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AFFIRMATIVE ACTIONS, ECONOMIC INSECURITY, AND ETHNIC CONFLICTS: EVIDENCE FROM SOUTH AFRICA POST-APARTHEID

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Abstract

This paper investigates whether and how affirmative action policies lead to backlash from the incumbent group. We exploit the unique historical context provided by the legacy of apartheid in democratic South Africa. Passing affirmative action legislation, intended to improve the conditions of the black community, increases support for far-right parties in national elections among low-educated white voters, who were most affected by the resulting labor market competition. This effect is larger in areas closer to the former homelands of the black community, where the threat of labor market competition was higher. We complement these findings using several survey datasets and find that this effect is associated with increased self-perceived economic insecurity. Our results indicate that, to design effective affirmative action policies, these should be accompanied by measures aimed at addressing the economic concerns of incumbent members.

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Affirmative Actions, Economic Insecurity, and Ethnic Conflicts: Evidence from South Africa Post-Apartheid*

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1 Introduction

Affirmative action policies are among the most effective policies for removing barriers to participation in labor markets (e.g., Holzer and Neumark, 2000). By helping to restore opportunities for individuals from various groups who are discriminated against due to gender or ethnicity, these policies have increased worldwide participation in labor markets and access to high-quality education for underrepresented groups (e.g., Bleemer, 2022; Subedi et al., 2022). Despite pursuing greater equality within society, affirmative action is often seen as reverse discrimination by groups that are not the target (e.g.,

Schildberg-Hörisch et al., 2023). Theoretical and empirical arguments suggest that not only affirmative action modifies incentives and behavior of individuals (e.g., Lundberg and Startz, 1983; Coate and Loury, 1993; Fryer Jr and Loury, 2005, 2013), but it may also lead to backlashes towards the targeted groups, especially when targeting competition in labor markets (Belmonte and Di Lillo, 2021; Bernini et al., forthcoming). These backlashes can intensify conflicts between groups and may even hinder the implementation of the policy. Therefore, understanding the nature of potential backlash is essential for mitigating these adverse effects and designing effective affirmative action policies.

In this paper, we document that backlashes against targeted groups are likely driven by increased economic insecurity. As we describe below, we find that these incumbent group members, threatened by the policy, react by shifting their votes toward political platforms characterized by ethnic hatred and opposition to the policy — a finding that is consistent with a growing body of literature examining the adverse effects of economic insecurity on political behavior and attitudes (e.g., Mughan et al., 2003; Rodrik, 2021; Rebechi and Rohde, 2023; Guiso et al., 2024a).[1] In other words, affirmative action policies can increase feelings of insecurity among the incumbent group, mirroring the effects of heightened global market competition (e.g., Colantone and Stanig, 2018a,b; Autor et al., 2020), immigration (e.g., Becker et al., 2016; Halla et al., 2017; Dustmann et al., 2019), and automation (e.g., Frey et al., 2018; Petrova et al., 2024). Our results, therefore, indicate that, in order to design effective affirmative action policies, such policies should be accompanied by measures to address concerns about the rising economic insecurity levels of incumbent members.

We document these effects in the unique context of South Africa. The history of racial segregation in South Africa traces back to the colonial past of the country when European settlers enforced vexatious practices such as marginalization and slavery at the expense of the indigenous population (Thompson, 2014; Von Fintel and Fourie, 2019). These practices culminated with the establishment of the apartheid regime when the Afrikaner-descendant party, the National Party, took office in the mid-1940s. Apartheid remains known as one of the most extensive and longest-lasting social engineering experiments in the recent history of mankind. Under the regime, the white minority group severely restrained the lives of the black majority in every aspect of life, ranging from education to employment, marital opportunities, and location choices (Burger et al., 2023; Valodia and Ewinyu, 2023). The regime ended in 1992, when it was officially repealed after decades

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[1]See Guriev and Papaioannou (2022) for a review of the literature.

of internal and international protests and uprisings. In 1994, South Africa experienced the first democratic and universal elections in its history with the African National Congress emerging as the uncontested winner (Thompson, 2014).

As the country transitioned to democracy, the mandate of the new political class was to restore fairness and equality in South African society.[2] The democratic government immediately started the process of enacting a series of affirmative action policies aimed at re-integrating those who suffered discrimination and marginalization during the apartheid era, in particular the black majority. The affirmative action legislation took the form of a cumulative process (Burger et al., 2023). Because discrimination during apartheid was primarily enforced by marginalization in employment opportunities, we study the presence of a potential backlash by focusing on the implementation of a series of policies targeting competition in labor markets. More specifically, we focus on the policy outlined in the Codes of Good Practice (CGP). This policy represented the cornerstone of the process of affirmative action in labor markets in South Africa. On the one hand, this policy concluded the process of reintegration of marginalized groups into labor markets. On the other hand, it established a regulatory framework that focused on reintegration, which was mandatory for all firms operating in South Africa. We argue that the CGP particularly threatened the low-educated members of the white minority, who historically benefited from protection in the labor market during the apartheid period (Mariotti, 2012). Under the regime, education was restricted, and job opportunities were differentiated based on the color of the skin, favoring European descendants (Mariotti, 2012; Burger et al., 2023; Valodia and Ewinyu, 2023). This created an ethnic legal barrier in labor markets and rents for white members. The transition towards democracy removed these barriers, increasing the vulnerability of low-educated members of the white minority to competition from the black majority.

South Africa not only provides a suitable historical setting to test the effects of affirmative action, but it is also a country with a relatively high level of information capacity. This feature enables us to leverage a wealth of data to identify the underlying mechanisms that drove the rise of the backlash. We combine information on the country's recent electoral history with demographic data on the population collected from census

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[2]Section 9 of Chapter 2 of the Constitution of the Republic of South Africa, Bill of Rights, explicitly states that: "[...] *Everyone is equal before the law and has the right to equal protection and benefit of the law.* [...] *The state may not unfairly discriminate directly or indirectly against anyone on one or more grounds, including race, gender, sex, pregnancy, marital status, ethnic or social origin, colour, sexual orientation, age, disability, religion, conscience, belief, culture, language and birth.*"

registries. We enrich the census data by including information from the last census wave conducted under the apartheid regime (i.e., the 1991 census). Therefore, the resulting dataset bridges the apartheid and post-apartheid eras by aligning data from the 1991 census (under apartheid) with the 2011 municipal geography. This integration is rare because administrative boundaries underwent drastic changes after apartheid, and few studies have successfully connected historical and modern spatial data. As we explain in detail below, we use spatial joining techniques (e.g., centroids and polygon containment via QGIS) to link 1991 enumeration areas to 2011 municipalities. Furthermore, we aggregate voting data at the voting district level to match municipality-level data, which was harmonized across censuses. We do so by creating a custom crosswalk file that maps older enumeration areas (EAs) to newer administrative regions. Finally, we geolocate survey responses from Afrobarometer to municipalities using latitude-longitude data and match spatially to the administrative units. This enables a rare combination of individual-level attitudes and local demographic and electoral contexts.

Using this novel and unique dataset, we find that municipalities with a 1% share above the average of low-educated whites increase support for far-right parties by 0.2% to 0.3% on average after the implementation of the CGP. This effect is significantly larger in municipalities closer to the territories of the former homelands, where most of the black majority was forced to live during the apartheid period. We corroborate our findings at the aggregate level by exploiting individual-level information sourced by the Afrobarometer Survey Project (Afrobarometer, 2018) and the World Values Survey Project (WVS) (Inglehart et al., 1998, 2004, 2008, 2014). We investigate whether the implementation of the affirmative action legislation induced a change in the voting preferences of the individuals. We find that the probability of voting for far-right parties increased by around 9 percentage points within the low-educated group of the white minority. This effect increases by 1.7 percentage points in municipalities located closer to the territories of the homelands. Furthermore, we examine the dynamics of the estimated effect on the voting intentions of individuals. We find that a backlash occurred in the immediate aftermath of the legislation's completion. However, this effect is short-lived and declines immediately in the subsequent periods. Because the affirmative action in labor markets took the form of a cumulative process in South Africa, we perform a series of sensitivity checks to test whether possible anticipation effects may have biased the estimated effect. We find that the effect of affirmative action arises only after the enactment of the CGP and remains consistent even after controlling for previous policies, thus ruling out the possibility of

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anticipation.

We delve into the potential mechanisms behind the increased support for far-right parties resulting from the implementation of affirmative action. We focus on two primary channels: i) economic insecurity and ii) ethnic conflict.[3] Using information from Afrobarometer and the Armed Conflict Location & Event Data (ACLED) archive (Raleigh et al., 2010; Raleigh and Dowd, 2015), we document that economic insecurity increased within the low-educated white group as a consequence of the completion of affirmative action. We find that members of this group are 4.3 percentage points more likely to perceive themselves as worse off relative to their future and 15.5 percentage points less likely to rate their own position as improving. Finally, we do not find an effect of the affirmative action legislation on the exacerbation of ethnic conflict between groups in the post-completion period.

Our study speaks to two major lines of research. First, it adds to a recent strand of literature investigating the political adverse effects of affirmative action policies. Belmonte and Di Lillo (2021), for instance, show that the introduction of hard quotas in public positions in the northern Italian region of South Tyrol, which were predominantly held by the Italian group, instigated ethnic tensions between Italians (the insider group) and the benefiting German-speaking group. Similarly, Bernini et al. (forthcoming) find that the enactment of the 1965 Voting Rights Act, in the United States, increased political participation and worsened the racial attitudes of the whites (the insider group). In a similar fashion, Chyn et al. (2024) document that, after the U.S. Civil War, aid to former black slaves led to a reduction of support for Democrats, the party that proposed the policy, and increased racial violence towards the black community. However, neither of these works examines the mechanisms through which affirmative action causes political backlash. Our analysis aims to fill this gap by documenting that, in the South African context, affirmative action raises economic concerns and insecurity among the insider group, which in turn leads to blocking and hatred.[4]

Second, this paper contributes to the strand of research that explores the causes of inter-ethnic tensions by focusing on inter-ethnic hostility in labor markets. More specifi-

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[3]Previous work showed that ethnic conflict may arise as a consequence of improving the social standing of the marginalized group at the expense of others (see e.g., Olzak and Shanahan, 1996; Mitra and Ray, 2014; Sharma, 2015).

[4]Bernini et al. (forthcoming, p. 1) acknowledge the role of economic insecurity, noting that: *The white political class viewed the potential extension of the franchise with fear, and predictions of "black takeover" were common.*

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cally, our analysis contributes to the existing literature on the impact of adverse economic shocks on extremist voting and ethnic hostility by demonstrating that competition and substitutability are two of the key factors that drive animosity (see e.g., Jha, 2013, 2014; Becker and Pascali, 2019; Grosfeld et al., 2020; Jedwab et al., 2019). In the South African context, the implementation of affirmative action legislation allowed the marginalized group (the black majority) to compete for the same low-skilled jobs as the insider group (the low-educated white minority), threatening their status. Our analysis suggests that affirmative action could lead to inter-ethnic tensions by enabling competition among groups that provide substitutable labor and heightening concerns within the insider group about their future economic situation. In this respect, we also contribute to the literature that examines the adverse impacts of economic insecurity on political behavior and attitudes (e.g., Mughan et al., 2003; Rodrik, 2021; Rebechi and Rohde, 2023; Guiso et al., 2024a), by highlighting an important channel going from affirmative action policies to economic concerns.

This article is organized as follows. Section 2 describes the historical and institutional context of racial segregation and affirmative action in South Africa. Section 3 presents the datasets, the variables and the identification strategy. Section 4 reports and comments the findings. Section 5 concludes.

2   Historical background and institutional setting

The history of racial segregation in South Africa dates back to the country's colonial past. Early practices of racial segregation took place in the former territories of the Cape Colony and Boer Republics (Von Fintel and Fourie, 2019), where European settlers marginalized the indigenous population and imposed slavery practices on local people (Burger et al., 2023). The discovery of gold and diamond deposits near European territories intensified these practices.

