Political Instability and Birth Outcomes: Evidence from the 1981 Military Coup in Spain[1] [2]

Ainhoa Aparicio Fenoll
Collegio Carlo Alberto

Libertad González
Universitat Pompeu Fabra and Barcelona GSE

May 2018

[1]Corresponding author: Ainhoa Aparicio Fenoll. E-mail: ainhoa.aparicio@carloalberto.org. Address: Collegio Carlo Alberto, piazza Arbarello 8, Turin (Italy).

[2]We would like to thank for their useful comments and suggestions Manuel Bagues, Alberto Palloni, Natalia Zinovyeva, and participants in the Collegio Carlo Alberto Applied Lunch and AIES Conference.

Abstract

Political instability can produce stress, which may affect the mental and overall health of pregnant women and ultimately their children's outcomes. We estimate the impact of an episode that generated an exogenous shock to political stability, the 1981 military coup in Spain. Using birth register and election results data, we exploit the fact that municipalities with more votes for leftist and regional nationalist parties were more likely to suffer reprisals in the event of coup success. Our results show that women who were pregnant during the coup were more likely to miscarry, while babies born were healthier in terms of birth weight and absence of complications during pregnancy or labor, which we interpret as a selection effect.

I Introduction

Political instability defined as "the propensity of a government to collapse" has been shown to have detrimental effects on economic growth through uncertainty (Alesina et al., 1996). Uncertainty has the potential to generate stress and affect mental and ultimately overall health (Aneshensel et al., 1991). Pregnant women deserve particular attention because they are a particularly sensitive group, and their health is intimately linked to their children's birth outcomes. The latter, in turn, are highly relevant since they have been shown to have significant and highly persistent effects on later life economic, educational and health outcomes (see Strauss and Thomas 2007 for a survey). We estimate the impact of the 1981 military coup in Spain on birth outcomes. We find that women exposed to the shock in early pregnancy were more likely to miscarry, but the children affected in utero who made it to term were healthier, which we interpret as positive selection dominating any negative health effects.

In this paper we add to the literature on the fetal origins hypothesis, which maintains that a wide variety of intrauterine shocks can have important, long-lasting consequences (Almond and Currie, 2011), by studying political instability as a potentially influential shock. To this end, we make use of an extreme political instability shock, the (eventually unsuccessful) coup d'etat that took place in Spain on February 23, 1981 (from now on called "23F coup"). The transfer of power through the use of military force is a commonplace event in world affairs. According to the dataset by Powell and Thyne (2011), since 1950 there have been an average of more than 8 military coups per country. About half of them result in a change in the government. Although most of the population thought it would succeed (CIS, 1981), the 23F was an unsuccessful coup, which allows us to isolate the effect of the coup itself from the effect of exposure to particular political regimes. The coup had clear time limits: it started at 6:23 pm on February 23 with the kidnapping of all members of the Parliament, and finished at 12:15 pm the following day with their release. This allows for a precise definition of exposure to the coup. The coup was covered in real time by the media and it became known to virtually all Spanish citizens within few hours. According to CIS (1981), 81% of Spaniards declared to have known about the coup before 9 pm of February 23. The perpetrators of the coup were identified and their intentions were clear: they wanted to abolish the recently established democracy and set up the previous dictatorial regime which used to be headed by the general Francisco Franco.

The old regime was characterized by prosecuting leftists and regional nationalists (indepen-

dentists), whose identities had just come to light with the new democracy. The coup perpetrators made lists of "reds" (socialists and communists) and independentists they intended to "take for a walk", an euphemism for assassination used by dictatorial regimes in Spain and Latin America.[1] Given that 55% of the votes in the previous national democratic election (held in 1979) were cast for socialist, communist and independentist parties, it is not surprising that 65% of individuals declared that the coup made them feel "scared" and "restless" (CIS, 1981).

The expectation of suffering reprisals if the coup succeeded clearly may have affected the intensity of the coup experience (the stress generated by the shock), hence we use it as a measure of intensity of exposure to the coup "treatment". We proxy the expectation (or fear) of suffering reprisals using vote shares for leftist (socialist and communist) and independentist parties by municipality in the 1979 national democratic election. Using the Spanish Birth Register, we run individual-level regressions of birth outcomes on vote shares interacted with dummies for being in the 1st, 2nd or 3rd trimester of pregnancy on February 23, 1981. We control for municipality, month and year of birth fixed effects, province time trends and parental characteristics.

