008).

Note: Entries are logit-coefficients estimated by a mixed generalized linear model. The AIC_0 of a model including only the individual level 1 covariates is 59,306.3 (Labour) and 36,833.0 (Conservatives). The table shows the difference of each model AIC_M to these baseline models.

der, and education). Comparing the model to a truly empty model – excluding all control variables – is slightly misleading, as the inclusion of individual characteristics tend to increase estimated level-2 variance (Snijders and Bosker 1999: p. 227-229). Overall adding the covariates testing the mechanism of the ‘making of political generations’ improves the fit of the models. Where the likelihood ratio-test is insignificant, the model parameters do not affect party support. These will be explained in more detail below.

A second way to further compare the party and ideology model, we use the AIC to compare the relative goodness-of-fit of several models. Tables 2 to 5 report the difference in AIC between each model and the model including only the individual-level control variables. The fit in the two-party systems in the US and GB are rather bad, as the small AIC differences show. However, the German and Dutch random-intercept models work quite well (except the model predicting support for the Dutch D66). It seems that the model fit for the party models is slightly better than for the ideology models though.

Turning now to the substantial effects of government characteristics on the making of political generations, we find mixed results. On the one hand, we expect that the party model – testing which party was in power – should work better in two-party, majoritarian systems. On the other hand voters in multi-party systems such as in Germany or the Netherlands should be more influenced by the ideology of a specific government,

as assigning responsibility to the different coalition parties should be more difficult. We therefore expect that leftist governments – in whichever constellation – have a lasting positive effect on supporting leftist parties and *vice versa* for rightist parties.

If we first look at the results of the two-party systems in the US and GB, the hypotheses are partly confirmed. As shown in Table 2, those who came of age during a Democratic government are indeed more likely to have a lasting positive bias towards the Democratic party. Thereby, the length a voter was exposed to this government does not play a role. However, a leftist ideological position of the president appears to also be influential on a lasting generational difference. The random intercept model presented in Table 2 does not explain the Republican vote intention over time for several political generations very well. None of the expected governmental (level 2) characteristics seem to explain variation in support for the Republicans, except the length a new voter was exposed to a specific government during her formative years, which reduces the likelihood to vote for the Republicans. This effect was, however, not anticipated.

As expected, in the British party system the ideological position of a government seems not to affect a voters' lasting partisan bias. Nevertheless, it seems to matter how long a voter was exposed to a Labour government. Initially, coming of age during Labour's reign has a positive effect on support for this party. However – contrary to what was hypothesized – the longer a voter was exposed to this Labour government, the less likely she is to vote for the party. The Conservative model seems to work less well than expected. The party effects are hardly significant or in the wrong direction. However, as in the US models, the main effect of the length variable has a very strong negative impact on the support for the Conservative party. Also notice that controlling for the length a voter was exposed to any particular government, reduces the cohort differences to a level of neglect. This effects seems, however, not to be conditioned on either Labour or Conservative governments.

Turning now to the multi-party systems in Germany and the Netherlands in Table 4 and 5, the results of the mixed generalized linear model confirm the hypotheses quite well. Except for the Christian Union in Germany, the ideological position of the government in power during a voters first election experience has a significant effect in the correct direction. For example, if a West German grew up during a leftist government (whether this was during the CDU/FDP-government in the 1950s or the SPD/FDP coalition in the 1970s is not important), she is more likely to support the leftist parties – SPD and the Greens. For the latter, the length of exposure also has a significant effect. However – in Germany more than in the Netherlands – the parties themselves which were in power still seem to matter as well. If, for example, the Democrats 66 were in power, a generation appears more likely to support them and less likely to have a positive bias towards the liberal VDD. It is worth noting that the Dutch Social Democratic party (PvdA) did not profit from being part of a coalition, which seems to have been putting off young voters to support the party.