In 1910, the racial segregation system was fully institutionalized under the Union of South Africa (UoSA). Through numerous laws, the black majority was gradually stripped of a range of rights, including political representation. The system peaked when the National Party took office in 1948, establishing the apartheid regime. The Afrikaner party's victory marked the start of a time of extreme brutality and injustice in the country's history. Through a long and torturous process, the white minority completely controlled the lives of the black majority in every aspect of life (Burger et al., 2023; Valodia and

Ewinyu, 2023). Marriage choices were restricted to individuals of the same race. Non whites were prohibited from living in the same neighborhoods as the white minority, and the black majority was forcefully relocated to remote and deprived areas of the country (Reed, 2013; Bakker et al., 2020). Education was restricted, and job opportunities were differentiated based on the color of one's skin (Van der Berg, 2007; Mariotti, 2012). These practices were based on the idea that each race needed to develop independently to serve a different role in society. European descendants had to become the uncontested leading caste, while local populations were supposed only to provide cheap labor for the benefit of the white minority (Mariotti, 2012; Burger et al., 2023; Valodia and Ewinyu, 2023).

Albeit the strong repression, the disenfranchisement of the black majority did not go unchallenged. After nearly 50 years of global unrest and internal uprisings, the system ended in 1992. In 1994, South Africa held its first democratic and universal elections in its history (Thompson, 2014). The African National Congress, led by Nelson Mandela, won uncontested in nearly all of the country. The party was promptly called to restore equality and cohesion in a severely fragmented society. To achieve this, it implemented a two-step strategy based on the 'redress and access' principle. First, the newly elected democratic government dismantled any remaining pieces of legislation from the apartheid period. Second, it initiated the process of reintegration for previously marginalized groups by enacting a series of laws aimed at restoring equity and social development. Because occupational segregation played a crucial role in enforcing racial discrimination during the regime, labor market policies were among the first to be enacted as they represented a key point to ensure new social justice (Burger et al., 2016; Gradín, 2019; Burger et al., 2023; Valodia and Ewinyu, 2023).

Figure 1 illustrates the timeline of affirmative action in labor markets within democratic South Africa. The red vertical lines refer to the years of policy enactment, while the black vertical segments refer to the years of general elections since the advent of democracy.

The affirmative action legislation in labor markets took the form of a cumulative process (Burger et al., 2023). The first piece of this legislation was the Employment Equity (EE) Act in 1998. The EE directly targeted workplace equity. To increase participation in the labor markets of previously marginalized groups, the policy established a cooperation system in which employers must consult with employees and trade unions to identify employment and salary gaps in the workforce and then develop specific plans to address any potential imbalances. Thereafter, it required employers to submit these plans to the

Figure 1: History of affirmative action policies in labor markets in South Africa
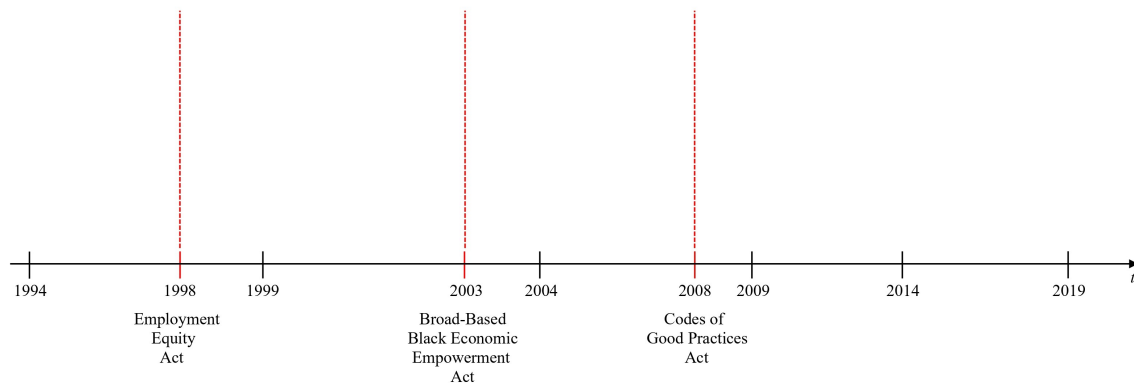
Notes: The red vertical lines indicate the years of enactment for the affirmative action policies, specifically 1998, 2003, and 2008. The black vertical segments refer to the years of the general elections since democratization, namely 1994, 1999, 2004, 2009, 2014, and 2019.

Department of Labor (DoL), which was responsible for monitoring compliance (Burger et al., 2016, 2023). The law aimed to eliminate the legacy of discrimination in employment and wages, favoring as much as possible upward mobility in occupational classes. Unlike the initial expectations, however, the EE failed to deliver the expected results due to a combination of poor state capacity and a weak sanctionary system that did not allow adequate monitoring and punishment of the noncompliers (Bezuidenhout et al., 2008).

To address this issue, the government implemented a second policy, called the Broad-Based Black Economic Empowerment (BBBEE) Act, in 2003. The purpose of the new legislation was twofold. On the one hand, the BBBEE sought to strengthen the provisions of the EE in terms of workplace equity. On the other hand, it tried to broaden the scope of affirmative action by targeting firm ownership and control. To achieve economic justice and social development, more individuals from marginalized groups needed the opportunity to access the economy and engage in entrepreneurship. The BBBEE stated a set of principles to be followed in order to achieve such economic empowerment.[5] Once again, however, the legislation failed to provide objective measures to serve as a reference for assessing compliance with these principles.

Finally, in 2007, the government implemented the Codes of Good Practice (CGP), a policy that complemented the normative framework of the BBBEE. It provided a regulatory framework based on standardized criteria designed to assess compliance with the

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[5]These principles referred to: i) 'ownership', ii) 'management and control', iii) 'skill development', iv) 'employment equity', v) 'preferential procurement' and vi) 'enterprise development'.

BBBEEE legislation. Compliance was assessed through scorecards and was mandatory for any firm wishing to do business with the state or seeking approval for licensing. The scorecards indicated seven targets, each representing one of the principles outlined in the BBBEE.[6] The Department of Trade and Industry (DTI) and the South African National Accreditation System were responsible for certifying compliance. The CGP represented, in every sense, the turning point of affirmative action legislation. In practice, it geared both the BBBEE and EE with a functioning system that enabled the authorities to enforce re-integration at all levels of business.

3   Data and methods

3.1   Data and descriptive analysis

We investigate whether the implementation of affirmative action legislation triggered a backlash among the low-educated white minority group. We study this effect from two perspectives. First, we use data from administrative records to examine whether the implementation of the package increased political support for far-right parties at the aggregate level. We focus on municipalities as our unit of analysis. To this end, we develop a new and unique dataset that combines information on South Africa's recent electoral history with demographic data from census registries. We obtain information on the country's recent electoral history from the Independent Electoral Commission (IEC) of South Africa, the official election management body. We focus on the National General Elections held in 1999, 2004, 2009, 2014, and 2019.[7] We gather demographic data from Statistics South Africa (StatsSA), the country's official census agency. Because significant structural changes have occurred since the advent of democracy, we focus only on information provided by the decadal censuses of 2001 and 2011. We enrich the census data by adding information from the most recent census conducted during the apartheid

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[6]The targets were grouped in three broad categories. The first category was 'direct empowerment'. It referred to the principles of ownership and control of the BBBEE. The second category was 'human resource development'. It referred to the principles of workplace equity and skill development outlined by the EE. Finally, the last category was 'indirect empowerment'. It referred to the principle of social development of the BBBEE.

[7]We are unable to include information about the election results for the 1994 National General Elections. Although 1994 represents a breakthrough year in South Africa's history, electoral data have never been released in disaggregated form by the government.

era (i.e., the 1991 census).[8] We combine this information with data on the number of incidents caused by ethnic conflict sourced from the Armed Conflict Location vent Data archive (Raleigh et al., 2010; Raleigh and Dowd, 2015) to examine whether the implementation of the package encouraged violent behaviors between ethnic groups.[9]

Second, we leverage individual-level data from surveys to examine whether people's political preferences shifted as a result of the legislation and, if so, to what extent. We use data sourced from the Afrobarometer Survey Project, a large-scale, repeated cross-country, cross-sectional survey covering the majority of African countries (Afrobarometer, 2018). Afrobarometer collects data on a variety of topics, including ethnicity, education, voting preferences, personal attitudes towards democracy, and trust in institutions. It is one of the most commonly used datasets to analyze economic and political issues related to developing economies in Africa, such as nation-building, tax compliance, and social cohesion (see e.g., Sangnier and Zylberberg, 2017; Ali et al., 2019; Depetris-Chauvin et al., 2020; Okoye, 2021; Belmonte et al., 2024; Carlitz et al., 2025).[10] We focus on interviews conducted between 2000 and 2018.[11] Since the set of policies began in 1998, we complemented the individual-level analysis by utilizing the length of the survey records available from the World Values Survey Project (Inglehart et al., 1998, 2004, 2008, 2014). Similar to Afrobarometer, the WVS also collects information about voting preferences and personal attitudes towards democracy. We use the waves from 3 to 6 for the period 1996 to 2013.[12]

We provide a detailed description of each dataset in Online Appendix Section A. Table B.1 in the Online Appendix reports the summary statistics.

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[8]For more details, visit https://www.datafirst.uct.ac.za/dataportal/index.php/ (last accessed January 13, 2025).

[9]For more details, visit https://acleddata.com/ (last accessed January 13, 2025).

[10]The restricted version of the Afrobarometer data also reports the geospatial information of the individuals, including the latitude-longitude points where the interviews took place. It is available upon request to the Afrobarometer Survey Project. For more details, visit https://www.afrobarometer.org/data/data-usage-and-access-policy/ (last accessed January 13, 2025).

[11]Afrobarometer conducted 9 survey waves in the Republic of South Africa (2000, 2002, 2006, 2008, 2011, 2015, 2018, 2021, and 2022). We focus on the first seven waves to maintain consistency with the administrative records provided by Statistics South Africa.

[12]The World Values Survey collected seven waves starting in 1981. We cannot use waves 1 and 2 due to the significant structural break that occurred in South Africa in 1994. Furthermore, the WVS only provides geospatial information at the level of large administrative units such as regions or provinces. Since the South African provincial boundaries underwent significant changes after the transition to democracy, we are unable to accurately locate observations made before 1996 within the current administrative divisions. Finally, we cannot use wave 7 because the country was not included in the sample.

3.1.1 Aggregate-level analysis

Our main outcome variable is the share of votes polled by the far-right parties' coalition at the municipality level. For each election year, we calculated the share as the ratio between the number of votes received by the coalition and the number of individuals in the labor force.[13] We consider as far-right the following list of parties: Freedom Front (FF), Afrikaner Unity Movement (AUM), and Freedom Front Plus.[14]

Figure 2 shows the box plots of the shares of votes polled by the coalition before and after the legislation was completed. The red (blue) line refers to the mean value of the share in the period before (after) the enactment of the last affirmative action policy (i.e., Codes of Good Practice). Since the advent of democracy, the far-right parties' coalition received small to no support in the National General Elections. However, after the implementation of the last policy, the coalition received higher support from the electorate. The graph shows that the cross-municipality distribution of the share stretched in the post-completion period, with the average value rising by 16.3% compared to the years before 2008.

To capture the intensity of exposure to competition in labor markets, we use the share of low-educated whites in the labor force in 1991. These are white individuals who completed at most grade 9 in school.[15] We compute the share at the municipality level and illustrate the spatial distribution in Figure 3. The polygons in darker (lighter) red refer to municipalities with higher (lower) concentrations of low-educated whites. The gray polygons indicate municipalities for which information is not available. Finally, the white polygon indicates the location of Lesotho. Although there were few low-educated whites during the apartheid regime, the graph shows that the distribution of this group was not uniform across municipalities. Low-educated whites were more concentrated in areas located in the center and south of the country, while they were almost absent in the north

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[13]We use the labor force as a normalization factor because affirmative action targeted competition in labor markets. As a sensitivity check, we replace the denominator using the general population. Online Appendix Table C.1 reports the corresponding results.

[14]After the repeal of apartheid, the Freedom Front and Afrikaner Unity Movement were the two Afrikaner nationalist parties in the country. Other than broadly defending the interests of the Afrikaner minority, a key point of their agenda was the promotion and establishment of the Volkstaat, a homeland intended for the South African white minority to live autonomously. After securing 4 out of 400 seats in the National Assembly during the 1999 National General Elections, in 2003 the two parties merged to form the Freedom Front Plus.

