Young and vulnerable:
Automation Risk and the AfD in Germany

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Abstract

Research on the effects of technological and right-wing populist party (RPP) voting has mostly paid attention to older workers. This paper shifts the focus of this discussion to young individuals with lower educational and training backgrounds which find themselves under pressure from technological change. Thus, this research analyses for the first time a sizeable group of potential automation losers who are only at the beginning of their careers. Combining a new data set on automation risk of German occupations with German panel data, this paper shows that while younger individuals in the workforce tend to be generally less likely to vote for a German RRP, the Alternative für Deutschland (AfD) than older workers, young individuals and in particular young males in high risk occupations and with no higher secondary school diploma or university background are more likely to vote for the AfD than both, their more educated peers and older counterparts. The results suggest that status anxiety and future aspirations might play a crucial role for young individuals in their voting behaviour.

Keywords: AfD, Germany, Automation, Technological change, Right-wing populism, Status anxiety

1. Introduction

An increasing number of publications have been focusing on the current technological shift and its potential distorting consequences on society (Osborne & Frey, 2013). This new technological era will exert more pressure on the workforce to adjust or face the risk of becoming redundant. However, not all of us are affected equally. Autor et al. (2003) already highlighted in the early 2000s that workers with a high share of routine tasks are especially exposed to the new automation risk (see also Dengler & Matthes, 2015). In most advanced societies the main structural response to these shifts have been an expansion of tertiary education (Baethge & Wieck, 2015), equipping future entrants into the labour market with better skillsets to cope with the changing labour market demands. However, not everyone makes the cut and receives university education which have led some experts to paint gloomy pictures of especially this group's occupational future, e.g. Frey & Osborne (2017) suggest that approximately 47% of jobs in the USA will be replaced in the next 10-20 years (see also Arntz et al. 2016, 2018; Bonin et al., 2015).

More recently, political scientists have become interested in how the rising awareness and discussion of potential negative consequences of new technologies is affecting individuals vote choice. First results show that individuals in high automation risk occupations are more likely to vote for right wing populist parties (RPP)[1](Im et al. 2018). However, technological change is a very gradual process and while there is an aggregate decline in occupations with a high share of routine tasks, many of these workers manage to cling to their jobs until entering into retirement (Cortes, 2016; Kurer & Gallego, 2019). So far, no research has been conducted into understanding what role age plays in an individual's reaction to these developments among the affected groups. Especially the career trajectories of younger individuals with a lower educational background and now in occupations with higher automation risk could be affected. While many of these occupations had guaranteed a decent standard of living and prospects of upward mobility in the past (Nachtwey, 2016), the susceptibility to automation by new technology is undermining this positive outlook (Kurer,

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[1] This article follows Mudde's definition of populism (2004 : 543) as "*[…] an ideology that considers society to be ultimately separated into two homogeneous and antagonistic groups, 'the pure people' versus 'the corrupt elite'",* and further states "[…] *that politics should be an expression of the volonté générale (general will) of the people*". This definition understands populism as a so-called thin ideology which tends to be coupled with other ideologies and ideas. Right-wing populism is usually a combination with xenophobic and authoritarian tendencies, i.e. nativism.

2020). Such a situation causes status anxiety for many (Kurer, 2020) which has been shown to increase RPP voting likelihood (Gidron & Hall, 2017; 2020). Hence, we should ask is there a generational effect in the political consequences of automation risk?

In Germany, a new RPP, the 'Alternative für Deutschland' (AfD) performed very well during the 2017 federal elections. The party's success was especially pronounced in regions with a strong manufacturing base (DIW Berlin 2018), a sector with occupations particularly prone to more automation as well as increasing competitive pressures. However, Germany is renowned for its very stable training and welfare system, which could weaken any worries associated with being in a high automation occupation. A defining characteristic of the German training system is employers invested in training and/or re-training their employees leading to a highly qualified workforce and a high likelihood of qualified older workers. In addition, German labour security laws and regulations do not just reward the length an employee has been staying with their employer but make it generally harder to make older employees redundant due to their personal circumstances (e.g. family situation.). This means that it is younger generations in the workforce who are likely to be more vulnerable compared to their older counterparts. While older workers are likely to have already achieved some upward mobility during their career and could possibly hang on until retirement, it is younger workers who are more likely to face social anxiety about their position in the labour market and society.

Younger individuals on the labour market are obviously not a homogenous group. Their educational and training background will differ among themselves as well as compared to the older generations. Accordingly, their expectations about their career are likely to be different as well. A university graduate might start in a low paid temporary contract in an occupation consisting of a high share of routine tasks, but this individual will still have a higher likelihood of finding a new job compared to a traditional apprentice with a specific skillset who might be find themselves in a declining sector and career path under threat of future unemployment.

This article uses individual level data from the SOEP panel in combination with new data on automation risk for German occupations (Matthes & Dengler, 2018) to analyse what role age plays in the political behaviour of the group of individuals in occupations with high automation risk without a high education background. Controlling for various socio-demographic and cultural factors, the results show that individuals in high automation risk occupations and no higher secondary or university background are more likely to vote for the AfD than their more educated or older peers with a similar educational background. A likely explanation for these results is that due to the uncertainty about their occupational future they experience status anxiety and consequently become more likely to vote for the AfD.

The main contribution of this research is in the emerging literature on political behavioural consequences as a result technological change. This paper explicitly studies the role played by the age of individuals in their reactions to possible automation threats. To the best of my knowledge it is also the first article researching the political consequences of technological change specifically in the German context with automation risk data tailored to German occupations. In addition, the fine-grained automation risk data allows controlling for within occupational group variance which has not been possible due to data limitations in previous studies.

In the following section, the existing literature on RPP, the AfD and their link to voting behaviour of the so called 'automation losers' will be reviewed. Subsequently, as part of the theoretical underpinning of the analysis the recent developments in education and training in the German context will be described and analysed. The third section discusses the data and method used to test the developed hypotheses. Afterwards, the fourth section will present and discuss the results of the analysis. In the last part of the article, implications of the results will be put into the wider context of the literature and potential future research questions will be highlighted.

2. Right Wing Populist Parties, the AfD and Automation

2.1 RPP literature and automation

Academics have tried to explain the rise of radical right-wing populism in recent years using different starting points. Demand-side explanations are theories which focus on the role of voter's attitudes, values and opinions as the main cause of party platforms and success. Supply side explanations focus on the role of the party in convincing potential voters to side with them based on the result of constraints and opportunities that the political-institutional context offers, i.e. especially the space left by political competitors. Ultimately, there is an interplay between the two dynamics and parties adjusting to voting groups (demand) and reaching out to and manifesting their position with them given existing constraints (supply).

 Demand side explanations are the dominant approach and have produced two main competing theses, i.e. cultural backlash and economic insecurity. The cultural backlash thesis emphasizes the populist surge as mainly a reaction or backlash against progressive cultural change, whereas the economic insecurity thesis focuses on the consequences of changes transforming society and the workforce in post-industrial economies (Inglehart & Norris, 2016, 2019; Oesch 2008; Colantone & Stanig, 2018; Rodrik, 2017).

Both sides have been criticized extensively (e.g. Kriesi & Bornschier, 2012; Franklin, 2004; Margalit, 2012), and others such as Gidron and Hall (2017; 2020) conceptualized how cultural and economic factors interact in determining a person's social anxiety. According to their argument widespread social status anxiety is the cause for the recent surge in right-wing populist party support. Thus, they see the rise of populist parties as a problem of social integration. Those *socially marginalized*, that is *"some people have the sense that they have been pushed to the fringes of their national community and deprived of roles and respect normally accorded to full members of it"* (Gidron & Hall, 2020: 1028).

While there is an ongoing debate about the effects on automation in the labour market and to which extent human jobs will be replaced (Frey & Osborne, 2017; Goos & Manning, 2007), the links between (expected) technological change and political behaviour still remain largely unstudied. Previous research hypothesized that individuals threatened by automation are a likely voter group for populist right parties (Camus and Lebourg, 2017). In fact, populist right

parties in Europe are increasingly using the threat of automation in their political campaigns (Mulot, 2017 in Im et al., 2019).This fits with these parties' overall narratives of warning about exogenous changes and nostalgia of the past (Mudde, 2007; Steenvoorden and Harteveld, 2018). Thus, populist right parties have identified fear of technological change as an opportunity that can be exploited and are supplying or offering potential voters with answers to the perceived threat that automation could pose to them.

With data from the ISSP Gingrich (2019) argues that those worker groups exposed to technological change are more likely to vote for the mainstream left, but also populist right and compensation does not forestall the rise of the populist voters.

Im et al. (2019) use individual level data from the European Social Survey and find that individuals who are just about managing economically are more inclined to vote for radical right parties while the pressure of automation rises.

Based on the fact that disadvantages are strongly concentrated among blue- and white-collar workers with a high share of routine tasks in the lower middle class, Kurer and Palier (2019) argue that socially conservative parties in general and right-wing populist parties in particular have recognized the electoral potential of disaffected routine workers and skillfully address and acknowledge their anxieties.

Kurer and Gallego (2019) show that while technological change is negatively affecting non-/ and semi-skilled workers, it has a positive economic effect for higher skilled workers. Kurer (2020) also shows that a perception of relative economic decline among the politically powerful group of workers with a high share of routine tasks drives support for conservative and, especially, right-wing populist parties.

Anelli, Colantone and Stanig (2019) find evidence that technological shocks increase the vote for nationalist and right-radical parties by studying the introduction of robots into the labour markets of 15 European countries between 1993 and 2016. They argue that the effect is likely due to the technological shock driving structural changes and thus is similar to the much-discussed impact of Chinese imports.

2.2 The AfD – a party of contradictions

In the light of the general literature, research about what explains the AfD's success in Germany is quite inconclusive and contradictory. The AfD was founded as a single-issue party in 2013 focused on getting Germany out of the Eurozone before it slowly transformed itself into Germany's first right-wing populist party (Franzmann, 2016). Until today the party is experiencing internal conflicts about the political and ideological orientation of the party. Yet, the refugee crisis in 2015 is seen as a decisive turning point with the AfD showing more populist radical right tendencies (Schmitt-Beck, 2017).

Research findings show that the AfD drew its voters from across the political party spectrum as well as from previous non-voters in 2013 (Hansen & Olsen, 2019). AfD voters tend to show mostly the same socio-demographic characteristics as all other German Parties except of being defined by a majority of male voters (Hansen & Olsen, 2019), who are mostly young and middle-aged men and over proportionally wealthy (Bergmann et al., 2017; Niedermayer & Hofrichter, 2016). Goerres, Spies and Kumlin (2018) call the AfD a populist radical right party with special features due to its anti-redistribution economic policy preferences and the strong support by specific immigrant groups (i.e. Russian-Germans in particular). AfD sympathizers and voters showcase very strong anti-immigration and anti-establishment, as well as communitarian and anti-cosmopolitan attitudes (Hansen & Olsen 2019). Tutic and Hermanni (2018) find evidence for the economic insecurity thesis, while Manow (2018) shows with the help of a deprivation index that the economic insecurity thesis does not hold. Manow (2018) further argues that labour market insiders upset about easy welfare access for new immigrants are more likely to vote for the AfD. Kohlrausch (2018) argues more similarly to Gidron and Hall (2017; 2020) that social uncertainty and fears, especially the fear of social decline motivated voters to elect the AfD in 2017.

The last radical right party that was relatively successful in Germany were 'Die Republikaner' (REP) in the 1990s. The REP employed similar strategies as the 'new' populist right, so the recent electoral success of the AfD appears to be less about the newness of its message than about new opportunity structures. From this supply side view, the AfD emerged due to a rise of Euroscepticism and D-Mark nostalgia, which arguably had to make way for the opportunities offered by the refugee crisis in 2015/16. The changing face of the AfD allowed

it to initially cater to different and often contradicting interests. This phase seems to be coming to an end with the party having moved away from a mainly economically liberal stance towards typical RPP positions (Arzheimer & Berning, 2019; Schmitt-Beck, 2017).

Even though there are to the best of my knowledge no studies that link technological change to the AfD's success, there is some circumstantial evidence, that the AfD is indeed attractive to 'losers of automation' (Im et al. 2019). The AfD electorate is more likely to be concerned about their jobs as a survey study with ca. 5000 employees by the Hans-Böckler Stiftung (Hilmer et al., 2017) suggests. The study results show that 34% of AfD voters are concerned about their occupational situation compared with 26% overall. Further, the survey shows that AfD voters are more likely to perceive the EU and globalisation as a threat to jobs in Germany. This is an indication that there is a concern among the AfD electorate for their occupations, even though the study does not shed any light on the underlying reasons for these fears directly one can hypothesise about possible mechanisms.

The AfD sees technological change, i.e. especially automation and robotisation, as a necessity to guarantee Germany's strong economic position in the future. However, it recognizes that there will be losers in this process which are more commonly found in the industrial sector and among occupation with a high share of routine tasks (Büttner, 2018[2], Scholtysek, 2017[3]). The party's strategy to attract them is to combine its position about accepting and pushing for technological change with heightening the threat from low-skill labour immigration which will not just compete with lower skilled Germans, but also put more strain on the welfare state

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[2] Kleine Anfrage Sachen-Anhalt, Drucksache 7/3409; Question 4: Warum setzt die Landesregierung mit dem Programmbereich „Digital Creativi-ty" des Förderprogramms Sachsen-Anhalt DIGITAL den Schwerpunkt auf die einseitige Förderung von Software- und Medienproduktionen (darunter auch „Spiele") anstatt mindestens in gleichem Maße die Entwicklung und Produkti-onsaufnahme digitaler Hardware (und damit die dringend benötigte Vervoll-ständigung der Industriegüterproduktion im Land) zu fördern?