Table 6 summarizes the findings of the models discussed here. As the model fit criteria already revealed, the results of the random-intercept models are weakest in the US, closely followed by the UK. We find some confirmation that national governments, respectively the party in power, do have a lasting effect on a cohorts coloring regarding their party preferences. In the German and Dutch multi-party systems, this 'making of political generations' is, however, much stronger. The models perform better and the re-

Table 4: Random Intercept Model on Vote Intention: West Germany

	SPD-Model (PARTY MODEL)		CDU-Model (PARTY MODEL)		FDP-Model (PARTY MODEL)		Green-Model (PARTY MODEL)	
	(IDEOLOGY)	(PARTY MODEL)	(IDEOLOGY)	(PARTY MODEL)	(IDEOLOGY)	(PARTY MODEL)	(IDEOLOGY)	(PARTY MODEL)
<u>Fixed Effects:</u>								
SPD gov	0.21**	0.15**	-0.02	-0.16**	-0.10*	-0.31**	0.21**	0.32**
Green gov	-0.91**	-1.66**	-0.28**	-0.90**	0.16	-0.69†	-1.05**	-2.01**
SPD * Length		0.01†		0.02**		0.03**		-0.01
Green * Length		0.22**		0.18**		0.25**		0.27
CMP position (-1 to +1)		-0.22**	-0.14	0.05	0.22	0.33**	0.43	-0.27*
CMP*Length		-0.01	-0.01	-0.02		-0.01		0.09*
Length Exposure		0.00	0.00†	-0.02**	-0.01**	-0.02**	0.00	0.01
Indiv. Covariates	<i>age, gender, education</i>							
Intercept	-0.38**	-0.37**	-1.99**	-1.85**	-1.98**	-4.83**	-4.86**	-3.42**
				-2.05**		-4.68**		-3.49**
								-3.62**
								-3.73**
<u>Random Effect:</u>								
Time (s.e.)	0.30 (0.04)	0.29 (0.04)	0.32 (0.04)	0.36 (0.05)	0.37 (0.05)	0.55 (0.07)	0.55 (0.07)	0.68 (0.10)
Cohort (s.e.)	0.19 (0.02)	0.18 (0.02)	0.23 (0.02)	0.10 (0.02)	0.12 (0.02)	0.00 (0.09)	0.00 (0.08)	0.19 (0.03)
								0.18 (0.03)
								0.26 (0.03)
<u>LL-Ratio Test (comp. to)</u>								
L1 variables only	0.00**	0.00**	0.04*	0.00**	0.45	0.00**	0.02*	0.00**
No interaction	0.00**	0.00**	0.18	0.00**	0.00**	0.00**	0.69	0.00**
$\Delta(AIC_M - AIC_0)$	-89.5	-105.6	-4.7	-2.3	1.4	-13.6	-3.8	-55.9
								-1.8
								-69.0
								-1.8
								-5.0
Obs. Level 3 (time)				35				26
Obs. Level 2 (cohorts)				475				392
Obs. Level 1 (indiv)				49,984				39,183

Significance levels: † $p < .10$, * $p < .05$, ** $p < .01$. *Data:* Eurobarometer (1970-2002); European Social Survey (2002-2008).
Note: Entries are logit-coefficients estimated by a mixed generalized linear model. The AIC_0 of a model including only the individual level 1 covariates is 62,175.6 (SPD; Social Democrats), 58,688.1 (CDU; Christian Union), 19,278.3 (FDP; Free Democrats), and 23,661.8 (Green). The table shows the difference of each model AIC_M to these baseline models. *Significance levels:* † $p < .10$, * $p < .05$, ** $p < .01$.

Table 6: Overview of Results

	Model	PARTY IMPACT	INTERACTION PARTY * LENGTH	IDEOLOGY IMPACT	INTERACTION IDEOL * LENGTH
United States	Democrats	+	0	+	0
	Republicans	0	0	0	0
Great Britain	Labour	0	+/-	0	0
	Conservatives	0	+	0	0
West Germany	Social Democrats	+	+	+	0
	Christian Union	+	+/-	0	0
	Free Liberals	+	+/-	+	0
	Green Party	-	-	+	+
The Netherlands	Social Democrats	-	0	+	+
	Christian Union	0	0	+	(+)
	Liberals	+	+	+	(+)
	Democrats 66	+	+	+	0

Note: Confirmation of hypothesis: +; Findings have opposite effect as expected: -; Mixed results: +/-; No significant finding: 0.

sults are (mostly) as expected and highly significant. Overall, we can conclude for these two cases that parties and their appearance in the national government does matter for the formation of lasting cohort differences regarding partisan bias. The overall ideological position of a government further works as expected. Leftist incumbent government during one's formative years lead to a positive bias towards leftist parties or a negative bias towards rightist parties.