[15]In South Africa, basic education is organized in twelve grades grouped in four different phases, namely: i) Foundation (grades 1-3), ii) Intermediate (grades 4-6), iii) Senior (grades 7-9) and iv) FET (grades 10-12). The entry age is 6 (grade 1). Individuals are required to attend school until they reach age 15 (grade 9).

Figure 2: Box plots of the share of votes for far-right parties
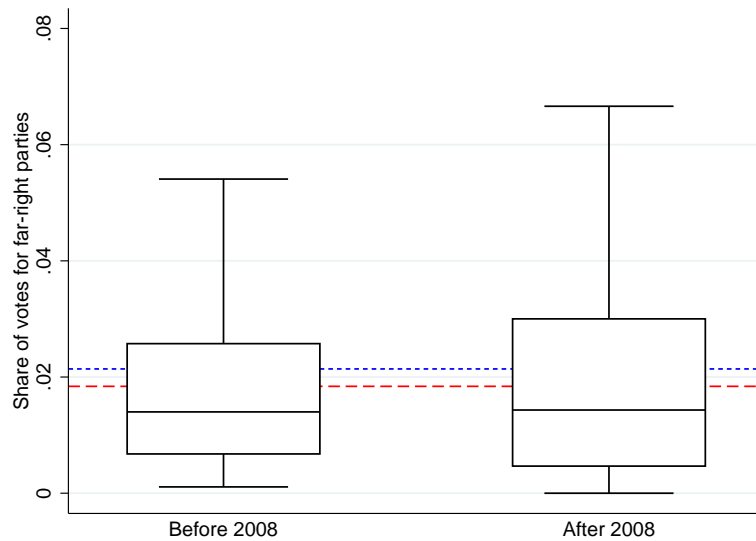
Notes: The thick horizontal segments refer to the median of the distribution in each election year. The red (blue) line refers to the mean value of the share of votes polled by the far-right parties coalition in National General Elections before (after) the enactment of the Codes of Good Practice. The corresponding value is 0.0184 (0.0214).

and east regions. This imbalance results from a series of forced resettlements carried out by the white minority government at the expense of the black majority under the system of "pass laws." To prevent black urbanization, the white minority government relocated millions of blacks to the homelands, that is, specific areas of the country solely devoted to hosting the lives of black South Africans. These districts were typically located in remote and severely underdeveloped areas of the country and could not be exited by inhabitants without permission from the central government. The local population living in these areas served as a reserve of cheap labor for the locations where the white minority used to reside. Figure 4 shows the location of the homelands in the map of South African municipalities. The yellow polygons indicate territories of the former homelands. Because mobility restrictions and job reservations were abolished at the end of the regime, we expect greater support for the far-right parties coalition from areas closer to the borders of former territories, where competition between groups might be more intense.

Figure 3: Map of the concentration of low-educated whites in labor force in 1991
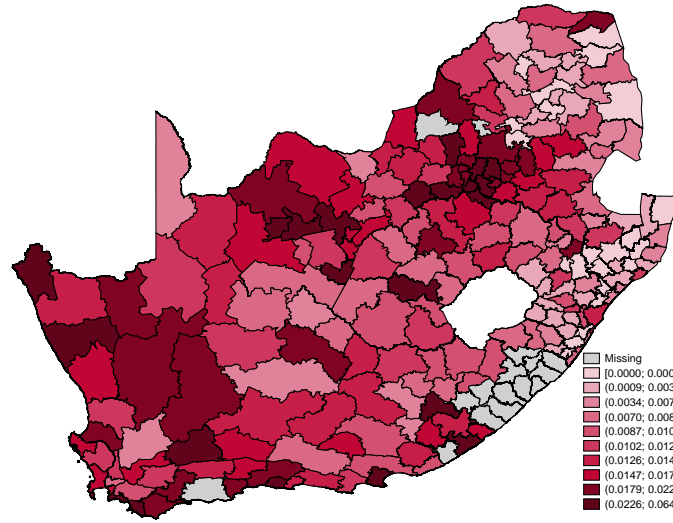
Notes: The black lines refer to municipality borders. The gray polygons are municipality with missing information. Finally, the white polygon refers to Lesotho.

3.1.2 Individual-level analysis

To proxy the voting preferences of the electorate in national elections, we select a survey question that asks people to indicate which party they would support if national elections were held tomorrow.[16] We create a dummy variable equal to 1 if the respondent reports a political preference for either the Freedom Front, the Afrikaner Unity Movement, or the Freedom Front Plus. We illustrate the percentage of individuals willing to support a far-right party in Figure 5 across survey rounds. Panel (*a*) refers to the Afrobarometer dataset, while panel (*b*) refers to the World Values Survey dataset. The red vertical lines indicate the year preceding the completion of the package of policies. The percentage of far-right supporters shows a declining trend across all datasets. Yet, from the Afrobarometer dataset, it is possible to notice a surge in the trend corresponding to the year of the enactment of the last affirmative action policy. However, this effect is short-lived as the percentage of supporters begins to decline right after the second post-policy wave.

To capture exposure to the labor market competition, we use information about ed-

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[16]The question is available in both the Afrobarometer and World Values Survey datasets. In Afrobarometer, the question is phrased as: "*Which party would you vote for if a national election were held tomorrow?*. In World Values Survey, the question is phrased as: "*If there were a national election tomorrow, for which party on this list would you vote?*".

Figure 4: Map of the locations of former homelands during the apartheid regime
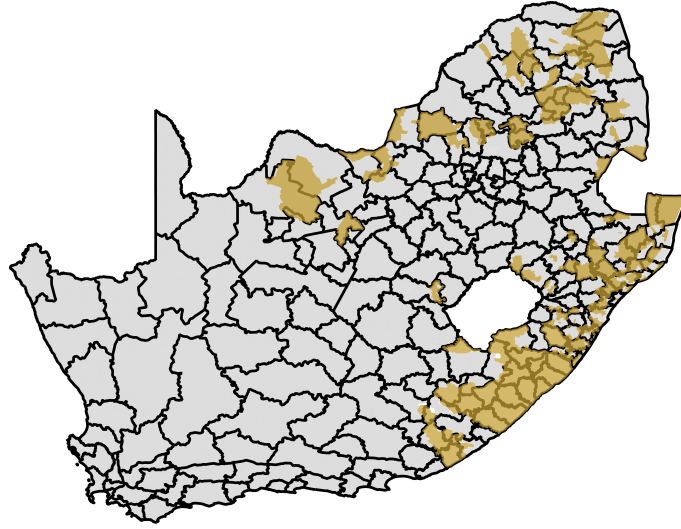
ucation at the ethnic group level. We use a survey item that asks people to state their race to identify the ethnic group. We code dummy variables equal to 1 according to the respondent's race. Within the ethnic group, we code the level of education using a survey item that asks people to indicate the highest level of education they completed. To measure low skills in labor markets, we code a dummy variable equal to 1 if the respondent reported not having completed high school.[17] We report the percentages of low-educated individuals by ethnic group in 2006 for both Afrobarometer (left panel) and World Values Survey (right panel) in Figure 6. We select 2006 because it is a common year between the two surveys. As one can see, the figures are almost identical regardless of the ethnic group or the dataset employed. Individuals of the black majority are over-represented in the low-educated group, with a percentage around 83%. Rather, individuals of the white minority represent only a small fraction, with the percentage ranging from 5% to 6%. In addition to the speculations from this visual inspection, these shares reflect the lasting legacy of racial segregation from apartheid, even 10 years after the regime's repeal. In Section 4.2, we leverage the similarity between Afrobarometer and the World

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[17]Neither Afrobarometer nor World Values Survey have an equivalent scale in grades for the education variable. We proxied grade 9 from census records by using all responses that ranged from "*No formal schooling*" to "*Incomplete/some secondary school.*"

Figure 5: Percentage of individuals that would support a far-right party in the next elections
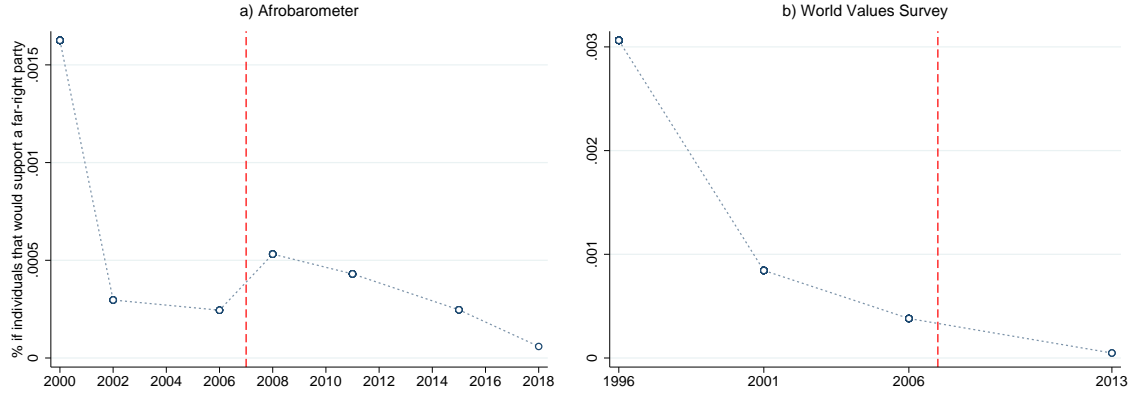
Values Survey to test whether the implementation of the first affirmative action policy in 1998 (i.e., Employment Equity Act) may have influenced changes in individuals' political preferences.

3.2 Identification strategy

To estimate the effect of backlash against affirmative action, we employ a difference-in-differences strategy. For the aggregate-level analysis, we use the following model specification:

$$y_{c,t} = \beta(\text{AAP}_t \times \text{Treatment}_{c,1991}) + \boldsymbol{\theta}\boldsymbol{X}_{c,t} + \alpha_c + \delta_t + \varepsilon_{c,t} \tag{1}$$

where c and t are the municipality and election year indexes. $y_{c,t}$ is the share of votes polled by the far-right parties coalition in election year t; AAP_t is a binary indicator for the implementation of the affirmative action policy at time t, and it is 1 after the period t; $\text{Treatment}_{c,1991}$ is the share of low-educated whites in municipality c in 1991; $\boldsymbol{X}_{c,t}$ is a vector of time-variant municipality characteristics; α_c and δ_t are the municipality and election year fixed effects; $\varepsilon_{c,t}$ is the error term component.

The parameter of interest is β that captures the effect of the affirmative action policy on the political preferences of the electorate. We primarily focused on the implementation of CGP as the relevant policy to study the presence of the backlash. This decision is motivated by two reasons. First, the enactment of the CGP marked the culmination of the

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Figure 6: Percentage of low-educated individuals by ethnic group
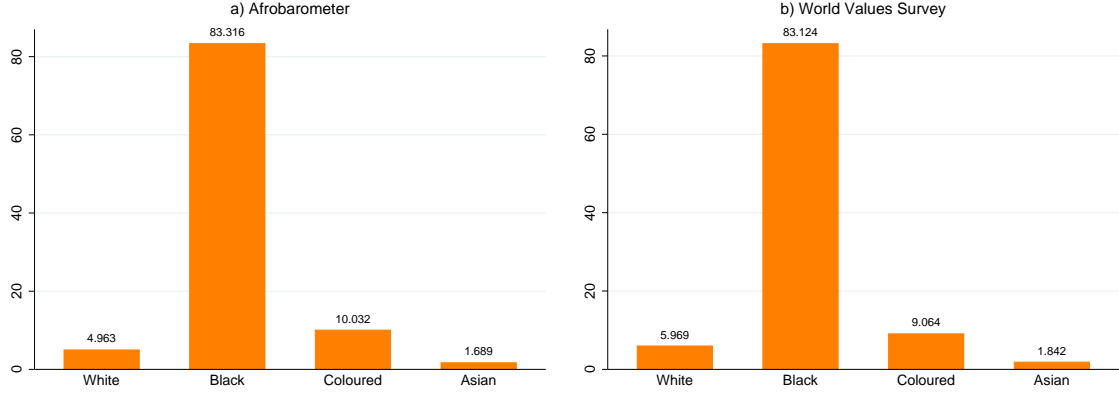
affirmative action process in South African labor markets. Second, the law established a regulatory framework based on scorecards to measure compliance with the reintegration process, which was mandatory for any firm operating in South Africa. However, because affirmative action occurred as a cumulative process in South Africa, we also tested the impact of the previous policies to assess the robustness of the results for the CGP.

