Dictatorship, Higher Education and Social Mobility*

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Abstract: We study the relationship between political regimes, education, and redistribution, focusing on the 1973 coup that brought Augusto Pinochet to power in Chile. We show that the Pinochet dictatorship's aims of political control and fiscal conservatism led to a sharp reduction in openings for new students in all universities in the country. Individuals who reached college age shortly after the coup experienced a large decline in college enrollment, had worse labor market outcomes throughout their lives, and struggled to climb up the socioeconomic ladder. This suggests a negative link between dictatorship and social mobility. We further show that limited educational opportunities affect political behavior, as those affected by the educational contraction increasingly voted against Pinochet in the 1988 plebiscite that triggered Chile's return to democracy. Hence, policies that foster regime survival in the short run may prove detrimental over a longer time horizon if a democratic window of opportunity arises.

Keywords: Chile, Pinochet, education, redistribution, democratization
Word count: 11,938

1 Introduction

Prominent theories of regime change posit a strong link between democracy and redistribution, which can take place through direct transfers or through the provision of public goods, including education (Boix 2003; Acemoglu and Robinson 2006). However, the empirical relationship between democracy, education, and redistribution remains undetermined (Lindert 2004; Ansell 2010; Acemoglu et al. 2015; Scheve and Stasavage 2017). Moreover, it is unclear whether any correlation reflects a causal relationship and how this may affect downstream social outcomes. Empirical progress on these topics has faced several important hurdles. First, sources of plausibly exogenous variation in political regimes are hard to find. Second, downstream outcomes may require a long time to materialize. Third, appropriate data to measure these outcomes is often unavailable.

In this paper, we study the relationship between political regimes, education, and social mobility in Chile. Our analysis is centered around the military coup that took place on September 11 of 1973, when socialist president Salvador Allende was overthrown and replaced by a junta led by Augusto Pinochet. Before the coup, college enrollment had been rapidly expanding in response to the demand for economic opportunities by the growing urban middle class. After the coup, universities were targeted as part of the new regime's attempt to eradicate all left-wing opposition. This political objective, combined with a technocratic concern about government spending, led the dictatorship to steadily reduce funding for higher education over the following years, which forced all universities to downscale. This mostly took place through a reduction in openings for incoming students and caused a sharp fall in college enrollment.

To study the impact of the contraction of higher education, we exploit quasi-random exposure to diminished educational opportunities across birth cohorts that reached college age in a narrow window around the military coup. We show that cohorts reaching college age shortly after the coup exhibit a sharp downward kink in college enrollment, despite no visible change in secondary completion. A complementary synthetic-control analysis using harmonized census data from other countries confirms the existence of a sizable gap in college completion for these Chilean cohorts.

We then combine information from the population census and a large household survey (CASEN) to check for analogous kinks in the cohort-level trends of various labor market outcomes, income and wealth, over a 27-year period.

We find that the affected cohorts exhibit a large negative kink in the probability of having a professional occupation (e.g., doctor, lawyer), which is offset by upward kinks in the probability of having various blue-collar or low-skill occupations (e.g., clerks, domestic workers, street food vendors). In addition, these cohorts exhibit downward kinks in labor force participation and an opposite upward kink in unemployment. We also document downward kinks in the probability of being in the top quintiles of the wealth (1992) or income (1990-2017) distributions for the affected cohorts. These results suggest that the educational contraction after the military coup hindered social mobility for an entire generation. Consistent with the previous evidence, a survey for Santiago spanning more than 50 years shows that inequality was falling before the coup, increased during the dictatorship, and declined (but only somewhat) after democratization in 1990.

While the contraction of higher education was seemingly successful at reducing political agitation in the early years of the Pinochet dictatorship, its long-term consequences for regime survival remain unclear. To answer this question, we turn our attention to the pivotal 1988 plebiscite that asked voters to decide whether they wanted Pinochet to continue in power (SI option) or to have open presidential elections instead (NO option). Using individual-level data on the universe of Chilean voters in 2017, we show that the affected cohorts exhibit an upward kink in voter registration before the plebiscite, which we interpret as an indication of enhanced political mobilization. To further understand the electoral consequences of reduced educational opportunities, we estimate county-specific measures of the downward kink in college enrollment. We then document a robust positive correlation between this local impact measure and support for NO, which won with 55% of votes and triggered Chile's return to democracy.

In the next section, we provide a theoretical framework and review related literature. Section 3 provides a historical overview of higher education in Chile and describes the policy changes introduced by the Pinochet dictatorship. Section 4 introduces our main data sources and presents our empirical strategy. Section 5 studies educational attainment for the cohorts reaching college

age after the coup and section 6 examines downstream socioeconomic effects. Section 7 studies political behaviors. Section 8 concludes.

2 Theoretical Framework and Related Literature

Our paper speaks to a large literature studying the link between political regimes and redistribution. Inspired by the seminal works of Romer (1975) and Meltzer and Richard (1981), canonical models in this literature associate democratization with gains in political power for poorer segments of society, which leads to the implementation of redistributive policies (Boix 2003; Acemoglu and Robinson 2006). Prominent among such policies is educational expansion, *the great equalizer*.

Naturally, the prospect of redistribution is unattractive for the minority that benefits under autocracy, which provides an incentive to implement policies that reduce the threat of democratization.[1] Given that universities typically foster critical enquiry, political debate, and social activism, authoritarian regimes are particularly inclined to restrict access to higher education. However, autocracies face a trade-off between the political threat posed by a more educated population and the economic loss resulting from lower human capital (Bourguignon and Verdier 2000; Cantoni and Yuchtman 2013). This trade-off can be captured by a simple payoff function for the dictator when facing the possibility to either expand or contract the higher education system:

$$\Pi(c) \equiv p(c) \cdot \tau Y(c) \tag{1}$$

where c is the percentage of the population with access to higher education, $p(c)$ is the *perceived* probability of regime survival as a function of college access, $Y(c)$ is the national product with $Y' > 0$ and $Y'' < 0$ (i.e., positive but decreasing marginal returns to college expansion), and τ is the rate of dictatorial extraction (e.g., taxes). Taking the first derivative with respect to c:

$$\frac{\partial \Pi(c)}{\partial c} = \tau \left[\frac{\partial p}{\partial c} Y(c) + \frac{\partial Y}{\partial c} p(c) \right] \gtreqless 0 \tag{2}$$

[1] Alternatively, the ruling elite can try to shape the design of democratic institutions in their favor, as Albertus and Menaldo (2018) and Londregan (2007) argue was the case in Chile with Pinochet's new constitution in 1980.

We can see that the dictator will expand higher education if the marginal product of college access is higher than its backlash effect on regime survival. Conversely, the dictator contracts the system if the regime survival effect is stronger. A necessary condition for this to happen is $p' < 0$ (i.e., contraction increases the probability of regime survival). Which effect dominates is ultimately an empirical question and the answer is likely to depend on the specific context of study (Connelly and Grüttner 2005).[2] As we show below, the answer may also depend on the time horizon: policies that contribute to regime stability in the short run may cause grievances and backfire over a longer period (Bautista et al. 2020). If not taken into consideration, this heterogeneous impact over time can lead to erroneous decisions (Treisman 2020).

A large empirical literature has studied the relationship between political regimes and redistribution, with mixed findings (Acemoglu et al. 2015; Scheve and Stasavage 2017). As expected, education has garnered substantial attention in this literature, but most research has focused on primary and secondary education, and the resulting body of evidence remains inconclusive (e.g., Baum and Lake 2003; Brown and Hunter 2004; Harding and Stasavage 2013; Paglayan 2021). Evidence specifically on higher education is more limited and points to a null effect (Stasavage 2005; Gallego 2010). Our paper contributes to this literature by providing novel historical and quantitative evidence on the negative impact of dictatorship on educational opportunities and social mobility. Since most of our outcomes are measured after democratization in 1990, our findings suggest that non-democracies can have persistent socioeconomic effects (Simpser et al. 2018).

The Pinochet dictatorship's approach to higher education shares many features with other authoritarian regimes (Connelly and Grüttner 2005).[3] These include the elimination of democratic structures within universities and the introduction of controls over the student body, as happened in the Soviet Union in the 1920s, in Germany in the 1930s, and in China in the 1960s (Waldinger 2010; Li and Meng 2022; Alesina et al. 2020). The shutdown of Central European University

[2] Alesina et al. (2021) and Paglayan (2022) provide theoretical and historical evidence showing that mass primary education homogenized the population and helped to reduce the threat of rebellion in various settings (i.e., $p' > 0$).

[3] A growing literature has studied various ways in which the Pinochet regime tightened its hold on power, including repression and censorship (González and Prem 2018; Bautista et al. 2020; Esberg 2020, 2021).

by Hungarian strongman Viktor Orban in 2018 provides a more recent example.[4] The Pinochet dictatorship is also not unique in its embrace of technocracy (Geddes et al. 2018; Guriev and Treisman 2022). In our setting, the reforms implemented under Pinochet are often credited for Chile's subsequent economic success (Becker 1997). Our findings bring to light the distributional cost of this approach to higher education. They also speak to the hypothesis that dictatorship may yield economic benefits at early stages of development (Posner 2010; Easterly 2013).

We also contribute to another large literature on the link between education and political behavior. Foundational work by Lipset (1959), Almond and Verba (1963) and Dahl (1971) posits that education fosters political participation and is fundamental for the development of democracy, though O'Donnell (1973) argues that this hypothesis has no empirical support in Latin America. On the empirical side, cross-country analyses have failed to reach definitive conclusions (Acemoglu et al. 2005; Sanborn and Thyne 2014). Subsequent research has studied the relationship between education and voter turnout, mostly focusing on established democracies (Sondheimer and Green 2010; Mayer 2011; Persson 2015). Studies on weak and non-democracies have found that educational expansion at lower levels increases political participation, but may also lead to disengagement if elections are not credible (Croke et al. 2016; Larreguy and Marshall 2017).

We add to this literature by using actual electoral outcomes to show that reduced access to higher education under dictatorship is associated with support for democratization when a window of opportunity arises. This finding suggests that access to economic opportunities is an important channel connecting education and regime change, which is consistent with previous theoretical and empirical research showing that the prospect of upward mobility reduces the demand for redistribution and affects political behavior (Benabou and Ok 2001; Alesina et al. 2018; Mitrea et al. 2021; Kurer and Van Staalduinen 2022).[5] In this vein, Bai and Jia (2016) show that the elimination of a civil service exam increased revolutionary activity by individuals facing reduced access to the

[4]More generally, Appendix Figure A1 uses cross-country data for the period 1970-2019 to show a positive correlation between enrollment in higher education and democracy, as measured by the Freedom in the World index produced by Freedom House. Appendix Table A1 shows that this correlations is robust to controlling for income per capita.

[5]Another related strand of literature links political backlash and upheaval to notions of relative deprivation or unfair treatment (Gurr 1970; Passarelli and Tabellini 2017).

elite in Imperial China. Our findings also suggest that policies that plausibly contribute to regime survival in the short run may in fact prove detrimental to this objective over a longer time horizon.

3 Institutional Background

In this section, we provide an overview of higher education in Chile around the time of the military coup. We summarize the main features of the pre-existing system and document the changes in policy implemented by the Pinochet regime.

3.1 Universities Before the Military Coup

There were eight universities in Chile when Salvador Allende won the 1970 presidential election.[6] Only two were public, but all were highly reliant on government funding. Most universities were based in the larger cities of Santiago, Concepción and Valparaiso, but several had smaller campuses throughout the country. Almost 40% of students were female and 67% attended public universities. College enrollment grew from 25,000 students in 1960 to 77,000 by the end of the Christian-Democrat government of Eduardo Frei in 1970. The Allende government oversaw an even larger increase, reaching 146,000 students by 1973. Panel (a) in Figure 1 shows that the gross enrollment rate in higher education was 4.6% in 1960, 9.2% in 1970 and 16.8% in 1973. This was a period of mass expansion of higher education throughout Latin America, aimed at improving equality of opportunity and social mobility for the growing urban middle class (Brunner 1984).

[FIGURE 1 ABOUT HERE]

A broad movement for educational reform reached Chilean universities in 1967. Besides bolstering enrollment, the reform furthered student and faculty involvement in university governance. Academic structures were modernized and new programs and research centers were created. Differentiated tuition based on family income was introduced, but fees were low. The reform also introduced a new centralized admissions process and a college admissions test called *Prueba de*

[6]The oldest was Universidad de Chile, founded in 1842, while the newest was Universidad del Norte, which opened in 1956.

Aptitud Académica (PAA). Under the new system, applicants ranked programs and universities ranked applicants, the latter based on a weighted average of their grades in secondary and their PAA scores. Universities chose the number of openings per program. A deferred-acceptance algorithm then determined admissions.

3.2 Universities After the Military Coup

Amid growing political polarization and worsening economic conditions, Allende was overthrown by a military coup on September 11, 1973. A junta presided by General Augusto Pinochet assumed all executive and legislative powers and would go on to govern the country until 1990. The junta quickly targeted universities as part of its goal to eliminate all political opposition. Two weeks after the coup, the junta appointed military officers to lead all universities, public and private. Over the following months, many students, faculty, and staff were expelled or dismissed for their political views, though the exact numbers remain unclear (Castro 1977; Brunner 1984). Some were detained, tortured, or killed.[7] Several academic units and most student organizations were shut down, political activity was forbidden and teaching materials were censored.

The dictatorship's initial handling of universities, focused exclusively on repression and political control, soon begun to incorporate a technocratic concern about the size of government and the efficiency of public spending (Echeverría 1980; PIIE 1984; Velasco 1994). This was the result of the growing influence over policy of a group of market-friendly economists known as the *Chicago Boys* (Valdés 1995).[8] The *Chicago Boys* criticised the *status quo* in Chilean universities on various grounds (CEP 1992; Valdés 1995). They argued that an assured stream of public subsidies failed to provide incentives for thrift or effort, which the regime linked with undesirable political activism. They also argued that higher education was too costly and should be considered a privilege rather

[7] There are 24 professors and 252 students among the 3,200 deaths or disappearances attributed to the Pinochet regime by Comisión Rettig (1996). These correspond to 0.2% of the respective numbers of faculty and students in 1975. Comisión Valech (2004) estimates that about 10% of the 38,000 victims of detention or torture were students.

[8] As early as 1974, the Ministry of Finance begun pushing for a reduction in subsidies to universities and increased self-financing. In 1975, the Ministry of Education called for a more efficient use of resources and set enrollment goals for universities that put an end to the rapid growth seen in previous years (PIIE 1984; Levy 1986).

than a right. Under their influence, the Pinochet dictatorship broke away from the view of higher education as a vehicle for social mobility that had prevailed under democratic rule and embraced a more traditional conception of universities as centers for academic excellence and elite training.

The fact that the changes in policy advocated by the *Chicago Boys* further helped to defuse the political threat posed by universities facilitated their implementation by the dictatorship. In the words of Levy (1986, p.105), "the regime's penchant for political control meshed conveniently with its penchant for economic conservatism." Returning to our theoretical framework, the Pinochet regime simultaneously perceived that universities posed a sizable political threat ($\frac{\partial p}{\partial c} << 0$) and that contracting the bloated system of higher education would have limited economic consequences ($\frac{\partial Y}{\partial c} \approx 0$). Under these conditions, the dictatorship deemed it desirable to implement policies conducive to a contraction of the system of higher education.

3.3 The Contraction of Higher Education

The military regime pursued its twin aims of political control and increased efficiency in public spending by cutting subsidies to universities. Panel (a) in Figure 1 shows that the share of the education budget devoted to higher education, which had risen during the Allende years to almost 50%, steadily declined after 1974 and reached 30% by 1980. This was a large financial blow to universities, as government subsidies were their main source of funding, equivalent to 77% of total revenue in 1972 (Appendix Figure A2). A push for higher tuition met with strong resistance and was abandoned, thus forcing universities to downscale their operations.

Panel (b) in Figure 1 shows the yearly number of college openings and applicants. Applicants exceeded openings at all points in time, meaning that supply was always the binding constraint on admissions. Openings rose in tandem with spending under Allende, but fell and stagnated after the coup.[9] Universities offered a total of 47,000 openings in 1973, but only 33,000 in 1980 (30% decline). Even though demand adjusted to the tighter supply after 1975, the number of applicants more than doubled the number of spots throughout the period. As a result of these cuts, college

[9] Appendix Figure A3 shows that the drop in openings was mostly driven by the two public universities, which had also been responsible for most of the growth under Allende.

enrollment sharply declined.[10] Panel (a) in Figure 1 shows that the gross enrollment rate fell from 16.9% in 1973 to 10.5% in 1981 (38% drop). UNESCO projections for 1975 overestimated the number of students by 33%, further suggesting that this fall was not anticipated (Levy 1986).

University downsizing did not affect all fields of study equally, but hardly any was left untouched (Appendix Figure A5). Most fields saw aggregate decreases in openings of about 30%, including the two fields with the largest shares of openings, education and engineering. As a result, the distribution of students across fields did not change very much after the coup. Since the dictatorship left the admissions process unchanged, applicants with lower PAA test scores were the ones that mechanically failed to gain admission as the number of openings fell. These excluded applicants predominantly came from less affluent backgrounds, making the educational contraction particularly detrimental to social mobility.[11] There is little evidence that the decline in college enrollment was offset by large gains elsewhere in the education system.[12]

4 Data and Empirical Strategy

In this section, we introduce our main data sources and present our empirical strategy to study the socioeconomic effects of the contraction of higher education after the 1973 military coup.

4.1 Data

Our main data sources are the individual records from the population censuses of 1992, 2002 and 2017, together with the thirteen waves of the biennial CASEN household survey between 1990 and 2017. The census collects basic demographic information and also asks questions on educational attainment and labor market outcomes. The dataset for 1992 additionally includes a

[10] Appendix Figure A4 provides evidence against conscription and student migration as alternative explanations for this pattern, as both the number of enlisted soldiers and students abroad fell after the coup.

[11] Appendix Figure A6 shows that the distribution of PAA test scores among admitted students compressed between 1976 and 1981, with the average scores of those from poorer backgrounds disproportionately increasing.

[12] Appendix Figure A7 shows that the enrollment rates in primary and secondary remained roughly constant, as well as the number of schools (despite increases in the respective shares of the education budget). The share of primary students receiving subsidized meals (a proxy for pro-poor policies) decreased (Appendix Figure A8).

variable calculating the wealth quintile to which the household belongs based on characteristics of the dwelling and ownership of durable goods. The CASEN survey (*Encuesta de Caracterización Socioeconómica Nacional*) is a repeated cross-section that is representative at the regional level.[13] Its sample size has grown over time, with the most recent waves surveying more than 200,000 individuals in over 70,000 households. The CASEN survey has information on education and economic conditions, including income. The data also includes a calculation of the income quintile to which each household belongs. Appendix B provides further information about the data.

We restrict the analysis to individuals who reached age 21 between 1964 and 1981 (i.e., born between 1943 and 1960), which corresponds to an 18-cohort window around 1973, the year of the military coup. We end the sample with the 1981 cohort to mitigate the confounding effect of a university reform implemented after that year. We focus on age 21 because it is a conservative estimate for the average age of first-year college students at the time of the coup (Appendix Figure A9). For our main analysis, we restrict the sample to individuals who report at least four years of secondary education to ensure a relevant counterfactual for college enrollment.

Our main educational outcome of interest is college enrollment, which is the margin that was directly affected by the dictatorship's policies. We then analyze downstream labor market outcomes, focusing on those that we expect to be directly affected by diminished access to higher education. These include occupation, labor force participation, unemployment and income. We further examine effects on social mobility using the household-level quintiles of wealth and income available in the 1992 census and CASEN.

Other data sources include harmonized census files from IPUMS - International for 57 countries (listed in Appendix Table B1), which we use for a synthetic control analysis. We also use income data from Universidad de Chile's *Encuesta de Ocupación y Desocupación* (EOD) to provide descriptive evidence on inequality. This is a smaller survey than CASEN and only covers the Santiago metropolitan area, but has the advantage of spanning the 52-year period between 1960-2012. To study political behaviors, we use administrative data on the outcome of the 1988 plebiscite at the county level, as well as individual-level registration data for all voters in 2017

[13] Chile is administratively divided into 16 regions, subdivided into 56 provinces and 346 counties.

from Chile's electoral agency (SERVEL). We postpone the discussion of the spatial measure of the contraction of higher education that we use to study the 1988 plebiscite until section 7 below.