[3] Kleine Anfrage Berlin, Drucksache 8/12142; Q19 - Wie sieht konkret die Ansiedlungspolitik zur Ansiedlung von Textilindustrie und damit zusammen-hängenden weiteren Unternehmen in Schöneweide aus?

(e.g. Joa, 2019[4]; Bessin & Schade, 2016[5]; Henke, 2016[6]; Herre, 2017[7]; Muhsal, 2016[8]). Finseraas et al. (2017) show that such a strategy is exploiting a polarizing effect among voters experiencing negative wage effects of immigration. Yet, how the present and future lower skilled employees affected by automation should be helped or prepared is not clear, as no substantive statements regarding upskilling or other approaches have been put forward by the party or its members so far. Instead, publications by the AfD's working group on digitalisation are focused on creating the right framework by cutting red tape, targeted subsidies for promising start-ups in the ICT sector and expand the cooperation between research and economic actors (Kamann, 2018)[9]. While the AfD's stance on welfare provision for those affected is not entirely clear, it is fair to say that one envisioned solution is to reduce access to the welfare state for foreigners in order to guarantee welfare to those 'Germans' affected. This message is in line with the AfD's success to reach voters by highlighting a deteriorating welfare state as was previously discussed by Manow (2018).

The AfD also highlights the threat of foreign investors taking over German high-tech and know-how, as well as the negative role of the EU as a hurdle to a more successful national strategy (Bernhard et al., 2018[10]; Cotar, 2019[11]). The party is trying to establish a link between the investment activities of Chinese companies and a growing political influence of China in

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[4] Joa, M. Technologischer Wandel im Kreis Germersheim: Brandenburg (FDP) verschweigt fatale Konsequenz für die Bürger. Retrieved online from: https://alternative-ger.de/2019/05/22/technologischer-wandel-im-kreis-germersheim-brandenburg-fdp-verschweigt-fatale-konsequenz-fuer-die-buerger/, date accessed: 06.05.2020.

[5] Kleine Anfrage Brandenburg Drucksache 6/5597, Question 6: Inwiefern kann die Entwicklung der Industrie 4.0 nach Ansicht der Landesregierung eine Gefahrfür die berufliche Integration von Asylbewerbern darstellen? [author transl.: According the regional government (anm. state of Brandenburg) how much does Industry 4.0 pose a risk for the occupational integration of asylum seekers?]

[6] Kleine Anfrage Thüringen, Drucksache 6/1942 – ibid

[7] Kleine Anfrage Baden-Württemberg, Drucksache 16/1416 – ibid

[8] Kleine Anfrage Thüringen, Drucksache 6/2549 – in context of lack of skilled labour in the state, questions 7-10.: 7.Wie werden die Qualifikationen der Zuwanderer erfasst (bitte nach Aufenthaltstiteln aufschlüsseln)? 8. Wie viele Personen sind seit dem Jahr 2010 nach Thüringen zugewandert (bitte nach Jahresscheiben, Aufenthaltstiteln und beruflichen Qualifikationen auflisten)?9. Wie viele dieser Personen (siehe Frage 8) waren Fachkräfte, die nach Thüringen zugewandert sind (bit-te nach Aufenthaltstiteln, Jahresscheiben, Berufsfeldern, Qualifikationen und Branchen auflisten)? Wie wird sich diese Zahl nach Ansicht der Landesregierung in den nächsten fünf Jahren entwickeln?10. Wie viele der Personen (siehe Frage 8) befinden sich in einem Beschäftigungsverhältnis (bitte aufschlüs-seln nach Branche und Qualifikationsniveau)?

[9] https://www.afdbundestag.de/kamann-digital-gipfel-wirft-schlaglicht-auf-kraft-und-ideenlos-agierende-bundesregierung/

[10] Kleine Anfrage Bundestag, Drucksache 19/645 – foreign investors.

[11] http://www.afd-kvhalle.de/presse/pressemitteilungen/staatsfinanzierte-europa-cloud-ist-falsches-mittel-fuer-digitale-souveraenitaet.html

Germany. Thus, the party is actively trying to frame some of the issues related to technological change into worldview based on competition between nations.

Overall, the AfD's solution to the effects of technological change seems to be focused on reducing the exposure of vulnerable groups to labour market competition from lower skilled migrants. What makes the party stand out in Germany is the emphasis on those workers who will be negatively affected by heightening their possible fears. This shows that the AfD is in line with the general suspicion raised in the literature about RRPs having identified this group as possible electorate. Next, we will try to establish why especially younger less educated individuals might be especially susceptible to this message.

3. Theory: Automation Risk, RPPs and Age

While the AfD refers to the negative consequences of technological change for parts of the workforce, it is not clear which groups are particularly affected and thus might be more prone to vote for the AfD.

Occupational automation risk is not affecting all groups equally and is further conditioned by the institutional framework. In other words, education and training, welfare as well labour market organisation differ across countries and thus will create different losers and winners. Many countries envy and try to imitate the German (as well as Austrian and Swiss) apprenticeship system. It is particularly well suited to the type of capitalism that has emerged in Germany (Hall & Soskice, 2001) but has also come under scrutiny over the last decades due to the rise of the knowledge economy.

As a response to the rise of the knowledge economy and increasing educational aspirations among the population, German politicians incentivised the further tertiarization of the educational system and pushed for more university graduates entering the labour market. This push has brought changes to the secondary educational system in Germany, which plays a prominent role in defining the future paths of individuals, enabling more pupils to pursue university studies via different paths. The efforts seem to show an effect with university student numbers steadily rising while apprenticeship numbers have simultaneously been

falling since 2000 (see figure 1). According to the Bertelsmann Stiftung this trend is far from over as they foresee a continuous significant decline in demand for apprenticeship degree holders and simultaneous increase of demand for university graduates (Euler & Severring, 2017). These shifts matter for the study of the effects of technological change as individuals without university education are especially vulnerable to being negatively affected by technological change (Kurer & Galego, 2019).
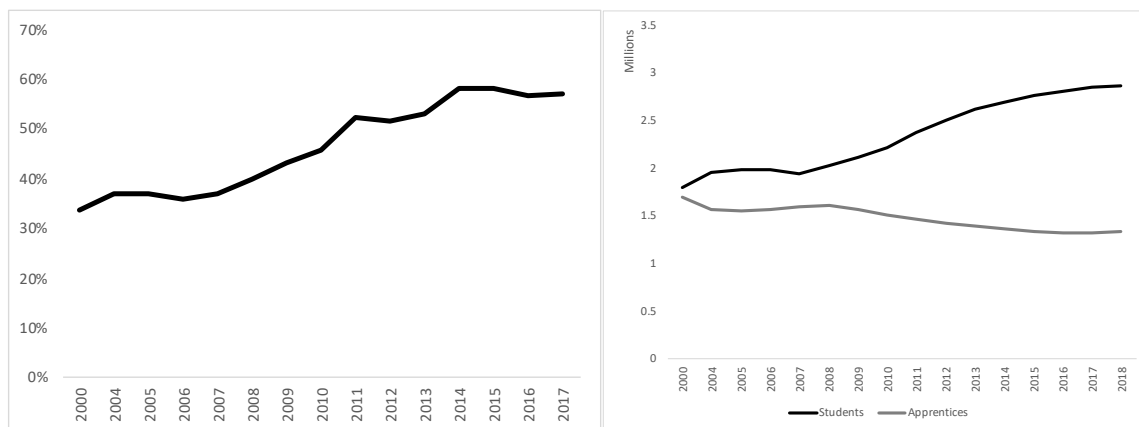

Figure 1. Left: Share of students of age cohort eligible for university studies; Right: Development of total number of students and apprentices. Data sources: BMBF (2020); BIBB (2019)

The German school system tends to sort pupils very early on into different labour market access paths (see figure 2). Lower and middle secondary schools are designed to prepare pupils for apprenticeships, while higher secondary schools are more theoretical and prepare for university studies or more demanding apprenticeships in the service sector (Thelen, 2014). Numbers of pupils holding a higher secondary diploma have increased dramatically since the start of the millennium. These individuals have more flexibility and choice compared to their peers, and crucially have the option to take on university studies right after school or at a later point in time. Pupils with a lower or middle secondary diploma are limited to the apprenticeship track or try the shift into a higher secondary school which represents a profound challenge for some due to the different more theoretical nature of education at higher secondary schools.
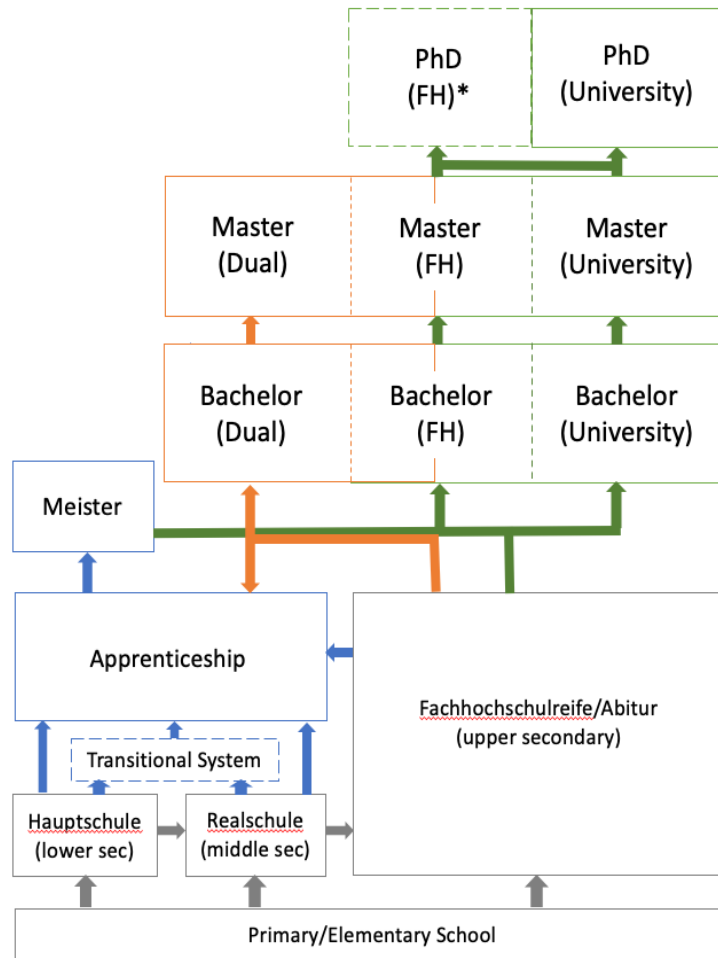
Figrue 2. Visual Representation of the German School and Training System. Notes: Grey: School system; Blue: Apprenticeship system; Orange: Dual studies system; Green: Academic system. The orange double arrow in the right figure is supposed to indicate the combined completion of both an apprenticeship and university degree as part of the dual studies programme. Source: Author

*PhD programmes at FHs are only allowed in some Laender and restricted to certain study programmes.

Thelen (2014) shows that companies across all sectors are more likely to offer stable employment opportunities to those highly skilled individuals which show promise. On the contrary, the least skilled often end up in a state-financed "transitional" system (Übergangssystem) waiting for a normal in-firm training slot to open up or take on 'shorter' apprenticeships. Within the German context these developments also have a significant gender dimension: Young women outperform their male counterparts at school and typically stay longer in school making them less likely to end up in the transitional system or shorter apprenticeship programmes. What is striking over the last years is the pace at which women are turning their backs on apprenticeships compared to men (figure 3). While the number of

first year male apprentices has only decline by around 7% since 2000, the equivalent decrease for female first year apprentices has been 28,5%. In other words, compared to men, women have become far more likely to pursue a university style education over the last 20 years.
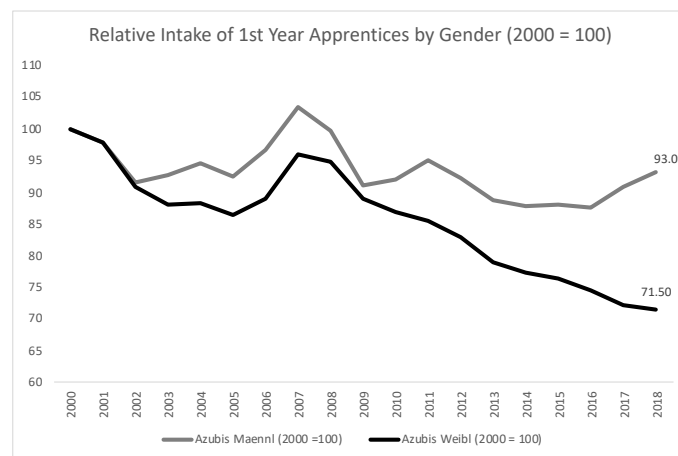

Figure 3. Data source: BMBF (2020b)

Apprenticeship training schemes tend to have a strong applied focus geared towards refining and perfecting routine tasks. However, with the need for more complex skillsets this type of training might not be enough anymore. In simple terms, many occupations have now increasing skill and educational attainment requirements compared to the past which call for more extensive training. This shift also partly explains the increasing academisation of many occupations that were previously 'just' apprenticeships. This increasing "academisation" is particularly pronounced in traditionally female-dominated apprenticeship programmes (e.g. social and medical care professions).