Robustness checks

Party identification vs. vote intention: As discussed above, we preferred to use a single data source for our European countries in order to draw comparable conclusions. This meant that, unfortunately, we were not able use partisanship as a dependent variable throughout the entire analysis. We acknowledge, however, that 'partisanship bias' as conceptualized in the theoretical section is not exactly the same as vote choice or vote intention. As LeDuc (1981) discussed in his research potential differences between vote choice and party identification variables are mainly a problem in the United States. Fortunately, the US General Social Survey allows us to compare the results of our empirical models using party identification alongside vote intention as the dependent variable.¹² Not surprisingly, a simple pairwise correlation indicates that the two variables are highly correlated ($r = \pm 0.6$).

This strong relationship is less clear when looking at the average proportion of voters and partisans by the year voters came of age. As illustrated in Figure 1 on page 12, we hardly find any differences if we look at the cohort effect descriptively with the vote intention variable. We only observed a small aging effect among the younger cohorts, as they are less likely to vote for the Republicans. However, as shown in Appendix IV, the

¹²We are using the typical seven point scale ranging from being a strong democrat to being a strong republican. The categorization into two party identifications includes the 'leaners' on both sides.

average proportion of partisans by voter cohort does indicate a clear advantage for the Democrats among most cohorts. Only during the period between late 1970s and early 1990s, we find no difference between Democrats and Republicans. The graph hence would support a 'Reagan/Bush Sr.' generation.

More importantly than these descriptive results is of course the comparison of results for our cohort differences measured by hierarchical modeling. As the table for a random intercept model using partisanship as the dependent variable in Appendix IV shows, the cohort effects are very similar in respect of partisanship and vote intention. A notable difference is the overall smaller cohort effect coefficient for party identification, which is only around 0.10 instead of 0.30 in the vote choice model. Furthermore, it appears that the length of exposure to a specific ideology measured by the CMP position of a government matters more for the development of a specific partisanship. Other than this, the development of political generations measured through vote intention and party identification show very similar patterns. We are, therefore, confident that for the European countries as well the vote intention variable is able to capture the concept of partisanship bias.

Voters and non-voters: The analyses presented above included non-voters based on the idea that abstention can be considered to be a deliberate choice. However, it is still important to test whether our results are sensitive to inclusion or exclusion of non-voters. The results presented above are nearly replicated in these reduced models which we do not report here because of space reasons. They are available upon request from the authors, however. Notable small exceptions concern the coefficients for the new parties in our multi-party systems, which are smaller (but still significant) compared to the models presented above. As we have argued, the Democrats 66 in the Netherlands and the Green Party in Germany appeal in particular to the newest electorates who grew up with these parties, but less to the cohorts which came of age when these parties did not yet exist. However, in the age distribution of our different cohorts, the former are on average younger than the latter. As life-cycle theory predicts and research on turnout has illustrated, younger voters are more likely to abstain. Hence, exclusion of non-voters would have systematically biased the results for younger citizens.

Conclusion and discussion

It is generally acknowledged that the impressionable years between adolescence and early adulthood are important for the development of political behavior and political attitudes. With this paper we add to the literature on the development of party preferences by expanding the work on government-driven socialization in several ways. Firstly, our aim has been to gauge what characteristics of incumbent governments cause incoming cohorts to establish a lasting bias towards the party(ies) holding executive power. Secondly, we assessed the mechanisms underlying the 'making of political generations' empirically with cross-sectional data in a hierarchical model, thereby using a new and innovative method to overcome the identification problem common to research on age, period and cohort effects. Thirdly, we added a comparative component by assessing the impact of government-driven socialization across various party and electoral systems.