4.2 Empirical Strategy

We begin by studying educational attainment among cohorts reaching college age in a small window around the 1973 military coup. For this analysis, we focus on the 1992 census to minimize bias from sample attrition, though similar patterns are present in all other sources. We first study secondary education, and then look at college enrollment, both unconditionally and conditional on secondary completion (i.e., 4+ years). We work with the following reduced-form model:

$$Y_{i,c} = \alpha + \beta X_i + \pi_0 f(c) + \pi_1 \mathbb{1}(c \geq 1973) \times g(c) + u_{i,c} \tag{3}$$

where $Y_{i,c}$ is an outcome for individual i belonging to cohort c (which indicates the year in which the cohort reached age twenty-one). X_i is a set of observable characteristics, including gender-specific county-of-birth fixed effects. $\mathbb{1}(c \geq 1973)$ is a dummy equal to one for individuals that reached age twenty-one in 1973 or later, while $f(c)$ and $g(c)$ are smooth functions (polynomials) capturing the birth-cohort profile of the outcome $Y_{i,c}$. We re-scale the running variable in these functions and set it equal to zero for 1972, the last year before the coup. We focus on a linear polynomial (i.e., $f(c) = g(c) = c$) to avoid over-fitting and we provide visual evidence showing that this parsimonious specification accurately describes the evolution of cohort-level averages for most outcomes. Our parameter of interest is π_1, which directly captures the change in trend (i.e., *kink*) for cohorts reaching college age after 1973. Finally, $u_{i,c}$ is an error term clustered at the county-of-birth level. To account for the correlation of the error term within cohorts, we also provide p-values from the Wild cluster bootstrap procedure following Cameron et al. (2008).

We then study downstream effects by looking for similar changes in the respective cohort-level trends of our other outcomes of interest, in the spirit of a regression kink design (Card et al. 2015). Our identifying assumption is that in the absence of the coup there is no reason to expect kinks in these outcomes for people reaching age 21 after 1973.

We provide estimates of equation (3) when using purely cross-sectional data (e.g., 1992 census). However, a comparison across cohorts in a single cross-section could be picking up non-linear age effects for outcomes that vary over the life cycle. To address this concern, we use repeated cross-sections to estimate a more stringent specification that includes age and survey year fixed effects.[14] This specification allows the outcome to flexibly vary with age and ensures that the comparison across cohorts takes place only among people observed at the same age. We estimate the following model either by pooling data from the 13 waves of the CASEN survey or by stacking the censuses of 1992 and 2002:

$$Y_{i,c,t} = \alpha + \beta X_i + \gamma_a + \phi_t + \psi \mathbb{1}(c \geq 1973) \times h(c) + e_{i,c} \tag{4}$$

where t denotes the year and a denotes age. Here, γ_a and ϕ_t are age and year fixed effects. The coefficient of interest is ψ, which captures any potential kink among the affected cohorts, relative to the average for individuals observed at the same age.

5 Results: Educational Attainment

In this section, we document a sharp downward kink in college enrollment for the cohorts that reached college age after the 1973 coup and we use a parsimonious parametric model to quantify it. We also present results from a synthetic control analysis that lend support to a causal interpretation of the findings.

5.1 Raw Data and Parametric Analysis

Panel (a) in Figure 2 shows the share of people per cohort that report completing secondary education in the 1992 census. The x-axis corresponds to the year in which cohorts reached age twenty-one (year of birth in parenthesis). The red vertical line marks the year of the military coup. We use solid lines to capture the actual trends before and after the coup, while the dashed line is the counterfactual trend for the post-coup period. We observe a smooth increase in the share of

[14] We drop the baseline cohort trend from this specification as age is a linear function of cohort and year.

people per cohort with full secondary education. Not only do the linear trends fit the data quite accurately, but the post-coup trend overlaps almost perfectly with the counterfactual. Panel (b) shows the share of people per cohort that report any college education, among those with full secondary, which we deem the relevant counterfactual. We observe a rise in college entry for the cohorts that reached college age before the coup, especially during the Allende government between 1970 and 1973, followed by a large decline for those cohorts that reached the same age after the coup. The enrollment rate increased by 12 percentage points (pp) between the 1964 and 1972 cohorts (44% increase) and *decreased* by 18 pp between the 1972 and 1981 cohorts (46% decrease).[15]

[FIGURE 2 ABOUT HERE]

Table 1 presents estimates of equation (3) for various measures of educational attainment in the 1992 census. In all tables, we show standard errors clustered by county in parentheses and p-values from the wild cluster bootstrap at the cohort level in brackets. The sample in columns 1-3 includes all individuals who reached age 21 between 1964 and 1981. Columns 1 and 2 show that the shares of people with any or full secondary education were growing at respective rates of 1 pp and 0.8 pp per cohort before the coup. These trends remain unchanged after the coup. Column 3 shows that college enrollment increased on average 0.8 pp per cohort before the coup. This trend changes by -1.2 pp per cohort for those reaching college age after the coup. The difference between the two coefficients indicates a net enrollment trend of -0.4 pp per cohort after the coup. Column 4 replicates the analysis for the restricted sample reporting full secondary. The results are qualitatively similar, which is consistent with the smooth trend in secondary completion. Conditional on completed secondary, college enrollment increased by 1.8 pp per cohort before the coup but *decreased* at the same net rate (-1.8 pp) for those that followed.[16] These results are in line with the *year-level* pattern in college enrollment shown in Figure 1, but reveal sharp differences in the incidence of the educational contraction across cohorts. We leverage this variation in exposure to

[15] Appendix Figures C1 and C2 show similar patterns for the unrestricted sample and for other sources. Appendix Figure C3 shows smooth increases in the share of people per cohort with any primary or any secondary education.

[16] Appendix Table C1 shows similar results for the censuses of 2002 and 2017 and the CASEN survey. Appendix Table C2 shows that the results are robust to small changes in the location of the kink point.

the dictatorship's change in policy to study downstream effects below.

[TABLE 1 ABOUT HERE]

In column 5, we verify that the results are not driven by changes in the composition of high school graduates across cohorts. For this purpose, we use the information on household composition in the census to replicate the analysis restricting the sample to siblings (96% drop in sample size) and including family fixed effects.[17] Finally, column 6 examines enrollment in any tertiary education, including vocational school. The trend among cohorts reaching college age before the coup is slightly larger than in column 4, indicating that enrollment in other institutions was also growing. Similarly, the net post-coup trend is smaller (-1.1 pp) than that for college enrollment (-1.8 pp), which suggests some substitution of college education with vocational schooling.

5.2 Synthetic control analysis

The previous results rely on an extrapolated linear trend to provide a counterfactual for college enrollment within a small window after the 1973 coup, but we can also use a synthetic control analysis to provide an alternative and more flexible counterfactual (Abadie and Gardeazabal 2003). This method uses data from other countries to construct a weighted average that best predicts a data time series in Chile before 1973, and then employs the same weights to construct the counterfactual for the period after 1973. Our baseline analysis focuses on other countries in Latin America. For each available census, we calculate the share of people per cohort with completed secondary and college, restricting the sample to individuals aged 20 or higher. We focus on college completion because harmonized data on educational enrollment is not available from IPUMS - International.[18]

Panel (a) in Figure 3 shows the results for college. The solid line corresponds to actual college completion per cohort in Chile, while the dashed line shows the prediction from the synthetic

[17] Appendix Table C3 shows similar results for the other censuses. Appendix Table C4 replicates the analysis within quintiles of housing wealth in 1992.

[18] All estimates use lags of the share of people with complete college to build the synthetic control. We follow Ferman et al. (2019) and use only *odd* years to avoid cherry-picking and overfitting, but verify that the results are unchanged if we use *even* or *all* pre-treatment years. The R^2 of a regression of the actual Chilean data on the synthetic control in the pre-treatment period is always larger than 0.95.

control. This counterfactual tracks the realized time series very closely up to the year of the coup. Afterwards, the synthetic control keeps growing, while the actual series drops and stagnates. For the 1981 cohort, the gap in college completion is equivalent to 38% of the counterfactual provided by the synthetic control. Placebo inference and confidence sets suggest this difference is statistically significant (Abadie et al. 2015; Firpo and Possebom 2018).[19] The graph further shows that college enrollment only caught up with the counterfactual for the cohorts that reached college age after 1990, when Chile returned to democracy. Panel (b) shows that the synthetic control matches well the realized times series for completed secondary education before and after the coup, providing further evidence against alternative explanations based on changes in educational attainment at lower levels.[20]

[FIGURE 3 ABOUT HERE]

6 Results: Socioeconomic Consequences

In this section, we study the effects of the contraction of higher education after the military coup on labor market outcomes and distributional measures of income and wealth. We uncover a large negative impact on the cohorts that reached college age after the coup.

[19] See Appendix Table D1 and Figure D1 for details. Appendix Figure D2 shows that the results are robust to changes in the set of controls or in the sample, and also provides estimates from a placebo exercise.

[20] Post-enrollment outcomes including graduation rates and returns to college seemingly improved after the military take-over. Panel (a) in Appendix Figure A10 shows that the graduation rate declined before the coup and recovered afterwards, but the variation is small, which suggests a limited role for educational attrition. Appendix Figure A11 shows that fewer people took the PAA test after the coup and that average (raw) test scores improved. Higher applicant quality could explain the increase in the graduation rate. Panel (b) in Appendix Figure A10 shows cohort-specific estimates of the return to college, which increased by approximately 13% after the coup, plausibly aggravating inequality (Appendix Figure C4 shows a similar pattern for alternative income measures). This higher return could reflect more selective admissions, but is also consistent with a lower supply of professionals putting upward pressure on wages.

6.1 Occupations and Labor Market Outcomes

Panels (a)-(d) in Figure 4 plot cohort-level means and estimated trends for binary indicators corresponding to selected occupations in the 1992 census (Appendix Figure E1 provides similar plots for the remaining occupations). Panel (a) shows a sharp downward kink in the probability of having a professional occupation (e.g., doctor, lawyer, engineer) for cohorts reaching college age after the coup. This kink is matched by opposite upward kinks in the probability of having other occupations, including clerks in panel (b), workers in crafts and related trades in panel (c), and workers in elementary occupations (e.g., domestic helpers, street food vendors) in panel (d). These findings indicate a large reduction in economic opportunities for the affected cohorts.

[FIGURE 4 ABOUT HERE]

Table 2 provides the corresponding estimates of equation (3). To facilitate the analysis, we have grouped the universe of occupations into white-collar and blue-collar, subdividing each into high-skill and low-skill groups (Appendix Table E1 provides more disaggregate estimates). Column 1 shows that the trend in the probability of having a white-collar high-skill occupation flips from a 0.4 pp gain per cohort in the pre-coup period to a 1.3 pp decline afterwards. This is equivalent to a 3% drop for each new post-coup cohort relative to the sample mean. The decline in these occupations is matched by a 0.7 pp net gain per cohort in the probability of having a white-collar, low-skill occupation (column 2), and by a 0.6 pp per-cohort increase in the probability of a blue-collar occupation (columns 3-4 combined). Column 5 shows results from an occupational income score that we construct based on the logarithm of the median wage for the 3-digit occupation code in the CASEN survey from 1992 to 2000, following Abramitzky et al. (2014). We also find a downward kink in this score, with each additional post-coup cohort experiencing a drop of 1.2%. Panel (e) in Figure 4 plots this sharp kink in the score, which anticipates the negative effects on income and wealth that we document below.[21]

[TABLE 2 ABOUT HERE]

[21] Appendix Table E2 and Figure E2 show similar results using different years to construct the score.

Panels (f) and (g) in Figure 4 plot cohort-level means and estimated trends for binary indicators of labor force participation and unemployment in the 1992 census (Appendix Figure E3 provides similar plots using data from the CASEN survey). Panel (h) shows an additional plot for log total income, which is only available in CASEN. Among the affected cohorts, there are downward kinks in labor force participation and income, and an upward kink in unemployment.

Table 3 quantifies these kinks.[22] While the census provides us with a much larger sample, CASEN enables us to observe the study cohorts repeatedly, which is important because these outcomes are likely to vary over the life cycle. Both sources show a downward kink in labor force participation (columns 1-3) and an upward kink in the unemployment rate (columns 4-6). Columns 7-8 show a downward kink in total income, which grew at an average rate of 1.6% per cohort for those reaching college age before the coup and drops to a -0.7% net trend per cohort after the coup.[23] Columns 3, 6 and 8 show estimates of equation (4), the more stringent specification that replaces the baseline trend with age fixed effects. We use CASEN data for this analysis because it allows us to observe different cohorts at the same age.[24] We find that the affected cohorts experienced sizable negative effects in labor market outcomes, even after accounting for age effects. In particular, column 3 shows that each new cohort reaching college age after the coup is 0.4 pp less likely to be in the labor force than the average for that age (0.5% decrease per cohort relative to the sample mean). Column 6 shows that the unemployment rate increases by 0.2 pp per post-coup cohort relative to the age-specific average (5% increase relative to sample mean), while column 8 shows that total income drops at a rate of 0.9% per post-coup cohort, also relative to the age-specific average.

[TABLE 3 ABOUT HERE]

[22] Similar results for the 2002 census are available in Appendix Table E3. We do not use the 2017 census for this analysis because it does not ask questions on occupation and because the cohort reaching age 21 in 1973 (i.e., kink point) reached age 65 on that year, which is the retirement age for men (women retire at 60).

[23] Appendix table E4 shows similar results for more restrictive measures of income (e.g., from main occupation).

[24] Appendix Table E3 shows similar results using pooled census data from 1992 and 2002.

6.2 Distributional Effects on Wealth and Income

We next study distributional measures of wealth and income available in the 1992 census and CASEN. These measures allow us to better understand the challenges that the affected cohorts faced in climbing up the socioeconomic ladder.

Figure 5 plots the cohort-level means and estimated trends for the top and bottom quintiles of wealth and income. Data on wealth comes from the 1992 census, while information on income comes from CASEN and is averaged across survey waves. There are sharp downward kinks in the probability of being in the top quintiles of wealth or income for the affected cohorts, matched by upward kinks in the probability of being in the bottom quintiles. Appendix Figure E4 shows upward kinks for the middle quintiles as well. These results suggest that people reaching college age after the coup struggled to reach the top of the income and wealth distributions.

[FIGURE 5 ABOUT HERE]

Panels A and B in Table 4 show estimates of equation (3) for indicators corresponding to each quintile of wealth and income. Column 1 in panel A shows a weakly negative trend in the probability of being in the top wealth quintile among pre-coup cohorts (-0.2 pp per cohort), which drops sharply after the coup and becomes -1.5 pp per cohort, equivalent to 3% of the sample mean. Column 1 in panel B shows a similar pre-coup trend in the probability of being in the top income quintile (-0.2 pp per cohort), which also accentuates and becomes -0.8 pp per cohort after the coup (2.4% of the sample mean). Panel C provides estimates of equation (4) for the income quintiles in CASEN (i.e., including age fixed effects). We find that individuals in each new cohort reaching college age after the coup are 0.2 pp less likely to be in a household belonging to the top income quintile than the age-specific average (0.6% decrease relative to the sample mean).[25] This reduction in the probability of being at the top of the income distribution is matched by 0.1 pp per-cohort increases in the probability of being in either of the bottom two quintiles (0.8% and 1% increases

[25] Since these distributional outcomes are calculated at the household level, resource pooling within households could help to attenuate the individual impact of reduced educational attainment.

relative to the respective sample means). These results show that social mobility stalled for those affected by the dictatorship's educational contraction.

[TABLE 4 ABOUT HERE]

As further evidence on the distributional effects of the dictatorship, we use data from the EOD survey for the period 1960-2012 to calculate the yearly share of total reported income that goes to the top 20% of earners (top quintile), the bottom 20% (bottom quintile), and the middle 60%. We plot these series in Figure 6, together with vertical lines indicating the year of the military coup (1973) and the return to democracy (1990). This plot shows a strong correlation between dictatorship and inequality, in line with previous work by Ffrench-Davis (2018).[26] In the years before the coup, we observe convergence in the shares of income going to the top and middle quintiles, particularly during the Allende government. After the coup, there is a steady increase in inequality, with the share of income going to top earners growing at the expense of the middle class. After democratization in 1990, we see again evidence of redistribution from the top quintile to the middle class, though a sizable gap remains as late as 2012. Importantly, the share of income accruing to the bottom 20% does not rise above 6% at any point during this 52-year period.[27]

[FIGURE 6 ABOUT HERE]

6.3 Robustness Checks and Heterogeneous Effects by Gender

We verify that the previous results are robust to additional tests. Appendix Tables E6 and E7 show that the results are very similar if we use the unrestricted sample from the relevant cohorts (i.e., including individuals lacking complete secondary education). We also examine the robustness of the results to changes in the bandwidth of cohorts in the sample, focusing on the more conservative specification with age fixed effects. Appendix Figures E6 and E7 plot estimates of ψ in equation

[26] Appendix Figure E5 shows the corresponding series for the Gini coefficient.

[27] De Rosa et al. (2020) use tax data and national accounts to show that surveys underestimate inequality in Latin America. They find that the share of income going to the top 10% in Chile exceeds 60%, the highest among the 10 countries considered.

(4) for alternative bandwidths that drop or add 1-3 cohorts on each side. The estimates are highly stable, though precision is reduced in some cases due to the smaller sample size.

Appendix Figure E8 and Tables E8-E9 provide disaggregate results by gender. We find that the downward kinks in labor market outcomes for the affected cohorts are systematically larger for women, especially when compared against the respective sample mean. For instance, women reaching college age after the coup were 1.6 pp less likely per cohort to have a white-collar high skill occupation than the age-specific average (3.5% of the female sample mean), while men experienced a 0.8 pp decline per cohort (2.2% of the male sample mean). These results indicate that access to higher education was fundamental to female progress in the labor market (Goldin 2006). Women also exhibit a larger downward kink in the probability of being in the top income quintile and larger upward kinks in the probability of being in the bottom two quintiles. Hence, gender inequality also seemingly worsened as a result of the dictatorship's educational contraction.

7 Results: Political Behaviors

The previous results show that people reaching college age after the military coup experienced reduced access to college and had worse socioeconomic outcomes. In this section, we study the relationship between diminished educational opportunities and political behavior, focusing on the 1988 plebiscite that triggered Chile's return to democracy. While a large literature posits a positive link between education and democracy, it is plausible that the educational contraction after the military coup caused a political backlash when a democratic window of opportunity arose. In terms of our model, we are interested in establishing whether the reduced access to higher education contributed to the demise of the Pinochet dictatorship in the long run (i.e., $p'_{\text{long run}} > 0$).

The military regime drafted a new constitution in 1980, which awarded Pinochet an eight-year term as president. After this time, a plebiscite was held to determine whether there would be a second eight-year term for Pinochet or open presidential elections instead. This was the first free election in Chile since 1973 and the "NO" option won with 55% of votes.[28] A presidential election

[28] Gandhi and Lust-Okar (2009) provide an overview of the role of elections in non-democracies. In the case of Chile, mounting domestic and international pressure throughout the 1980s left the military regime with no alternative

followed in 1989 and Pinochet stepped down as president in 1990.

We first look at voter registration for the plebiscite as a measure of engagement with the political process (Bautista et al. 2020). The military junta declared the previous voting registry void shortly after the coup, so all voters had to register anew to participate in the plebiscite. Based on individual-level records for the universe of voters in 2017, panel (a) in Figure 7 plots the share of voters per cohort that registered in 1987 or 1988, as well as the estimated trends for the cohorts reaching college age before and after the coup.[29] We observe a clear upward kink in the registration rate among the affected cohorts. Even though registration was generally very high, with a sample mean of 81%, there is still a 1.3 pp difference between the cohorts that reached age 21 in 1981 and 1972. We interpret this result as suggesting increased political engagement by those experiencing reduced access to higher education.

[FIGURE 7 ABOUT HERE]

To study potential effects on the outcome of the plebiscite, we construct a localized measure of the impact of the contraction in higher education. For this purpose, we estimate a more flexible version of equation (3) that allows for separate pre- and post-coup trends in college enrollment for each county j in the 1992 census.[30] We then adjust the county-specific kink in enrollment ($\pi_{1,j}$) based on the precision of the estimates (i.e., Krueger and Summers 1988) and we standardize this measure to facilitate interpretation. Panel (b) in Figure 7 shows a binned scatterplot of the vote share for the NO option against this impact measure. The plot shows that counties with a larger reduction in college enrollment (i.e., more negative kinks) voted against Pinochet at higher rates.

Table 5 examines the robustness of this correlation. We present robust standard errors in parentheses. We also show in brackets the p-values from a bootstrap procedure that accounts for the generated regressors. Column 1 indicates that a one standard deviation (SD) *decrease* in the

but to hold the plebiscite without manipulation, in line with Magaloni (2010). Pinochet may have also overestimated his chances of victory, having won two previous (but manipulated) elections (Treisman 2020).