As a result, the trend towards university graduates has consequences for young people in the apprenticeship system. The Hans Böckler Stiftung (Elsholz et al., 2018) assumes that there will be a general upgrading of the educational system and companies demanding more qualified individuals. Early indications support this view showing that as a result of the incentivised academisation, many BA holders are taking previous apprenticeship entry jobs. Elsholz et al.'s prediction would mean more pressure on less educated apprentices. In the words of the think tank's report: "The dual apprenticeship will remain as a leftover for a small share of underperforming youths".

Zika et al. (2018) predict few job losses but expect large movements between sectors, occupations and skill requirements for German labour market over the next 15 years. Such an increasing pressure for more flexibility of labour market participants is not well suited for the apprenticeship system either, who is geared to produce sectoral specialists.

In another report by the IAB (Institute for Employment Research) and the BIBB (Federal Institute for Vocational Education and Training) expect a different scenario (Maier et al. 2016). While they agree that there is an inevitable increase in the number of university students, they foresee inferior job placements especially for bachelor's degree holders, if not even an increase in the unemployment rate among graduates. This outcome does not necessarily help apprentices either, as it still means that they face increasing competition from university educated graduates.

The developments show that there is an emerging cleavage along educational lines across the entire labour market which is likely to intensify in the coming years. Holding at least a higher secondary education or university degree are the new fault line between winners and losers of the new labour market. This would be in line with Kurer and Galego's (2019) findings about the skill split of those who are benefitting or losing out from technological change. As a consequence of the shift to more knowledge economic activities, academisation and technological change, entering the labour market today via the apprenticeship path without a higher secondary school diploma means facing more pressures and competition on the labour market than for previous generations.

Arguably, older workers are generally less likely to be in a high automation risk occupation due to the upskilling nature of the German system. Yet, even if they are in automation risk prone occupations, they are likely to be more shielded from possible negative consequences due to German labour market regulations and employee protection laws. Many of them will hold on until retirement (Kurer, 2020), an unfeasible option for younger workers in a similar occupation. Hence, we expect that older workers are likely to remain relatively unaffected by being part of the high automation risk occupation group.

More generally, entry jobs tend to require fewer complex skillsets and thus early career Germans are likely to find themselves in more automation risk prone occupations, but we expect their future outlook to differ based on their educational and training backgrounds.

Young workers without a higher secondary diploma who went through the German apprenticeship system are likely to perceive that the social mobility previous generations with their training background enjoyed is not guaranteed anymore. They are not just facing competitive pressure for high value apprenticeships with higher secondary school diploma holders (directly or via dual studies programmes), but their sectoral training makes them generally less favourable candidates on a shifting labour market compared to more generally trained university graduates. Higher secondary school diploma holders always have the benefit of possibly entering university, whereas this option is not in reach for lower educated individuals. This is a situation which can lead to fears about job security, the future more generally and cause status anxiety – factors which have been identified previously as increasing the likelihood for voting RPPs.

4. Data

Based on the discussion in the previous section we can summarise our expectations as follows: young, less qualified (ie. Lower than higher secondary school diploma) individuals, particularly males with a high occupational automation risk are more likely drawn to the AfD compared to their older, as well as more educated younger peers.

> **H1** A higher occupational automation risk is more likely to increase the probability of younger individuals to vote for the AfD than for older individuals.

> **H2** A high automation risk occupation is more likely to make young individuals with no, lower or middle secondary school diploma and an apprenticeship or no vocational training more susceptible to vote for the AfD than their peers with a higher educational background.

To test explore the validity of these hypotheses, I draw on data from the socio-economic panel survey (SOEP) and a dataset about substitution potentials of German occupations from the Institute of Employment Research (IAB).

The Socio Economic Panel Data (SOEP) from the DIW Berlin is an annual survey that has been running since 1984. With nearly 15,000 households and about 30,000 persons participating in the survey, SOEP provides representative longitudinal data of private households in Germany. SOEP provides both a broad set of self-reported "objective" variables, such as income, age, gender, education, or employment status, and a broad set of self-reported "subjective" variables, such as from satisfaction with life, over fairness and reciprocity perceptions to psychological measurement like the "Big Five."

Since 2013 each survey after a federal election includes a question about the respondent's party choice during the federal election in the previous year. The main problem with answers to survey questions –and with questions regarding possibly radical political party affinity in particular – are that individuals do not necessarily reveal their true preferences. This also becomes evident in the SOEP federal election responses. In the entire data set 8.9% (excluding non-voters, not eligible to vote, multiple party mention and no-answers) stated they voted for the AfD. Thus, the party is underrepresented in the survey compared to the 12.6% of the proportional vote in the actual federal election results from 2017 (Bundeswahlleiter)[12]. The inconsistencies are not surprising as the question was posed after the results were already published and thus some survey response bias is likely. This issue is common to other surveys as well (see for e.g. Lee et al. 2018).

Occupations in the SOEP are reported according to the German occupational classifier (KdlB 2010), which allows the SOEP data to be amended with more information about each occupation from the Institute for Employment Research (IAB).

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[12] Other parties underrepresented are the FDP with 8.35% (vs. 10.7% proportional vote excl. non-voters); Die Linke is also underrepresented with 8.09% (vs. 9.2%); the Green party is heavily overrepresented with 15.6% (vs. 8.9%); the CDU/CSU is overrepresented with 34.14% compared to 32.9%; the SPD is overrepresented with 23.97% (vs. 20.5%).

To assess an individual's automation risk this study relies on an objective measure of an occupation's so called substitution potential from the IAB (Dengler & Matthes, 2018). The data compiled by the IAB is different to other datasets interested in automation risk of tasks, as it is specifically tailored to the German occupation classification (KldB2010) system which allows for a much more fine-grained analysis of a possible effect on political choices, but more importantly it does not try to make predictions about possible future task substitutions. Instead it calculates the substitutability of a task based on current technological capabilities. The researchers have been calculating and adjusting their data twice so far in 2013 and 2016 which also allows for testing longitudinal trends. Assuming that only certain tasks in an occupation, rather than entire occupations, can be substituted, the IAB team assessed whether tasks can be replaced by computers or computer-controlled machines to programmable rules. Hence, the researchers also prefer referring to the calculated values as 'substitution potentials' and not automation risk. Based on the existing literature the term automation risk is used in this article.

The IAB researchers used data from the German BERUFENET, an expert database of the Federal Employment Agency that contains information that is quite similar to the US O*NET. BERUFENET provides information regarding all known occupations in Germany online and free of charge. It contains up-to-date information as occupational experts yearly update the BERUFENET. It is used in particular for vocational guidance or job placement and currently comprises approximately 3900 occupations. In addition to information on tasks, it includes information regarding the work equipment used, work conditions, required training or legal regulations in each occupation.

In their calculations they used the so-called requirement matrix for the year 2013 from the BERUFENET, which assigns approximately 8000 tasks to these 3900 occupations. The requirement matrix assigns each single occupation the tasks to perform in this respective occupation. Then, three coders independently researched each of these approximately 8000 tasks to determine whether there is a computer-controlled machine or a computer algorithm that can perform this task fully automatically in 2013. In line with Autor et al. (2003), the decision of whether a task is to be regarded as substitutable corresponds to the distinction between routine task and non-routine task in the task-based approach (Dengler et al., 2014).

The term 'routine' means that an activity can be broken down into machine-programmable sub-elements and can be replaced by machines.

The IAB relies on a categorisation of the German labour market that as presented in table x. The aggregated publication of automation risk results is based on this classification and the outlined sector definition will later be used as a control in the analysis.

The new classification is based on the homogeneity of occupations based on their task structure. Based on this definition, the German labour market can be divided into five main sectors that emerge from the traditional three sectors categorisation. The first sector (1) Occupations involving manual labour and work in production, combines the traditional primary and secondary sector (i.e. agriculture and industry). The remaining sectors 2-5 emerge from the 'old' tertiary sector: (2) Personal service occupations; (3) Retail and business-oriented service occupations; (4) IT- and natural science-oriented service occupations; and (5) Other service occupations. The five sectors are made up of 14 segments for which the IAB calculated aggregated and weighted automation risks. Each of the 14 occupational segments can further differentiated by main occupation groups according to the KLDB 2010 (number varies depending on the segment), which in turn are further refined into four skill activity requirement levels (given that all skill activity requirement levels exist within an occupational group). For example, a service engineer is equivalent to skill level 4 in the machine- und vehicle technology occupational group, part of the manufacturing and other industry segment and Occupations involving manual labour and work in production sector and has an associated automation risk of 34.2%. In other words, 34.2% of tasks of this occupation could be substituted by an already existing technology.

Overall this leads to a total of 144 different calculated automation risk values ranging from 0% to 85.6% for 2013[13]. In other words, 85.6% of tasks of the occupation under most risk could be substituted by an already existing technology.

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[13] The values for 2016 are currently restricted to the 14 segments but the analysis will be updated once the requirement level aggregation has been completed and published by the IAB.

Sector		Segments
Occupations involving manual labour and work in production.	Primary	Agriculture, Forestry and Fishery Mining
	Secondary	Manufacturing and other industry; Construction
Personal service occupations		Gastronomy and hospitality; Medical and non-medical health occupations; Social and cultural service occupations
Retail and enterprise/business-oriented service occupations		Retail and trade occupations; management and organisation occupations; business-oriented service occupations
IT- and natural science-oriented service occupations		IT- and natural science-oriented service occupations
Other service occupations		Security services (non-military); Traffic and logistics; Cleaning services

Table 1. Source: Matthes, Meinken & Neuhauser (2015)

Sector		Segments	Occupational group…	Skill Level	Automation Risk
Occupations involving manual labour and work in production.	*Primary*	Agriculture, Forestry and Fishery Mining	e.g. Horticultural professions and floristry	1	42.5%
				2	36.1%
				3	32.3%
				4	16.7%

Table 2. Source: Matthes, Meinken & Neuhauser (2015); Dengler & Matthes (2016)

After combining data from the socio-economic panel data (SOEP) and the automation risk dataset from the IAB excluding non-responses to all questions of interest, the data sample consisted of 6872 respondents who were in an occupation in 2017 (based on the conducted 2018 survey round; this excludes retired; too young, i.e. non-eligible to vote; still in training; un- and atypically employed individuals), had indicated their voting behaviour during the 2017 election and respondent to all control questions of interest. Of the final sample 551 (i.e. 9% excl. non-voters) allegedly voted for the AfD in the last federal election.

4.1 Limitations

The data and approach have limitations for the purposes of understanding if and how an occupation's automation risk influences an individual's political behaviour. Even though e.g. in a certain occupation 70% of tasks could be automated and thus the occupation would classify as under high-automation risk, the remaining 30% of tasks could be so crucial or not substitutable in the foreseeable future, that there is no real automation threat to the individual in question. In addition, someone in a high-risk occupation might be an employee of a company that is likely to introduce training programmes which will change the nature of their tasks and is investing in its employees instead of making them redundant. This type of information is unfortunately inaccessible. Researchers have assumed that such a measure is diffusely sensed by individuals (Im et al. 2019). In order to control for this assumption, the correlation between the measure and a survey question about perception of the current job security will be calculated. Kropp and Dengler argue that it is reasonable to assume that occupations with high automation risk will change more than jobs with low automation risk, and that regions with high values of employees with highly substitutable occupations will experience more change than regions with low values (Kropp & Dengler, 2019). Anelli, Colantone and Stanig (2019) argue along similar lines in order to explain the political consequence of automation, namely that these are indicators which predict structural changes similar to previous trade shock exposure. Hence, they find that "*higher robot exposure at the individual level leads to poorer perceived economic conditions and well-being, lower satisfaction with government and democracy, and a reduction in perceived political self-efficacy.*" (Anelli, Colantone and Stanig, 2019: 1). This suggests that an individual's exposure to automation risk is likely to have a similar effect and thus affect their political behaviour.

5. Research Design

5.1 Model and Methodology

The data are a cross-section, where the dependent variable takes the form of a binary variable indicating if a respondent has voted for the AfD in the 2017 German federal elections. To separate out the impact of automation risk and age from other potentially confounding

factors, we begin by estimating a simple logit regression model. This is estimated for each individual 'i' and takes the following form:

$$Pr(y_i = 1) = p_i$$

$$logit(p_i) = \alpha + \beta_1 Automation_i + \beta_2 Age_i + \beta'_3 Person_i + \beta'_4 Automation_i \times Age_i + \varepsilon$$

Where p_i is the probability of having voted AfD in the last federal election. "Automation" is an individual's occupational calculated automation risk. "Age" is an indicator for the age group each individual belongs to. "Person" is a vector of individual characteristics such as gender, education or attitudes. "Automation × Age" is the linear interaction term between an individual's automation risk and age group.

In a second step, we will re-run the regressions for two sub-populations based on an individual's educational and training background. Thus, the data will be divided into two groups, one consisting of individuals with a higher educational and training background, i.e. higher secondary school diploma and apprenticeship or university graduate, and another group with a lower educational and training background, i.e. no, lower or middle secondary school diploma and apprenticeship or no vocational certificate.

5.2 Control Variables

The choice of control variables is informed by the literature on populist voting in general and for Germany in particular. A set of variables controlling for the basic demographic characteristics of individuals.