The idea behind government driven socialization is straightforward: the government that is in power as a citizen comes of age will leave a lasting imprint on a given cohort or generation. Multi-party systems – as opposed to two-party systems – often lead to coalition governments. In such a setting it is much more difficult for voters to allocate responsibility and hold a specific party accountable. Young adults could develop a preference for either of the parties in power.

Rather than forming a positive bias towards a certain party, it seems more likely that in a multi-party system young cohorts will form a bias for a leftist or rightist ideology. If a left coalition government is in power, the important impression is not the social-democratic or green party but rather the dominant leftist political discourse. We thus contrast ‘the making of partisans’ in two-party systems to the ‘making of ideologues’ in multi-party-settings. Lastly, we also take into account the length of time citizens are exposed to a certain type of government. The longer the period of exposure to a particular government, the stronger the socialization effect, and the more durable the cohort effect.

We assess our hypotheses in four established Western democracies characterized by a variety of party and electoral systems: the USA and Great Britain as typical two-party systems and Germany and the Netherlands as exemplary of multi-party systems. Our data sources for the European countries are the Eurobarometer (1970-2002) and the European Social Survey (2002-2008). For the United States we rely on data from the General Social Survey (1972-2008).

Our results indicate that the government-driven socialization hypothesis – slightly surprising – finds least support in two-party systems. In the United States and Great Britain parties hardly benefit from being in power. Government ideology position, as expected, plays next to no role in the development of partisan generations in two-party settings. Our hypotheses are, however, confirmed in multi-party settings. Government ideology explains the making of political generations better than party labels do. The more leftist the government in power during the first vote experiences of a cohort, the more left-leaning this cohort will remain. Although parties that are in power as citizens come of age do significantly affect the partisan preferences of cohorts, these parties sometimes suffer instead of benefit from being in power. The fact that the mechanisms of the government-driven socialization theory find less support in two-party systems may be explained by the fact that citizens feel better represented in proportional systems and are therefore more attentive to what is happening in the political arena.

The interaction between length of exposure and government characteristics gives mixed results. Our expectation that the longer a cohort is exposed to a government of a given composition will lead to stronger cohort effects does not find unequivocal support. In certain instances, the effect is indeed found to be opposite. The longer the exposure, the weaker the cohort effect. It therefore seems that in certain cases a mechanism of diminishing returns is in play. The interaction between government characteristics and length of power deserves to be researched in more detail in the future.

To stay in the terminology of Jennings (1989), we have to conclude that on the whole governments in power do indeed color cohorts and that differences in the make up of governments leads to the ‘making of political generations’. Both parties and ideologies matter although the extent to which depends from country to country. Further research is necessary to understand the more general consequences for other political attitudes and behaviors.

While this paper has advanced our knowledge on the development of political generations, we have not been able to explore a multitude of explanatory factors as we preferred to focus on the comparison between different systemic settings. It would, however, be interesting to include macro-level economic indicators to control for the impact of the government contextual effects. Moreover, future research could take into account the impact of other government characteristics such as popularity rates. George Bush jr. was an exceptionally unpopular president. It may thus perhaps be somewhat far-fetched to expect the rise of a 'Bush jr. generation' anytime soon.

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Appendix

I) Voting Age Regulations

COUNTRY	LOWERING MINIMUM VOTING AGE	WOMEN'S SUFFRAGE
Germany	1948: 24 1918: 20 1949: 21 1970: 18	1918
Great Britain	1832: 21 1918: 19 ¹⁾ 1948: 21 1969: 18	1928
Netherlands	1948: 23 1897: 25 1946: 23 1956: 21 1972: 18	1919
United States	Originally: 21 1971: 18	1920

Notes: Adopted from Katz 1997, Table 13.1, pp. 218-229.

¹⁾ Only servicemen and ex-servicemen.