[29] In 2012, the country switched to having automatic and universal registration. Hence, the composition of our sample in 2017 is unaffected by differences in the propensity to register across cohorts. The electoral data does not include information on educational attainment, so these results correspond to the unrestricted sample.

[30] For computational convenience, we drop the county by gender fixed effects in this regression.

county-specific kink in college enrollment (i.e., larger fall) is associated with a 3.9 pp increase in the NO vote share (8% increase over sample mean). This column includes no controls, while column 2 controls for total population and for the shares of rural and female population in 1970. Column 3 further controls for the respective distances to Santiago, the regional capital and the provincial capital, while column 4 also adds region fixed effects. The magnitude of the correlation between the kink in enrollment and the NO vote share decreases as we add more controls, but it remains economically and statistically significant. Finally, column 5 adds the vote share for Allende in 1970 as an additional control. This variable is also strongly correlated with the NO vote share, with a one-point increase in the Allende vote share being associated with a 0.44 pp increase in support for NO. Adding this control leads to a further reduction in the correlation of the NO vote share with the local kink in college enrollment, but it still remains sizable, negative and statistically significant. This is to be expected as the areas that were affected by the contraction were also the ones that arguably benefited from the redistributive policies implemented by Allende and were more likely to support him. Overall, these results suggest that the contraction of higher education plausibly led to a political backlash and contributed to Pinochet's defeat in the 1988 plebiscite.

[TABLE 5 ABOUT HERE]

8 Conclusion

In this paper, we study the relationship between political regimes, education and social mobility. For the case of Chile, we show that the Pinochet dictatorship's goals of political control and fiscal conservatism caused a large contraction of all universities in the country, which took place through a steady reduction in the number of openings for new students. As a result, individuals who reached college age shortly after the military coup experienced a sharp decline in college enrollment. These individuals had worse economic outcomes throughout the life cycle and struggled to reach the top of the socioeconomic ladder. However, these individuals also registered to vote at higher rates for the pivotal 1988 plebiscite and they increasingly voted against Pinochet.

We draw two main conclusions from these results. First, our findings show that political

regimes affect social mobility and redistribution via changes to the education system. In our setting, a large educational contraction following a transition to autocracy hindered social mobility for an entire generation and led to higher inequality. Second, our results also suggest that diminished educational opportunities can undermine the long-term survival of authoritarian regimes, even if they serve short-term goals of political control. In contrast to a long intellectual tradition, we find that reduced access to education under a dictatorship can cause a political backlash and may contribute to democratization if a window of opportunity arises.

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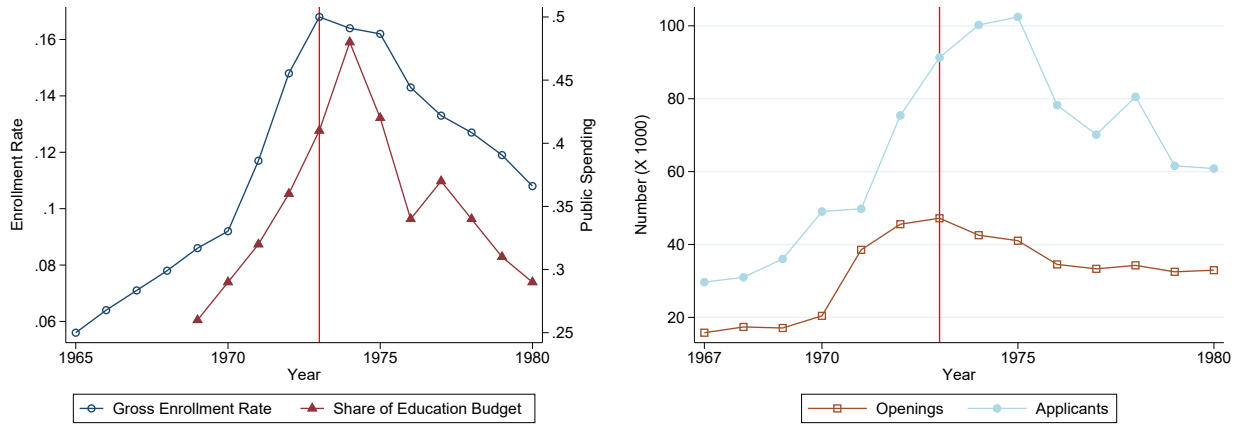
Figure 1: College Funding, Enrollment and Openings

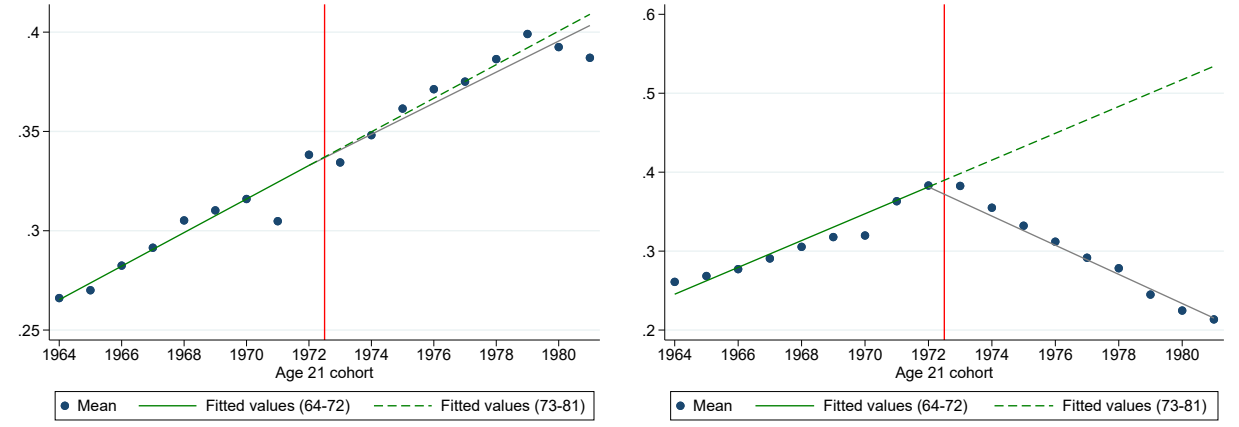


(a) Funding and Enrollment

(b) Applicants and Openings

Notes: Panel (a) shows the gross enrollment rate in higher education (i.e., share of 20-24 year-old population) and the share of the national government's education budget devoted to universities. Panel (b) shows the yearly number of college applicants and openings. Sources: PIIE (1984); Universidad de Chile (2011).

Figure 2: Visualization of Kink: Educational Attainment

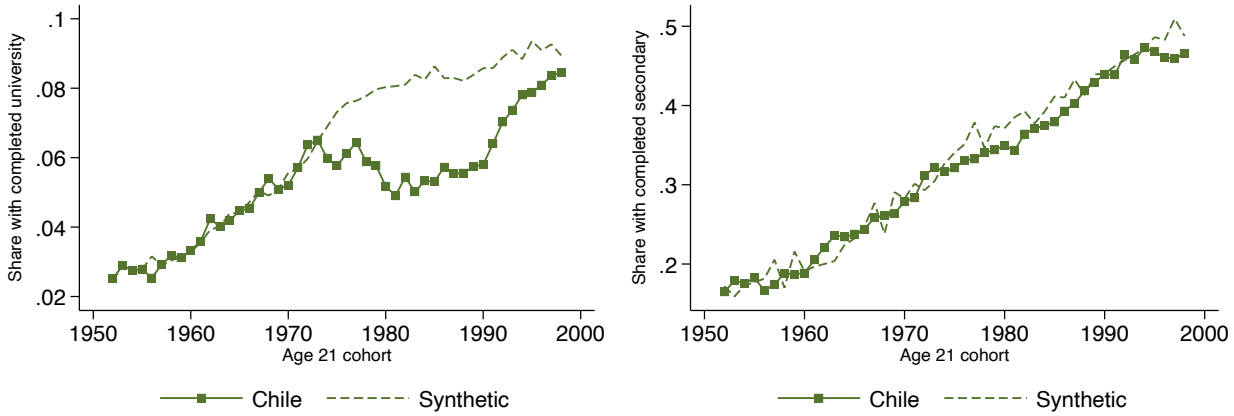


(a) Full Secondary

(b) Any College| Full Secondary

Notes: Figures show the share of people per cohort that report full secondary (i.e., 4+ years) or any college (conditional on full secondary) in the 1992 census. The solid red line indicates the year of the military coup. Solid green line corresponds to line of best fit for cohorts reaching college age before 1973. Dashed green line shows extrapolation for later cohorts. Solid grey line corresponds to line of best fit for cohorts reaching college age in 1973 or afterwards.

Figure 3: Educational Attainment: Synthetic Control

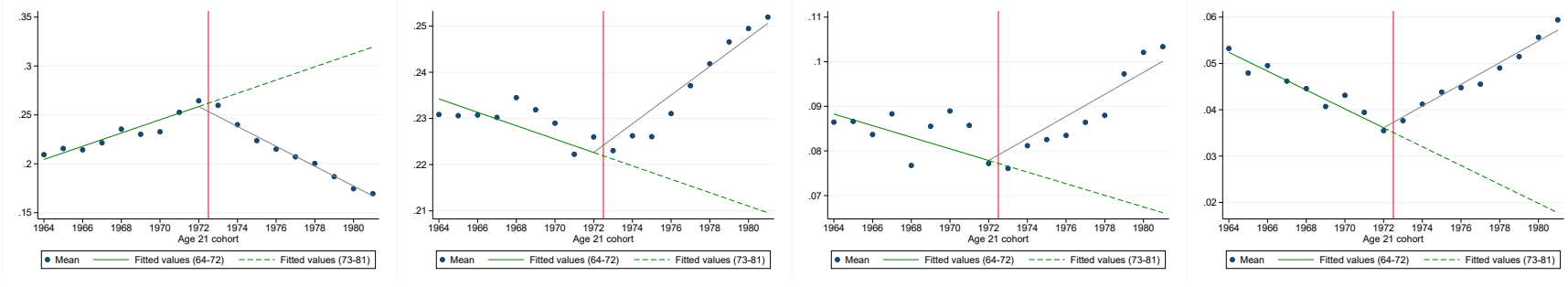


(a) Full college

(b) Full secondary

Notes: Panels show observed rates of educational attainment by cohort in the 2002 population census (solid line) and counterfactuals from a synthetic control (dashed line). See the text for additional information on sample construction and estimation. The outcome in panel (a) is the share of people with full college education, while in panel (b) it is the share of people with full secondary education.

Figure 4: Visualization of Kink: Occupations and Labor Market Outcomes

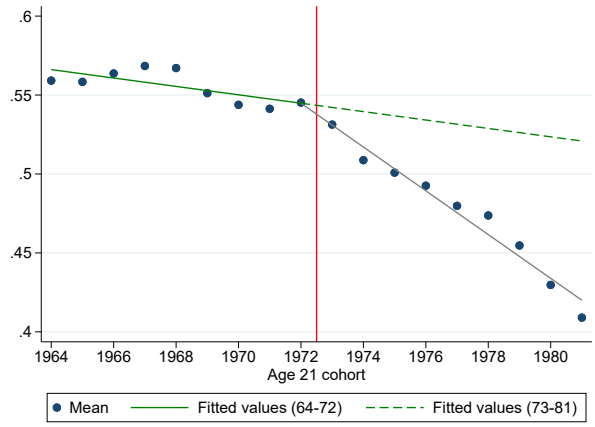


(a) Professionals **(b)** Clerks **(c)** Craft and Related Trades **(d)** Elementary occupations

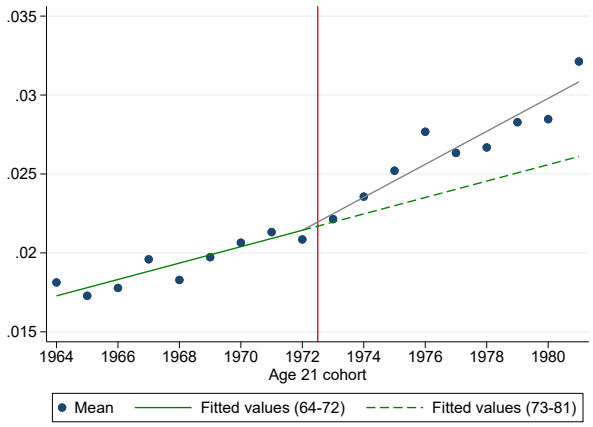
(e) Occupational Income Score **(f)** In Labor Force **(g)** Seeking Work **(h)** Log Total Income (CASEN)

Notes: Panels show averages by cohort for the variable in the caption. Solid green line corresponds to line of best fit for cohorts reaching college age before 1973. Dashed green line shows extrapolation for later cohorts. Solid grey line corresponds to line of best fit for cohorts reaching college age in 1973 or afterwards. Panels (a)-(g) use data from 1992 population census, while panel (h) uses pooled data from the CASEN survey between 1990 and 2017.

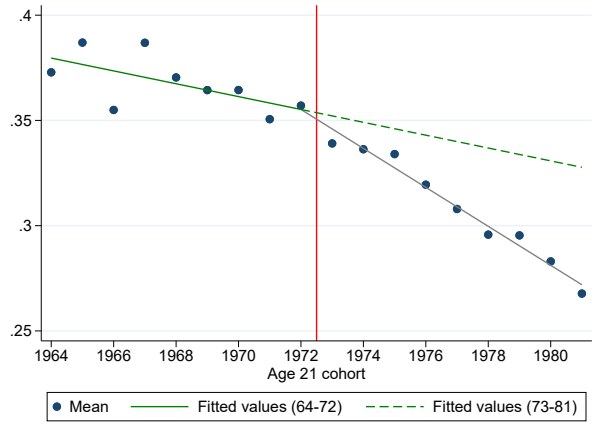
Figure 5: Visualization of Kink: Household Wealth and Income



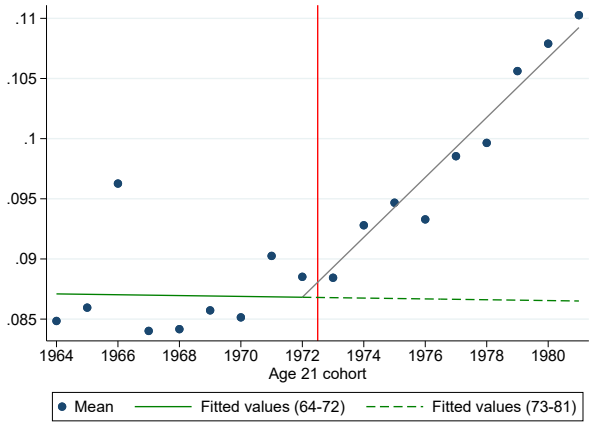
(a) Wealth: Top Quintile



(b) Wealth: Bottom Quintile



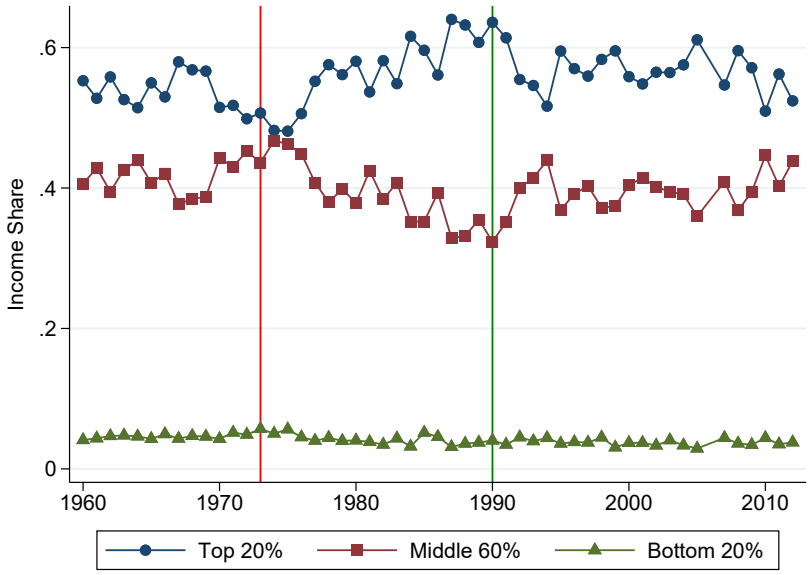
(c) Income: Top Quintile



(d) Income: Bottom Quintile

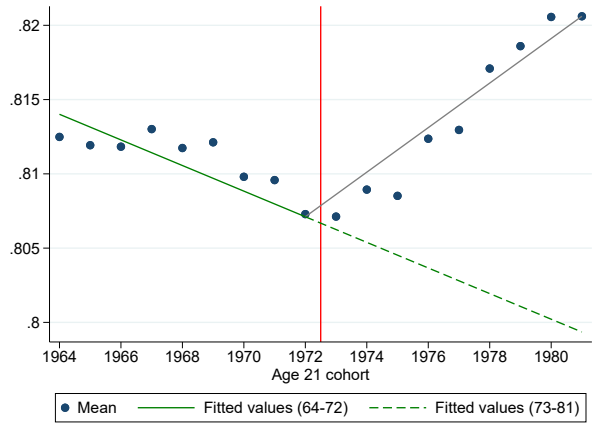
Notes: Panels show averages by cohort for the variable in the caption. Solid green line corresponds to line of best fit for cohorts reaching college age before 1973. Dashed green line shows extrapolation for later cohorts. Solid grey line corresponds to line of best fit for cohorts reaching college age in 1973 or afterwards. Panels (a)-(b) use data from 1992 population census, while panels (c)-(d) use data from the CASEN survey between 1990 and 2017.

Figure 6: Yearly Income Shares

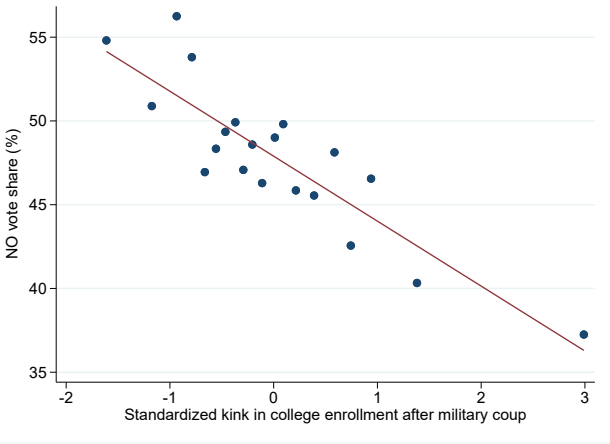


Notes: Figure shows the share of income going to the top 20% of earners, middle 60% and bottom 20%. Sample includes all respondents of Universidad de Chile's EOD Survey between 1960 and 2012, which covers the Santiago metropolitan area. Vertical lines indicate the year of the military coup (1973) and the return to democracy (1990).

Figure 7: Political outcomes: 1988 plebiscite



(a) Voter registration



(b) NO vote share

Notes: Panel (a) shows the share of voters per cohort in 2017 that registered to vote before the 1988 plebiscite (i.e., 1987 or 1988). Solid green line corresponds to line of best fit for cohorts reaching college age before 1973. Dashed green line shows extrapolation for later cohorts. Solid grey line corresponds to line of best fit for cohorts reaching college age in 1973 or afterwards. Panel (b) shows a binned scatter plot of the estimated kink in college enrollment at the county level (adjusted for precision and standardized) and the vote share for the NO option in the 1988 plebiscite. Unit of observation is the county.