Educational attainment is generally understood as a critical determinant for populist views, with those holding lower educational qualifications being likely to be more drawn to RRPs (see figure 4). Hence, we expect individuals with a lower educational background group to be more likely to vote for the AfD. In this study education carries a more crucial dimension, since an individual's future career trajectory could be influenced by holding a higher secondary degree or a university degree already. The descriptive statistics shows that apprenticeship degree holders without a higher secondary school diploma being the most likely group to vote AfD among both the 18-29 and 30-39 year old.
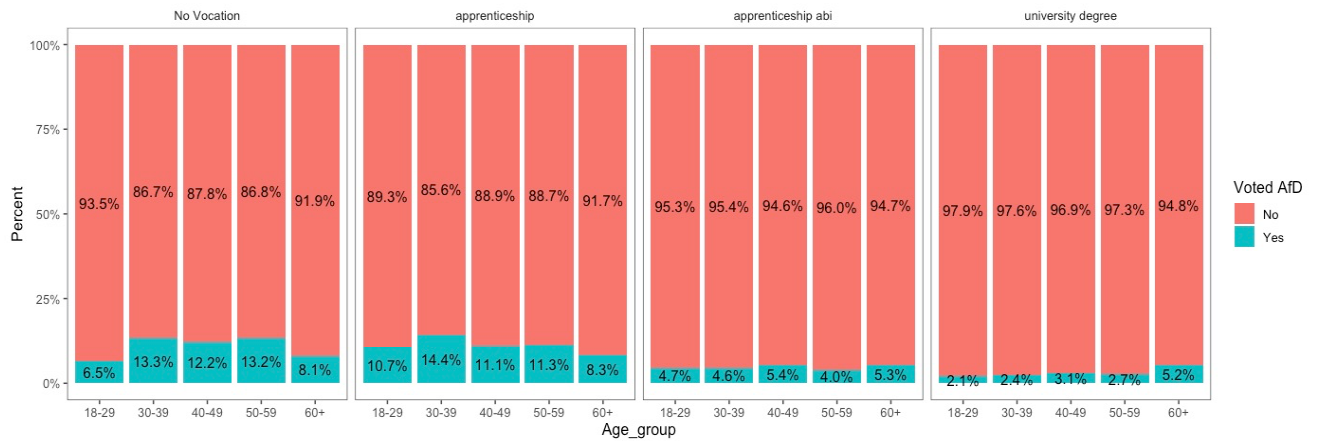
Figure 4. Share of AfD voters by educational background and age group; source: Author's own calculations

The descriptive statistics (figure 5) also show that young individuals with a lower educational background and especially those with apprenticeship degrees but without a higher secondary school diploma are less optimistic about the future than their more educated peers.
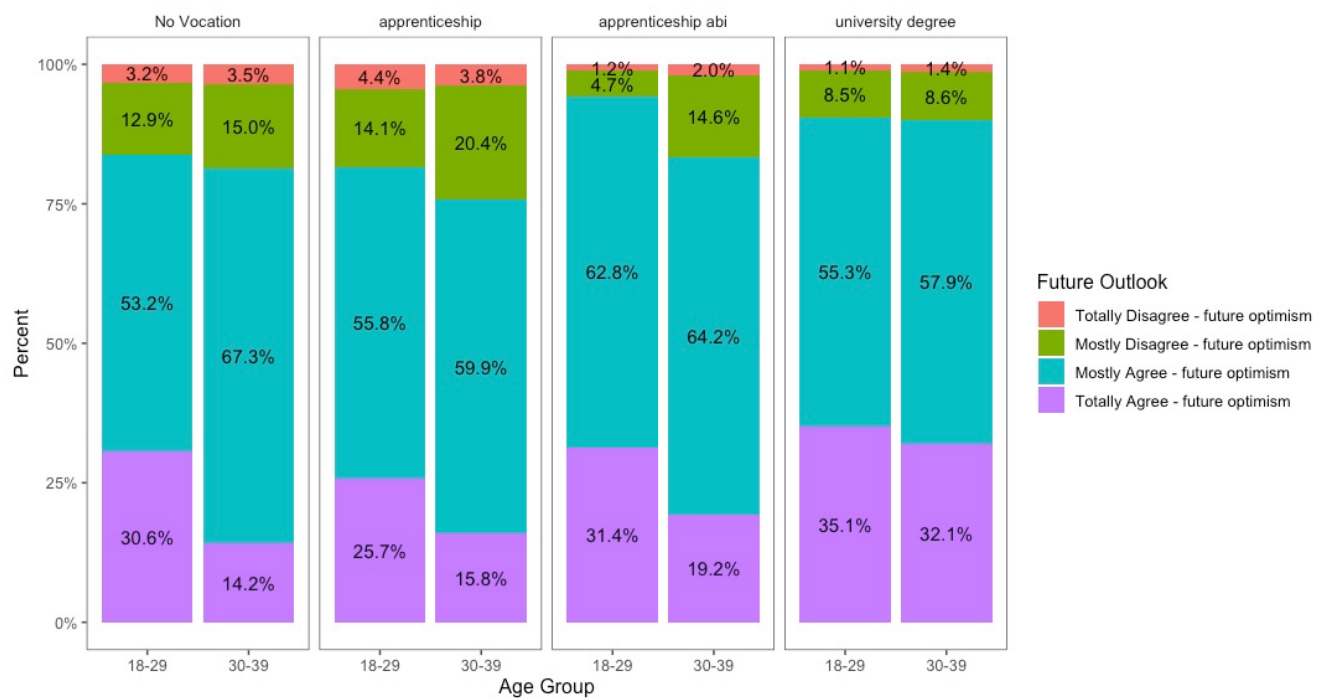

Figure 5. Share of future outlook by educational background and age. Source: Author's own calculations

Not all occupations and occupational sectors will be equally affected by automation risk. Most civil servants should be relatively sheltered, whereas especially many blue-collar workers are

likely to be among the most exposed, making them more sensitive to the labour market situation. The distribution of these different occupational categories is likely to be uneven across different sectors of the labour market. Blue collar workers are likely to be concentrated in the manufacturing and industrial sectors, whereas most service sectors are likely to be dominated by white collar workers. In addition, the contractual status is likely to affect an employee in their attitudes as well due to less labour market protection of temporary contracts compared to permanent ones. Hence, the models the occupations control will be further differentiated along contractual status. The different sectors also differ in terms of their economic outlook. The industrial and manufacturing sector has been in decline and is dominated by gloomy stories of the future which are likely to affect workers and could make them more open to RRP messages. Thus, the models will control for occupational category and sectors as well.

The models will also control for gender. It is generally understood that women are less likely to vote for RRPs. In this study the role of occupations and education is expected to play a crucial role and the German system shows longstanding and stark gender differences in the kind of training and career women and men receive and pursue. Apprenticeship programmes in general and technical ones in particular have been traditionally dominated by men (Dengler & Matthes, 2020). Technical apprenticeships in the manufacturing sector are especially affected by the current technological changes and hence men are likely to be on average more affected than women. Dengler and Matthes (2020) find that in general the automation risk is higher for men than women, that means that women complete less tasks that could be currently substituted. The difference is especially pronounced in the case for so called un-/semi-skilled occupations.

In addition, the status effect of their job might be different between women and men. Over 75% of part-time contracts are with women in Germany. As a consequence, a woman might perceive the role of a job in her differently and possibly play a lesser role in her status anxiety compared to men (esp. keeping in mind the male breadwinner image). However, a job and a career (even part-time) can still be valued very highly by women due to emancipatory reasons. Ultimately, due to the higher automation risk exposure and generally lower

education levels we expect males across all age groups to be more likely to vote for the AfD compared to females.

Another control will be an individual's union membership. Union membership is especially concentrated in the core manufacturing sectors (Thelen, 2014) and thus more likely to be exposed to automation risks. Yet, union members are expected to be generally less likely to vote for AfD due to their increased labour market protection, as well as their ties to the left party spectrum.

Due to German labour laws employees who are with an employer for longer tend to have higher labour market protection. Due to the incremental increase in security we expect less support for the AfD.

5.3 Results and Discussion

	Dependent Variable: Voted AfD in last Federal Election					
	Model 0		Model 1		Model 2	
	AME	SE	AME	SE	AME	SE
AutoRisk	0.10***	(0.02)	0.03	(0.03)	0.03	(0.03)
Female	-	-	-0.04***	(0.01)	-0.04***	(0.01)
Age: 30-39[1]	-	-	0.01	(0.03)	0.01	(0.03)
Age: 40-49	-	-	-0.01	(0.03)	-0.01	(0.03)
Age: 50-59	-	-	-0.01	(0.02)	0.00	(0.03)
Age: 60+	-	-	-0.02	(0.03)	-0.02	(0.03)
Edu: Apprenticeship[2]	-	-	-0.03	(0.02)	-0.03	(0.02)
Edu: ApprenticeshipAbi	-	-	-0.05**	(0.03)	-0.05*	(0.03)
Edu: University Degree	-	-	-0.08***	(0.03)	-0.08**	(0.02)
Socio-Demo Controls	-		X		X	
Interaction Term	-		-		X	
Observations	6872		6872		6872	

Notes: estimated as a weighted logit regression with robust errors. Displayed are Average Marginal Effects (AME) and Robust Standard Errors (SE) in brackets. All continuous predictors are mean-centered and scaled by 1 standard deviation.

Unreported socio-demographic controls are for: East Germany; occupational type; occupational sector; union member; part/full time employment; household income.

[1] Reference category Age: 18-29
[2] Reference category Edu: No Vocational Degree
*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table 3. Average Marginal Effect Regression results for sub-populations according to educational and training background.

The models (table 3) confirm previous findings that males and individuals with a lower educational background are all more likely to vote for the AfD. Further, as previous studies suggested East-Germans are more likely to vote for the AfD. Educational Background matters in the models as well. The higher the educational level the less likely a vote for the AfD becomes compared to the base educational attainment (no vocational degree). This difference is significant at the 10% level for apprenticeship degree holders with higher secondary school diploma (Abitur) and at the 1% level for University graduates. University graduates are on average 8% less likely than those without a vocational degree to have voted for the AfD during the last election. The results of the educational categories provide some evidence for the educational fault line between those who can and cannot go to University.

The occupational group plays also a role in the predicted likelihood to vote for the AfD. Blue collar workers are the most likely to vote for the AfD compared to all other occupational groups. Being a civil servant reduces likelihood of voting for the AfD compared to a blue-collar worker. This should not come as a surprise as most civil servants in the sample are not just highly educated and qualified (80% university degrees) but also shielded from labour market competition. Equally, white collar workers and the self-employed are also less likely to vote for the AfD compared to blue collar workers however only at the 10% and 5% significance levels respectively.

While automation risk of one's occupation does not show a significant effect on its own in model 1, the interaction between automation risk and age groups in model 2 provide an interesting trend (see table 4 and appendix). The reference group of 18-29 year olds shows no significant difference in the interaction term to the other age groups, however there is a trend with the older age groups being less likely to be affected in their probability to vote for the AfD by higher automation risks compared to the youngest age group.

	Dependent Variable: Voted AfD in last Federal Election		
	Model 2		
	AutoRisk	**ME**	**SE**
AutoRisk::Age30-39[1]	20%	0.01	(0.03)
	40%	0.02	(0.03)
	60%	0.02	(0.04)
	80%	0.03	(0.07)
AutoRisk::Age40-49	20%	0.02	(0.03)
	40%	0.00	(0.02)
	60%	-0.02	(0.03)
	80%	-0.04	(0.06)
AutoRisk::Age50-59	20%	0.02	(0.03)
	40%	0.00	(0.02)
	60%	-0.03	(0.03)
	80%	-0.06	(0.05)
AutoRisk::Age60+	20%	0.00	(0.03)
	40%	-0.02	(0.02)
	60%	-0.05	(0.03)
	80%	-0.08	(0.06)
Socio-Demo Controls	X		
Observations	6872		
[1] Reference category AutoRisk::Age:18-29 *** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.			

Table 4. Model 2 Marginal Effects at Representative values (MER). Author's calculations

The results in the first regression models do not provide definite results about the role of occupational automation risk in individual's voting behaviour. However, they do suggest that the educational and training background might play a role in an individual's susceptibility to vote for the AfD. Educational attainment does play a role across all age groups and university educated individuals are significantly less likely to vote for the AfD than those without a vocational degree.

In a next step the data is divided among the educational and training background and the regression models will be re-run (table 5 & 6). The population sample is divided into two sub-populations, one consisting of individuals with a higher educational and training background, i.e. higher secondary school diploma and apprenticeship or university graduate, and another group with a lower educational and training background, i.e. no, lower or middle secondary school diploma and apprenticeship or no vocational certificate. The lower educational background group is left with 3957 observations whereas the higher educational background group has 2915 observations.

	Dependent Variable: Voted AfD in last Federal Election							
	Lower Education		Higher Education		Lower Education		Higher Education	
	Model 3		Model 4		Model 5		Model 6	
	AME	SE	AME	SE	AME	SE	AME	SE
AutoRisk	0.07	(0.04)	0.03	(0.04)	0.08*	(0.05)	0.02	(0.03)
Female	-0.05***	(0.02)	-0.01	(0.02)	-0.07***	(0.02)	-0.01	(0.01)
Age: 30-39[1]	0.06**	(0.03)	-0.03	(0.03)	0.06**	(0.03)	0.00	(0.02)
Age: 40-49	0.03	(0.03)	-0.04	(0.03)	0.04	(0.03)	-0.01	(0.02)
Age: 50-59	0.03	(0.02)	-0.03	(0.03)	0.02	(0.02)	0.00	(0.02)
Age: 60+	0.00	(0.03)	-0.03	(0.03)	-0.01	(0.03)	0.00	(0.02)
Socio-Demo Controls	X		X		X		X	
Cultural Controls	-		-		X		X	
Interaction Term	X		X		X		X	
Observations	3957		2915		3957		2915	

Notes: estimated as a weighted logit regression with robust errors. Displayed are Average Marginal Effects (AME) and Robust Standard Errors (SE). All continuous predictors are mean-centered and scaled by 1 standard deviation.