For the individual-level analysis, we rearranged Equation (1) as follows:

$$
\begin{aligned}
y_{i,c,t} = {} & \gamma_1 \text{Low-educated}_{i,t} + \gamma_2 \text{White}_{i,t} + \gamma_3(\text{AAP}_t \times \text{Low-educated}_{i,t}) + \\
& \gamma_4(\text{AAP}_t \times \text{White}_{i,t}) + \gamma_5(\text{Low-educated}_{i,t} \times \text{White}_{i,t}) + \\
& \gamma_6(\text{AAP}_t \times \text{Low-educated}_{i,t} \times \text{White}_{i,t}) + \boldsymbol{\psi} \boldsymbol{Z}_{i,t} + \kappa_c + \lambda_t + \upsilon_{i,c,t} \quad (2)
\end{aligned}
$$

where i is the individual index whilst c and t are same as in Equation (1). The outcome variable is a binary indicator for the individual political preference in favor of a far-right party; Low-educated$_{i,t}$ and White$_{i,t}$ are two binary indicators for the education level and ethnic group of the respondent; AAP$_t$ is the same as in Equation (1); $\boldsymbol{Z}_{i,t}$ is a vector of individual characteristics; κ_c and λ_t are the municipality and survey year fixed effects; $\upsilon_{i,c,t}$ is the error term component.

For this analysis, the parameter of interest is γ_6, which captures the change in voting intentions of the individuals after the implementation of the affirmative action policy. Similar to the aggregate-level analysis, we focus on the CGP as the relevant policy that triggered the backlash. However, for the same reasons discussed, we test this hypothesis

by assessing the effect of previous policies on the voting intentions of the individuals.

Finally, for both analyses, we employ the Liang and Zeger's (1986) cluster-robust variance estimator to account for within-municipality correlation.

4 Empirical findings

4.1 Main results

4.1.1 Evidence from administrative data

The main findings from the aggregate analysis are shown in Table 1. Column (1) shows the simple means difference for the share of votes for the periods before and after the completion of the package. Column (2) reports the unconditional difference-in-differences estimator of Equation (1) by including election year fixed effects to account for possible common shocks across municipalities. Column (3) extends the model specification, adding the following set of municipality characteristics: population, share of black South Africans, share of black South Africans with less (more) than a high school diploma and share of white South Africans with less (more) than a high school diploma. Because it is the richest in terms of information included, column (3) is our preferred specification. Finally, in column (4) we follow Easterly and Levine (1997) and Alesina et al. (2003) and replaced the share of black South Africans with a measure of ethnolinguistic concentration to capture the potential differences in racial composition across municipalities.

We find that support for far-right parties increased after the enactment of the CGP. The simple means difference is 0.003, indicating that the share of votes polled by the far-right parties coalition rose by a margin of 16.3% compared to the pre-completion period. After accounting for common shocks and possible time-varying heterogeneity across municipalities, we estimate a coefficient ranging between 0.2016 and 0.2888. This means that municipalities with a 1% above the average share of low-educated whites increased support for far-right parties by 0.2% to 0.3% on average. By comparing to the pre-completion period, the number of votes in the next elections increased by a margin of 334 to 478 at the national level.[18] These findings align with the results of previous empirical research, which suggest that affirmative action legislation may trigger a backlash from the insider

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[18]For the pre-completion period, the average number of votes polled by the far-right parties coalition in the national election is 708.

Table 1: Main estimation results

	Share of votes for far-right parties			
	(1)	(2)	(3)	(4)
CGP	0.0030***			
	(0.0006)			
CGP×Share of low-educated whites		0.2425***	0.2015**	0.2889***
		(0.0709)	(0.0789)	(0.0752)
Controls	No	No	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
Election year FE	No	Yes	Yes	Yes
# observations	1,090	1,090	1,090	1,090
# clusters	218	218	218	218
R^2	0.697	0.828	0.833	0.835

Sources: Independent Electoral Commission (1999, 2004, 2009, 2014, 2019) and Statistics South Africa (1991, 2001, 2011).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Each specification includes municipality fixed effects. Columns (2), (3) and (4) also includes election year fixed effects. Column (3) includes the following municipality characteristics: population, share of black South Africans, share of black South Africans with less than high school diploma, share of black South Africans with more than high school diploma, share of white South Africans with less than high school diploma, share of white South Africans with more than high school diploma. Finally, column (4) replaces the share of black South Africans with the ethnic concentration index. The sample covers the period 1999–2019.

group (see, e.g., Belmonte and Di Lillo, 2021; Bernini et al., forthcoming).[19]

In Section 3.1.1, we argue that the support for far-right parties may not be homogeneous across municipalities. Given the unequal distribution of the population between municipalities during the apartheid period, due to the system of "pass laws", it is possible that support for the coalition may be larger in areas located closer to the borders of the territories of the former homelands. Indeed, the removal of mobility restrictions for the black majority may have fostered competition in local labor markets for those municipalities located closer to the areas of the reserves (Mariotti, 2012; Reed, 2013; Bakker et al., 2020). We account for this possibility and exploit the geospatial information about the location of the homelands. We create a series of indicators based on the distance between the municipalities and the territories of reserves. For each indicator, we test a different hypothesis relative to the source of additional competition in local labor markets. First, for each municipality, we create an indicator based on the distance to the closest homeland enclave. In this case, we assume that competition in labor markets comes only from the area closest to the municipality. Second, we enlarge the scope of the distance measure and create an indicator to account for the closest homeland on average. Therefore, we as-

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[19]We replicated the analysis by using the general population as the reference group. Online Appendix Table C.1 presents the results. Although the point estimates are smaller compared to those reported in Table 1, the findings are qualitatively similar.

sume that the competition may come from the closest homeland regardless of the location of the single enclaves. Finally, we create an indicator using the value of 10th percentile of distance distribution between municipalities and the various homeland enclaves. In this case, we assume that the source of additional competition is represented by all those territories of former homelands located within a given radius of the single municipalities.

Figure 7 clarifies the idea. The black lines represent the geographical boundaries of municipalities in South Africa. The yellow polygons represent the territories of the former homelands during the apartheid era. The point in violet refers to the local municipality of Ubuntu as an example. The point in red-green (blue) refers to the location of the closest enclave (closest homeland on average) with respect to the reference municipality. The points in red illustrate all the enclaves identified within the 10th percentile of the distance distribution between the reference municipality and the homeland areas. Finally, the right arrows indicate the distance between the reference municipality and the various locations, based on the different criteria used.

Table 2 shows the results for the analysis. We find that support for far-right parties is significantly larger in municipalities closer to the territories of former homelands. The sign of the coefficient for the triple interaction is negative regardless of the distance criterion considered. However, the coefficient is statistically different from zero only for the criterion reported in column (1) that refers to the case for which the source of additional competition is not limited to a specific enclave or homeland.[20] Thereafter, we compute the marginal effects of the AAP using various levels of distance with respect to the former homelands using the metric reported in column (1) of Table 2. Table 3 reports the findings. By considering the distance dimension, we find that the support for far-right parties is higher in municipalities located closer to the borders of former homelands. This finding suggests that stronger support for far-right parties may come from locations where labor market competition is more salient, given the proximity to the outsider group.[21]

Finally, we test whether our findings might be driven by anticipation resulting from the implementation of previous AAPs. More specifically, we utilize the length of infor-

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[20]We perform a sensitivity analysis using different cutoff points of the distance distribution. We consider three alternatives. First, we restrict the radius by considering only those areas located within the 5th percentile of the distance distribution. Second, we enlarge the spectrum by considering all the enclaves located within the 25th percentile. Finally, we set the cutoff equal to the median value of the distance distribution. Online Appendix Table C.2 reports the results, which are in line with those reported in Table 2.

[21]As a robustness check, we replicate the analysis by replacing the share of black South Africans with a measure of ethnolinguistic concentration as in column (4) of Table 1. Online Appendix Table C.3 presents the results. They are qualitatively similar to those reported in Tables 2 and Online Appendix Table C.2.

Figure 7: Identification of nearest areas belonging to former homelands
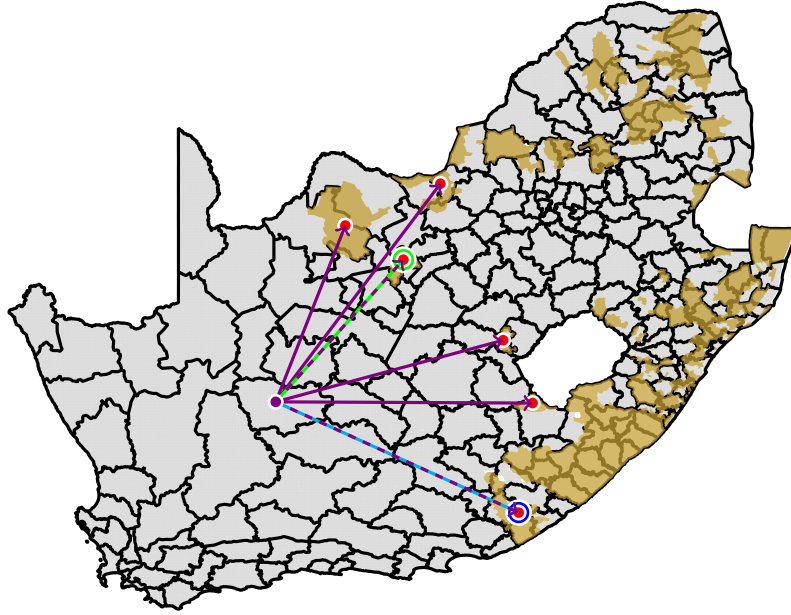
Notes: The black solid lines refer to the municipalities' borders in 2011. The polygons in yellow represent the areas belonging to the former South African homelands during the apartheid regime. Distance from homelands was identified with respect to each municipality in South Africa. The point in violet refers to the local municipality of Ubuntu as an example. The point in red-green (blue) refers to the location of the closest enclave (closest homeland on average) with respect to the reference municipality. The points in red refer to all the enclaves identified within the 10th percentile of the distance distribution between the reference municipality and the homeland areas. Finally, the right arrows refer to the distance between the reference municipality and the various locations based on the different criteria used.

mation available in our dataset to examine whether the implementation of the BBBEE has triggered an anticipated backlash. Table 4 reports the results for the placebo regressions. We find no effect of the BBBEE implementation on voters' behavior. This evidence aligns with the idea that, due to the executive nature of the CGP, it was that specific law which served as a key turning point for the affirmative action legislation, triggering opposition from the low-educated white minority group.

4.1.2 Evidence from survey data

To verify whether voting intentions changed after implementing the package of policies, and corroborate the findings from the previous section, we use individual-level data from surveys. Table 5 presents the estimated effect from Equation (2) using data from the Afro-barometer Survey Project. Column (1) shows the results for the baseline specification. It includes a binary indicator equal to 1 if an individual reported being of white ethnicity, a

Table 2: Effect of AAP using distance with respect to former homelands

	Share of votes for far-right parties		
	Enclaves within 10th percentile	Closest homeland enclave	Closest homeland on average
	(1)	(2)	(3)
CGP×Share of low-educated whites	0.2574**	0.1634*	0.2764**
	(0.1033)	(0.0888)	(0.1104)
CGP×Distance from homelands	0.0017***	0.0017**	0.0020***
	(0.0005)	(0.0007)	(0.0006)
CGP×Share of low-educated whites×Distance from homelands	-0.0472*	-0.0198	-0.0509
	(0.0284)	(0.0443)	(0.0348)
Controls	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Election year FE	Yes	Yes	Yes
# observations	1,090	1,090	1,090
# clusters	218	218	218
R^2	0.837	0.837	0.837

Sources: Directorate of Public State Land Support via Africa Open Data, Independent Electoral Commission (1999, 2004, 2009, 2014, 2019) and Statistics South Africa (1991, 2001, 2011).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in column (3) of Table 1. The variable 'Distance' is measured in 100-miles. The sample covers the period 1999–2019.