Table 1: Educational Attainment

	Secondary Education		Any College Education			Any Higher Education
	Any	Full				
	(1)	(2)	(3)	(4)	(5)	(6)
Yr Age 21	0.010***	0.008***	0.008***	0.018***	0.020***	0.019***
	(0.0006)	(0.0003)	(0.0004)	(0.0004)	(0.0021)	(0.0003)
	[0.001]	[0.002]	[0.000]	[0.001]	[0.000]	[0.001]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.000	-0.001	-0.012***	-0.036***	-0.041***	-0.030***
	(0.0004)	(0.0005)	(0.0007)	(0.0007)	(0.0030)	(0.0006)
	[0.932]	[0.707]	[0.000]	[0.000]	[0.000]	[0.000]
Sample	Full	Full	Full	4+ Years of Secondary Education		
County of birth x gender FE	Yes	Yes	Yes	Yes	Yes	Yes
Family FE	No	No	No	No	Yes	No
Observations	2,982,951	2,982,951	2,982,951	1,024,570	42,649	1,024,570
R-squared	0.119	0.088	0.046	0.040	0.647	0.034
Mean DV	0.540	0.343	0.101	0.295	0.293	0.379

Notes: Dependent variable in the header. Sample includes census respondents born between 1943 and 1960. "Yr Age 21" is a continuous variable indicating the year when the cohort reached age 21, normalized to zero in 1972. 𝟙(Yr Age 21 ≥ 1973)" is a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table 2: Occupational choice

	White-collar		Blue-collar		Occupational income score
	High-skill	Low-skill	High-skill	Low-skill	
	(1)	(2)	(3)	(4)	(5)
Yr Age 21	0.004***	-0.003***	-0.002***	-0.003***	0.004***
	(0.0005)	(0.0004)	(0.0002)	(0.0002)	(0.0004)
	[0.004]	[0.001]	[0.006]	[0.000]	[0.005]
Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)	-0.017***	0.010***	0.005***	0.006***	-0.016***
	(0.0008)	(0.0005)	(0.0003)	(0.0005)	(0.0006)
	[0.000]	[0.000]	[0.001]	[0.000]	[0.000]
County of birth x gender FE	Yes	Yes	Yes	Yes	Yes
Observations	770,652	770,652	770,652	770,652	684,995
R-squared	0.032	0.027	0.049	0.024	0.061
Mean DV	0.431	0.323	0.104	0.109	12.70

Notes: Dependent variable in the header. White collar, high skilled (WC-HS): Politicians and managers, professionals and technicians. WC-LS: Clerks and service or sales workers. BC-HS: Skilled agricultural workers, craft and related trades. BC-LS: Plant/machine operators and elementary occupations. The occupational income score is the logarithm of the median wage of the occupation at the 3-digit level. Wages come from the CASEN biennial survey from 1992 to 2000. Sample includes census respondents born between 1943 and 1960 with 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year when the cohort reached age 21, normalized to zero in 1972. $\mathbb{1}$(Yr Age 21 $\geq$ 1973)" is a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table 3: Labor Market Outcomes

	In Labor Force			Seeking Work			Log Total Income	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Yr Age 21	0.008***	0.027***		-0.001***	-0.000		0.016***	
	(0.0003)	(0.0008)		(0.0001)	(0.0004)		(0.0017)	
	[0.000]	[0.000]		[0.004]	[0.114]		[0.000]	
Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)	-0.012***	-0.016***	-0.004***	0.003***	0.002***	0.002***	-0.023***	-0.009***
	(0.0006)	(0.0009)	(0.0009)	(0.0002)	(0.0005)	(0.0005)	(0.0023)	(0.0027)
	[0.000]	[0.001]	[0.000]	[0.003]	[0.007]	[0.020]	[0.001]	[0.026]
County x gender FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Survey year FE	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Age FE	No	No	Yes	No	No	Yes	No	Yes
Source	Census	CASEN	CASEN	Census	CASEN	CASEN	CASEN	CASEN
Observations	1,024,570	163,693	163,693	776,304	114,790	114,790	135,152	135,152
R-squared	0.200	0.223	0.248	0.004	0.013	0.013	0.155	0.163
Mean DV	0.758	0.701	0.701	0.043	0.039	0.039	709,631	709,631

Notes: Dependent variable in the header. Sample includes individuals born between 1943 and 1960 with 4+ years of secondary education. Income in column 4 deflated using yearly CPI. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972. "Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county (panel A: birth; B/C: residence) in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table 4: Household Wealth and Income

	Household's wealth or income quintile (dummy)				
	Q5 (highest)	Q4	Q3	Q2	Q1 (lowest)
	(1)	(2)	(3)	(4)	(5)
		Panel A: Wealth (Census 1992)			
Yr Age 21	-0.002***	-0.000	0.001***	0.001***	0.000***
	(0.0005)	(0.0004)	(0.0003)	(0.0003)	(0.0001)
	[0.010]	[0.392]	[0.017]	[0.014]	[0.004]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.013***	0.004***	0.004***	0.004***	0.001***
	(0.0007)	(0.0006)	(0.0004)	(0.0003)	(0.0001)
	[0.003]	[0.001]	[0.003]	[0.001]	[0.000]
		Panel B: Income (CASEN 1990-2017)			
Yr Age 21	-0.002**	0.000	0.001*	0.001***	-0.000
	(0.0008)	(0.0006)	(0.0006)	(0.0004)	(0.0004)
	[0.077]	[0.833]	[0.096]	[0.073]	[0.419]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.006***	-0.001	0.002*	0.003***	0.003***
	(0.0011)	(0.0010)	(0.0008)	(0.0007)	(0.0006)
	[0.002]	[0.532]	[0.118]	[0.002]	[0.001]
		Panel C: Income (CASEN 1990-2017) w/ Age FE			
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.002**	-0.001	0.001	0.001*	0.001*
	(0.0011)	(0.0010)	(0.0009)	(0.0008)	(0.0007)
	[0.047]	[0.478]	[0.533]	[0.041]	[0.055]
Panel A:					
County of birth x gender FE	Yes	Yes	Yes	Yes	Yes
Observations	1,007,957	1,007,957	1,007,957	1,007,957	1,007,957
R-squared	0.114	0.013	0.032	0.052	0.050
Mean DV	0.500	0.250	0.145	0.080	0.024
Panels B and C:					
County of residence x gender FE	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes
Observations	163,342	163,342	163,342	163,342	163,342
R-squared [Panel B]	0.080	0.012	0.016	0.024	0.028
R-squared [Panel C]	0.084	0.013	0.017	0.026	0.031
Mean DV	0.327	0.257	0.184	0.137	0.096

Notes: Dependent variable in the header. Sample includes individuals born between 1943 and 1960 with 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972. "Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county (panel A: birth; B/C: residence) in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table 5: Opposition to Pinochet in 1988 Plebiscite

	Dependent variable: NO vote share				
	(1)	(2)	(3)	(4)	(5)
Kink in college enrollment	-3.88***	-3.21***	-2.35***	-1.98***	-1.13**
	(0.79)	(0.66)	(0.67)	(0.62)	(0.56)
	[0.000]	[0.000]	[0.010]	[0.000]	[0.050]
Allende vote share in 1970					0.44***
					(0.04)
Population controls	No	Yes	Yes	Yes	Yes
Geographic controls	No	No	Yes	Yes	Yes
Region FE	No	No	No	Yes	Yes
Observations	318	318	318	318	318
R-squared	0.100	0.439	0.485	0.543	0.681
Mean DV	47.90	47.90	47.90	47.90	47.90

Notes: Dependent variable is the NO vote share in the 1988 plebiscite. Unit of observation is the county. Local impact measure is equal to the negative of the county-specific estimate of the net trend in college enrollment for cohorts reaching college age between 1973 and 1981 (adjusted for precision), multiplied by the share of the voting-age population in 1988 belonging to the affected group (age 21 between 1964 and 1981 and reporting 4+ years of secondary education in 1992 census). We exclude counties with less than 1,000 people in the estimating sample. Population controls include total population, rural share and female share in 1970. Geographic controls include distance to Santiago and to the provincial and regional capitals. Observations weighted by population in 1970. Robust standard errors in parentheses. P-values from wild bootstrap in brackets. *** p<0.01, ** p<0.05, * p<0.1

Dictatorship, Higher Education and Social Mobility: Appendix for online publication

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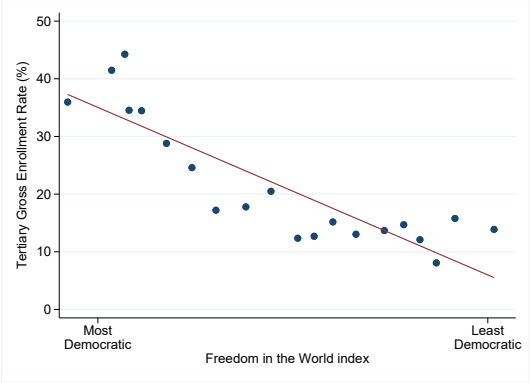
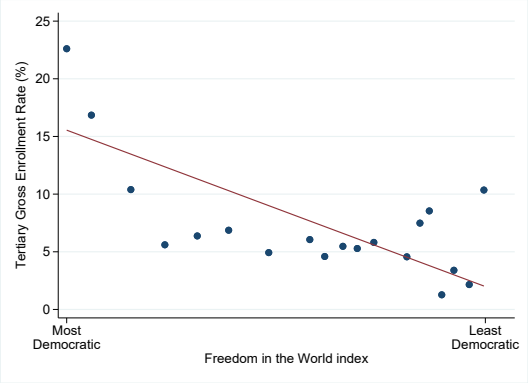
Appendix A Additional Background Tables and Figures

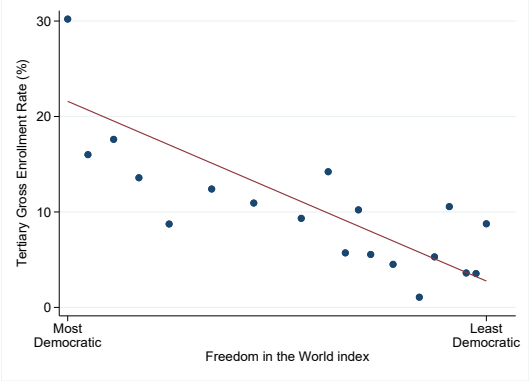
Figure A1: Tertiary Enrollment and Democracy



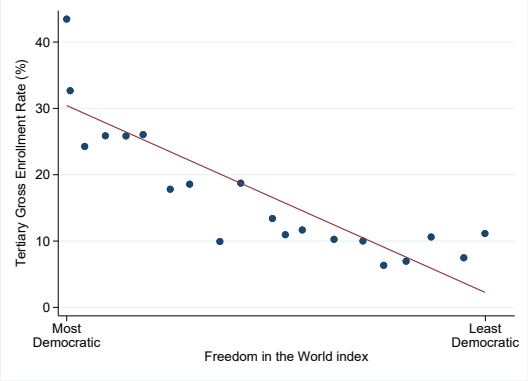
(a) Full sample



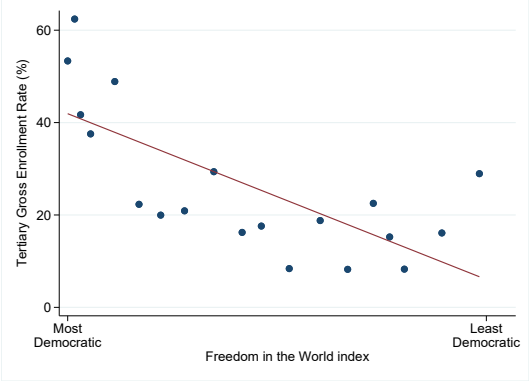
(b) 1970s



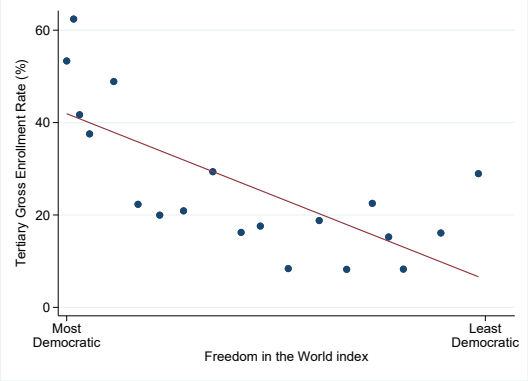
(c) 1980s



(d) 1990s



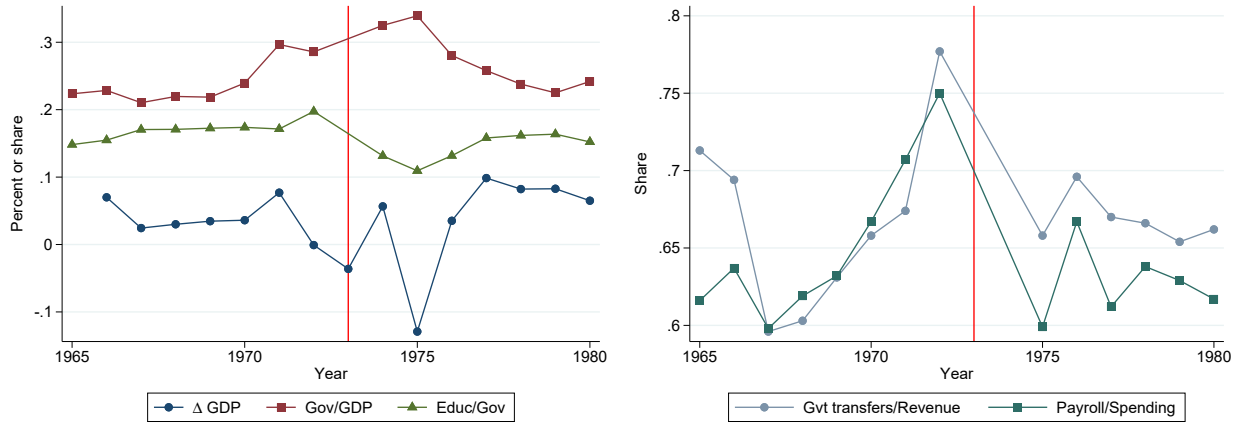
(e) 2000s



(f) 2010s

Notes: Figures show binned scatter plots of the gross tertiary enrollment rate from the World Bank's World Development Indicators against the Freedom in the World index produced by Freedom House. The unit of observation is the country-decade (averaging across years). Panel (a) includes decade fixed effects, while in panels (b)-(f) we restrict the sample to observations in the decade in the caption.

Figure A2: Public Spending on Education

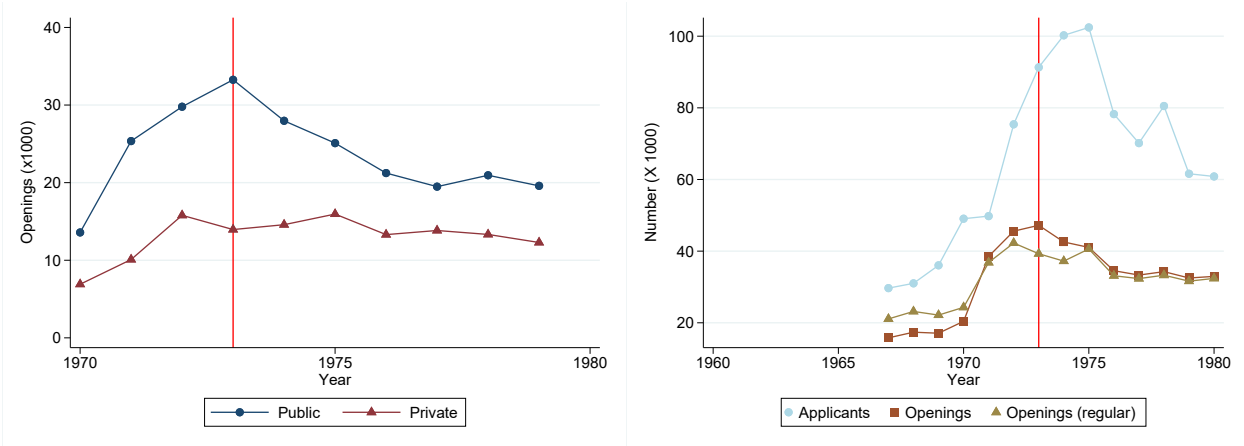


(a) Government Spending

(b) University Finances

Notes: Panel (a) shows GDP growth, government spending as a share of GDP, and spending on education as a share of government spending. Panel (b) shows fiscal transfers as a share of total revenue in the university system, and payroll as a share of total spending by universities. Source: PIIE (1984).

Figure A3: Further Evidence on Supply and Demand for College

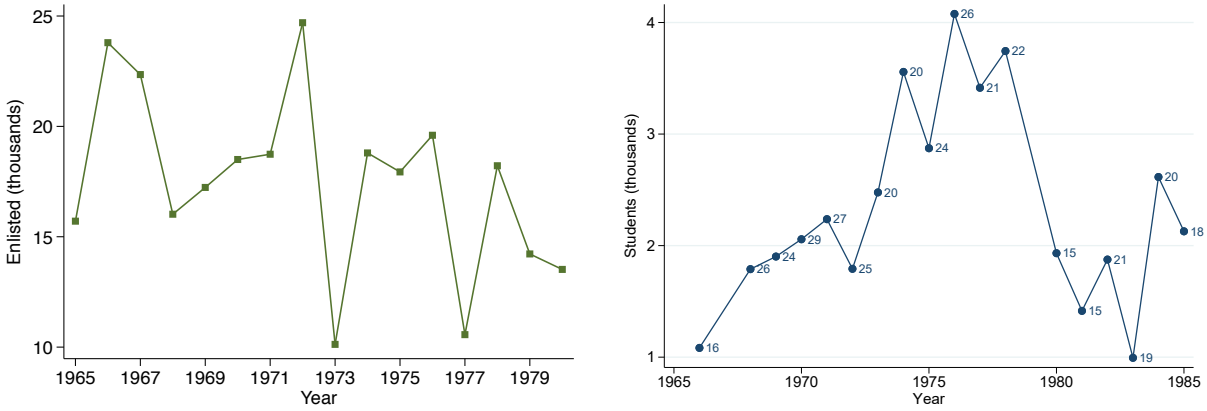


(a) Openings: Public and Private

(b) Alternative Measure of Openings

Notes: Panel (a) shows yearly openings in private and public universities. Panel (b) shows the number of applicants and openings per year, but includes an alternative measure of regular openings.

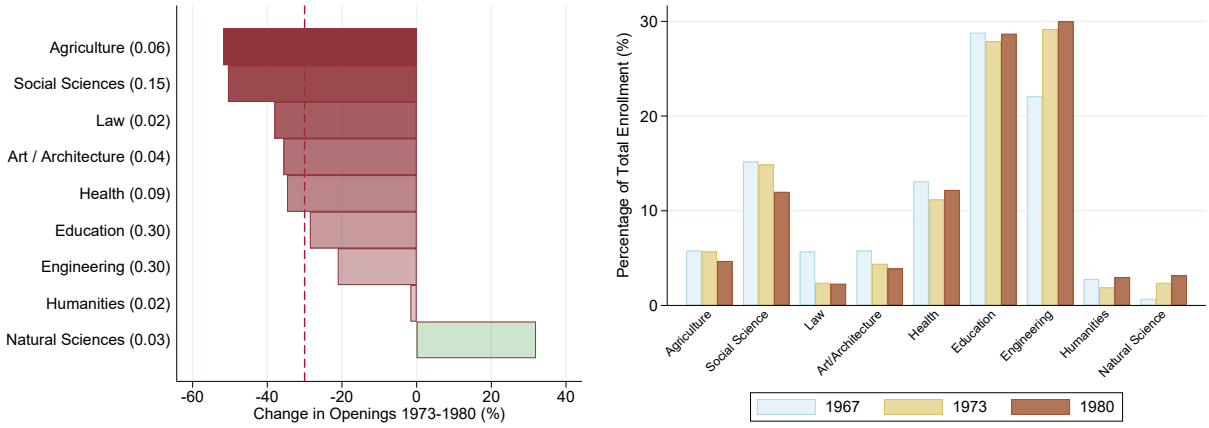
Figure A4: Alternative Mechanisms



(a) Conscription **(b)** Students Abroad

Notes: Panel (a) shows the number of army conscripts per year. Panel (b) shows the number of Chilean students abroad . Sources: records of conscripts per year were obtained through a Freedom-of-Information request and the number of students abroad from UNESCO statistical yearbooks.