IIa) Information on Governments: United States

NR	FROM	TO	LENGTH	PARTY	PRESIDENT	CMP (GOV)	OBS. COHORT
1	1921	1924	12	Rep	Harding	13.9	569
2	1925	1928	12	Rep	Coolidge	-5.0	827
3	1929	1932	12	Rep	Hoover	-4.9	1,118
4	1933	1936	20	Dem	Roosevelt	-1.1	1,507
5	1937	1940	20	Dem	Roosevelt	-15.7	1,890
6	1941	1944	20	Dem	Roosevelt	-15.9	2,136
7	1945	1948	20	Dem	Roosevelt	-10.1	2,314
8	1949	1952	20	Dem	Truman	-18.9	2,214
9	1953	1956	8	Rep	Eisenhower	19.5	2,334
10	1957	1960	8	Rep	Eisenhower	-5.3	2,611
11	1961	1964	8	Dem	Kennedy	-19.1	3,074
12	1965	1968	8	Dem	Johnson	-20.1	3,777
13	1969	1972	8	Rep	Nixon	1.6	7,579
14	1973	1976	8	Rep	Nixon	0.7	4,362
15	1977	1980	4	Dem	Carter	-19.8	3,736
16	1981	1984	12	Rep	Reagan	22.4	3,085
17	1985	1988	12	Rep	Reagan	33.6	3,016
18	1989	1992	12	Rep	Bush Sn.	29.4	1,327
19	1993	1996	8	Dem	Clinton	12.3	1,378
20	1997	2000	8	Dem	Clinton	8.8	992
21	2001	2004	8	Rep	Bush Jr.	33.3	516
22	2005	2008	8	Rep	Bush Jr.	24.9	152

Note: Elections are typically held in November and the presidency starts in January of the following calendar year. Length measures the time in years a party consecutively was in power.

IIb) Information on Governments: Great Britain

NR	FROM	TO	LENGTH	PARTY	CMP (GOV)	OBS. COHORT
1	Jul 1945	Jan 1950	6	Labour	-31.30	3,567
2	Feb 1950	Sep 1951	6	Labour	-28.10	1,816
3	Oct 1951	Apr 1955	13	Tories	-1.40	2,652
4	May 1955	Sep 1959	13	Tories	-30.60	4,638
5	Oct 1959	Sep 1964	13	Tories	-23.30	5,054
6	Oct 1964	Mar 1966	6	Labour	-23.80	1,126
7	Apr 1966	May 1970	6	Labour	-14.80	8,354
8	Jun 1970	Jan 1974	4	Tories	8.20	4,679
9	Oct 1974	Apr 1979	5	Labour	-27.50	6,216
10	May 1979	May 1983	18	Tories	24.40	4,455
11	Jun 1983	May 1987	18	Tories	29.00	3,796
12	June 1987	Mar 1992	18	Tories	30.50	3,826
13	Apr 1992	Apr 1997	18	Tories	27.90	2,322
14	May 1997	Apr 2001	13	Labour	8.07	1,321
15	May 2001	Apr. 2005	13	Labour	5.58	562
16	May 2005	Apr 2010	13	Labour	-2.90	301

Note: The election in February 1974 was ignored due to the short duration of the government.