Unreported socio-demographic controls are for: East Germany; occupational type; occupational sector; union member; part/full time employment; household income.

[1] Reference category Age: 18-29

[2] Reference category Edu: No Vocational Degree

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table 5. Average Marginal Effect Regression results for sub-populations according to educational and training background.

		Dependent Variable: Voted AfD in last Federal Election			
		Lower Education		Higher Education	
		Model 5		Model 6	
	AutoRisk	ME	SE	ME	SE
AutoRisk::Age30-39[1]	20%	0.07***	(0.02)	0.00	(0.02)
	40%	0.07***	(0.03)	0.01	(0.03)
	60%	0.04	(0.06)	0.02	(0.04)
	80%	-0.04	(0.11)	0.03	(0.05)
AutoRisk::Age40-49	20%	0.09***	(0.02)	-0.01	(0.02)
	40%	0.06***	(0.02)	0.00	(0.03)
	60%	-0.02	(0.05)	0.01	(0.04)
	80%	-0.16	(0.10)	0.02	(0.04)
AutoRisk::Age50-59	20%	0.09***	(0.02)	-0.01	(0.02)
	40%	0.04**	(0.02)	0.01	(0.03)
	60%	-0.05	(0.04)	0.03	(0.04)
	80%	-0.21**	(0.09)	0.05	(0.05)
AutoRisk::Age60+	20%	0.07***	(0.02)	-0.01	(0.02)
	40%	0.01	(0.03)	0.02	(0.03)
	60%	-0.09**	(0.05)	0.05	(0.04)
	80%	-0.26***	(0.10)	0.09	(0.06)
Socio-Demo Controls		X		X	
Cultural Controls		X		X	
Interaction		X		X	
Observations		3957		2915	

[1] Reference category AutoRisk::Age:18-29
*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table 6. Model 5 & 6 Marginal Effects at Representative values (MER). Author's calculations

The new results (table 5 and 6) show a strong difference in terms of the relationship between occupational automation risk and voting behaviour between the two groups. Occupational automation risk only plays a significant role for the sub-population with a lower educational and training background, and within that group it is younger individuals who become more susceptible to vote for the AfD with a rising occupational automation risk (see also figure 6).

Individuals with a higher educational background are not affected by increasing automation risk. These results are consistent with the expectations of both hypotheses.

Models seven and eight also control for explanatory variables of cultural explanations to RRP voting. These models include variables on an individual's attitude towards immigration as a proxy for xenophobic tendencies, attitude towards climate change as a way to test for postmaterialist values, and attitude towards crime as a conservative value measure.

The cultural explanatory variables themselves are all significant: The more concerned an individual from both groups is about crime, the more likely they are to have voted for the AfD compared to those not concerned about crime. The same holds for individuals concerned about immigration. Individuals who are somewhat or very concerned about climate change are less likely to have voted for the AfD compared to those who are not concerned about climate change across both groups.

Gender remains only a significant predictor for the lower educational background group. A higher household income decreases the probability of having voted for the AfD for the higher educational background group but does not show a significant effect in the lower educational background sample (see also figure 7). While women with the lower educational background still show a slight increase for younger age groups in likelihood to vote for the AfD with a higher occupational automation risk, the results also suggest that the risk has less of an impact on women's political behaviour than on men.

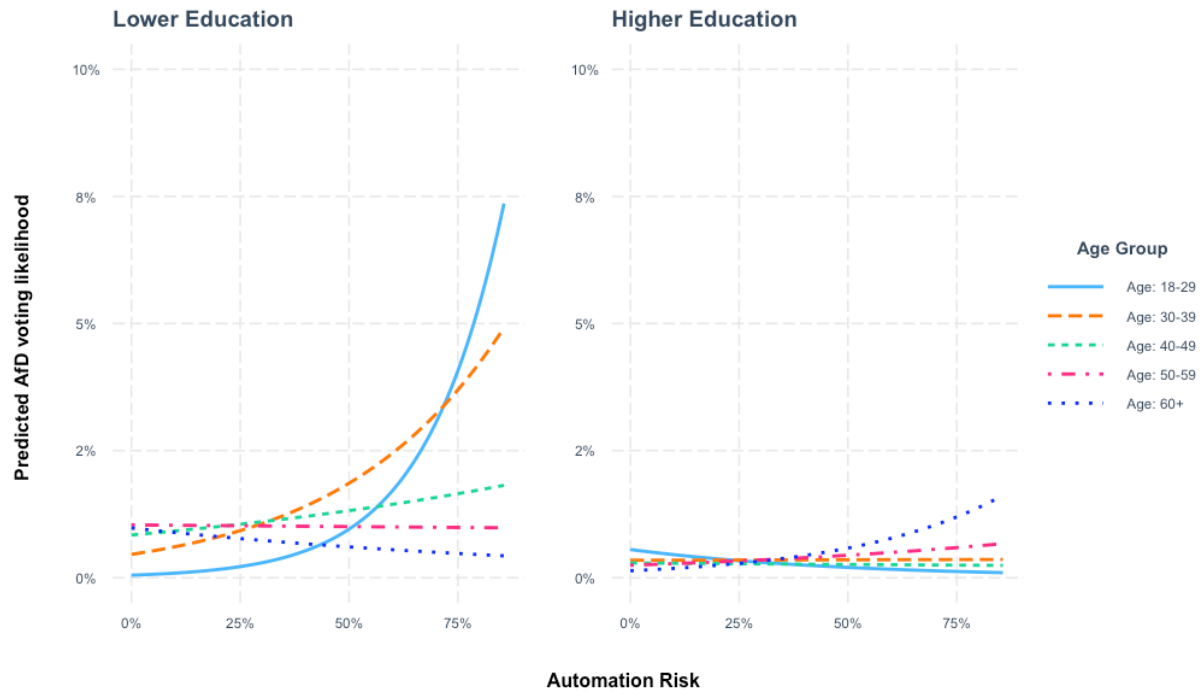*Figure 6. Interaction between Age Group and Automation Risk based on models 5 and 6. Note: hidden confidence intervals for improved readability. Source: Author's own calculations.*
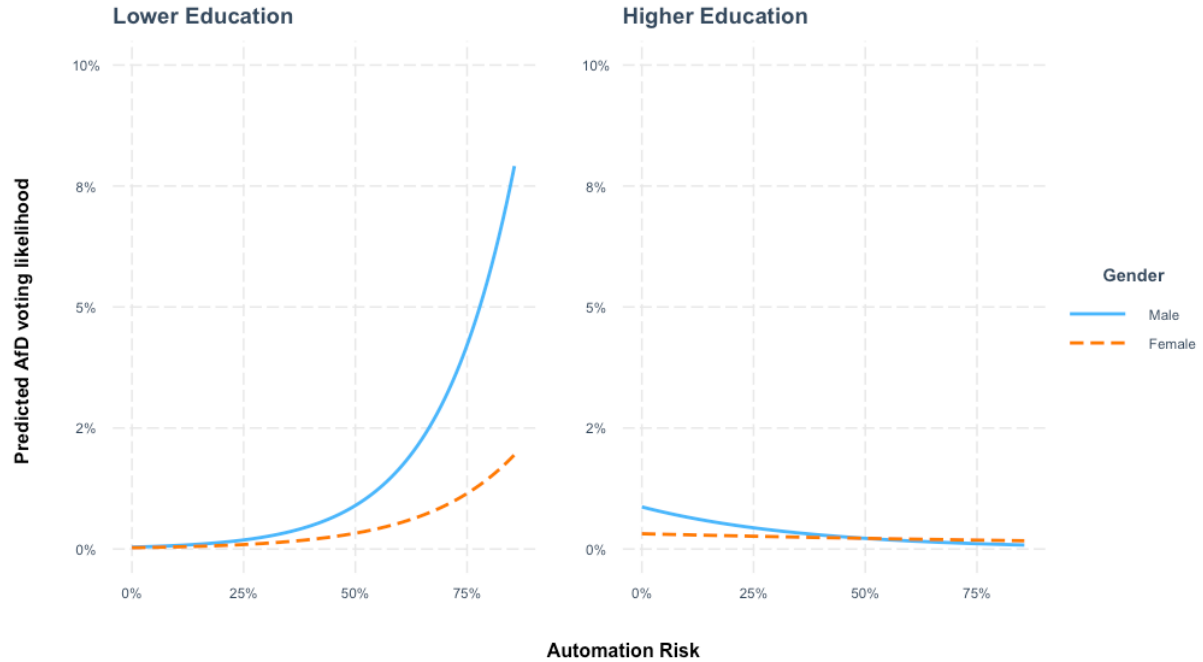

Figure 7. Interaction Gender and Automation Risk for different education backgrounds, based on model 11 and 12 in Table A3 (Appendix). Note: hidden confidence intervals for improved readability. Source: Author's own calculations.

Overall, the models suggest that the observed effect of technological change is pronounced among a subgroup of young people who are on previously thought of stable career paths. The age divergence in an individual's response to their occupational automation risk is likely to be due to young individuals more fragile labour market position. Younger individuals are more likely to be at the start of their careers and thus in occupations which require less skilled activities making them more substitutable. Yet, as the results show there is a difference among younger individuals who might find themselves in less attractive occupations at the beginning of their careers. Individuals with a higher secondary school diploma or university degree are much less affected in their electoral choice by being in an occupation under technological change threat, whereas those who entered the labour market coming from lower or middle secondary schools and via the traditional dual vocational training path have been more likely to vote for the AfD.

In the wider discussion about explanations of the rise of RPPs in recent years, the results suggest that economic factors matter especially for those with lower educational and training backgrounds. Cultural explanatory variables are better at predicting higher educated individuals RPP voting but also matter for individuals with lower educational backgrounds. The scope of the analysis does not allow for a direct causal interpretation of the effect of occupational automation risk on voting behaviour, however the age divergence suggests that an individual's aspirations and social anxiety which could explain the strong response among young individuals with a lower educational background.

6. Conclusion

There is now consensus that votes for the radical right are, in part, driven by fears of automation. This paper shows that this is not true for the majority of the population in Germany but instead applies only to young people without a higher education background. These young people are at the beginning of their lives and careers and face an uncertain future. With a declining industrial and manufacturing sector and a disadvantage compared to their higher skilled university graduate peers, they cannot rely on the labour market protection that older workers without university education have and are enjoying. As a

consequence, they are likely to feel more anxious about their situation. Gidron and Hall (2017, 2020), as well as Kurer (2020) showed how social status concerns are a major driver in voting for RRPs in recent times. The results presented in this paper show that this phenomenon is likely to be affecting parts of the younger generation and could explain why some of them are drawn to a party like the AfD in Germany.

How generalizable are these specific results? The discussed age divergence is likely to be especially acute in countries that emphasize narrow and specialized education and training for their labour markets. Whereas general skillsets allowing for a very flexible workforce are a priority in liberal market economies, coordinated market economies such as Germany, rely on much narrower education and training schemes to support an economy characterised by specialist firms (Hall and Soskice, 2001; Thelen, 2014). The analysis showed that the German training system is generally working with a training and upskilling trend that makes older workers harder to substitute. This also means that social status fears might be overall at higher levels in systems unlike Germany's. An obvious most similar case is Austria. The two countries are organised in a relatively similar fashion and the close similarities of AfD and FPÖ have already been partly established (Grigat, 2017). The profile of the typical FPÖ voters are also indicative of the proximity between the experiences of the two countries. The FPÖ received most support from younger voters, as well as individuals with an apprenticeship degree.

The academisation discourse in Germany has so far concentrated on the upward mobility narrative and the younger generations who are achieving at least higher secondary school diplomas. While the university system itself is slowly undergoing a transformation in the country with new programmes (e.g. dual university studies) to build on the country's strengths in the apprenticeship tradition, the challenge of how to uplift those who come from lower educational backgrounds remains. The numbers of new students who enter university via the so called third way, i.e. qualifying for university studies via an apprenticeship, are still very low and show that there might be a lack of options for many in the future.

However, the further push towards more university graduates can also be perceived as part of the issue. Michael Sandel has raised a flag about the consequences of the efforts to realise the idea of higher education as the key to upward mobility. According to Sandel "*Building a politics around the idea that a college degree is a precondition for dignified work and social esteem has a corrosive effect on democratic life"* (2020). The increasing interest in questions of perceived social status and politics among political scientists are in line with the worry of this statement. Research has to start thinking about how to address the issue of pre-judice against less educated in society and how to help those falling through the gaps of the education and training system.

More research will be needed in order to better understand what is holding some individuals back from further education or if they perceive technological change as a threat to their social status, and what to do about it.

Bibliography

Anelli, M., Colantone, I., & Stanig, P. (2019). We Were The Robots: Automation and Voting Behavior in Western Europe. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3419966

Arntz, M., Gregory, T. and Zierahn, U. (2016). The Risk of Automation for Jobs in OECD Countries - A Comparative Analysis, OECD Social, Employment and Migration - Working Papers No. 189.