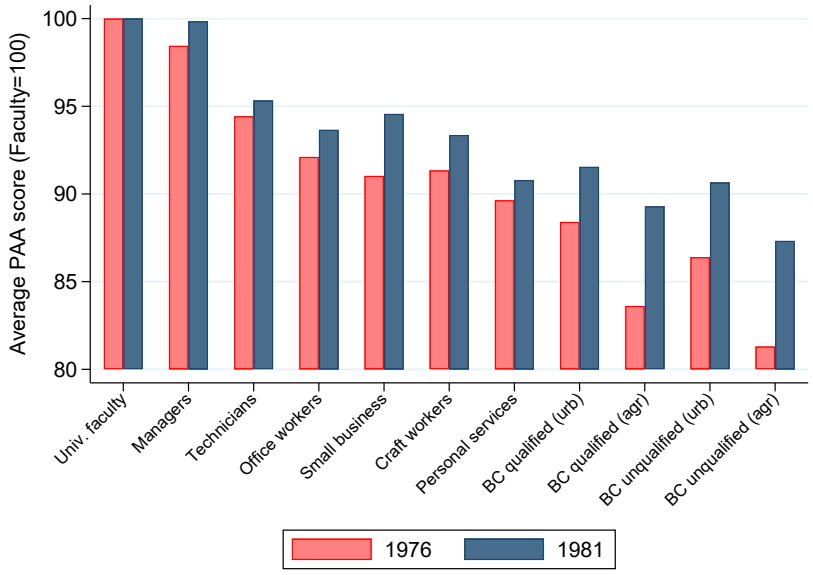
Figure A5: College Openings and Enrollment by Field



(a) Change in Openings by Field (1973-1980) **(b)** Enrollment by Field

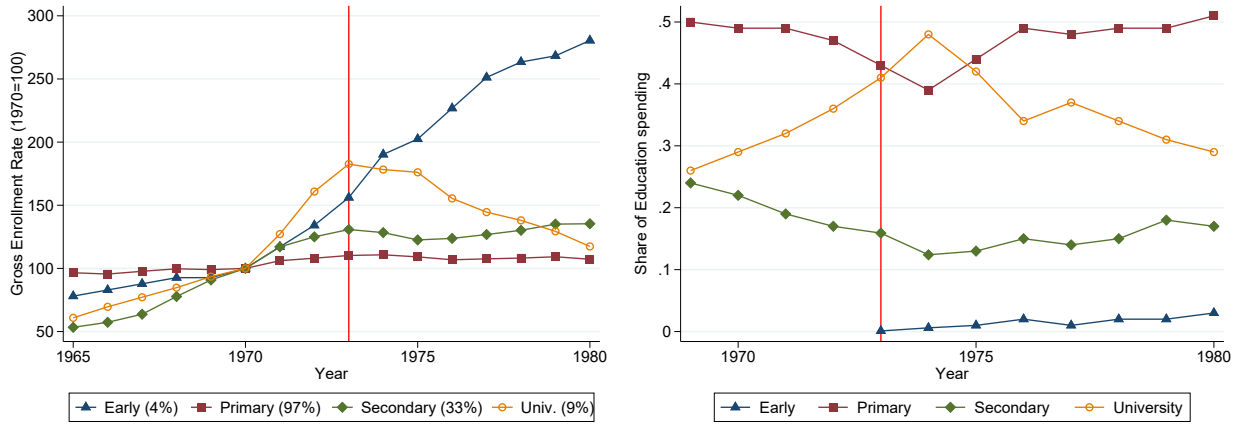
Notes: Panel (a) shows the change in openings by field of study between 1973 and 1980. The number in parenthesis corresponds to the field's share of openings in 1973, while the dashed line indicates the aggregate reduction in openings. Panel (b) shows the share of students enrolled in programs corresponding to different fields of study in 1967, 1973 and 1980. Classification corresponds to UNESCO categories. Sources: PIIE (1984); Brunner (1984).

Figure A6: Average PAA Test Score of Admitted Students by Father's Occupation



Notes: Figure shows the average PAA test scores for admitted college students in 1976 and 1981, classified by father's occupation. In both years, the maximum corresponds to children of university faculty, which we have normalized to 100. BC = Blue collar. Source: PIIE (1984).

Figure A7: Educational Spending and Enrollment

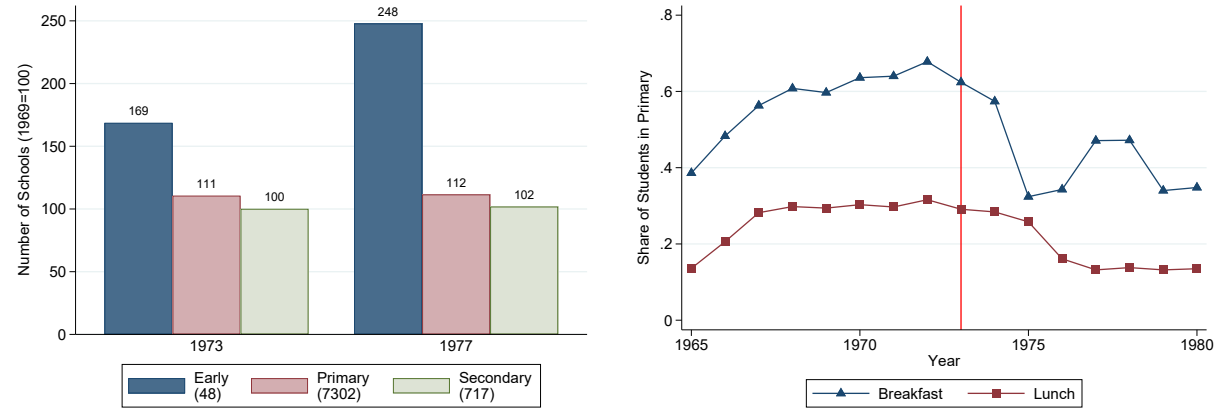


(a) Gross Enrollment Rate (Index)

(b) Share of Education Budget

Notes: Panel (a) shows indices for the gross enrollment rates in each level. The respective denominators are population in the 0-5,6-14-15-19,20-24 age groups. Enrollment rates have been normalized to 100 in 1970, number in parenthesis corresponds to enrollment rate in that year. Panel (b) shows the share of public spending on education devoted to early, primary, secondary and higher education. Source: PIIE (1984).

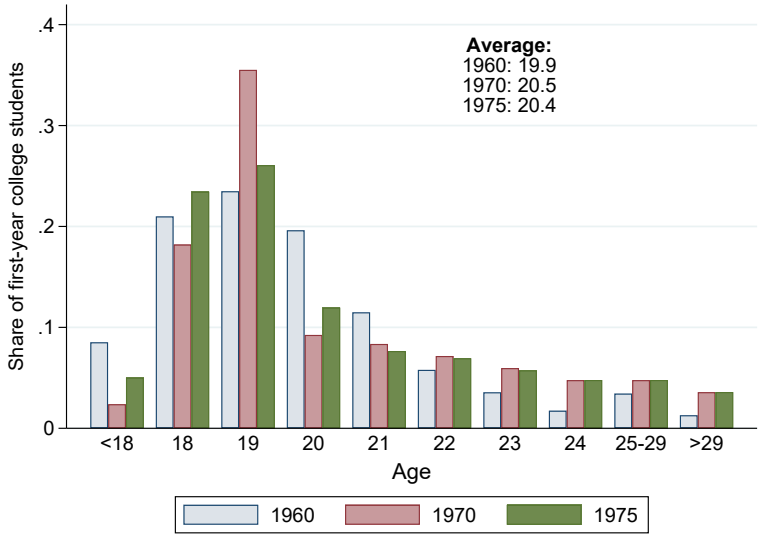
Figure A8: Other Outcomes: Lower Levels



(a) Number of Schools **(b)** School Meals

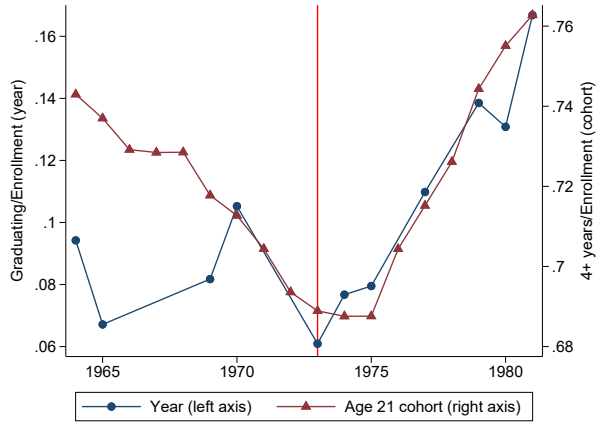
Notes: Panel (a) shows the number of schools per level (early, primary, secondary) in 1973 and 1977, relative to 1969 (normalized to 100). Panel (b) shows the yearly share of primary students receiving either free breakfast (triangle markers) or lunch (square markers). Sources: Echeverría (1980); PIIE (1984).

Figure A9: Age Distribution of First-year College Students

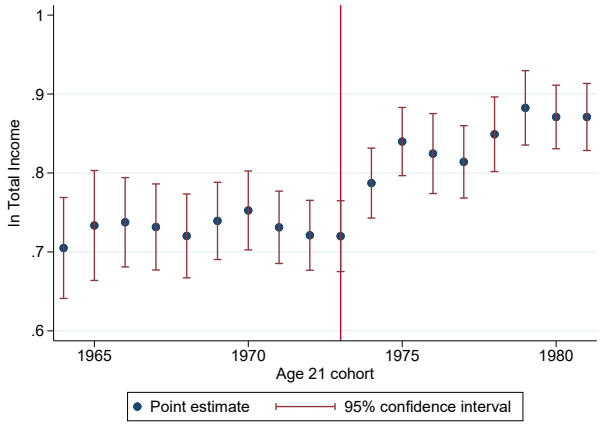


Notes: Information for 1960 comes from the published results from that year's population census (INE 1965). The respective sources for 1970 and 1975 are Schiefelbein (1976) and Echeverría (1982), based on administrative records and the 1970 population census. Data for 1970 corresponds to entire tertiary sector (i.e., including technical education). For the average, we set age at 17, 25 and 30 for the < 18, $25 - 29$ and > 29 age groups respectively, which likely leads to an underestimate.

Figure A10: Post-Enrollment Outcomes



(a) Graduation Rate

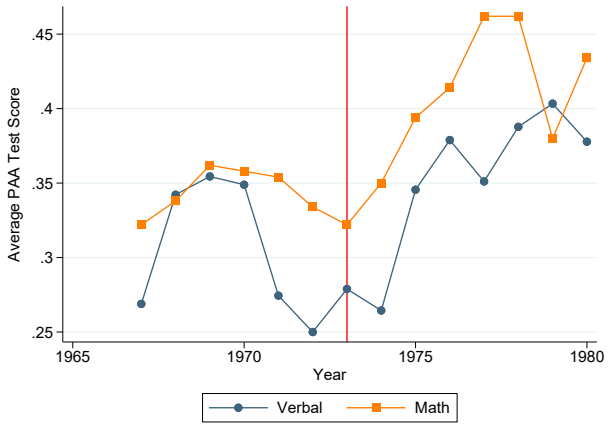


(b) Returns to Any College (OLS)

Notes: Panel (a) shows the college graduation rate. Circle markers (left axis) correspond to the number of graduating students as a share of the total number of students per year, based on the UNESCO statistical yearbooks. Triangle markers (right axis) show the number of people in the 1992 census that report 4+ years of college as a share of the people with any college per cohort. Panel (b) shows results from a regression of log real total income on a full set of interactions of a dummy for any college with cohort fixed effects. Sample includes all respondents in the CASEN survey reaching age 21 between 1964 and 1981 and reporting 4+ years of secondary education. Controls include county of residence by gender, survey year and age fixed effects. Standard errors clustered by county of residence.

Figure A11: Additional Information on PAA Test

(a) PAA Test-takers



(b) Average test scores

Notes: Panel (a) shows the yearly number of students that registered for the PAA testand the number that actually took the test. Panel (b) shows the average (raw) scores in the verbal and math sections of the PAA test. The score is calculated by adding the number of correct answers and subtracting one quarter of the wrong answers. We divide these averages by the number of questions in each section (90 questions in verbal, 50 questions in math) for enhanced comparability. Sources: Díaz and Himmel (1985); Universidad de Chile (2011).

Table A1: Tertiary Enrollment and Democracy

	Dependent variable: Gross Enrollment Rate in Tertiary Education (%)											
	Pooled		1970s		1980s		1990s		2000s		2010s	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
FiW index	-30.87***	-8.35**	-16.03***	-7.32**	-17.28***	-4.42	-29.03***	-8.98**	-37.32***	-12.65**	-46.60***	-11.75*
	(3.51)	(4.02)	(2.76)	(2.90)	(3.04)	(4.41)	(3.90)	(3.75)	(5.65)	(6.10)	(5.92)	(6.53)
log GDP per capita		8.17***		3.14***		4.41***		6.86***		9.68***		13.14***
		(0.93)		(0.67)		(0.98)		(0.87)		(1.21)		(1.50)
Observations	700	700	99	99	122	122	157	157	161	161	161	161
R-squared	0.42	0.58	0.33	0.48	0.26	0.43	0.29	0.51	0.25	0.51	0.27	0.57
Decade	Pooled	Pooled	1970	1970	1980	1980	1990	1990	2000	2000	2010	2010
Mean DV	22.44	22.44	7.60	7.60	10.84	10.84	18.03	18.03	27.78	27.78	39.30	39.30

Notes: The dependent variable in all regressions is the gross tertiary enrollment rate, sourced from the World Bank's World Development Indicators (WDI). The Freedom in the World (FiW) index is produced by Freedom House, with lower values representing a greater enjoyment of political values and civil liberties. We rescale the original index, which ranges from 1 to 6, to range from 0 to 1. Log GDP per capita is measured in constant 2010 USD and is sourced also from the WDI. The unit of observation is country-decade (averaging across years with available information within the same decade). Columns 1-2 pool data from all decades and include decade fixed effects as additional controls. Columns 3-12 only include data from the decade in the header (i.e., purely cross-sectional regression). Robust standard errors in parentheses (clustered by country in columns 1-2). *** p<0.01, ** p<0.05, * p<0.1

Appendix B Additional Information on Data Sources

Censuses and surveys: The population censuses of 1992, 2002 and 2017 were *de facto* and took place on days declared as national holidays. We restrict the sample to people born in Chile and we identify the cohort of birth using the respondents' age. The census files provide universal information at the individual level on gender, age, educational attainment, labor force participation, unemployment, occupation, marital status and fertility. In each census, individuals are classified into households and one person is identified as the head of each household. For all other respondents, the census reports how they are related to the household head. The questions in the census and their level of detail vary slightly over time, especially in 2017. For example, the 2017 census does not ask about employment categories (i.e., business-owner vs salaried employee), but does ask about completion of the highest educational level. Only the 1992 census includes an additional calculated variable indicating the wealth quintile to which the household belongs based on the observable characteristics of the dwelling and ownership of various assets.

We complement the censuses with a repeated cross-section of the National Socioeconomic Characterization Survey CASEN. This survey has been conducted biannually by the Ministry of Planning since 1987, and it includes detailed information on the labor market of the interviewed population.

Other sources: We use data from the Integrated Public Use Micro-data Series (IPUMS) for the synthetic control analysis. Harmonized data is available for 57 countries (see Table B1 for details). The countries (census year) that we use in the baseline analysis are: Argentina (2010), Bolivia (2001), Brazil (2010), Colombia (2005), Costa Rica (2011), Dominican Republic (2010), Ecuador (2010), Honduras (2001), Haiti (2003), Mexico (2015), Nicaragua (2005), Panama (2010), Peru (2007), Paraguay (2002), El Salvador (2007), Uruguay (2011). The data for Chile comes from the 2002 census.

Table B1: Countries and samples in Synthetic Control Analysis

Without dictatorship beetween 1950-1990		**With dictatorship beetween 1950-1990**	
Country	**Last year of Census**	**Country**	**Last year of Census**
Armenia	2011	Argentina	2010
Austria	2011	Bolivia	2001
Bangladesh	2011	Brazil	2010
Benin	2013	Burkina Faso	2006
Botswana	2011	Chile	2002
Cambodia	2008	Colombia	2005
Canada	2011	Dominican Republic	2010
China	2000	Ecuador	2010
Costa Rica	2011	Egypt	2006
El Salvador	2007	Fiji	2007
Ethiopia	2007	Ghana	2010
France	2011	Greece	2011
India	2009	Haiti	2003
Ireland	2011	Honduras	2001
Jamaica	2001	Hungary	2011
Kenya	2009	Indonesia	2010
Liberia	2008	Jordan	2004
Malaysia	2000	Mongolia	2000
Mexico	2015	Nicaragua	2005
Morocco	2004	Nigeria	2010
Senegal	2002	Panama	2010
Switzerland	2000	Paraguay	2002
Ukraine	2001	Peru	2007
United States	2015	Philippines	2010
Vietnam	2009	Poland	2011
		Portugal	2011
		Romania	2011
		South Africa	2011
		Spain	2011
		Thailand	2000
		Turkey	2000
		Uruguay	2011

Appendix C Educational Attainment: Additional Results

Table C1: College Enrollment: Other Sources

Source	Dependent variable: Any College			
	CASEN 1990-2017		Census 2002	Census 2017
	(1)	(2)	(3)	(4)
Yr Age 21	0.011***	0.011***	0.012***	0.007***
	(0.0007)	(0.0007)	(0.0004)	(0.0004)
	[0.001]	[0.001]	[0.001]	[0.001]
Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)	-0.024***	-0.024***	-0.025***	-0.018***
	(0.0011)	(0.0011)	(0.0008)	(0.0007)
	[0.000]	[0.000]	[0.000]	[0.000]
County x gender FE	Yes	Yes	Yes	Yes
Year FE	No	Yes	No	No
Observations	163,693	163,693	1,192,851	1,036,105
R-squared	0.057	0.059	0.035	0.037
Mean DV	0.261	0.261	0.325	0.300

Notes: Sample includes survey/census respondents born between 1943 and 1960 and reporting 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972, while $\mathbb{1}$(Yr Age 21 $\geq$ 1973)" is a dummy for cohorts that reached age 21 on or after 1973. All regressions include county of birth x gender fixed effects. Standard errors clustered by county of residence in columns 1-2 and of birth in columns 3-4. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table C2: College Enrollment: Different Kink Points

Kink point (x):	Dependent variable: Any college				
	1971	1972	1973	1974	1975
	(1)	(2)	(3)	(4)	(5)
Yr Age 21	0.024***	0.021***	0.018***	0.015***	0.011***
	(0.0006)	(0.0005)	(0.0004)	(0.0004)	(0.0003)
	[0.006]	[0.002]	[0.001]	[0.000]	[0.000]
Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ x)	-0.037***	-0.037***	-0.036***	-0.036***	-0.035***
	(0.0008)	(0.0007)	(0.0007)	(0.0007)	(0.0007)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.000]
County of birth x gender FE	Yes	Yes	Yes	Yes	Yes
Observations	1,024,570	1,024,570	1,024,570	1,024,570	1,024,570
R-squared	0.037	0.039	0.040	0.040	0.039
Mean DV	0.295	0.295	0.295	0.295	0.295

Notes: Sample includes all respondents of the 1992 census born between 1943 and 1960 that report 4+ years of secondary education (media). "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972, while $\mathbb{1}$(Yr Age 21 $\geq$ 1973)" is a dummy for cohorts that reached age 21 on or after 1973. All regressions include county of birth x gender fixed effects. Standard errors clustered by county of birth in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table C3: College Enrollment: Within-Household Estimates

	Dependent variable: Any College					
Source (Census):	1992		2002		2017	
Relationship to HH head:	Children	Siblings	Children	Siblings	Children	Siblings
	(1)	(2)	(3)	(4)	(5)	(6)
Yr Age 21	0.021***	0.018***	0.012**	0.010***	0.015	0.007**
	(0.0028)	(0.0034)	(0.0048)	(0.0033)	(0.0108)	(0.0035)
	[0.000]	[0.000]	[0.001]	[0.002]	[0.066]	[0.011]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.043***	-0.038***	-0.029***	-0.022***	-0.034**	-0.020***
	(0.0038)	(0.0050)	(0.0061)	(0.0048)	(0.0143)	(0.0048)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.002]	[0.001]
County of birth x gender FE	Yes	Yes	Yes	Yes	Yes	Yes
Household FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	27,518	14,986	14,412	14,133	4,955	20,658
R-squared	0.653	0.667	0.655	0.670	0.705	0.672
Mean DV	0.287	0.304	0.304	0.323	0.289	0.309

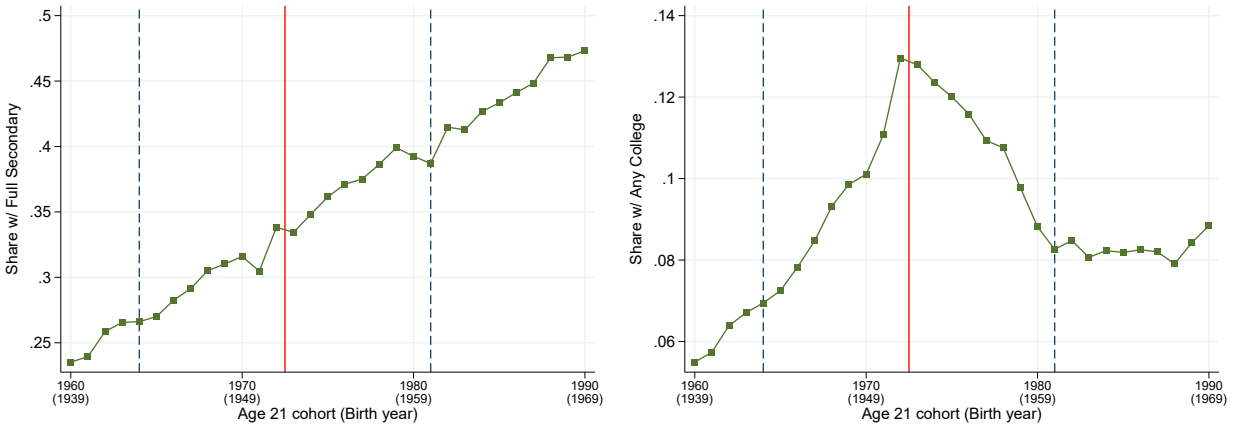
Notes: Sample includes all census respondents from cohorts born between 1943 and 1960, reporting four or more years of secondary education (media). Odd-numbered columns include household heads and respondents classified as siblings. Even-numbered columns include respondents classified as children of the household head. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972, while 𝟙(Yr Age 21 ≥ 1973)" is a dummy for cohorts that reached age 21 on or after 1973. All regressions include county of birth x gender and household fixed effects. Standard errors clustered by county of birth in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table C4: College Enrollment: Within-Wealth-Quintile Estimates