IIc) Information on Governments: Germany

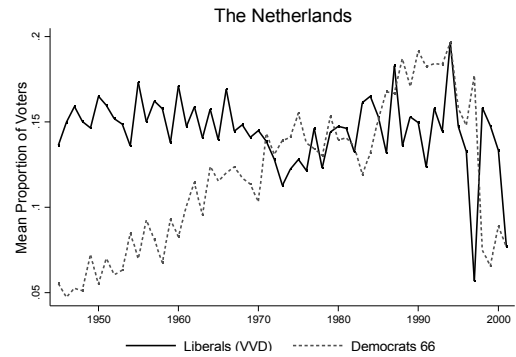
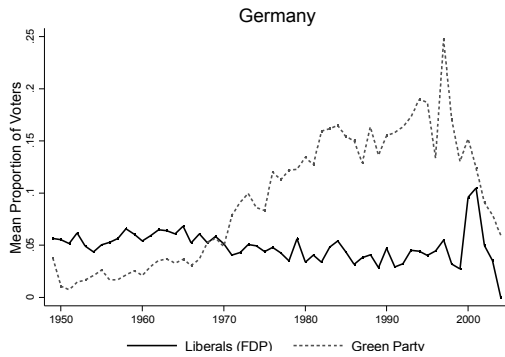
NR	FROM	TO	LENGTH	PARTIES	CMP (GOV)	OBS. COHORT
1	Sep 1949	Sep 1953	17	CDU/FDP/DP	-3.76	3,889
2	Oct 1953	Sep 1957	17	CDU/FDP/DP	-6.75	4,264
3	Oct 1957	Oct 1961	17	CDU/DP	45.85	5,476
4	Nov 1961	Oct 1965	17	CDU/FDP	-2.06	4,903
5	Oct 1965	Nov 1966	17	CDU/FDP	-1.18	1,055
6	Dec 1966	Sep 1969	3	CDU/SPD	-3.54	5,560
7	Oct 1969	Nov 1972	13	SPD/FDP	-11.38	4,802
8	Dec 1972	Nov 1976	13	SPD/FDP	-8.15	4,845
9	Dec 1976	Oct 1980	13	SPD/FDP	-18.44	4,942
10	Nov 1980	Sep 1982	13	SPD/FDP	-17.80	2,365
11	Oct 1982	Mar 1983	16	CDU/FDP	15.82	1,119
12	Mar 1983	Feb 1987	16	CDU/FDP	19.10	4,033
13	Mar 1987	Oct 1990	16	CDU/FDP	25.47	1,994
14	Jan 1991	Oct 1994	16	CDU/FDP	-7.56	1,499
15	Nov 1994	Sep 1998	16	CDU/FDP	23.34	962
16	Oct 1998	Sep 2002	7	SPD/Green	-2.11	497
17	Oct 2002	Sep 2005	7	SPD/Green	-8.22	331

IIId) Information on Governments: The Netherlands

NR	FROM	TO	LENGTH	PARTIES	CMP (Gov)	OBS. COHORT
1	Jul 1946	Aug 1948	3	PvdA/KVP	-7.37	1,744
2	Aug 1948	Mar 1951	4	KVP/PvdA/CHU/VVD	2.02	1,544
3	Mar 1951	Sep 1952	4	KVP/PvdA/CHU/VVD	2.02	1,833
4	Sep 1952	Oct 1956	6.5	PvdA/KVP/ARP/CHU	3.88	5,105
5	Oct 1956	May 1959	6.5	PvdA/KVP/ARP/CHU	-1.19	1,814
6	May 1959	Jul 1963	5.5	KVP/VVD/ARP/CHU	3.08	5,287
7	Jul 1963	Apr 1965	5.5	KVP/VVD/ARP/CHU	-5.54	1,301
8	Apr 1965	Apr 1967	2	KVP/PvdA/ARP	-18.39	2,477
9	Apr 1967	Jul 1971	6.5	KVP/VVD/ARP/CHU	6.04	7,312
10	Jul 1971	May 1973	6.5	KVP/VVD/ARP/CHU/DS'70	-18.27	5,891
11	May 1973	Dec 1977	4.5	PvdA/KVP/D66/PPR	-31.6	7,067
12	Dec 1977	Sep 1981	4	CDA/VVD	-2.51	7,067
13	Sep 1981	Nov 1982	1	CDA/PvdA/(D66)	-23.49	1,133
14	Nov 1982	Jul 1986	7	CDA/VVD	2.83	3,677
15	Jul 1986	Nov 1989	7	CDA/VVD	-0.47	2,348
16	Nov 1989	Aug 1994	4.5	CDA/PvdA	-14.41	2,176
17	Aug 1994	Aug 1998	8	PvdA/VVD/D66	4.68	1,139
18	Aug 1998	May 2003	8	PvdA/VVD/D66	-9.97	475
19	May 2003	Jul 2006	3.5	CDA/VVD/D66	12.12	268