Arntz, M., Gregory, T., Zierahn, U. (2018). Digitali- sierung und die Zukunft der Arbeit: Makroökonomi- sche Auswirkungen auf Beschäftigung, Arbeitslosig- keit und Löhne von morgen, Bundesministerium für Forschung und Entwicklung (BMBF), Mannheim.

Arzheimer, K., & Berning, C. C. (2019). How the Alternative for Germany (AfD) and their voters veered to the radical right, 2013–2017. *Electoral Studies*, *60*, 102040. https://doi.org/10.1016/j.electstud.2019.04.004

Autor, D. H., Levy, F., & Murnane, R. J. (2003). The Skill Content of Recent Technological Change: An Empirical Exploration. *The Quarterly Journal of Economics*, *118*(4), 1279–1333. https://doi.org/10.1162/003355303322552801

Baethge, M., & Wolter, A. (2015). Das deutsche Ausbildungsmodell im Umbruch: zwischen dualem Berufsbildungssystem und Hochschulstudium. *Journal for Labour Market Research*, *48*(2), 97–112. https://doi.org/10.1007/s12651-015-0181-x

Bonin, H., Gregory, T. and Zierahn, U. (2015). Übertragung der Studie von Frey/Osborne (2013) auf Deutschland, Mannheim.

Bundesinstitut für Berufsbildung (BIBB) (ed.) (2019). Datenreport zum Berufsbildungsbericht 2020. Informationen und Analysen zur Entwicklung der beruflichen Bildung. Bonn

Bundesministerium für Bildung und Forschung (BMBF) (2020). Datenportal. Tabelle 1.9.6., Grunddaten zum Bildungswesen. URL: https://www.datenportal.bmbf.de/portal/de/Tabelle-1.9.6.html [Accessed 04.03.2020]

Bundesministerium für Bildung und Forschung (BMBF) (2020b). Datenportal. Tabelle 2.4.17, Auszubildende insgesamt und mit neu abgeschlossenem Ausbildungsvertrag nach Ausbildungsbereichen, Geschlecht und Ländern. URL: https://www.datenportal.bmbf.de/portal/de/Tabelle-2.4.16.html [Accessed 05.03.2020]

Colantone, I., & Stanig, P. (2018). The Economic Determinants of the "Cultural Backlash": Globalization and Attitudes in Western Europe. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3267139

Cortes, G. M. (2016). Where have the middle-wage workers gone? A study of polarization using panel data. *Journal of Labor Economics*, *34*(1), 63–105. https://doi.org/10.1086/682289

Dengler, K., & Matthes, B. (2015). Folgen der Digitalisierung für die Arbeitswelt. Substituierbarkeitspotenziale von Berufen in Deutschland. *IAB-Forschungsbericht 11/2015*, 34. https://doi.org/10.1007/s10273-011-1262-2

Dengler, K., & Matthes, B. (2018). The impacts of digital transformation on the labour market: Substitution potentials of occupations in Germany. *Technological Forecasting and Social Change*, *137*, 304–316. https://doi.org/10.1016/j.techfore.2018.09.024

Dengler, K., & Matthes, B. (2020). Substituierbarkeitspotenziale von Berufen und die möglichen Folgen für die Gleichstellung auf dem Arbeitsmarkt. *Expertise für den Dritten Gleichstellungsbericht der Bundesregierung*. Berlin

Dungan, N. (2018). Far-right politics in Europe. *International Affairs*, *94*(1), 205–206. https://doi.org/10.1093/ia/iix266

Elsholz, U., Jaich, R., & Neu, A. (2018). *Folgen der Akademisierung der Arbeitswelt. Wechselwirkungen von Arbeits- und Betriebsorganisation, betrieblichen Qualifizierungsstrategien und Veränderungen im Bildungssystem* (Vol. 401).

Euler, D., & Severing, E. (2017). *Welche Berufsausbildungen sind durch akademische Bildungsangebote gefährdet?* https://doi.org/10.11586/2017032

Franklin, M. N. (2004). *Voter turnout and the dynamics of electoral competition in established democracies since 1945*. *Voter Turnout and the Dynamics of Electoral Competition in Established Democracies since 1945*. Cambridge University Press. https://doi.org/10.1017/CBO9780511616884

Franzmann, S. T. (2016). Calling the ghost of populism: The AfD's strategic and tactical agendas until the EP election 2014. *German Politics*, *25*(4), 457–479. https://doi.org/10.1080/09644008.2016.1201075

Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, *114*, 254–280. https://doi.org/10.1016/j.techfore.2016.08.019

Gidron, N., & Hall, P. A. (2020). Populism as a Problem of Social Integration. *Comparative Political Studies*, *53*(7), 1027–1059. https://doi.org/10.1177/0010414019879947

Gingrich, J. (2019). Did State Responses to Automation Matter for Voters? *Research and Politics*, *6*(1), 205316801983274. https://doi.org/10.1177/2053168019832745

Goerres, A., Spies, D. C., & Kumlin, S. (2018). The Electoral Supporter Base of the Alternative for Germany. *Swiss Political Science Review*, *24*(3), 246–269. https://doi.org/10.1111/spsr.12306

Grigat, S. (2017). *AfD & FPÖ. Antisemitismus, völkischer Nationalismus und Geschlechterbilder*. (Grigat, S., Ed.). Nomos, Baden Baden.

Hall, P. A., & Soskice, D. (2001). *Varieties of Capitalism*. (P. A. Hall & D. Soskice, Eds.). Oxford University Press.

Hansen, M. A., & Olsen, J. (2019). Flesh of the Same Flesh: A Study of Voters for the Alternative for Germany (AfD) in the 2017 Federal Election. *German Politics*, *28*(1), 1–19. https://doi.org/10.1080/09644008.2018.1509312

Herrigel, G., Voskamp, U., & Wittke, V. (2017). *Globale Qualitätsproduktion : transnationale Produktionssysteme in der Automobilzulieferindustrie und im Maschinenbau*. campus.

Hilmer, R., Kohlrausch, B., Müller-Hilmer, R., & Gagné, J. (2017). Einstellung und soziale Lebenslage. Eine Spurensuche nach Gründen für rechtspopulistische Orientierung, auch unter Gewerkschaftsmitgliedern. *Working Paper Forschungsförderung*, (044), 1–48. https://doi.org/10.2139/ssrn.701181

Im, Z. J., Mayer, N., Palier, B., & Rovny, J. (2019). The "losers of automation": A reservoir of votes for the radical right? *Research & Politics*, *6*(1), 205316801882239. https://doi.org/10.1177/2053168018822395

Inglehart, R., & Norris, P. (2017). Trump, Brexit, and the Rise of Populism: Economic Have-Nots and Cultural Backlash. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2818659

Kaihovaara, A., & Im, Z. J. (2020). Jobs at risk? Task routineness, offshorability, and attitudes toward immigration. *European Political Science Review*. https://doi.org/10.1017/S1755773920000144

Kohlrausch, B. (2018). *Fears of Social Decline in Germany. Magnitude and Causes in Times of Growing Right-Wing Populism.* Retrieved from www.boeckler.de

Kriesi, H., Grande, E., Lachat, R., Dolezal, M., Bornschier, S., & Frey, T. (2008). *West European politics in the age of globalization*. *West European Politics in the Age of Globalization* (Vol. 9780521895). Cambridge University Press. https://doi.org/10.1017/CBO9780511790720

Kropp, P., & Dengler, K. (2019). The Impact of Digital Transformation on Regional Labour Markets in Germany: Substitution Potentials of Occupational Tasks. In *Proceedings of the Weizenbaum Conference 2019 "Challenges of Digital Inequality - Digital Education, Digital Work, Digital Life"* (pp. 1-8). Berlin https://doi.org/10.34669/wi.cp/2.8

Kurer, T. (2020). The Declining Middle: Occupational Change, Social Status, and the Populist Right. *Comparative Political Studies*, 001041402091228. https://doi.org/10.1177/0010414020912283

Kurer, T., & Gallego, A. (2019). Distributional consequences of technological change: Worker-level evidence. *Research and Politics*, *6*(1). https://doi.org/10.1177/2053168018822142

Kurer, T., & Palier, B. (2019). Shrinking and shouting: the political revolt of the declining middle in times of employment polarization. *Research and Politics*, *6*(1), 205316801983116. https://doi.org/10.1177/2053168019831164

Lee, N., Morris, K., & Kemeny, T. (2018). Immobility and the Brexit vote. *Cambridge Journal of Regions, Economy and Society*, *11*(1), 143–163. https://doi.org/10.1093/cjres/rsx027

Maier, T., Zika, G., Wolter, M. I., Kalinowski, M., Neuber-Pohl, C., Winnige, S., & Quack, L. (2016). Die Bevölkerung wächst–Engpässe bei fachlichen Tätigkeiten bleiben aber dennoch bestehen. *BIBB-Report*, *3*, 1–22. Retrieved from https://www.bibb.de/veroeffentlichungen/de/publication/show/8147

Manow, P. (2018). *Die Politische Ökonomie des Populismus*. Suhrkamp.

Margalit, Y. (2012). Lost in Globalization: International Economic Integration and the Sources of Popular Discontent. *International Studies Quarterly*, *56*(3), 484–500. https://doi.org/10.1111/j.1468-2478.2012.00747.x

Margalit, Y. (2012). Lost in Globalization: International Economic Integration and the Sources of Popular Discontent. *International Studies Quarterly*. WileyThe International Studies Association. https://doi.org/10.2307/23256800

Matthes, B., Meinken, H. and P. Neuhauser (2015). Berufssektoren und Berufssegmente auf Grundlage der KldB 2010, in Bundesagentur für Arbeit Statistik (ed.) *Methodenbericht*.

Mudde, C. (2004). The Populist Zeitgeist. *Government and Opposition*. https://doi.org/10.1111/j.1477-7053.2004.00135.x

Mudde, C. (2007). *Populist radical right parties in Europe. Populist Radical Right Parties in Europe*. Cambridge University Press. https://doi.org/10.1017/CBO9780511492037

Niedermayer, O., & Hofrichter, J. (2016). Die Wählerschaft der AfD: Wer ist sie, woher kommt sie und wie weit rechts steht sie? *Zeitschrift Für Parlamentsfragen*, *47*(2), 267–285. https://doi.org/10.5771/0340-1758-2016-2-267

Niedermayer, O., & Hofrichter, J. (2016). Die Wählerschaft der AfD: Wer ist sie, woher kommt sie und wie weit rechts steht sie? *Zeitschrift Für Parlamentsfragen*. Nomos Verlagsgesellschaft mbH. https://doi.org/10.2307/43977120

Oesch, D. (2008, June). Explaining workers' support for right-wing populist parties in Western Europe: Evidence from Austria, Belgium, France, Norway, and Switzerland. *International Political Science Review*. https://doi.org/10.1177/0192512107088390

Rodrik, D. (2018). Populism and the economics of globalization. *Journal of International Business Policy*, *1*(1–2), 12–33. https://doi.org/10.1057/s42214-018-0001-4

Sandel, M. (2020). Disdain for the Less Educated Is the Last Acceptable Prejudice. The New York Times, 02.09.2020. URL: https://www.nytimes.com/2020/09/02/opinion/education-prejudice.html [Accessed 07.09.2020]

Schmitt-Beck, R. (2017). The 'alternative für deutschland in the electorate': Between single-issue and right-wing populist party. *German Politics*, *26*(1), 124–148. https://doi.org/10.1080/09644008.2016.1184650

Stahlmann, M. (2017). Rezension: Oliver Nachtwey: Die Abstiegsgesellschaft. Über das Aufbegehren in der regressiven Moderne. *Unsere Jugend*, *69*(7+8), 348. https://doi.org/10.2378/uj2017.art52d

Steenvoorden, E., & Harteveld, E. (2018). The appeal of nostalgia: the influence of societal pessimism on support for populist radical right parties. *West European Politics*, *41*(1), 28–52. https://doi.org/10.1080/01402382.2017.1334138

Thelen, K. (2013). *Varieties of liberalization and the new politics of social solidarity*. *Varieties of Liberalization and the New Politics of Social Solidarity*. Cambridge University Press. https://doi.org/10.1017/CBO9781107282001

Tutić, A., & von Hermanni, H. (2018). Socioeconomic Status, Deprivation, and the Affinity for the AfD—A Note. *Kolner Zeitschrift Fur Soziologie Und Sozialpsychologie*, *70*(2), 275–294. https://doi.org/10.1007/s11577-018-0523-0

Zika, G., Helmrich, R., Maier, T., Weber, E., & Wolter, M. I. (2018). Arbeitsmarkteffekte der Digitalisierung bis 2035 - Regionale Branchenstruktur spielt eine wichtige Rolle. *IAB-Kurzbericht*, 1–12.