Table 3: Marginal effect of AAP using distance with respect to the former homelands

	Share of votes for far-right parties			
	Minimum distance	50-miles distance	100-miles distance	Mean distance
	(1)	(2)	(3)	(4)
Predicted share of votes for far-right parties	0.2352	0.2338	0.2102	0.1007

Sources: Directorate of Public State Land Support via Africa Open Data, Independent Electoral Commission (1999, 2004, 2009, 2014, 2019) and Statistics South Africa (1991, 2001, 2011).

binary indicator for individuals who did not complete high school, and a set of interaction terms between the binary indicators and the binary variable for the affirmative action policy considered, that is, the CGP. Column (2) extends the model specification with the inclusion of further individual characteristics: A dummy for individuals of black ethnicity; a dummy for individuals who achieved the highest educational level (that is, high school); and a set of interaction terms between ethnicity and the education level.

We find that the completion of the package fostered a backlash within the low-educated white minority group. After implementing the CGP, this group of individuals increased their intention to vote for a far-right party by roughly 9 percentage points. This evidence aligns with the results documented above, which show that the coalition has increased support since 2008.

Table 4: Placebo using Broad-Based Black Economic Empowerment as AAP

	Share of votes for far-right parties	
	(1)	(2)
BBBEE×Share of low-educated whites	0.0683	-0.0716
	(0.0646)	(0.1003)
Controls	No	Yes
Municipality FE	Yes	Yes
Election year FE	Yes	Yes
# observations	1,090	1,090
# clusters	218	218
R^2	0.825	0.832

Sources: Independent Electoral Commission (1999, 2004, 2009, 2014, 2019) and Statistics South Africa (1991, 2001, 2011).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as columns (2) and (3) of Table 1. The sample covers the period 1999–2019.

Finally, we examine whether this rise in support may be driven by individuals residing in municipalities nearer to the former territories of the homelands. We re-estimate Equation (2) including the distance metrics described in Section 4.1.1. Table 6 shows the results. We find that political support for far-right parties is greater in municipalities closer to the borders of the former homelands. Similar to the results for the aggregate analysis, the quadruple interaction shows a negative sign regardless of the distance criterion considered. The results suggest that the probability that individuals from the low-educated white minority group may cast a vote in favor of far-right parties increases by 1.5 to 1.7 percentage points compared to the benchmark estimates. This finding provides support for the idea that policies aimed at restoring labor market participation may trigger a backlash as an unintended consequence.[22]

4.2 Event-study analysis

In previous sections, we have brought evidence in favor of a political backlash against affirmative action. Specifically, low-skilled whites were more likely to vote for far-right parties and reported a higher intention to vote for them in survey questionnaires after the policy was enacted. Panel a) of Figure 5, however, shows an immediate decline in the

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[22]We perform a sensitivity analysis similar to the one presented in Online Appendix Table C.2. We use different cutoff points of the distance distribution to test whether the presence of the backlash was sensitive to a different distance criterion employed. We consider the same alternatives at 5th, 25th and 50th percentile of the distance distribution. Online Appendix Table C.4 reports the results which are in line with those presented for the aggregate analysis.

Table 5: Effect of AAP on intention to vote in next national elections

	Probability of voting for far-right parties in the next national elections	
	(1)	(2)
Low-educated	0.0018	-0.0051
	(0.0020)	(0.0085)
White	0.0870***	-0.0121
	(0.0196)	(0.0100)
CGP×Low-educated	-0.0034	-0.0029
	(0.0024)	(0.0026)
CGP×White	-0.0491***	-0.0471**
	(0.0184)	(0.0183)
Low-educated×White	-0.0551**	0.0350*
	(0.0239)	(0.0193)
CGP×Low-educated×White	0.0888**	0.0879**
	(0.0420)	(0.0425)
Controls	No	Yes
Municipality FE	Yes	Yes
Survey year FE	Yes	Yes
# observations	11,275	11,275
# clusters	229	229
R^2	0.072	0.074

Source: Afrobarometer (2000, 2002, 2006, 2008, 2011, 2016, 2018).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Each specification includes municipality fixed effects and survey year fixed effects. Column (2) also includes the following individual characteristics: whether an individuals is of black ethnicity, whether the highest education level completed by an individual is equal to (higher than) high school and a set of interaction terms between the ethnicity of the individuals and the binary indicators for the education level of the respondents. The sample covers the period 2000–2018.

support of these parties. In this section, we investigate whether the above documented effect is short-lived or persists for longer periods. We analyze the evolution of the intentions to vote as measured in surveys. To this purpose, we estimate an event-study specification for Equation (2). Table 7 reports the findings for the dynamic analysis. In panel a), we report the estimated coefficients for the period before the implementation of the CGP. In panel b), we illustrate the estimated evolution of the outcome after the completion of the package. Column (1) refers to the baseline specification reported in column (1) of Table 5, whereas column (3) refers to the richer specification including individual characteristics.

Overall, we find that individuals did not alter their voting behavior in anticipation of the CGP implementation. The tests for the significance of the placebo effects report a *p*-value greater than 0.2 in both specifications analyzed. However, passing the law triggered a backlash in the post-reform period. The effect is concentrated in the immediate period after the legislation ends, where individuals are approximately 14 percentage points more likely to vote for the far-right parties' coalition. Furthermore, we test whether voting

Table 6: Effect of AAP on intentions to vote using distance with respect to former homelands

	Probability of voting for far-right parties in the next national elections		
	Enclaves within 10th percentile	Closest homeland enclave	Closest homeland on average
	(1)	(2)	(3)
Low-educated	-0.0085	-0.0069	-0.0077
	(0.0082)	(0.0076)	(0.0086)
White	0.0188	0.0022	0.0172
	(0.0167)	(0.0116)	(0.0205)
CPG×Distance from homelands	0.0010	0.0007	0.0012
	(0.0008)	(0.0007)	(0.0009)
CPG×Low-educated	-0.0023	-0.0036	-0.0032
	(0.0041)	(0.0031)	(0.0038)
CPG×White	-0.0791***	-0.0624***	-0.0658**
	(0.0293)	(0.0235)	(0.0317)
Distance from homelands×Low-educated	0.0008	0.0008	0.0007
	(0.0008)	(0.0008)	(0.0008)
Distance from homelands×White	-0.0101***	-0.0103***	-0.0095
	(0.0038)	(0.0034)	(0.0058)
Low-educated×White	0.0286	0.0322	0.0119
	(0.0346)	(0.0242)	(0.0263)
CPG×Distance from homelands×Low-educated	-0.0003	0.0003	0.0000
	(0.0008)	(0.0006)	(0.0008)
CPG×Distance from homelands×White	0.0072*	0.0058*	0.0048
	(0.0037)	(0.0035)	(0.0056)
CPG×Low-educated×White	0.1638**	0.1204**	0.1376**
	(0.0775)	(0.0556)	(0.0652)
Distance from homelands×Low-educated×White	0.0045	0.0057	0.0082*
	(0.0055)	(0.0049)	(0.0045)
CGP×Distance from homelands×Low-educated×White	-0.0173*	-0.0132	-0.0148*
	(0.0097)	(0.0083)	(0.0088)
Controls	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes
# observations	11,275	11,275	11,275
# clusters	229	229	229
R^2	0.082	0.080	0.078

Source: Afrobarometer (2000, 2002, 2006, 2008, 2011, 2016, 2018).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in column (2) of Table 5. The variable 'Distance' is measured in 100-miles. The sample covers the period 2000–2018.

Table 7: Event-study analysis of the estimated effect

	Probability of voting for far-right parties in the next national elections			
	No controls		Add controls	
	(1)	(2)	(3)	(4)
a) Pre-treatment placebo				
Placebo in 2000	-0.0548*	-0.0064	-0.0525*	-0.0057
	(0.0318)	(0.0068)	(0.0300)	(0.0062)
Placebo in 2002	-0.0484		-0.0468	
	(0.0294)		(0.0285)	
Test on significance of placebo effects, *p*-value	0.2261	0.3535	0.2062	0.3580
b) Post-treatment impact				
Impact in 2006		0.0484		0.0468
		(0.0294)		(0.0285)
Impact in 2008	0.1396*	0.1880**	0.1416*	0.1884**
	(0.0798)	(0.0776)	(0.0796)	(0.0777)
Impact in 2011	-0.0487*	-0.0003	-0.0429	0.0039
	(0.0286)	(0.0052)	(0.0284)	(0.0053)
Impact in 2016	0.0589	0.1074	0.0636	0.1104
	(0.1025)	(0.0904)	(0.1025)	(0.0910)
Impact in 2018	-0.0401	0.0083**	-0.0429	0.0039
	(0.0291)	(0.0040)	(0.0287)	(0.0046)

Source: Afrobarometer (2000, 2002, 2006, 2008, 2011, 2016, 2018).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications in columns (1) and (2) are the same as in column (1) of Table 5, whilst model specifications in columns (3) and (4) are the same as in column (2) of Table 5. The sample covers the period 2000–2018.

intentions shifted earlier when previous affirmative legislation was introduced. This is important because the CGP policy was the final step in a longer affirmative action process. In columns (2) and (4) of Table 7, we consider the implementation of the BBBEE as the relevant change in policy. Similar to the case for CGP, we do not find evidence of individuals anticipating the policy. For the BBBEE, the tests for the significance of the placebo effect return a *p*-value greater than 0.3. Analyzing the dynamics, we find evidence in favor of the critical role played by the CGP in triggering the backlash. Indeed, the estimated effect in 2006 yields a coefficient that is not statistically different from zero at the 10% level. On the contrary, the coefficient for the 2008 impact is in line with the results from the dynamic analysis using the CGP.

Moreover, we attempt to test the role of the EE — the first South African affirmative action step implemented in 1998. Although it is widely considered a relatively ineffective policy for re-integrating the black majority into the country's economy (Burger et al., 2023), it may have caused fear of potential economic losses among white low-educated individuals, leading to a backlash. We test this hypothesis in Table 8, where we exploit

Table 8: Event-study analysis of the estimated effect using World Values Survey

	Probability of voting for far-right parties in the next national elections		
	(1)	(2)	(3)
a) Pre-treatment placebo			
Placebo at 1996	0.1734**	0.1723	0.1640**
	(0.0840)	(0.1146)	(0.0592)
Placebo at 2001	-0.0043	-0.0044	-0.0113
	(0.0330)	(0.0282)	(0.0329)
Joint significance of placebo effects, *p*-value:			
i) Asymptotic	0.0869	0.4690	0.0287
ii) Wild cluster bootstrap	0.1502	0.3524	0.1121
iii) Randomization inference	0.2197	0.3556	0.1478
b) Post-treatment impact			
Impact in 2013	-0.0160	-0.0173	-0.0255
	(0.0301)	(0.0311)	(0.0268)
Clusterization level	Province	Province + Town size	Province×Town size
# clusters	9	9 + 3	27

Source: World Values Survey (1996, 2001, 2006, 2013).

Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in column (2) of Table 5. The sample covers the period 1996–2013.

the length of information available in the World Values Survey. Specifically, we perform an event-study specification to assess the robustness of the joint test for placebo effects, which also includes one period preceding the implementation of the EE. Because the WVS reports geographic information at the level of large administrative units, we follow MacKinnon et al. (2023) using wild-cluster bootstrapping and randomization inference to account for the small number of clusters available (Roodman et al., 2019; Young, 2019).[23]

In column (1) of Table 8 we illustrate the dynamic analysis using a cluster-robust variance estimator based on information at the provincial level. In column (2) we present the results with a two-way clustering approach. We use information on the size of the town of the respondents as the second dimension of clustering. Finally, in column (3), we show the results with iterative clusters. We find that the early implementation of the EE does not impact the effectiveness of the CGP policy. By and large, the results for the joint significance of the placebo effects suggest that no anticipation occurred before 2008. Indeed, the *p*-values of the tests are not significant at the 10% level in all but two cases. However, these cases refer to the use of a standard cluster-robust variance estimator that

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[23]We used the Stata commands `boottest` and `randcmd` developed by Roodman et al. (2019) and Young (2019). For the Roodman et al.'s (2019) procedure, the *p*-values were obtained by bootstrapping the results 999 times. For the Young's (2019) procedure, the *p*-values were obtained by bootstrapping the results 1,000 times.

is likely to fail with a small number of clusters. Finally, similar to the case reported in Table 7, the estimated effect of the impact in 2013 is not statistically different from zero. Taken together, these findings suggest that the backlash against affirmative action should have started after the implementation of the CGP.