	Dependent variable: Any college				
Sample (Housing wealth quintile):	5th Quintile (highest)	4th Quintile	3rd Quintile	2nd Quintile	1st Quintile (lowest)
	(1)	(2)	(3)	(4)	(5)
Yr Age 21	0.020***	0.018***	0.017***	0.015***	0.013***
	(0.0005)	(0.0007)	(0.0009)	(0.0008)	(0.0012)
	[0.001]	[0.001]	[0.000]	[0.001]	[0.001]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.037***	-0.031***	-0.030***	-0.027***	-0.026***
	(0.0009)	(0.0012)	(0.0014)	(0.0013)	(0.0018)
	[0.000]	[0.000]	[0.000]	[0.000]	[0.001]
Birth county x gender FE	Yes	Yes	Yes	Yes	Yes
Observations	504,456	252,358	146,316	80,095	24,493
R-squared	0.042	0.036	0.038	0.035	0.059
Mean DV	0.413	0.209	0.165	0.127	0.125

Notes: Dependent variable in the header. The sample in each column includes all 1992 census respondents from cohorts born between 1943 and 1960 (both inclusive) classified in the respective quintile, but is restricted to respondents reporting four or more years of secondary education (media). "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972. "Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. All regressions include county of birth x gender and household fixed effects. Standard errors clustered by county of birth in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

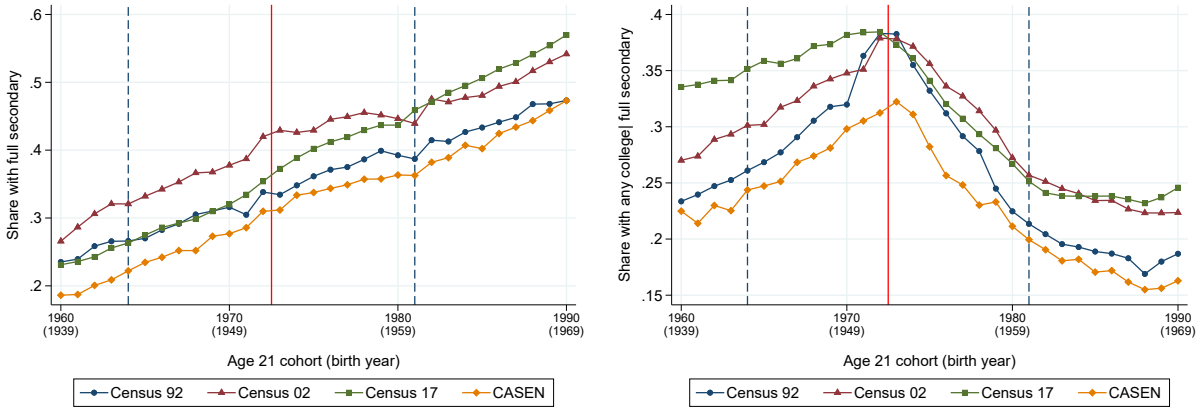
Figure C1: Visualization of Kink: Educational Attainment (Unrestricted Sample)



(a) Full Secondary **(b)** Any College

Notes: Figures show the share of people per cohort that report any college or 4+ years of secondary education in the 1992 census. The solid red line indicates the year of the military coup. Dashed lines correspond to the sample of cohorts used in the analysis.

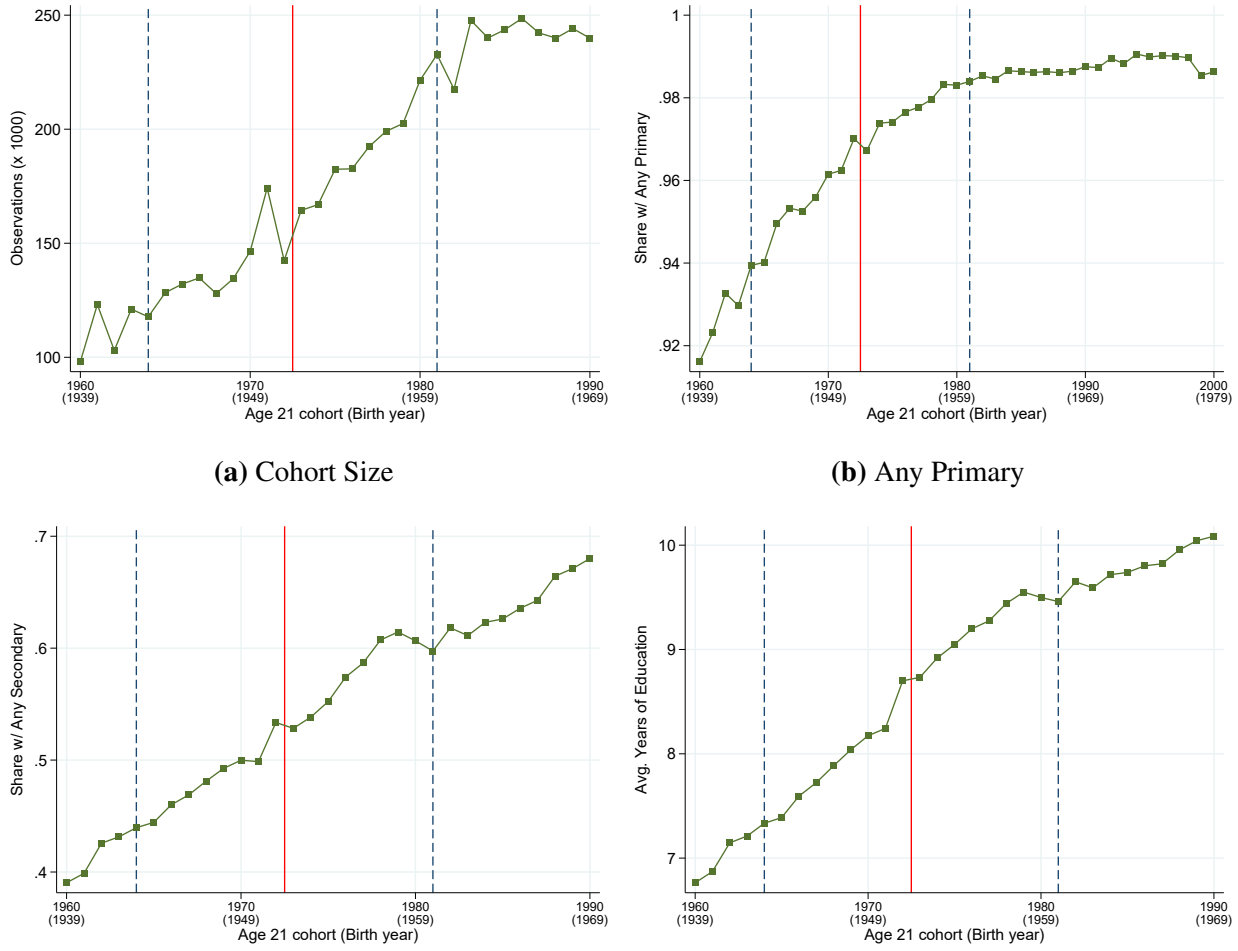
Figure C2: College Enrollment: Different Sources



(a) Share with 4+ years secondary **(b)** Share with any college | 4+ years secondary

Notes: Panel (a) shows for each source the share of people in each cohort that report at least four years of secondary education. Panel (b) shows the share of people with any college, conditional on having 4+ years of secondary education. The solid red line shows the year of the military coup. Dashed lines show the start (1964) and end date (1981) of the sample of cohorts used in the analysis.

Figure C3: Educational Attainment: Raw Data



(a) Cohort Size

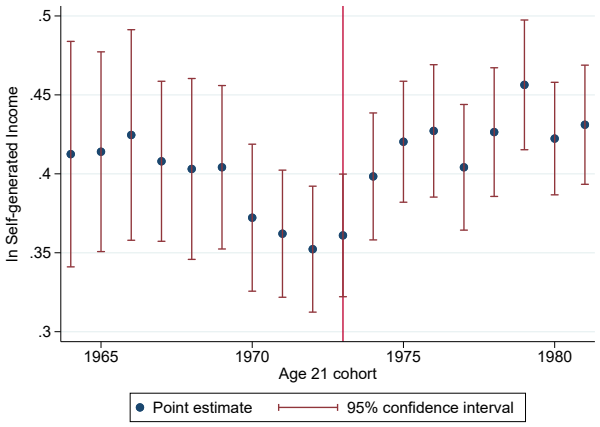
(b) Any Primary

(c) Any Secondary

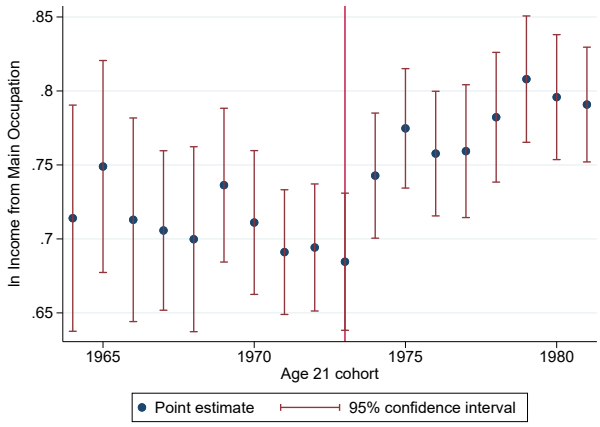
(d) Years of Education

Notes: Panel (a) shows the total number of people per cohort (normalized to age 21) in the 1992 population census. Panel (b) shows the share of census respondents per cohort that report any primary education. Panel (c) shows the corresponding share that reports any secondary education. Panel (d) shows the average years of education per cohort. The solid red line shows the year of the military coup. Dashed lines show the start (1964) and end date (1981) of the sample of cohorts used in the analysis.

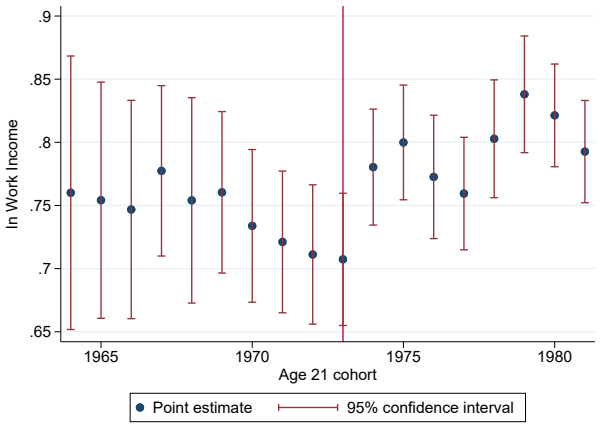
Figure C4: Cohort-specific Estimates of the College Premium



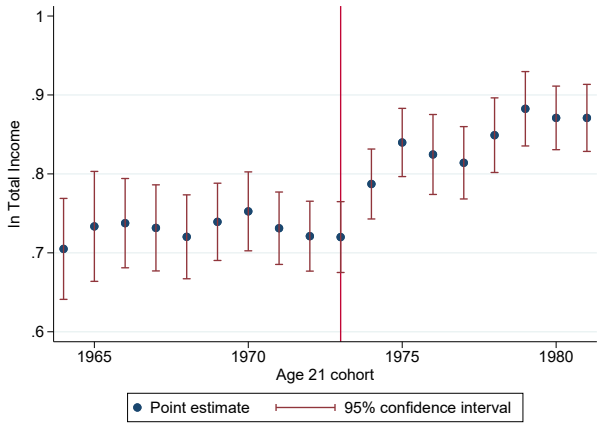
(a) Self-generated (w/ occup. FE)



(b) Primary occupation



(c) Work



(d) Total

Notes: Each panel shows results of a regression of log income from the category in the caption on a full set of interactions of a dummy for any college education with cohort fixed effects. Sample includes all respondents in the CASEN survey from cohorts born between 1943 and 1960 (both inclusive), but is restricted to respondents reporting four or more years of secondary education. Regression includes county of residence x gender, survey year and age fixed effects. Panel (a) additionally includes occupation fixed effects. Standard errors are clustered by county of residence.

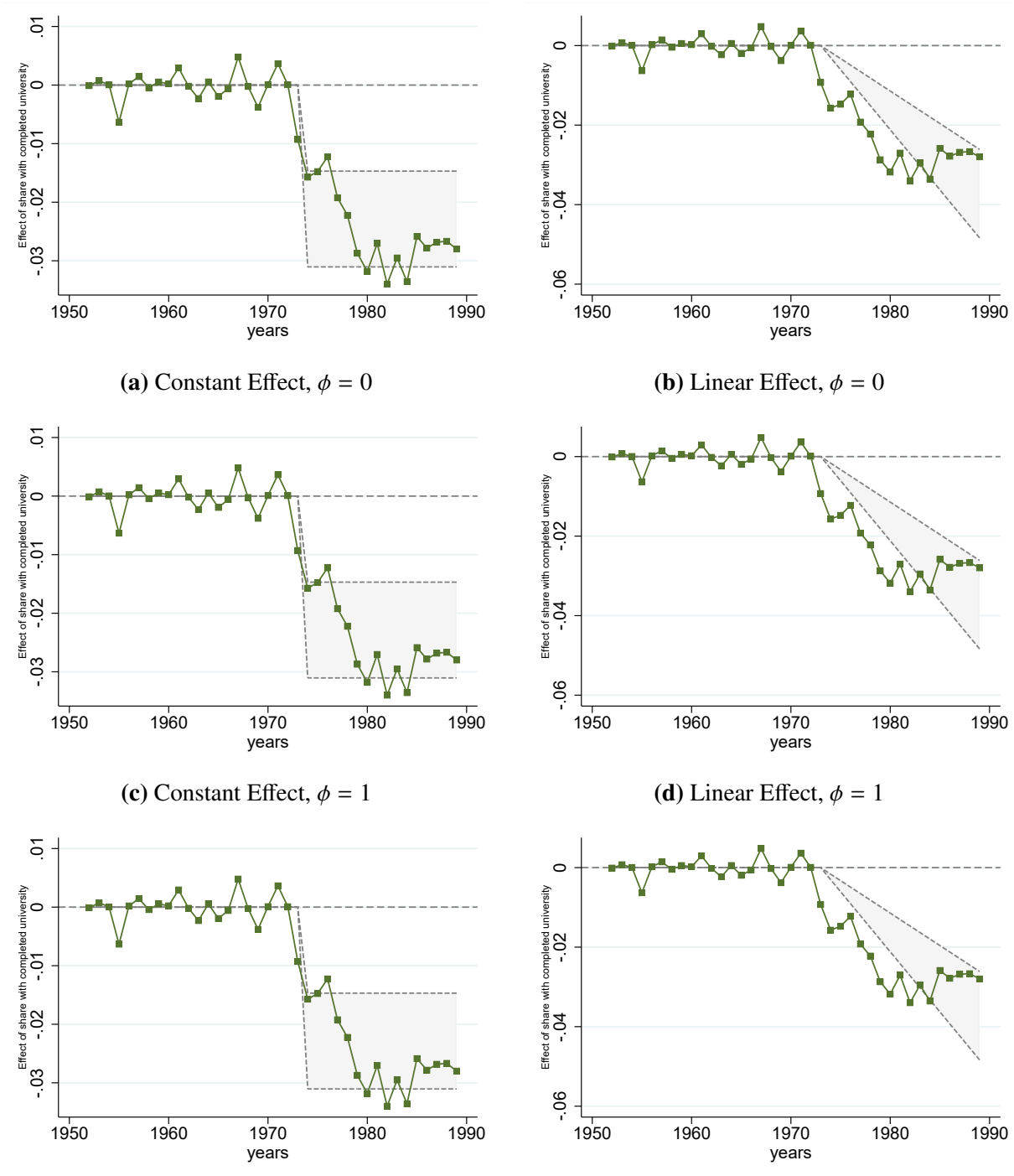
Appendix D Synthetic Control: Additional Results

Table D1: Robustness checks to the synthetic control analysis

Sample:	R^2	Average effect	p-value Unrestricted	p-value Restricted
Panel A: Using even pre-treatment period outcomes for matching				
LA without controls	96%	-1.69%	0.00	0.00
LA with controls	94%	-1.27%	0.00	0.00
All countries without controls	96%	-1.23%	0.00	0.00
All countries with controls	95%	-1.02%	0.04	0.04
Exclude dictatorships without controls	88%	-1.11%	0.04	0.04
Exclude dictatorships with controls	94%	-1.20%	0.04	0.04
Panel B: Using all pre-treatment period outcomes for matching				
LA without controls	98%	-1.18%	0.00	0.00
All countries without controls	99%	-0.86%	0.02	0.02
Exclude dictatorships without controls	98%	-0.66%	0.04	0.04

Notes: This table presents the goodness of fit of the matching and the treatment effects for different samples and different sets of matching characteristics. The R^2 comes from a regression between the Chilean data and the synthetic control during the pre-treatment period. The *Average effect* is the average difference between Chile and the synthetic control between 1973 and 1981. The *p-value* is computed based on placebo treatments, for each country in the control group we construct their synthetic control and then we create the ratio between the RMSPE in the post (1973-1981) and the RMSPE in the pre-treatment period. Then we see how likely is to find a ratio as large as the one for Chile for the case of a negative effect. The *unrestricted* version uses all the countries, while the *unrestricted* uses only countries with a RMSPE in the pre-treatment period that is smaller than two times the one of Chile, to avoid including as controls countries with a noisy fit.

Figure D1: Confidence Sets for Latin America



(a) Constant Effect, $\phi = 0$

(b) Linear Effect, $\phi = 0$

(c) Constant Effect, $\phi = 1$

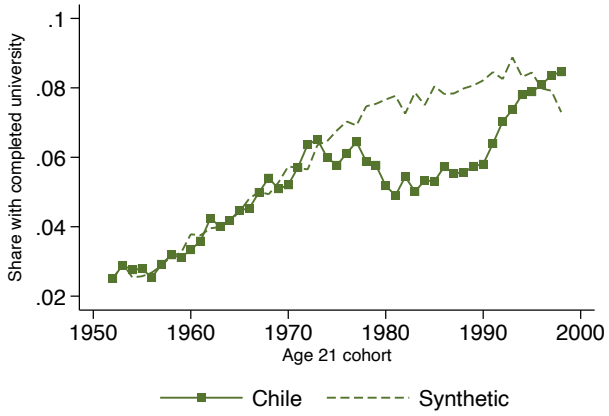
(d) Linear Effect, $\phi = 1$

(e) Constant Effect, $\phi = 2$

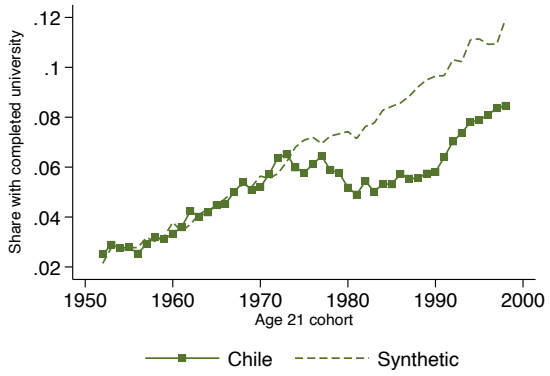
(f) Linear Effect, $\phi = 2$

Notes: This figure shows the confidence set proposed by Firpo and Possebom (2018) for a constant and a linear treatment effect. Panels A and B use a sensitivity parameter of 0, while Panels C and D (E and F) use a sensitivity parameter of 1 (2). The sample is all Latin American countries and we use as matching characteristics the even pre-treatment outcomes.