Appendix

Training/Educational Background
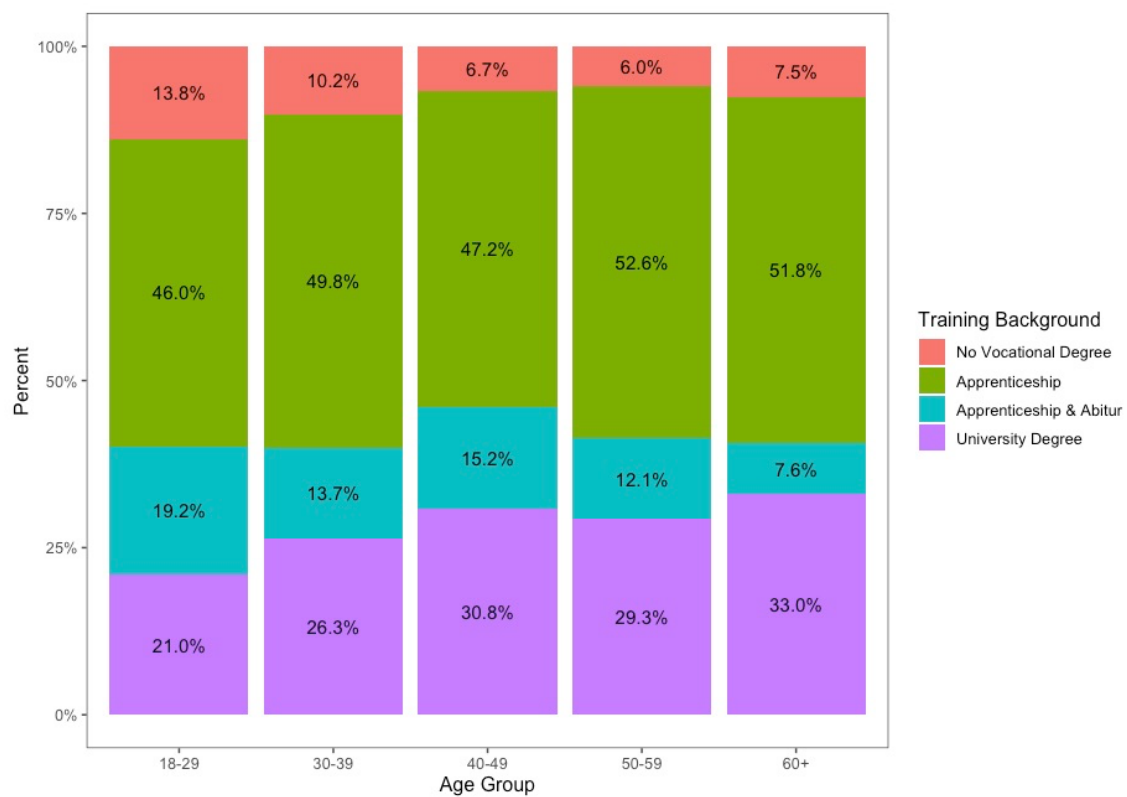
Note: ca. 40% of those without a Vocational Degree in the 18-29 year old group hold Abitur.

Occupational Groups and Sectors
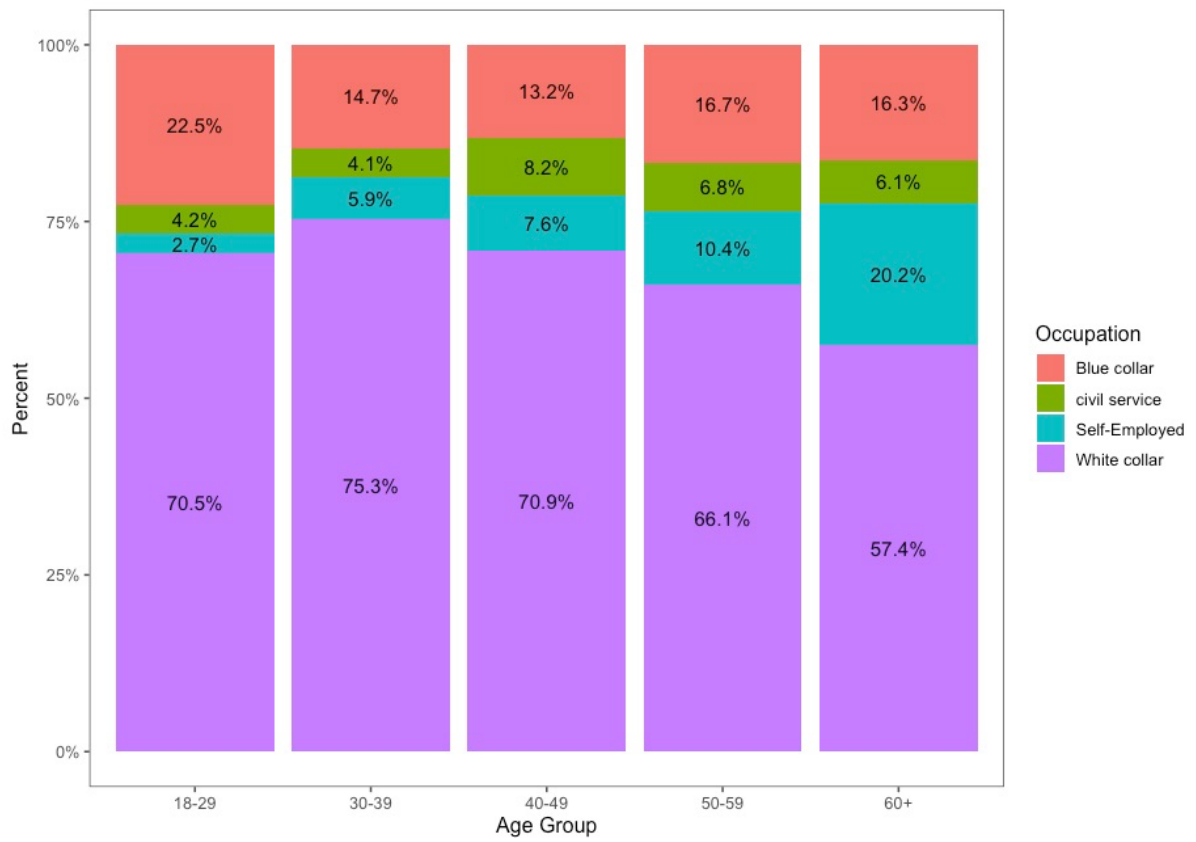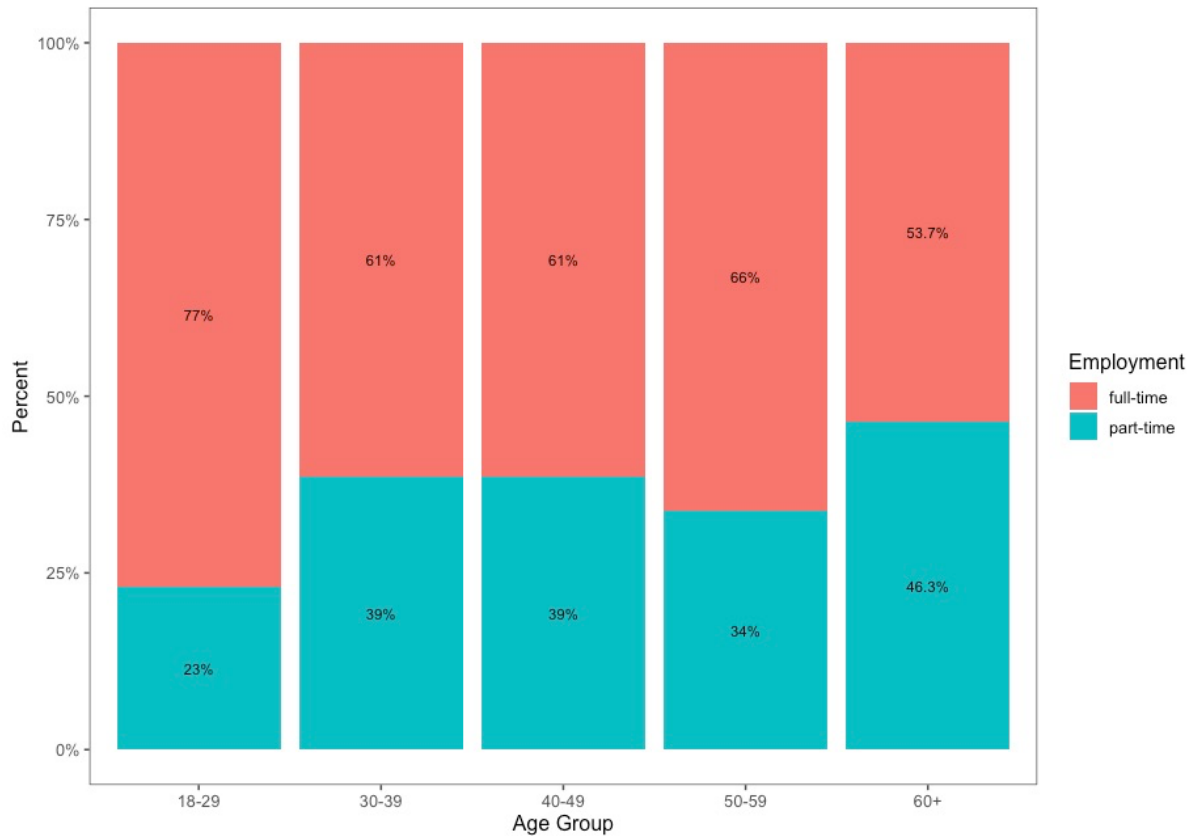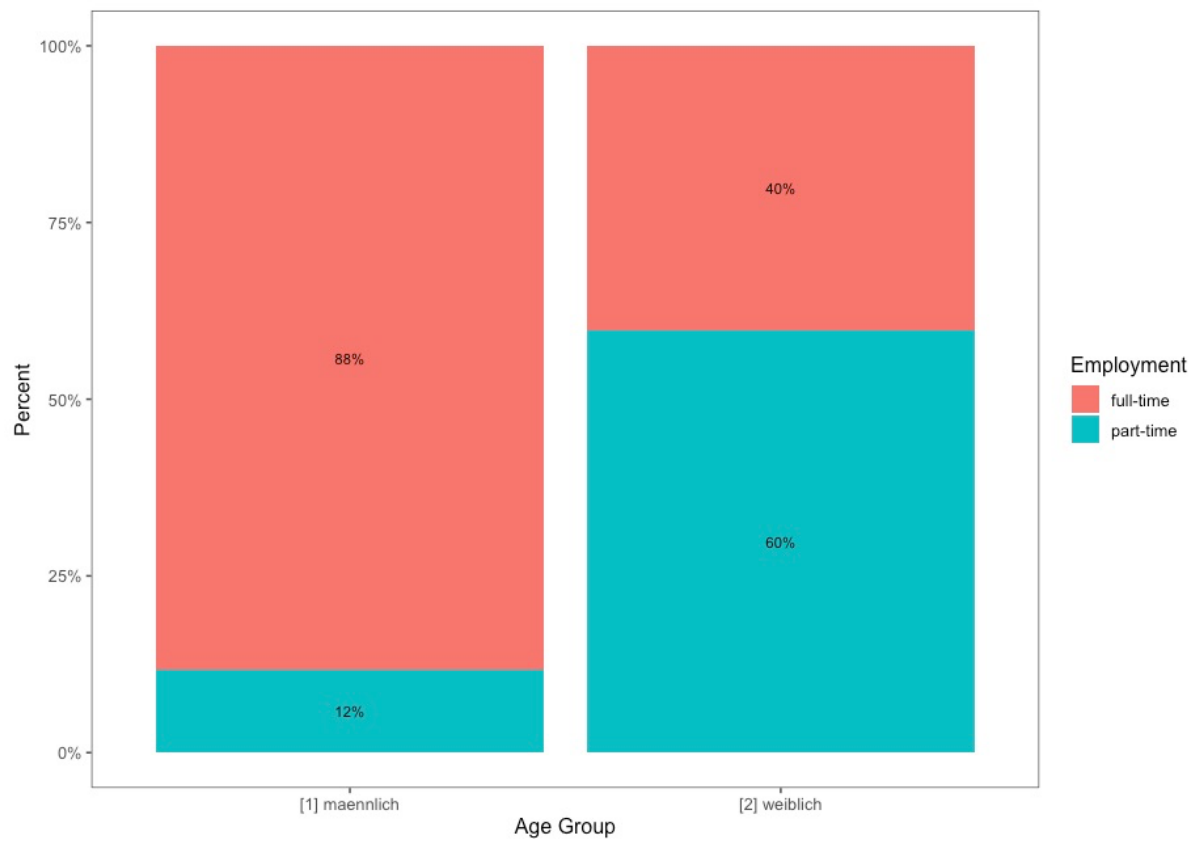
Union Membership
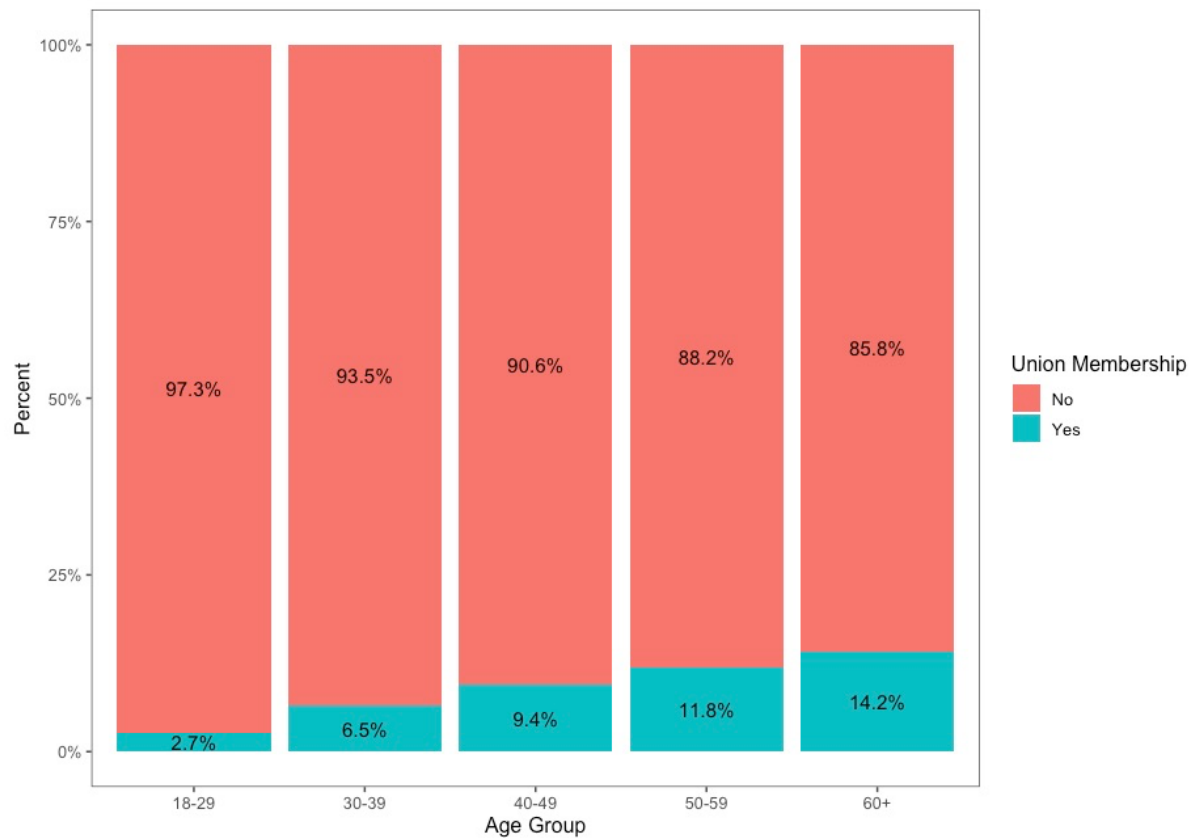
Regression Results