4.3 Heterogeneity analysis

A long-standing query in social sciences is what influences voters' behavior. Individual and contextual characteristics may profoundly shape the political preferences of the voters (Cantoni and Pons, 2022). In this section, we examine the heterogeneity of the effect of affirmative action policies by investigating whether demographic characteristics, such as age or gender, may influence differences in voting intentions.

We first analyze the effects of ageing. Whether individuals become more conservative with age remains an open question. Studies that examine the relationship between age and voting behavior do not provide clear-cut conclusions. For instance, Tilley and Evans (2014) and Peterson et al. (2020) find that aging is associated with a more conservative stance of the individuals. Using a life-cycle approach, Geys et al. (2022) demonstrate that the shift towards conservatism typically occurs around the mid-point of life. However, Goerres (2008) finds no evidence in favor of the hypothesis that older voters are more likely to support conservative parties than younger voters do. We, therefore, explore this relationship by dividing the individual-level sample sourced from Afrobarometer using the median age of the respondents (36 years). Columns (1) and (2) of Table 9 report the results for this analysis. We find that the voting intentions of the individuals do not differ along the age dimension. The point estimate remains positive in both subsamples. This finding is in line with the results presented in Goerres (2008), who shows that older and younger voters are equally likely to support conservative parties.[24]

Second, we divide the sample by gender. Political favor of the electorate may differ depending on the gender of the voters. Previous empirical literature shows that typically men and women hold different political stances (Giger, 2009; Cascio and Shenhav, 2020). On the one hand, women tend to be more left-leaning due to a preference towards redistribution policies (Buser et al., 2020; Koeppl-Turyna, 2021). On the other hand, men tend to show themselves as more supportive of conservative parties (Rippl and Seipel, 1999).

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[24]We also tried different cutoffs at age 40, 45, and 50, finding similar evidence. Results using different thresholds are not reported for brevity. They are available from the authors upon request.

Table 9: Heterogeneity analysis based on individual characteristics

	Probability of voting for far-right parties in the next national elections			
	Above the median	Below the median	Men	Women
	(1)	(2)	(3)	(4)
Low-educated	-0.0054	-0.0085	0.0006	-0.0139***
	(0.0114)	(0.0096)	(0.0033)	(0.0041)
White	-0.0112	-0.0065	-0.0056	-0.0196***
	(0.0138)	(0.0107)	(0.0066)	(0.0061)
CGP×Low-educated	-0.0020	-0.0065**	-0.0043	-0.0017
	(0.0038)	(0.0027)	(0.0042)	(0.0020)
CGP×White	-0.0521**	-0.0426	-0.0601**	-0.0344
	(0.0211)	(0.0346)	(0.0234)	(0.0212)
Low-educated×White	0.0486	0.0038	0.0467	0.0301
	(0.0297)	(0.0105)	(0.0372)	(0.0210)
CGP×Low-educated×White	0.0780	0.1153	0.0599	0.1069*
	(0.0483)	(0.0807)	(0.0527)	(0.0573)
Controls	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes
# observations	5,631	5,637	5,696	5,570
# clusters	223	224	225	224
R^2	0.081	0.104	0.081	0.085

Source: Afrobarometer (2000, 2002, 2006, 2008, 2011, 2016, 2018).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in column (2) of Table 5. The median age of the sample is 36. The sample covers the period 2000–2018.

There is also evidence suggesting that differences in political views may be due to mediating factors such as education or occupation (Howell and Day, 2000; Givens, 2004). In columns (3) and (4) of Table 9, we test whether our findings on the political preferences may be driven by such gender bias. We find that men and women from the low-educated white minority group share similar political preferences. This piece of evidence is in line with previous findings that show that the gender gap in political preferences for right-wing parties tends to narrow in subgroups such as blue-collar workers or low-educated individuals (Givens, 2004).

4.4 Potential mechanisms

In this section, we explore the reasons why political support for far-right parties grew after the implementation of the affirmative action legislation.

The package of affirmative action policies increased the competition in labor markets by favoring the integration of the previously disenfranchised black majority. The

legislation aimed to improve the economic standings of this group that was historically discriminated against during the apartheid regime. Several recent studies have shown that increasing competition in labor markets by favoring outsiders may yield unintended consequences for the targeted group. For instance, the increase in competition may lead to a rise in support for populist parties, as demand for protection increases due to growing economic insecurity (see e.g., Mughan et al., 2003; Rebechi and Rohde, 2023; Guiso et al., 2024b). Furthermore, improving the social standing of a marginalized group at the expense of others may foster inter-ethnic conflict and lead to social violence (see e.g., Olzak and Shanahan, 1996; Mitra and Ray, 2014; Sharma, 2015). By leveraging the wealth of data assembled, we empirically test whether the occurrence of the backlash may be explained by one of (or both) these channels.

First, we use individual-level data from Afrobarometer to analyze whether the passage of the legislation worsened the (perceived) economic situation of the low-educated white minority. We examine the impact of the reform on several dimensions of economic insecurity. First, we use a survey item that asks individuals to rate their own economic condition at the time of the interview. Second, we select two survey items that ask respondents to assess their own condition with respect to the 12 months before and after the time of the interview. Third, we use a survey item that asks people to rate their own condition in comparison to others at present. For each of these cases, five answers are available: 'much worse', 'worse', 'same', 'better', and 'much better'. We assign value 1 to 'much better' and 5 to 'much worse'. Therefore, higher scores reflect greater levels of economic insecurity. In Table 10 and Online Appendix Table C.5, we show the results for the standard OLS and the marginal effects for the ordered logit estimators. We find that the implementation of the CGP increased the economic insecurity perceived by individuals from the low-educated white minority group. This insecurity refers to their own condition relative to the future. We find that these individuals are 4.3 percentage points more likely to see themselves as worse off when thinking about their future prospects. Furthermore, they are 15.5 percentage points less likely to perceive themselves as better off financially.

Second, we utilize information sourced from ACLED to investigate whether the package of policies intensified ethnic conflict in the post-reform period. We conduct the analysis at the aggregate level by combining information on the number of incidents with demographic information from census records. For each municipality, we create an indicator for the total number of incidents motivated by ethnic tension that occurred in a

Table 10: Effect of AAP on economic insecurity

| | Economic insecurity with respect to: | | | |
	Others at present	Own condition relative to past	Own condition at present	Own condition relative to future
	(1)	(2)	(3)	(4)
Low-educated	0.1130	0.0031	0.7551***	-0.3264***
	(0.3433)	(0.8000)	(0.0977)	(0.0932)
White	-0.0305	1.0392	0.5438	0.0234
	(0.4889)	(0.7958)	(0.7023)	(0.0708)
CGP×Low-educated	0.0747**	-0.0409	-0.0617	0.0457
	(0.0384)	(0.0558)	(0.0514)	(0.0553)
CGP×White	-0.3800***	-0.2380***	-0.2146**	-0.3660***
	(0.0844)	(0.0905)	(0.0968)	(0.1234)
Low-educated×White	0.1623	-0.9706	-0.6132	0.2671
	(0.4520)	(0.8150)	(0.6164)	(0.2496)
CGP×Low-educated×White	0.1841	0.2248	-0.1080	0.5169**
	(0.1426)	(0.2214)	(0.1570)	(0.2555)
Controls	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes
# observations	11,111	6,121	9,344	5,849
# clusters	229	220	226	220
R^2	0.101	0.029	0.072	0.090

Source: Afrobarometer (2000, 2002, 2006, 2008, 2011, 2016, 2018).

Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in column (2) of Table 5. The sample covers the period 2000–2018.

given year.[25] In Table 11, we present the findings for this analysis. Column (1) shows the simple means difference between the pre- and post-completion periods. Columns (2) and (3) refer to the same model specification as described in Equation (1). We find that the implementation of the CGP did not exacerbate ethnic conflict between groups in the post-completion period. This finding is robust even after accounting for common shocks and time-varying heterogeneity across municipalities. We also conduct an event study to understand the dynamics of the estimated effect and show the related plot in Online Appendix Figure C.1. By and large, the number of incidents motivated by ethnic conflict remained relatively stable over time, with the notable exception of a spike in 2011. However, this peak is not due to a specific heightening in ethnic conflict, but rather it refers to a year of particular generalized unrest that occurred in South Africa.

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[25]We define an incident as motivated by ethnic conflict using a two-step procedure. First, we retain all entries that report at least one of the following keywords in the description: Afrikaner, apartheid, colonial, ethnic, extremist, language, race, racial, white, wing. Second, we scrutinize and assess each entry individually to determine which ones refer to an episode of ethnic conflict. In this way, we identify 89 incidents motivated by ethnic conflict.

Table 11: Effect of AAP on number of incidents due to ethnic conflict

	No. of incidents motivated by ethnic conflict		
	(1)	(2)	(3)
CGP	0.0025		
	(0.0043)		
CGP×Share of low-educated whites		0.5631	0.4739
		(0.7162)	(0.8158)
Controls	No	No	Yes
Municipality FE	Yes	Yes	Yes
Election year FE	No	Yes	Yes
# observations	4,796	4,796	4,796
# clusters	218	218	218
R^2	0.202	0.212	0.216

Source: Armed Conflict Location and Event Data Project (1997–2018) and Statistics South Africa (1991, 2001, 2011).

Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in columns (1) to (3) of Table 1. The sample covers the period 1997–2018.

5   Conclusions

This paper examined the potential backlash effect against affirmative action policies, using the unique historical context of the legacy of the apartheid regime in democratic South Africa. We leveraged the relatively high level of information capacity of South Africa to study both the macro and micro implications of the affirmative action legislation. For the aggregate-level analysis, we assembled a novel dataset that combines administrative census records from both the democratic and segregation periods with information on the electorate's voting behavior since the advent of democracy. For the individual-level analysis, we created two comparable datasets using survey data from the Afrobarometer Survey Project and the World Values Survey Project.

We used these datasets to study whether affirmative action policies led to changes in individuals' political preferences and found that the implementation of affirmative action legislation triggered a backlash in favor of far-right parties among the low-educated segment of the white minority. We further documented that such an effect is particularly pronounced in areas located closer to the former homelands established during the apartheid regime. We also found that the enactment of the policies increased individuals' intentions to support far-right parties in the next national election. Overall, we found that the backlash occurred only after the implementation of the Codes of Good Practice, the

last policy of the affirmative action process in labor markets in South Africa.

These findings are robust to an extensive set of robustness checks by means of placebo regressions. The heterogeneity analysis revealed that the political shift is homogeneous across individual characteristics like age and gender. We explored potential mechanisms for why this shift occurred and found that the increased support for far-right parties by low-educated members of the white minority is primarily due to higher economic insecurity about the future. We did not find evidence of an increase in ethnic conflict in the period after the completion of the legislation, however.

Our results are consistent with previous empirical literature that documents backlash effects as a consequence of affirmative action policies. Nonetheless, our analysis adds to the existing literature by providing evidence on potential mechanisms behind the rise of the backlash such as (perceived) higher economic insecurity.

The analysis presented in this work emphasizes the importance of addressing the adverse effects of affirmative action, such as the rise of economic insecurity among some parts of the population, in order to design effective policies that reduce the potential negative consequences in other dimensions.

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Online appendix

A Data

We analyze extensive data from South Africa to examine whether the implementation of affirmative action policies after the end of legislative apartheid caused a backlash among low-educated members of the white minority. We create several datasets to study this phenomenon at both the aggregate and individual levels. We use information from administrative records to perform aggregate analysis and employ survey data to carry out individual-level analysis. In the following sections, we provide a detailed explanation of the data construction process.