We find that children who were in the womb at the time of the coup had higher birth weight and were more likely to be "normal" (as defined by the absence of complications during the pregnancy or labor), in municipalities more "exposed" to fear and uncertainty as a result of the coup (proxied by larger leftist and regional nationalist vote shares). The effects are found for exposure in the first and second trimesters of pregnancy. We also find that babies exposed to the coup in the third trimester were more likely to die in the first 24 hours in more affected municipalities. These results seem to suggest a positive effect of early exposure to the coup on health at birth. However, our results are also consistent with positive selection, such that babies who would have otherwise been at the bottom of the weight and "normality" distributions are less likely to be born (via miscarriages), and this increases average weight even though those who are born may weigh less as a consequence of the coup. See Figure 2 for a graphical representation of that hypothetical scenario. We explore this possibility by looking at number of live births as an additional outcome. We find that there were fewer live births after the coup in more "exposed" municipalities, suggesting the coup increased the incidence of miscarriages and/or late

[1] Figure 1 shows the list of 3,000 individuals that coup perpetrators intended to assassinate in the Real Madrid football stadium, classified by province of origin. The list was made public by the press one year after the coup (Actual Magazin, August 20, 1982). There are also many local public lists available, as every group of dictator followers were expected to elaborate one. The lists were very extensive, including individuals even if they were not officially affiliated to political parties (for instance, those who had participated in cultural events organized in the parties' facilities or simply believed to have a certain ideology).

fetal deaths. We can rule out late fetal deaths as the channel for the reduction in the number of babies since we can observe them in the data. Moreover, the type of mothers giving birth changes in the sense that the pool of mothers is more likely to be married or have a partner; both characteristics associated with a higher propensity of receiving good-quality health care (because they are associated with higher income) and to higher mental stability (Williams et al., 1992). We conclude that the coup increased miscarriages, inducing positive selection in the health of children born live, which compensated any potential negative health effects.

Related literature includes a small number of recent papers studying the impact of political conflict on babies' health. Previously analyzed contexts include: landmine explosions in Colombia (Camacho, 2008), the September 11 terrorist attack (Brown, 2012; Currie and Schwandt, 2014), the Palestinian conflict (Mansour and Rees, 2012), and ETA terrorist attacks in Spain (Quintana-Domeque and Rodenas-Serrano, 2014). Our paper differs from these in the source of stress, which is not a foreign country or terrorist group but the possibility of a change in the national political regime from democracy to a (violent) dictatorship, a frequent event across the globe.

II The Spanish 1981 military coup

The general and dictator Francisco Franco (1892-1975) ruled over Spain from 1939 until his death. He rose to power during the bloody Spanish Civil War when, with the help of Nazi Germany and Fascist Italy, his Nationalist forces overthrew the democratically elected Second Republic. Adopting the title of "El Caudillo" (The Leader), Franco persecuted political opponents, repressed the culture and language of Spain's Basque and Catalan regions, censored the media and otherwise exerted absolute control over the country. Some of these restrictions gradually eased as Franco got older, and upon his death the country transitioned to constitutional democratic monarchy.

The first democratic elections took place on June 15, 1977. The subsequent national elections took place in March 1, 1979 under the rules of the recently signed constitution (approved by referendum on December 6, 1978). After the elected Prime Minister, Adolfo Suárez, resigned in 1981, King Juan Carlos I designated Leopoldo Calvo Sotelo as a substitute. The designation of Calvo Sotelo as the country's new Prime Minister need to be approved by the Spanish Deputies, who started to vote one by one at 6:00 pm of February 23, 1981. Only 23 minutes later, Lieutenant Colonel Antonio Tejero led a group of 200 armed officers of the Civil Guard that burst into the

Spanish Congress of Deputies. Figure 3 shows the photograph that captures that moment. Tejero and fellow members of the Guardia Civil held deputies and cabinet members hostage. In the meantime (7:00 pm), Lieutenant Colonel Milans del Bosch occupied by force the third biggest city in Spain, Valencia. Many other military divisions were waiting for instructions to surrender. There is anecdotal evidence that the military headquarters received calls from local groups of dictator followers who had made "lists of reds" and declared to be "ready to take their weapons". On the other side, people ran to collect basic goods in supermarkets and left-wing parties' affiliates ran to the parties' facilities to burn all documentation that would allow the coup perpetrators to identify them or their colleagues.[2]