	Dependent Variable: Voted AfD in last Federal Election		
	Model 0	Model 1	Model 2
AutoRisk	0.25 ***	0.23**	1.26 ***
	(0.0)	(0.12)	(0.29)
Age: 30-39	-	-	1.14 ***
	-	-	(0.41)
Age: 40-49	-	-	0.92 **
	-	-	(0.40)
Age: 50-59	-	-	0.92 **
	-	-	(0.39)
Age: 60+	-	-	0.57
	-	-	(0.43)
AutoRisk::Age30-39	-	-	-0.83 ***
	-	-	(0.31)
AutoRisk::Age40-49	-	-	-1.13 ***
	-	-	(0.32)
AutoRisk::Age50-59	-	-	-1.32 ***
	-	-	(0.30)
AutoRisk::Age60+	-	-	-1.48 ***
	-	-	(0.36)
Female	-	-	-0.51 **
	-	-	(0.20)
East German	-	-	0.79 ***
	-	-	(0.17)
Occupation:CivilServ	-	-	-2.34 **
	-	-	(1.00)

Occupation:SelfEmpl	-	-	-0.75 **
	-	-	(0.31)
Occupation:WhiteColl	-	-	-0.38 **
	-	-	(0.19)
Sector:Primary	-	-	0.53 *
	-	-	(0.30)
Sector:ServiceOther	-	-	0.68 **
	-	-	(0.31)
Sector:ServiceBusiness	-	-	0.30
	-	-	(0.31)
Sector:ServiceIT	-	-	-0.06
	-	-	(0.46)
Sector:ServicePeople	-	-	0.21
	-	-	(0.36)
Union Member	-	-	-0.74 ***
	-	-	(0.27)
Full Time Empl	-	-	-0.18
	-	-	(0.20)
HH Income: Middle	-	-	0.04
	-	-	(0.33)
HH Income: High	-	-	0.01
	-	-	(0.35)
Observations	6872	6872	6872

Notes: estimated as a weighted logit regression with robust errors in parentheses. All continuous predictors are mean-centered and scaled by 1 standard deviation.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table A1, Regression Results

	Lower Education	Higher Education	Lower Education	Higher Education	Lower Education	Higher Education	Lower Education	Higher Education
	**Dependent Variable: Voted AfD in last Federal Election**							
	Model A3	Model A4	Model A5	Model A6	Model A7	Model A8	Model A9	Model A10
AutoRisk	0.17**	0.23**	1.26 ***	-0.51	1.29 ***	-0.40	1.25 ***	-0.36
	(0.03)	(0.12)	(0.29)	(0.54)	(0.33)	(0.68)	(0.33)	(0.65)
Age: 30-39	-	-	1.14 ***	-0.52	1.04 **	0.05	1.03 **	0.04
	-	-	(0.41)	(0.62)	(0.42)	(0.68)	(0.42)	(0.67)
Age: 40-49	-	-	0.92 **	-0.68	0.91 **	-0.19	0.92 **	-0.18
	-	-	(0.40)	(0.53)	(0.39)	(0.62)	(0.40)	(0.59)
Age: 50-59	-	-	0.92 **	-0.57	0.75 **	0.00	0.74 *	0.05
	-	-	(0.39)	(0.52)	(0.38)	(0.63)	(0.39)	(0.61)
Age: 60+	-	-	0.57	-0.57	0.35	-0.14	0.35	-0.18
	-	-	(0.43)	(0.60)	(0.44)	(0.65)	(0.44)	(0.63)
AutoRisk::Age30-39	-	-	-0.83 ***	0.71	-0.67 *	0.41	-0.69 *	0.38
	-	-	(0.31)	(0.54)	(0.37)	(0.70)	(0.36)	(0.68)
AutoRisk::Age40-49	-	-	-1.13 ***	0.59	-1.09 ***	0.36	-1.09 ***	0.27
	-	-	(0.32)	(0.58)	(0.35)	(0.69)	(0.34)	(0.67)
AutoRisk::Age50-59	-	-	-1.32 ***	0.69	-1.30 ***	0.63	-1.31 ***	0.56
	-	-	(0.30)	(0.56)	(0.33)	(0.67)	(0.33)	(0.65)
AutoRisk::Age60+	-	-	-1.48 ***	1.00	-1.50 ***	0.98	-1.50 ***	0.98
	-	-	(0.36)	(0.61)	(0.39)	(0.74)	(0.39)	(0.71)
Female	-	-	-0.51 **	-0.27	-0.87 ***	-0.39	-0.87 ***	-0.50
	-	-	(0.20)	(0.37)	(0.22)	(0.41)	(0.23)	(0.39)
East German	-	-	0.79 ***	0.82 ***	0.46 **	0.62 *	0.47 **	0.62 *
	-	-	(0.17)	(0.30)	(0.19)	(0.35)	(0.19)	(0.35)

Occupation:CivilServ	-	-	-2.34 **	0.05	-2.12 **	-0.35	-2.10 **	-0.41
	-	-	(1.00)	(0.95)	(0.96)	(0.98)	(0.95)	(0.98)
Occupation:SelfEmpl	-	-	-0.75 **	0.66	-0.68 *	0.39	-0.66 *	0.35
	-	-	(0.31)	(0.83)	(0.36)	(0.91)	(0.37)	(0.90)
Occupation:WhiteColl	-	-	-0.38 **	0.84	-0.31	0.93	-0.29	0.84
	-	-	(0.19)	(0.73)	(0.20)	(0.78)	(0.20)	(0.78)
Sector:Primary	-	-	0.53 *	-1.57 **	0.65 *	-1.95 *	0.73 **	-1.99 *
	-	-	(0.30)	(0.77)	(0.34)	(1.06)	(0.35)	(1.05)
Sector:ServiceOther	-	-	0.68 **	1.03	0.85 **	0.87	0.93 **	0.67
	-	-	(0.31)	(0.65)	(0.40)	(0.78)	(0.41)	(0.81)
Sector:ServiceBusiness	-	-	0.30	-0.10	0.55	-0.27	0.65 *	-0.40
	-	-	(0.31)	(0.55)	(0.36)	(0.60)	(0.37)	(0.60)
Sector:ServiceIT	-	-	-0.06	-0.50	-0.04	-0.07	0.03	-0.22
	-	-	(0.46)	(0.71)	(0.51)	(0.83)	(0.51)	(0.86)
Sector:ServicePeople	-	-	0.21	-0.21	0.72	0.11	0.71	0.05
	-	-	(0.36)	(0.59)	(0.44)	(0.77)	(0.45)	(0.75)
Union Member	-	-	-0.74 ***	-1.09 *	-0.67 **	-1.04 *	-0.66 **	-1.00
	-	-	(0.27)	(0.57)	(0.27)	(0.63)	(0.27)	(0.61)
Full Time Empl	-	-	-0.18	-0.70 **	-0.07	-0.85 **	-0.10	-0.84 **
	-	-	(0.20)	(0.34)	(0.22)	(0.41)	(0.21)	(0.41)
HH Income: Middle	-	-	0.04	-1.24 **	0.12	-1.07 *	0.15	-1.06
	-	-	(0.33)	(0.56)	(0.33)	(0.64)	(0.32)	(0.65)
HH Income: High	-	-	0.01	-1.24 **	-0.01	-0.87	0.04	-0.86
	-	-	(0.35)	(0.51)	(0.35)	(0.65)	(0.34)	(0.66)
Immigration: Somewhat Concerned	-	-	-	-	0.82	1.78 **	0.82	1.78 **
	-	-	-	-	(0.53)	(0.74)	(0.52)	(0.74)

Immigration: Very Concerned	-	-	-	-	2.32 ***	4.01 ***	2.32 ***	4.04 ***
	-	-	-	-	(0.53)	(0.79)	(0.53)	(0.79)
Climate Change: Somewhat Concerned	-	-	-	-	-0.64 ***	-2.05 ***	-0.65 ***	-2.11 ***
	-	-	-	-	(0.23)	(0.44)	(0.23)	(0.44)
Climate Change: Very Concerned	-	-	-	-	-0.72 ***	-1.33 ***	-0.74 ***	-1.39 ***
	-	-	-	-	(0.24)	(0.47)	(0.24)	(0.47)
Crime: Somewhat Concerned	-	-	-	-	0.98 **	2.02 **	0.98 **	2.00 **
	-	-	-	-	(0.46)	(0.99)	(0.46)	(1.00)
Crime: Very Concerned	-	-	-	-	1.68 ***	2.67 ***	1.68 ***	2.64 **
	-	-	-	-	(0.49)	(1.03)	(0.49)	(1.04)
Female::AutoRisk	-	-	-	-	-	-	-0.27	0.40
	-	-	-	-	-	-	(0.19)	(0.29)
Observations	3957	2915	3957	2915	3957	2915	3957	2915

Notes: estimated as a weighted logit regression with robust errors in parentheses. All continuous predictors are mean-centered and scaled by 1 standard deviation.

*** p < 0.01; ** p < 0.05; * p < 0.1.

Table A2. Sub-Population Regression Model Results

	Dependent Variable: Voted AfD in last Federal Election	
	Lower Education	Higher Education
	Model A11	Model A12
AutoRisk	0.12	0.11
	(0.13)	(0.21)

Age: 30-39	0.34	0.04
	(0.40)	(0.65)
Age: 40-49	0.13	-0.22
	(0.36)	(0.58)
Age: 50-59	-0.05	0.09
	(0.34)	(0.59)
Age: 60+	-0.36	-0.01
	(0.39)	(0.59)
Female	-0.81 ***	-0.51
	(0.22)	(0.39)
East German	0.45 **	0.66 *
	(0.19)	(0.35)
Occupation:CivilServ	-2.00 **	-0.36
	(0.94)	(0.97)
Occupation:SelfEmpl	-0.70 *	0.26
	(0.37)	(0.90)
Occupation:WhiteColl	-0.32	0.89
	(0.20)	(0.79)
Sector:Primary	0.50	-1.73 *
	(0.33)	(0.97)
Sector:ServiceOther	0.72 *	0.79
	(0.41)	(0.82)
Sector:ServiceBusiness	0.42	-0.31
	(0.36)	(0.60)
Sector:ServiceIT	-0.15	-0.17
	(0.48)	(0.86)
Sector:ServicePeople	0.45	0.14
	(0.44)	(0.75)

Union Member	-0.72 ***	-1.07 *
	(0.28)	(0.58)
Full Time Empl	-0.08	-0.83 **
	(0.21)	(0.40)
HH Income: Middle	0.09	-1.09 *
	(0.35)	(0.65)
HH Income: High	0.00	-0.86
	(0.37)	(0.66)
Immigration: Somewhat Concerned	0.83	1.77 **
	(0.54)	(0.74)
Immigration: Very Concerned	2.28 ***	3.99 ***
	(0.54)	(0.79)
Climate Change: Somewhat Concerned	-0.71 ***	-2.16 ***
	(0.22)	(0.43)
Climate Change: Very Concerned	-0.82 ***	-1.39 ***
	(0.24)	(0.46)
Crime: Somewhat Concerned	0.96 **	2.00 **
	(0.45)	(1.00)
Crime: Very Concerned	1.69 ***	2.68 **
	(0.48)	(1.04)
Female::AutoRisk	-0.29	0.35
	(0.19)	(0.29)
Observations	3957	2915

Notes: estimated as a weighted logit regression with robust errors in parentheses. All continuous predictors are mean-centered and scaled by 1 standard deviation.

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$.

Table A3. Sub-Population Regression Results with second interaction term.