A.1 Administrative data

We gather voting data from the Independent Electoral Commission (IEC) of South Africa, the country's official election management agency. The agency was established in 1996 and is responsible for the proper organization and implementation of all elections in South Africa, both at the national and local levels. We focus on the National General Elections held in 1999, 2004, 2009, 2014, and 2019. For each election, we collect information about the voting behavior of the electorate at the voting district level. We enhance this data with demographic information gathered by Statistics South Africa (StatsSA), the country's census agency.

After the end of the apartheid regime, StatsSA conducted four census waves in 1996, 2001, 2011, and 2022. Due to substantial structural changes since the inception of democracy, our analysis focuses exclusively on the decadal censuses of 2001 and 2011. In particular, this decision is motivated by two circumstances. First, in 1996, South Africa conducted its first comprehensive national census since the democratic era began. However, the legal foundations of the Republic of South Africa had yet to be established. President Nelson Mandela officially promulgated the Constitution of South Africa only in 1997, three years after democracy was introduced. One year later, in 1998, the Local Government Municipal Demarcation Act was enacted, establishing the official administrative boundaries of the new democratic South Africa. As a result, the administrative boundaries of the 1996 census are not comparable to those of later censuses. For the 1996 census, the smallest geographic unit of observation is the transitional local authority, which does not have an equivalent in the current municipalities' structure. Second, for the 2022 census,

there is no available shapefile of the country's administrative divisions. We therefore enrich the census data with information from the last census conducted under the apartheid regime (i.e., the 1991 census). We obtained a digital map of nearly all enumeration areas (EAs) in South Africa in 1991 and spatially linked it to the country's municipal geography in 2011.[26]

Figure A.1 explains the procedure. The thick black lines show the administrative boundaries of municipalities in South Africa in 2011, while the thin red lines outline the borders of the EAs in 1991. The white polygons represent areas where information about the EAs was not available in 1991. These areas correspond to the former Ciskei and Transkei, two of the homelands during apartheid. For each available polygon in 1991, we calculate the centroid point and link it to the 2011 municipal geography. As a result, each municipality in 2011 contains a certain number of EAs that were established in 1991. The green dots refer to the calculated centroid points.[27] We use the information in this crosswalk file to match each individual record in the censuses to the corresponding municipality in 2011. Afterwards, we aggregate the sample at the municipality level and combine it with data on the voting behavior of the electorate during the democratic period. Since voting information was provided at the voting district level, we aggregated districts to match the available information at the municipality level censuses.[28]

This procedure enables us to create a unique dataset that covers South Africa's history, bridging both the democratic and segregation eras. However, limitations remain. First, we can only link the last census wave conducted under the apartheid regime. Although StatsSA has made the full historical archive available since the early 1960s, to the best of our knowledge, there are no other digital maps of South Africa's spatial division for previous censuses that might allow researchers to link waves before 1991. Second, under the apartheid regime in the 1950s, the National Party enacted three key laws to establish the 'separate development' system: the Population Registration Act (1950), the Group Areas Act (1950), the Bantu Authorities Act (1951), and the Bantu Self-Governing Act (1959). This collection of laws created the so-called system of homelands, where specific

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[26]Enumeration areas correspond to the smallest geographic unit of the South African administrative division. We are profoundly grateful to Daniel De Kadt and Melissa Sands for sharing the 1991 EAs shapefile. We also acknowledge the valuable insights they provided.

[27]We use the QGIS functions "`Centroids`" and "`Join Location By Attributes`" to calculate the centroid points and join the locations together. We choose the attribute "`contain`" because each municipality contains several EAs, thus creating a 1-to-many crosswalk file.

[28]In our sample, each voting district is assigned to a specific municipality. We re-create each municipality by grouping all the voting districts sharing the same municipality name.

Figure A.1: Map of South African administrative division in 1991 and 2011
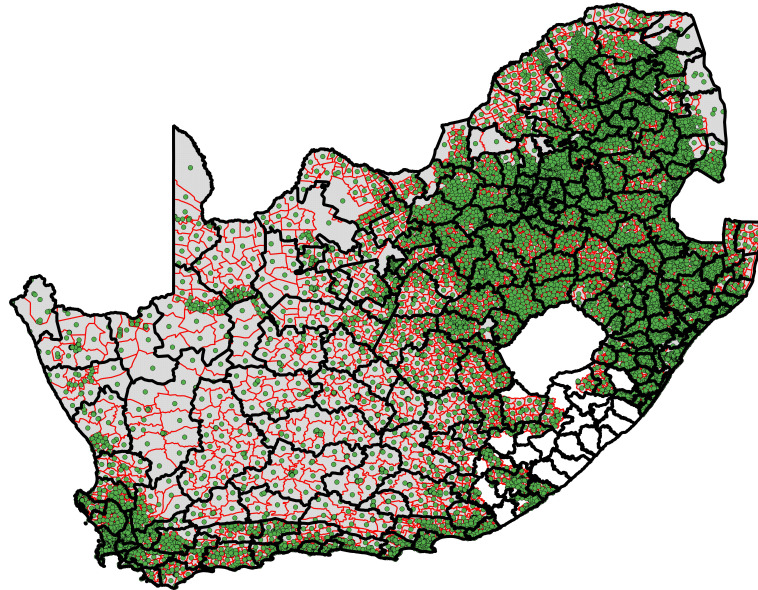
areas of South Africa were solely designated to support the lives of black South Africans. Out of ten proclaimed homelands, four were officially considered 'independent' from the rest of the country by the ruling white minority government. As a result, these areas were typically excluded from censuses conducted during the apartheid regime.[29] Therefore, we account for 218 of the 234 existing municipalities in 2011.

Finally, we standardized the data by imputing missing demographic information of

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[29]The four independent homelands were Bophuthatswana, Ciskei, Transkei, and Venda. These nominally independent countries had their own parallel administrative apparatus, including a homeland government and a census agency. The 1991 South African census provided separate records for these areas. However, linking these records to the digital map shown in Figure A.1 has been proven challenging for two main reasons. First, the homelands of Ciskei and Transkei never submitted their records to the central government in 1991. Second, due to coding discrepancies for the EAs' serial numbers, records for the homelands of Bophuthatswana and Venda could not be linked to the 1991 digital map. Nevertheless, as the focus of the paper is on the white minority, we feel confident that these missing observations are not relevant for the study.

municipalities during election years using predictions based on the linear trend observed between decadal censuses.

A.2 Survey data

We collected individual-level data from the Afrobarometer Survey Project, a large-scale repeated cross-section survey covering most African countries (Afrobarometer, 2018). For each country in each wave, Afrobarometer selects a random sample of individuals representative of the voting-age population. Typically, nationally representative samples range from 1,200 to 2,400 units per wave.[30] Interviews are conducted in local languages, and questions are standardized to ensure comparability across countries. We focus on interviews conducted from 2000 to 2018 to maintain consistency with the administrative records provided by Statistics South Africa. Afrobarometer collects data on a wide range of topics. We use the restricted version of the dataset, which also reports the geospatial information of individuals, including the latitude-longitude coordinates of where the interviews took place. For each survey wave, we utilize this geographic information to assign all units to their respective municipalities using a method similar to the one described in Section A.1.

Finally, we also gather data from the World Values Survey Project (Inglehart et al., 1998, 2004, 2008, 2014). Started in 1981, the WVS is the largest cross-country study on human beliefs and social values worldwide. According to the latest report, the survey has covered more than 120 countries since its inception, currently representing nearly 95% of the global population. Similar to Afrobarometer, the WVS conducts interviews in local languages using standardized questionnaires. Additionally, for each country, it selects a nationally representative sample of at least 1,200 individuals per wave. We use data from waves 3 to 6, covering the period from 1996 to 2013.

A.3 Ethnic conflict data

We gather data on ethnic conflict and political violence from the Armed Conflict Location & Event Data (ACLED) archive (Raleigh et al., 2010; Raleigh and Dowd, 2015). This open-access database records all conflicts worldwide since January 1, 1997. For each event, ACLED includes details such as the involved actors and their types, motiva-

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[30]For more details, visit https://www.afrobarometer.org/feature/annual-report-2023/ (last accessed January 13, 2025).

tions, casualty counts, geographic coordinates (latitude and longitude), and a short event description. We identify incidents driven by ethnic conflict through a two-step process. First, we keep all entries that mention at least one of the following keywords in their description: Afrikaner, apartheid, colonial, ethnic, extremist, language, race, racial, white, wing. Second, we carefully review each of these entries to determine which ones specifically refer to an episode of ethnic conflict. This method results in the identification of 89 incidents from 1997 to 2018. Finally, we combine data on the number of incidents caused by ethnic conflict with demographic information from census records, following the same procedure described in Section A.1.

B Summary statistics of the dataset employed

Table B.1: Summary statistics

	Obs.	Mean	Std. dev.	Min.	Max.
a) StatSA-IEC sample					
Outcome variable					
Share of votes cast to far-right parties	1,090	0.0202	0.0204	0.0000	0.1431
Treatment variable					
Share of low-educated white in labor force in 1991	1,090	0.0118	0.0095	0.0000	0.0642
Control variables					
Population	1,090	171,758.4899	405,082.5635	5,001.0000	3,863,862.0000
Share of blacks	1,090	0.7391	0.3132	0.0000	1.0000
Share of blacks whose level of education is equivalent to:					
Less than high school diploma	1,090	0.7264	0.0797	0.2241	0.9252
High school diploma	1,090	0.1245	0.0593	0.0000	0.3600
More than high school diploma	1,090	0.0310	0.0359	0.0000	0.7714
Share of whites whose level of education is equivalent to:					
Less than high school diploma	1,090	0.4009	0.1234	0.0000	1.0000
High school diploma	1,090	0.3283	0.0953	0.0000	1.0000
More than high school diploma	1,090	0.2067	0.0977	0.0000	0.7720
Distance from closest homeland's enclave (in miles)	1,090	161.8597	207.7687	1.8196	841.2824
Distance from closest homeland on average (in miles)	1,090	277.7517	210.1124	21.1250	990.9485
Distance from closest homelands' enclaves: (in miles)					
5th percentile	1,090	261.6892	248.5365	18.0686	983.7158
10th percentile	1,090	331.9314	277.3204	47.0492	1,074.8914
25th percentile	1,090	424.4472	291.2324	123.7044	1,245.5209
50th percentile	1,090	587.9231	293.3399	288.3383	1,361.1505
b) Afrobarometer sample					
Outcome variables					
Share of respondents can vote for either FF or AUM	11,275	0.0079	0.0885	0.0000	1.0000
Economic insecurity with respect to:					
Others at present	11,111	2.9311	1.0913	1.0000	5.0000
Own conditions relative to past	6,123	2.8575	0.9606	1.0000	5.0000
Own conditions at present	9,344	3.0408	1.2846	1.0000	5.0000
Own conditions relative to future	5,849	2.4141	1.0725	1.0000	5.0000
Control variables					
Share of blacks	11,275	0.7405	0.4384	0.0000	1.0000
Share of black whose level of education is equivalent to:					
Less than high school diploma	11,275	0.3880	0.4873	0.0000	1.0000
High school diploma	11,275	0.2463	0.4309	0.0000	1.0000
More than high school diploma	11,275	0.1052	0.3068	0.0000	1.0000
Share of whites	11,275	0.1014	0.3018	0.0000	1.0000
Share of whites whose level of education is equivalent to:					
Less than high school diploma	11,275	0.0148	0.1208	0.0000	1.0000
High school diploma	11,275	0.0412	0.1987	0.0000	1.0000
More than high school diploma	11,275	0.0452	0.2078	0.0000	1.0000
Distance from closest homeland's enclave (in miles)	11,275	153.1596	211.0150	1.8196	841.2824
Distance from closest homeland on average (in miles)	11,275	262.4920	195.7555	21.1250	990.9485
Distance from closest homelands' enclaves: (in miles)					
5th percentile	11,275	240.1564	248.4062	18.0686	983.7158
10th percentile	11,275	314.7324	264.4083	47.0492	1,074.8914
25th percentile	11,275	401.8972	281.5961	123.7044	1,245.5209
50th percentile	11,275	557.9742	294.7332	288.3383	1,361.1505
c) Armed Conflict Location and Event Data Project sample					
Outcome variable					
No. of incidents motivated by ethnic conflict	4,796	0.0171	0.1772	0.0000	40.000
Treatment variable					
Share of low-educated whites in labor force in 1991	4,796	0.0118	0.0095	0.0000	0.0642
Control variables					
Population	4,796	20,313.7004	47,063.9329	305.0000	751,152.0000
Share of blacks	4,796	0.7368	0.3146	0.0000	1.0000
Share of blacks whose level of education is equivalent to:					
Less than high school diploma	4,796	0.7390	0.0722	0.2496	0.9333