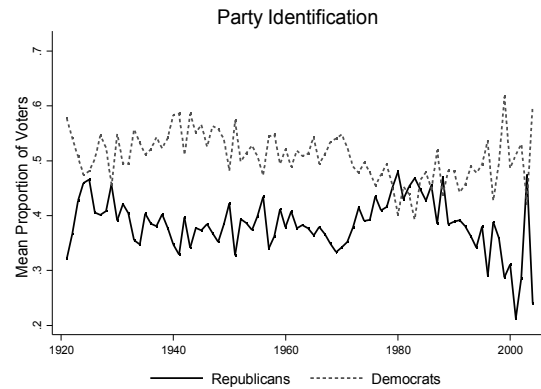
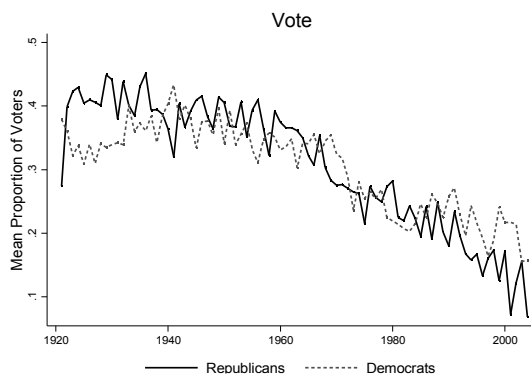
Note: The Beel II ('59), Zijlstra ('67), Biesheuvel II ('72-'73) and Balkenende I (02-'03) cabinets were not considered given their short duration of less than one calendar year. Van Agt II & III ('81-'82) were merged and counted as one.

III) Mean Proportion of Voters for Small(er) Parties by Year of Coming of Age



IV) Comparing Voters and Partisans (US only)

Proportion of Voters and Partisans by Year of Coming of Age



Random Intercept Model on Party Identification: United States

	Democratic Partisan				Republican Partisan			
	(PARTY MODEL)		(CMP GOV)		(PARTY MODEL)		(CMP GOV)	
<u>Fixed Effects:</u>								
Democratic gov	0.07**	0.05			-0.07*	-0.05		
Democrats * Length		0.00				0.00		
CMP position (-1 to +1)			-0.29**	-0.06			0.35**	0.15
CMP*Length				-0.06**				0.05*
Length Exposure		0.00		0.00		0.00		0.00
Indiv. Covariates	age, gender, education							
Intercept	0.10	0.12 [†]	0.17**	0.19**	-1.98**	-1.99**	-2.05**	-2.06**
<u>Random Effect:</u>								
Time (s.e.)	0.19 (0.03)	0.18 (0.03)	0.17 (0.03)	0.17 (0.03)	0.15 (0.03)	0.15 (0.03)	0.15 (0.02)	0.15 (0.02)
Cohort (s.e.)	0.10 (0.02)	0.10 (0.02)	0.10 (0.02)	0.09 (0.02)	0.17 (0.01)	0.17 (0.01)	0.16 (0.01)	0.15 (0.02)
<u>LL-Ratio Test (comp. to)</u>								
L1 variables only	0.00**	0.01**	0.00**	0.00**	0.01**	0.09 [†]	0.00**	0.00**
No interaction		0.74		0.00**		0.82		0.05*
$\Delta(AIC_M - AIC_0)$	-8.1	-4.8	-14.8	-22.8	-4.0	-0.4	-14.1	-16.0
Obs. Level 3 (time)	27							
Obs. Level 2 (cohorts)	445							
Obs. Level 1 (indiv)	51,802							

Significance levels: [†] $p < .10$, * $p < .05$, ** $p < .01$. Data: General Social Survey (1972-2008).

Note: Entries are logit-coefficients estimated by a mixed generalized linear model. Partisanship includes 'leaners'. The AIC_0 of a model including only the individual level 1 covariates is 71,062.6 (Democrats) and 65,481.6 (Republicans). The table shows the difference of each model AIC_M to these baseline models.