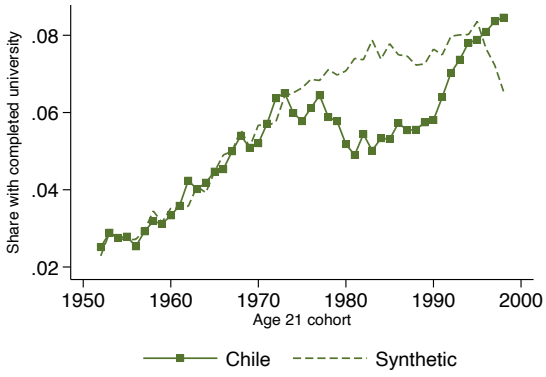
Figure D2: Robustness of Synthetic Control Analysis



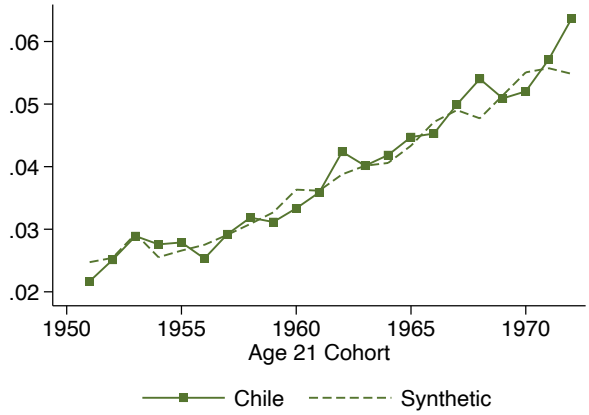
(a) With Controls



(b) Countries Without Dictatorship



(c) All Countries



(d) Placebo

Note: Panels show observed rates of educational attainment by cohort in the 2002 population census (solid line) and counterfactuals from a synthetic control (dashed line). The outcome in all panels is the share of people with full college education. Panel (a) includes the share of people with ages 18-65, the share of women and the share of people with secondary education as additional controls. Panel (b) excludes country-year pairs under dictatorship as control units to be potentially used in the synthetic control. Similarly, panel (c) uses all 57 countries with IPUMS data. Panels (b) and (c) use the specification with controls and all countries in the sample of potential controls. Panel (d) uses 1960 as a placebo treatment date for the military coup.

Appendix E Economic Consequences: Additional Results

Table E1: Occupational Choice: Disaggregated Categories

	Politicians, Managers	Professionals	Technicians	Clerks	Services, Sales	Skilled Agriculture	Craft	Plant/ Machine ops	Elementary Occups.	Military
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Yr Age 21	-0.004***	0.007***	0.001***	-0.002***	-0.002***	-0.000*	-0.001***	-0.001***	-0.002***	0.004***
	(0.0002)	(0.0006)	(0.0003)	(0.0004)	(0.0002)	(0.0001)	(0.0002)	(0.0002)	(0.0002)	(0.0002)
	[0.000]	[0.001]	[0.008]	[0.001]	[0.000]	[0.042]	[0.006]	[0.006]	[0.000]	[0.001]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	0.000	-0.016***	-0.001***	0.005***	0.005***	0.001***	0.004***	0.002***	0.005***	-0.004***
	(0.0003)	(0.0009)	(0.0003)	(0.0004)	(0.0003)	(0.0001)	(0.0003)	(0.0003)	(0.0004)	(0.0003)
	[0.431]	[0.000]	[0.131]	[0.000]	[0.000]	[0.002]	[0.002]	[0.000]	[0.000]	[0.004]
County of birth x gender FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	770,652	770,652	770,652	770,652	770,652	770,652	770,652	770,652	770,652	770,652
R-squared	0.023	0.038	0.004	0.021	0.008	0.033	0.037	0.033	0.009	0.027
Mean DV	0.0965	0.215	0.120	0.235	0.0878	0.0157	0.0880	0.0620	0.0467	0.0335

Notes: Dependent variable in the header. Sample includes census respondents born between 1943 and 1960 with 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972. "Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table E2: Occupational income score: Other wage windows

	Sample	
	1992-1996	1992-2017
	(1)	(2)
Yr Age 21	0.003***	0.008***
	(0.0004)	(0.0005)
	[0.007]	[0.000]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.016***	-0.022***
	(0.0006)	(0.0008)
	[0.000]	[0.000]
County of birth x gender FE	Yes	Yes
Observations	684,995	684,995
R-squared	0.063	0.043
Mean DV	12.67	12.93

Notes: The occupational income score is the logarithm of the median wage of the occupation at the 3-digit level. Wages come from the CASEN biannual survey from 1992 to 1996 (column 1) and from 1992 to 2017 (column 2). Sample includes census respondents born between 1943 and 1960 with 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year when the cohort reached age 21, normalized to zero in 1972. 𝟙(Yr Age 21 ≥ 1973)" is a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table E3: Labor Market Outcomes: Census 2002

	In Labor Force			Seeking Work			White-collar high-skill occupation		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Yr Age 21	0.017***	0.012***		0.000	-0.000**		-0.004***	-0.000	
	(0.0004)	(0.0002)		(0.0002)	(0.0001)		(0.0004)	(0.0003)	
	[0.000]	[0.001]		[0.547]	[0.046]		[0.000]	[0.981]	
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.014***	-0.013***	-0.006***	0.000**	0.001***	0.001***	-0.006***	-0.011***	-0.011***
	(0.0004)	(0.0003)	(0.0005)	(0.0002)	(0.0002)	(0.0002)	(0.0005)	(0.0005)	(0.0008)
	[0.001]	[0.001]	[0.002]	[0.213]	[0.002]	[0.001]	[0.001]	[0.000]	[0.002]
County of birth x gender FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Age FE	No	No	Yes	No	No	Yes	No	No	Yes
Observations	1,192,851	2,217,491	2,217,491	909,204	1,685,569	1,685,569	872,783	1,643,495	1,643,495
R-squared	0.133	0.158	0.160	0.004	0.009	0.009	0.022	0.051	0.052
Sample (census)	02	92/02	92/02	02	92/02	92/02	02	92/02	92/02
Mean DV	0.762	0.760	0.760	0.0822	0.0641	0.0641	0.596	0.519	0.519

Notes: Dependent variable in the header. Sample includes individuals born between 1943 and 1960 with 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972. "Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county of birth in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table E4: Other Income Measures

Dependent variable (log income):	Main Occupation		All Work		Self-generated	
	(1)	(2)	(3)	(4)	(5)	(6)
Yr Age 21	0.002		0.017***		0.014***	
	(0.0019)		(0.0024)		(0.0018)	
	[0.371]		[0.000]		[0.002]	
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.014***	-0.006**	-0.023***	-0.008***	-0.021***	-0.008***
	(0.0024)	(0.0025)	(0.0030)	(0.0031)	(0.0023)	(0.0025)
	[0.001]	[0.039]	[0.001]	[0.029]	[0.001]	[0.044]
County of residence x gender FE	Yes	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes	Yes
Age FE	No	Yes	No	Yes	No	Yes
Observations	107,536	107,536	102,008	102,008	131,133	131,133
R-squared	0.161	0.167	0.143	0.155	0.151	0.159
Mean DV	471,432	471,432	504,077	504,077	526,115	526,115

Notes: Dependent variable in the header. Income deflated using yearly CPI. Sample includes individuals born between 1943 and 1960 with 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972, while 𝟙(Yr Age 21 ≥ 1973)" is a dummy for cohorts that reached age 21 on or after 1973. All regressions include county of residence by gender, survey year and age fixed effects. Standard errors clustered by county of residence in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table E5: Occupation and Employment Categories

Owner	Boss/ Employee	Salaried employed	Self-Worker	Domestic Relative	Helping
	(1)	(2)	(3)	(4)	(5)
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	0.004***	-0.007***	0.004***	0.001	0.000
	(0.0007)	(0.0013)	(0.0013)	(0.0004)	(0.0002)
	[0.001]	[0.002]	[0.019]	[0.267]	[0.639]
County of residence x gender FE	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes
Age FE	Yes	Yes	Yes	Yes	Yes
Observations	110,347	110,347	110,347	110,347	110,347
R-squared	0.031	0.039	0.038	0.056	0.021
Mean DV	0.066	0.661	0.228	0.024	0.007

Notes: Dependent variable in the header. Sample includes individuals born between 1943 and 1960 with 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972, while 𝟙(Yr Age 21 ≥ 1973)" is a dummy for cohorts that reached age 21 on or after 1973. All regressions include county of residence by gender, survey year and age fixed effects. Standard errors clustered by county of residence in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table E6: Labor Market Outcomes: Unrestricted Sample

	In Labor Force	Seeking Work	White-collar High-skill Occupation	Log Total Income
	(1)	(2)	(3)	(4)
		Panel A: Census 1992		
Yr Age 21	0.007***	-0.001***	0.004***	
	(0.0002)	(0.0001)	(0.0002)	
	[0.000]	[0.004]	[0.003]	
Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)	-0.009***	0.002***	-0.009***	
	(0.0004)	(0.0002)	(0.0003)	
	[0.001]	[0.003]	[0.000]	
		Panel B: CASEN survey (1990-2017)		
Yr Age 21	0.024***	0.000	0.002***	0.015***
	(0.0005)	(0.0002)	(0.0005)	(0.0011)
	[0.000]	[0.840]	[0.001]	[0.000]
Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)	-0.013***	0.001***	-0.006***	-0.016***
	(0.0005)	(0.0003)	(0.0007)	(0.0014)
	[0.001]	[0.007]	[0.000]	[0.003]
		Panel C: CASEN survey (1990-2017) w/ Age FE		
Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)	-0.001**	0.001***	-0.007***	-0.008***
	(0.0005)	(0.0003)	(0.0007)	(0.0016)
	[0.120]	[0.028]	[0.000]	[0.017]
Panel A:				
County of birth x gender FE	Yes	Yes	Yes	-
Observations	2,982,951	1,873,045	1,842,799	-
R-squared	0.333	0.004	0.056	-
Mean DV	0.628	0.057	0.208	-
Panels B and C:				
County of residence x gender FE	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes
Observations	513,582	308,732	278,032	396,935
R-squared [Panel B]	0.304	0.012	0.066	0.186
R-squared [Panel C]	0.320	0.012	0.067	0.189
Mean DV	0.601	0.048	0.189	404,278

Notes: Dependent variable in the header. Sample includes individuals born between 1943 and 1960. Income in column 4 deflated using yearly CPI. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972. "Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county (panel A: birth; B/C: residence) in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table E7: Household Wealth and Income: Unrestricted Sample

	Household's wealth or income quintile (dummy)				
	Q5 (highest)	Q4	Q3	Q2	Q1 (lowest)
	(1)	(2)	(3)	(4)	(5)
			Panel A: Wealth (Census 1992)		
Yr Age 21	0.002***	-0.001***	-0.001***	-0.000	0.000
	(0.0002)	(0.0002)	(0.0001)	(0.0001)	(0.0001)
	[0.035]	[0.003]	[0.010]	[0.608]	[0.748]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.007***	0.000	0.002***	0.003***	0.003***
	(0.0005)	(0.0004)	(0.0003)	(0.0002)	(0.0003)
	[0.005]	[0.915]	[0.011]	[0.007]	[0.006]
			Panel B: Income (CASEN 1990-2017)		
Yr Age 21	0.001***	0.001***	-0.001*	-0.000	-0.002***
	(0.0003)	(0.0003)	(0.0003)	(0.0003)	(0.0004)
	[0.018]	[0.001]	[0.128]	[0.508]	[0.038]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.004***	-0.003***	0.000	0.002***	0.005***
	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)
	[0.002]	[0.001]	[0.670]	[0.022]	[0.001]
			Panel C: Income (CASEN 1990-2017) w/ Age FE		
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)	-0.002***	-0.001	0.001**	0.001**	0.000
	(0.0005)	(0.0005)	(0.0005)	(0.0005)	(0.0005)
	[0.020]	[0.082]	[0.022]	[0.045]	[0.437]
Panel A:					
County of birth x gender FE	Yes	Yes	Yes	Yes	Yes
Observations	2,938,505	2,938,505	2,938,505	2,938,505	2,938,505
R-squared	0.074	0.021	0.008	0.014	0.069
Mean DV	0.241	0.212	0.193	0.180	0.175
Panels B and C:					
County of residence x gender FE	Yes	Yes	Yes	Yes	Yes
Survey year FE	Yes	Yes	Yes	Yes	Yes
Observations	511,927	511,927	511,927	511,927	511,927
R-squared [Panel B]	0.080	0.012	0.016	0.024	0.028
R-squared [Panel C]	0.076	0.022	0.008	0.014	0.074
Mean DV	0.148	0.185	0.202	0.223	0.242

Notes: Dependent variable in the header. Sample includes individuals born between 1943 and 1960 with 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972. "Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county (panel A: birth; B/C: residence) in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table E8: Labor Market Outcomes: Heterogeneous Effects by Gender

Dependent variable:	In Labor Force	Seeking Work	White-collar High-skill Occupation	Log Total Income
	(1)	(2)	(3)	(4)
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973) x 𝟙(Male)	-0.004***	0.001	-0.008***	-0.006*
	(0.0010)	(0.0006)	(0.0021)	(0.0035)
	[0.001]	[0.375]	[0.035]	[0.022]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973) x 𝟙(Female)	-0.004**	0.003***	-0.016***	-0.013***
	(0.0015)	(0.0008)	(0.0024)	(0.0041)
	[0.022]	[0.019]	[0.000]	[0.054]
County of residence x gender FE	Yes	Yes	Yes	Yes
Survey year x gender FE	Yes	Yes	Yes	Yes
Age x gender FE	Yes	Yes	Yes	Yes
Observations	163,693	114,790	104,061	135,152
R-squared	0.251	0.014	0.065	0.164
Mean DV (Male)	0.874	0.035	0.372	880,000
Mean DV (Female)	0.533	0.044	0.452	480,000

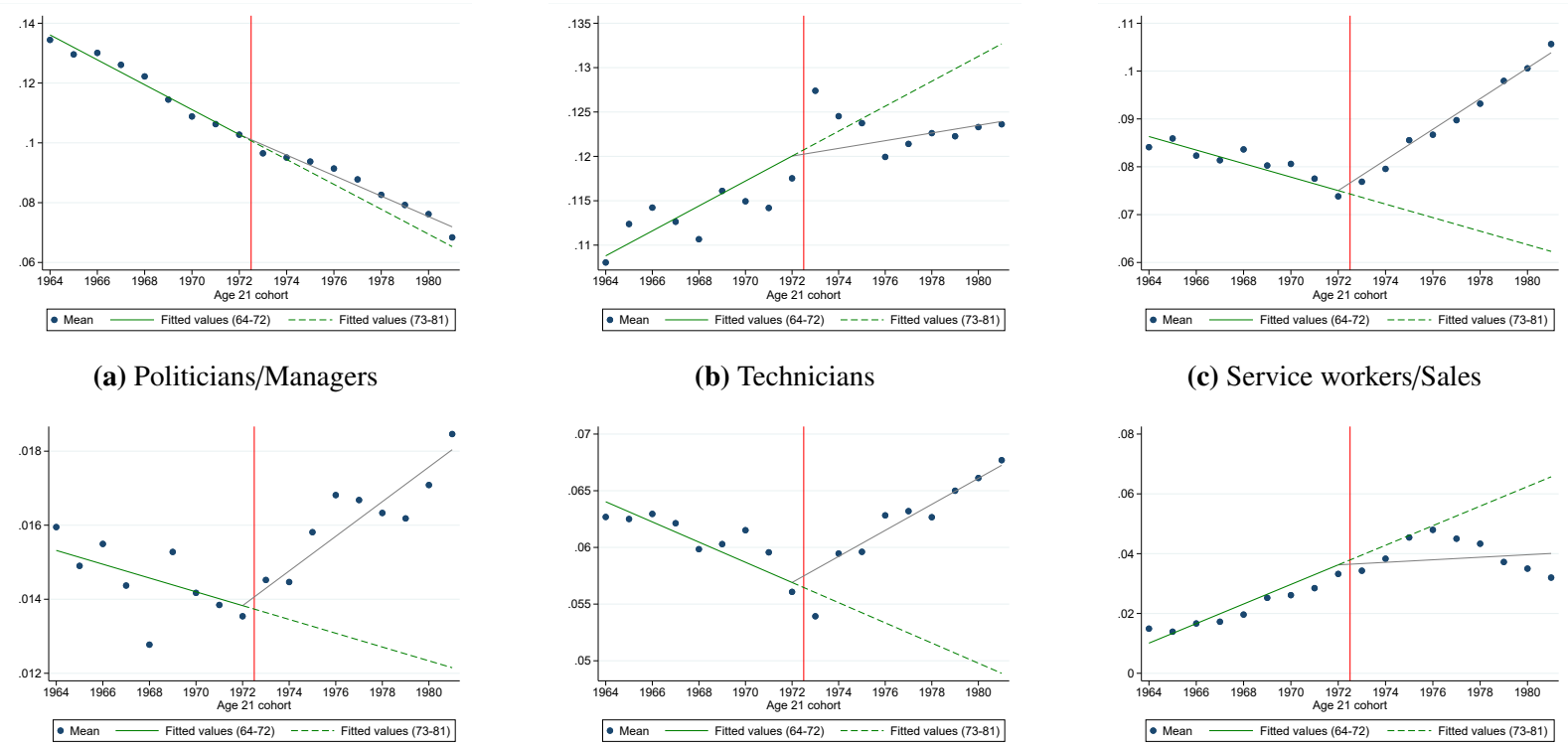
Notes: Dependent variable in the header. Sample includes individuals born between 1943 and 1960 with 4+ years of secondary education. Income in column 4 deflated using yearly CPI. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972. "Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county of residence in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Table E9: Household Income: Heterogeneous Effects by Gender

Dependent variable:	Household's income quintile (dummy)				
	Q5 (highest)	Q4	Q3	Q2	Q1 (lowest)
	(1)	(2)	(3)	(4)	(5)
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973) x 𝟙(Male)	-0.001	-0.001	0.001	0.001	0.000
	(0.0015)	(0.0014)	(0.0011)	(0.0011)	(0.0009)
	[0.429]	[0.688]	[0.277]	[0.502]	[0.621]
Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973) x 𝟙(Female)	-0.003**	-0.001	0.000	0.002**	0.002**
	(0.0014)	(0.0013)	(0.0012)	(0.0011)	(0.0009)
	[0.027]	[0.432]	[0.793]	[0.146]	[0.088]
County of residence x gender FE	Yes	Yes	Yes	Yes	Yes
Survey year x gender FE	Yes	Yes	Yes	Yes	Yes
Age x gender FE	Yes	Yes	Yes	Yes	Yes
Observations	163,342	163,342	163,342	163,342	163,342
R-squared	0.085	0.013	0.017	0.026	0.031
Mean DV (M)	0.332	0.255	0.183	0.136	0.0940
Mean DV (F)	0.322	0.258	0.185	0.139	0.0970

Notes: Dependent variable in the header. Sample includes individuals born between 1943 and 1960 with 4+ years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached age 21, normalized to zero in 1972. "Yr Age 21 x 𝟙(Yr Age 21 ≥ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Standard errors clustered by county of residence in parentheses. P-values from wild cluster bootstrap at the cohort level in brackets. *** p<0.01, ** p<0.05, * p<0.1

Figure E1: Visualization of Kink: Occupational choice



(a) Politicians/Managers

(b) Technicians

(c) Service workers/Sales

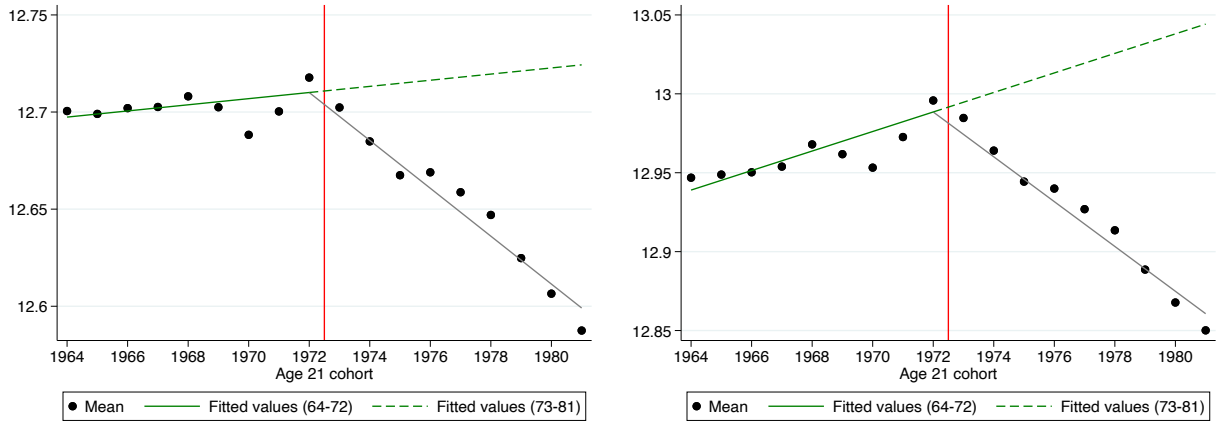
(d) Skilled Agriculture

(e) Plant/machine operators

(f) Armed forces

Notes: Panels show averages by cohort. Solid green line corresponds to line of best fit for cohorts reaching college age before 1973. Dashed green line shows extrapolation for later cohorts. Solid grey line corresponds to line of best fit for cohorts reaching college age in 1973 or afterwards. Source: 1992 census.