(continued on next page)

	Obs.	Mean	Std. dev.	Min.	Max.
High school diploma	4,796	0.1153	0.0541	0.0000	0.3400
More than high school diploma	4,796	0.0289	0.0310	0.0000	0.7286
Share of whites whose level of education is equivalent to:					
Less than high school diploma	4,796	0.4114	0.1154	0.0000	1.0000
High school diploma	4,796	0.3246	0.0870	0.0000	1.0000
More than high school diploma	4,796	0.2000	0.0909	0.0000	0.7380
d) World Values Survey sample					
Outcome variable					
Share of respondent can vote for either FF or AUM	9,865	0.0192	0.1371	0.0000	1.0000
Control variables					
Share of blacks	9,865	0.6430	0.4791	0.0000	1.0000
Share of blacks whose level of education is equivalent to:					
Less than high school diploma	9,865	0.4052	0.4909	0.0000	1.0000
High school diploma	9,865	0.2052	0.4038	0.0000	1.0000
More than high school diploma	9,865	0.0291	0.1681	0.0000	1.0000
Share of whites	9,865	0.1935	0.3951	0.0000	1.0000
Share of whites whose level of education is equivalent to:					
Less than high school diploma	9,865	0.0391	0.1939	0.0000	1.0000
High school diploma	9,865	0.1057	0.3075	0.0000	1.0000
More than high school diploma	9,865	0.0365	0.1875	0.0000	1.0000

Sources: Armed Conflict Location & Event Data (1997–2018), Afrobarometer (2000–2018), Directorate of Public State Land Support via Africa Open Data, Independent Electoral Commission (1999, 2004, 2009, 2014, 2019), Statistics South Africa (1991, 2001, 2011) and World Values Survey (1996–2013).

Notes: We considered as far-right the following list of parties: i) Freedom Front, ii) Afrikaner Unity Movement and iii) Freedom Front Plus. Incidents motivated by ethnic conflict were identified using a two-step procedure. First, we filtered the following list of keywords: Afrikaner, for apartheid, colonial, ethnic, extremist, language, race, racial, white, wing. Thereafter, we scrutinized and evaluated each entry one-by-one.

C   Additional estimation results

Table C.1: Main estimation results using general population as reference group

	Share of votes for far-right parties			
	(1)	(2)	(3)	(4)
CGP	0.0007***			
	(0.0002)			
CGP×Share of low skilled whites		0.1613***	0.1050*	0.2027***
		(0.0485)	(0.0562)	(0.0526)
Controls	No	No	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes
Election year FE	No	Yes	Yes	Yes
# observations	1,090	1,090	1,090	1,090
# clusters	218	218	218	218
R^2	0.732	0.838	0.841	0.848

Sources: Independent Electoral Commission (1999, 2004, 2009, 2014, 2019) and Statistics South Africa (1991, 2001, 2011).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in Table 1. The sample covers the period 1999–2019.

Table C.2: Effect of AAP using different distance metrics

	Share of votes for far-right parties		
	Enclaves within 5th perc.	Enclaves within 25th perc.	Enclaves within 50th perc.
	(1)	(2)	(3)
CGP×Share of low-educated whites	0.2272**	0.2975**	0.3587**
	(0.0934)	(0.1160)	(0.1417)
CGP×Distance from homelands	0.0018***	0.0016***	0.0014***
	(0.0005)	(0.0004)	(0.0004)
CGP×Share of low-educated whites×Distance from homelands	-0.0462	-0.0473*	-0.0392
	(0.0295)	(0.0267)	(0.0244)
Controls	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Election year FE	Yes	Yes	Yes
# observations	1,090	1,090	1,090
# clusters	218	218	218
R^2	0.837	0.837	0.836

Sources: Independent Electoral Commission (1999, 2004, 2009, 2014, 2019) and Statistics South Africa (1991, 2001, 2011).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in Table 2. The variable 'Distance' is measured in 100-miles. The sample covers the period 1999–2019.

Table C.3: Effect of AAP depending on distance using ethnic concentration index

	Share of votes for far-right parties					
	Enclaves within 10th percentile	Closest homeland enclave	Closest homeland on average	Enclaves within 5th perc.	Enclaves within 25th perc.	Enclaves within 50th perc.
	(1)	(2)	(3)	(4)	(5)	(6)
CGP×Share of low skilled whites	0.3256***	0.2195**	0.3352***	0.2869***	0.3622***	0.4216***
	(0.0984)	(0.0866)	(0.1050)	(0.0887)	(0.1093)	(0.1353)
CGP×Distance from homelands	0.0016***	0.0015**	0.0018***	0.0017***	0.0015***	0.0012***
	(0.0005)	(0.0007)	(0.0006)	(0.0005)	(0.0004)	(0.0004)
CGP×Share of low skilled whites×Distance from homelands	-0.0492*	-0.0210	-0.0489	-0.0470*	-0.0479*	-0.0388
	(0.0276)	(0.0421)	(0.0335)	(0.0282)	(0.0259)	(0.0242)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes	Yes	Yes	Yes
Election year FE	Yes	Yes	Yes	Yes	Yes	Yes
# observations	1,090	1,090	1,090	1,090	1,090	1,090
# clusters	218	218	218	218	218	218
R^2	0.838	0.838	0.838	0.838	0.838	0.837

Sources: Independent Electoral Commission (1999, 2004, 2009, 2014, 2019) and Statistics South Africa (1991, 2001, 2011).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in Table 2. The variable 'Distance' is measured in 100-miles. The sample covers the period 1999–2019.

Table C.4: Effect of AAP on intentions to vote using different distance metrics

	Probability of voting for far-right parties in the next national elections		
	Enclaves within 5th percentile	Enclaves within 25th percentile	Enclaves within 50th percentile
	(1)	(2)	(3)
Low-educated	-0.0078	-0.0086	-0.0091
	(0.0080)	(0.0086)	(0.0081)
White	0.0038	0.0206	0.0309*
	(0.0129)	(0.0178)	(0.0174)
CGP×Distance from homelands	0.0009	0.0011	0.0006
	(0.0008)	(0.0008)	(0.0006)
CGP×Low-educated	-0.0030	-0.0020	-0.0024
	(0.0036)	(0.0046)	(0.0051)
CGP×White	-0.0689***	-0.0779***	-0.0943***
	(0.0258)	(0.0299)	(0.0330)
Distance from homelands×Low-educated	0.0008	0.0008	0.0007
	(0.0008)	(0.0007)	(0.0006)
Distance from homelands×White	-0.0092**	-0.0088**	-0.0097***
	(0.0036)	(0.0034)	(0.0029)
Low-educated×White	0.0360	0.0213	0.0299
	(0.0277)	(0.0319)	(0.0413)
CGP×Distance from homelands×Low-educated	-0.0001	-0.0003	-0.0001
	(0.0007)	(0.0008)	(0.0006)
CGP×Distance from homelands×White	0.0062*	0.0058*	0.0074**
	(0.0034)	(0.0032)	(0.0032)
CGP×Low-educated×White	0.1460**	0.1697**	0.1991**
	(0.0662)	(0.0765)	(0.0912)
Distance from homelands×Low-educated×White	0.0044	0.0054	0.0041
	(0.0046)	(0.0039)	(0.0044)
CGP×Distance from homelands×Low-educated×White	-0.0166*	-0.0156**	-0.0168**
	(0.0089)	(0.0078)	(0.0085)
Controls	Yes	Yes	Yes
Municipality FE	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes
# observations	11,275	11,275	11,275
# clusters	229	229	229
R^2	0.081	0.081	0.084

Source: Afrobarometer (2000, 2002, 2006, 2008, 2011, 2016, 2018).
Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in column (2) of Table 5. The variable 'Distance' is measured in 100-miles. The sample covers the period 2000–2018.

Table C.5: Marginal effect of AAP on economic insecurity

		Economic insecurity with respect to:			
		Others at present	Own condition relative to past	Own condition at present	Own condition relative to future
Treatment	Class	(1)	(2)	(3)	(4)
CGP×Low-educated×White	Much better	-0.0225	-0.0309	0.0124	-0.1546**
		(0.0173)	(0.0277)	(0.0201)	(0.0663)
	Much worse	0.0243	0.0233	-0.0207	0.0431**
		(0.0188)	(0.0207)	(0.0333)	(0.0175)

Source: Afrobarometer (2000, 2002, 2006, 2008, 2011, 2016, 2018).

Notes: * Significant at 10%, ** significant at 5% and *** significant at 1%. Regression method is the ordered logit model. Standard errors robust to heteroskedasticity and within-municipality correlation reported in parentheses. Model specifications are the same as in column (2) of Table 5. The sample covers the period 2000–2018.

Figure C.1: Eventy-study analysis of the estimated effect on ethnic conflict
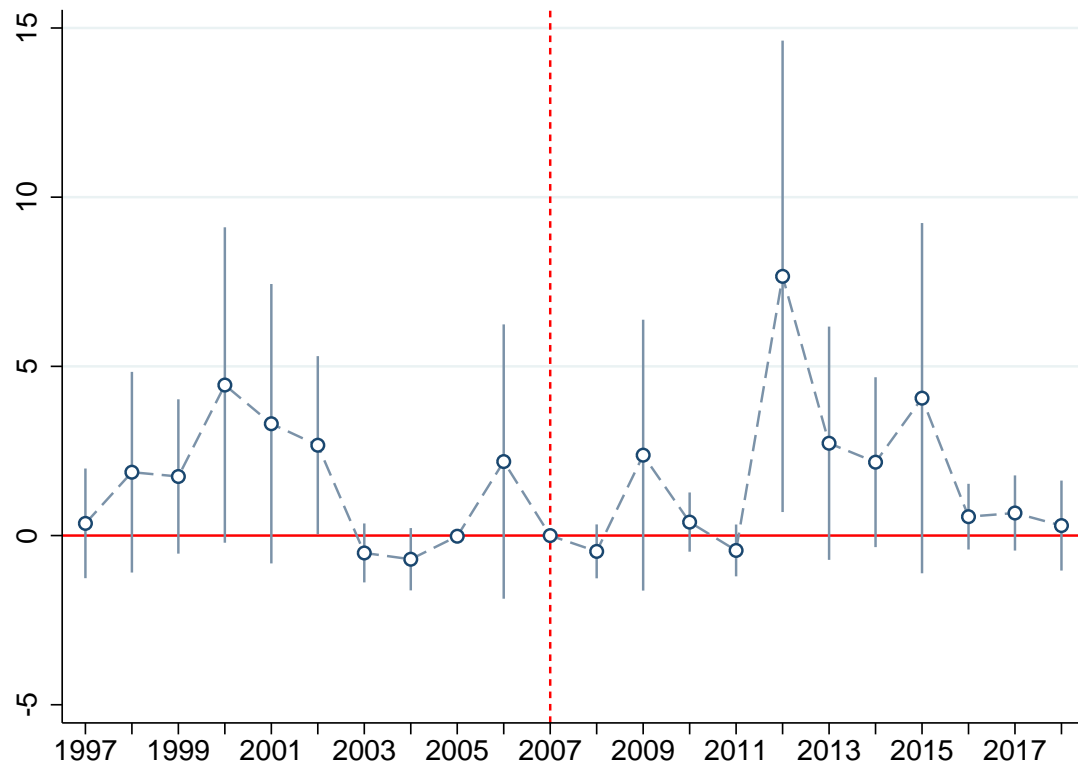
Notes: The red dashed vertical line refers to the period $t-1$ with respect to the enactment of the policy. The light blue vertical lines refer to the 90% confidence interval of the estimated coefficients. The treatment is share of low-educated white South African workers in labor force in 1991. The p-value for test of joint significance of the placebo effects is 0.1845.