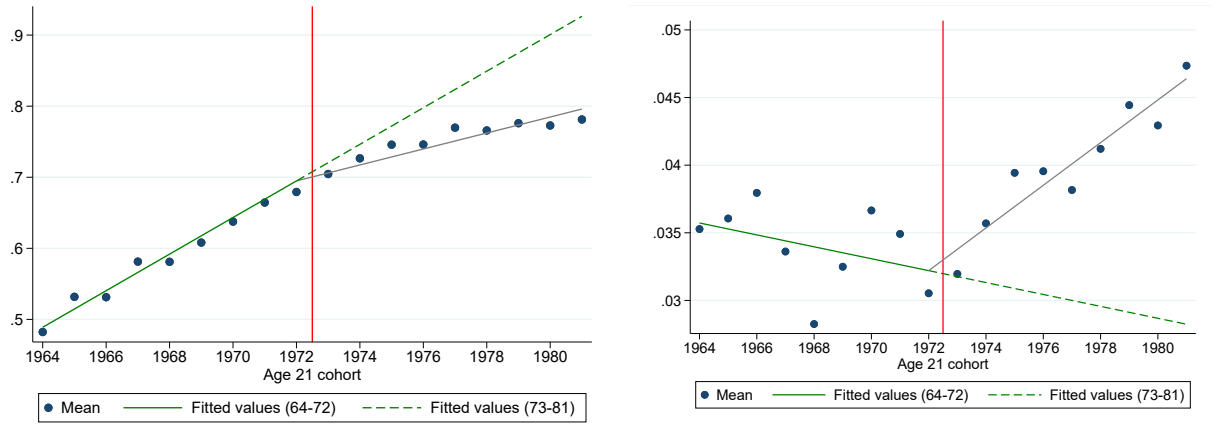
Figure E2: Visualization of Kink: Occupational income score for other wage samples



(a) Sample: 1992-1996 **(b)** Sample: 1992-2017

Notes: Panels show averages by cohort for the occupational income score is the logarithm of the median wage of the occupation at the 3-digit level. Wages come from the CASEN biannual survey from 1992 to 1996 (panel A) and from 1992 to 2017 (panel B). Solid green line corresponds to line of best fit for cohorts reaching college age before 1973. Dashed green line shows extrapolation for later cohorts. Solid grey line corresponds to line of best fit for cohorts reaching college age in 1973 or afterwards. Source: 1992 census.

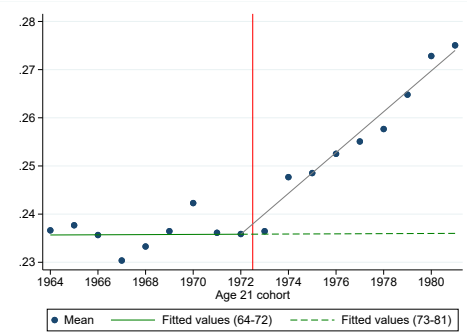
Figure E3: Visualization of Kink: Additional Labor Market Outcomes



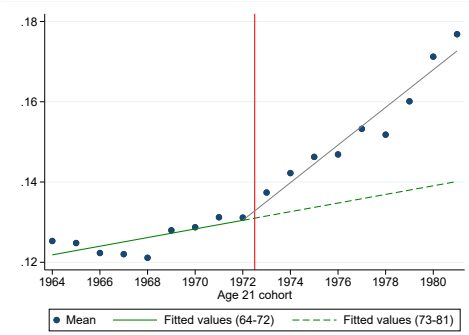
(a) In Labor Force (CASEN) **(b)** Seeking Work (CASEN)

Notes: Panels show averages by cohort for the variable in the caption. Solid green line corresponds to line of best fit for cohorts reaching college age before 1973. Dashed green line shows extrapolation for later cohorts. Solid grey line corresponds to line of best fit for cohorts reaching college age in 1973 or afterwards. Both panels use pooled data from the CASEN survey between 1990 and 2017.

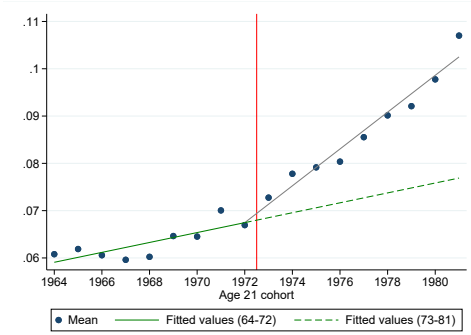
Figure E4: Visualization of Kink: Household Wealth and Income (Quintiles 2-4)



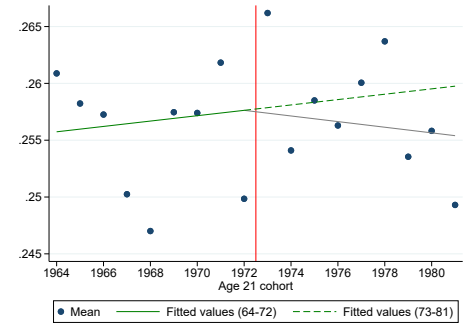
(a) Wealth: Fourth Quintile



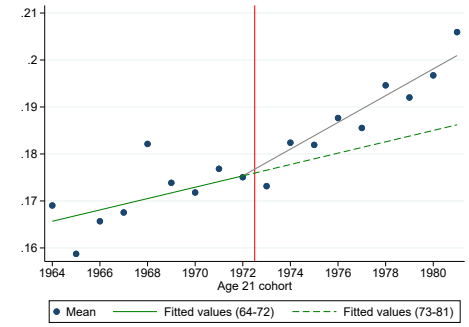
(b) Wealth: Third Quintile



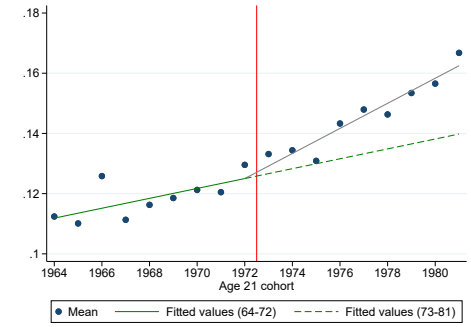
(c) Wealth: Second Quintile



(d) Income: Fourth Quintile



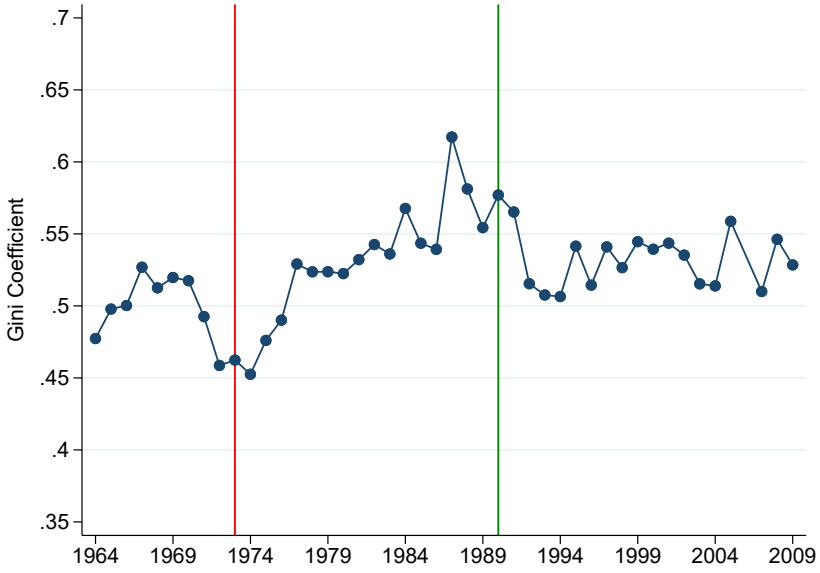
(e) Income: Third Quintile



(f) Income: Second Quintile

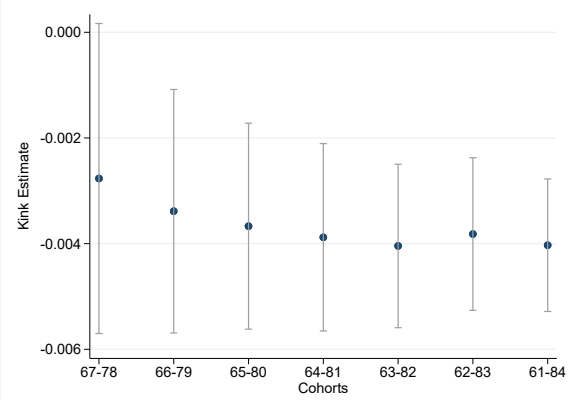
Notes: Panels show averages by cohort for the variable in the caption. Solid green line corresponds to line of best fit for cohorts reaching college age before 1973. Dashed green line shows extrapolation for later cohorts. Solid grey line corresponds to line of best fit for cohorts reaching college age in 1973 or afterwards. Panels (a)-(c) use data from 1992 population census, while panels (d)-(f) use data from the CASEN survey between 1990 and 2017.

Figure E5: Gini Coefficient

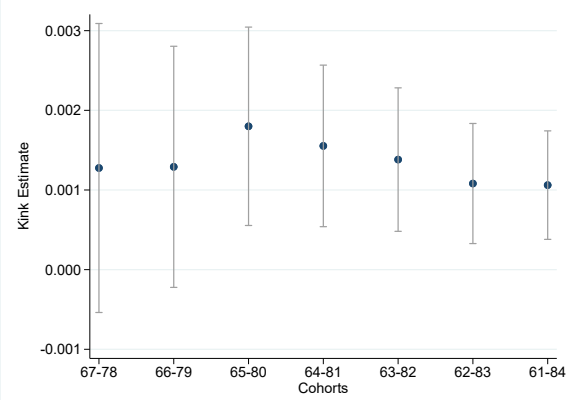


Notes: Figure shows the Gini coefficient, based on self-reported income data in Universidad de Chile's EOD survey.

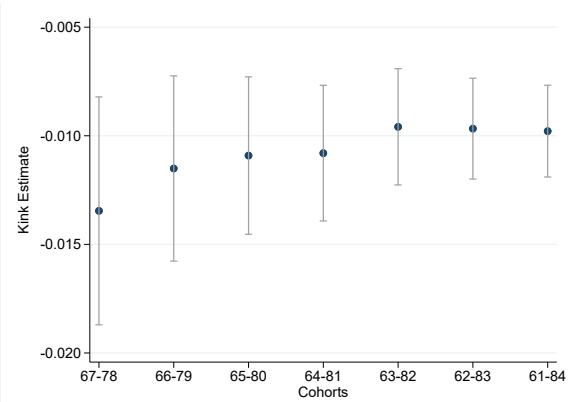
Figure E6: Labor Market Outcomes: Different Bandwidths



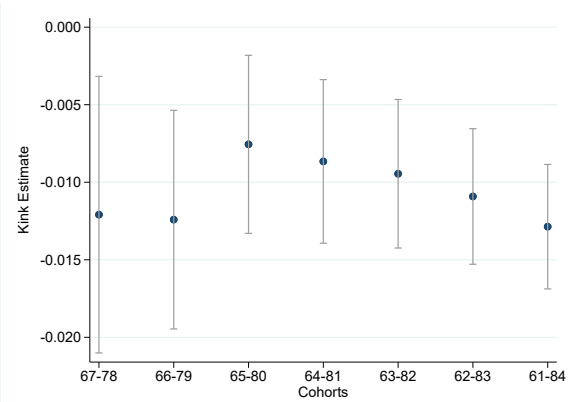
(a) Labor Force Participation



(b) Unemployment



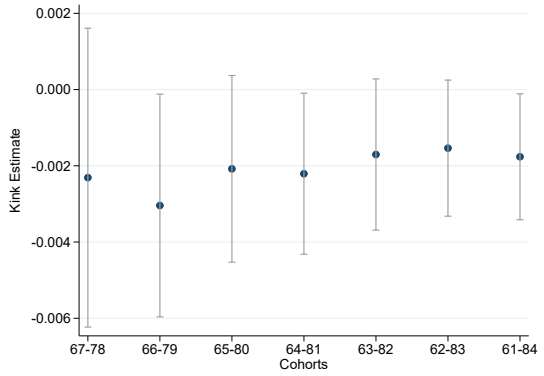
(c) White-Collar High-Skill Occup.



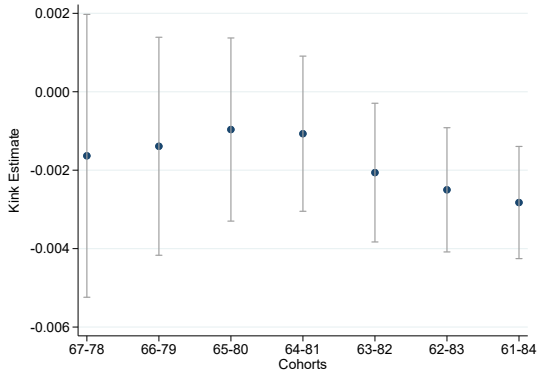
(d) Log Total Income

Notes: Each figure replicates the analysis in panel (c) of Table 3 for the outcome in the caption, using the different bandwidths in the x-axis. Sample includes respondents of the CASEN survey born between the relevant years (both inclusive), reporting four or more years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached 21 years of age, normalized to zero in 1972. "Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Plotted coefficients and 95% confidence intervals correspond to this variable. All regressions include county of birth x gender, survey year and age fixed effects. Standard errors clustered by county of birth in parentheses.

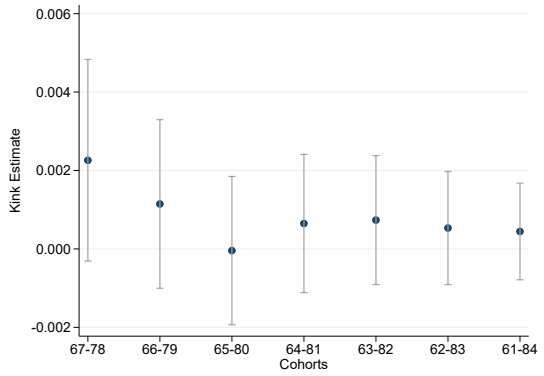
Figure E7: Household Income: Different Bandwidths



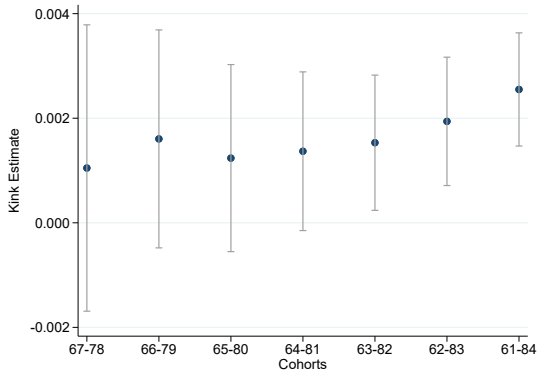
(a) Top Quintile



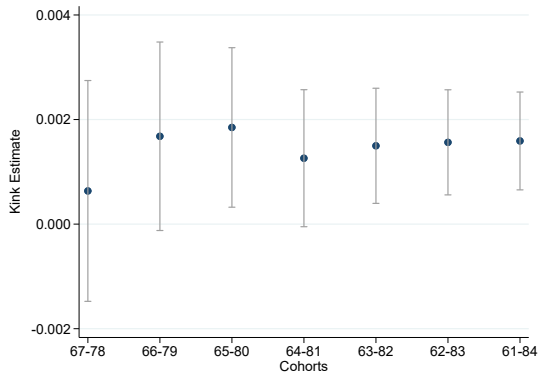
(b) Fourth Quintile



(c) Third Quintile



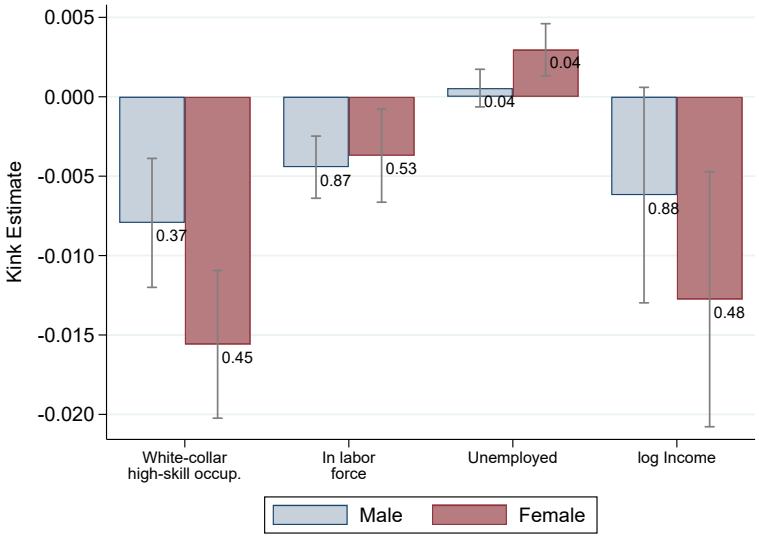
(d) Second Quintile



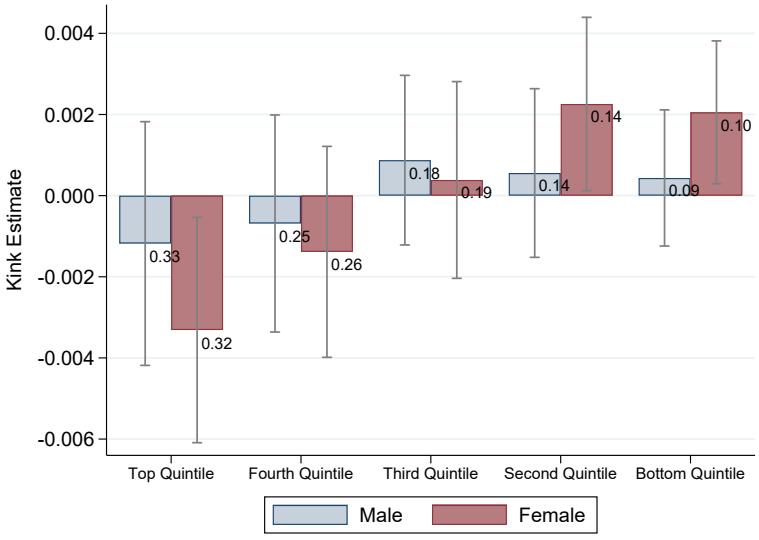
(e) Bottom Quintile

Notes: Each figure replicates the analysis in panel (c) of Table 4 for the outcome in the caption, using the different bandwidths in the x-axis. Sample includes respondents of the CASEN survey born between the relevant years (both inclusive), reporting four or more years of secondary education. "Yr Age 21" is a continuous variable indicating the year at which the cohort reached 21 years of age, normalized to zero in 1972. "Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)" is the interaction of this variable with a dummy for cohorts that reached age 21 on or after 1973. Plotted coefficients and 95% confidence intervals correspond to this variable. All regressions include county of birth x gender, survey year and age fixed effects. Standard errors clustered by county of birth in parentheses.

Figure E8: Heterogeneous Effects by Gender



(a) Labor Market Outcomes



(b) Income Quintiles

Notes: Graphs shows gender-specific estimates and 95% confidence intervals of the kink in the variable in the caption for the cohorts reaching age 21 after 1973. The number next to each bar indicates the sample mean. Sample includes respondents from the CASEN survey reaching age 21 between 1964 and 1981 and reporting 4+ years of secondary education. The gender-specific interaction term 'Yr Age 21 x $\mathbb{1}$(Yr Age 21 $\geq$ 1973)" is the regressor of interest, where "Yr Age 21" is a continuous variable indicating the year at which the cohort reached 21 years of age, normalized to zero in 1972. "$\mathbb{1}$(Yr Age 21 $\geq$ 1973)" is a dummy for cohorts that reached age 21 on or after 1973. All regressions include gender-specific county, age, and year fixed effects. Standard errors clustered by county of residence.