The public television managed to broadcast the first 30 minutes of the Congress takeover. After the coup perpetrators destroyed the cameras, one radio station managed to broadcast real time. The fact that most Spaniards spent the night listening to the radio explains why that night is popularly called "la noche de los transistores" (the night of radio receivers). At 1:24 am next day, the king gave a nationally televised address where he denounced the coup, called for the rule of law to be upheld, and for the democratically elected government to continue in place. The coup soon collapsed. At 5:45 am the military troops abandoned Valencia, at 10:00 am female Deputies exited congress, and at 12:15 pm male Deputies were freed, putting a final point to a very stressful 18 hours.[3]

III Methodology

We estimate the impact of the military coup on birth outcomes by means of a quasi-difference-in differences approach. Our sample includes all singleton children born live between January 1980 and November 1981 (between 12 months before and 9 months after the coup). Children are considered "treated" if they were in the womb in February 1981. Thus, the "treated" children in our sample were conceived before the coup, and born between March and November of 1981, while "control" children were born before the coup, between January 1980 and February 1981. The intensity of the treatment is proxied by the share of votes for leftist and regional nationalist parties in the previous election, in the municipality of residence of the mother. We estimate the

[2] https://23defebrerode1981.wordpress.com/

[3] Soledad Álvarez-Coto, one of the directors of the most popular newspaper in Spanish language, El Pais declared: "I believe the 23-F is the most important moment in the history of this newspaper." See: http://elpais.com/elpais/2016/02/18/eps/1455812618_874352.html

following linear model:

$$B_{ict} = \alpha_0 + \alpha_1 E_{ict} V_i + \alpha_2 E_{ict} + \alpha_3 C_{it} + \alpha_4 T_t + \alpha_5 M_i + \alpha_6 Trend_t P_i + U_{ict} \quad (1)$$

where B is one of the birth outcomes (birth-weight, low birth-weight, "normality", prematurity or mortality) for baby i conceived on month c and born on month t, E is a vector of dummies indicating whether the baby was exposed to the military coup in the first, second or third trimester of pregnancy, and V is the share of votes for leftists and independentists in the mother's municipality of residence. Vector C includes all individual-level controls: indicators for mother younger than 25, 25-35 and over 35, birth order (capped at 5), married mother, no registered father, high-skilled mother, high-skilled father, and both parents high-skilled. T stands for year and month of birth dummies, and M includes municipality dummies. The interaction of a linear time trend ($Trend$) and province dummies (P) accounts for province-specific time trends in birth outcomes. Finally U is the residual. Standard errors are clustered at the municipality level.[4]

In the language of the treatment effects literature, E indicates whether the individual has been exposed to the treatment, while V represents the intensity of the treatment. We interpret a positive (negative) α_1 as evidence that the coup implied an increase (decrease) in the average magnitude of the birth outcome.

To analyze the potential presence of selection in the pool of babies born as a consequence of the coup (via miscarriages or stillbirths), we aggregate the data by municipality and month of birth. Then, we estimate whether the number of babies born live (expressed in logarithms to account for the different municipality sizes) or their characteristics changed as a consequence of the coup, by means of the following linear specification:

$$Y_{mt} = \beta_0 + \beta_1 \cdot E_{mt} \cdot V_m + \beta_2 \cdot E_{mt} + \beta_3 \cdot T_t + \beta_4 \cdot M_m + \beta_5 \cdot Trend_t \cdot P_m + W_{mt} \quad (2)$$

where Y is the logarithm of the number of births or alternatively, the proportion of newborns with a certain characteristic born in municipality m at month t. E contains three elements: "exposed in the 1st trimester of pregnancy" for babies born between September 1981 and November 1981, "exposed to the coup in the 2nd trimester" for those born between June 1981 and August 1981, and "exposed to the coup in the 3rd trimester", for March 1981 to May 1981 births. The

[4] There are 7,554 municipalities in our sample.

rest of the variables are as defined above, and W is the corresponding error term.

IV Data

The health information for newborn babies is derived from birth-certificate data, made publicly available by the National Statistical Institute for the universe of all registered births. To that we added restricted-access information on mothers' municipality of residence. We use the sample of children born between January 1980 and November 1981. We restrict to that interval because good quality register data started to be collected on January 1980, and November 1981 is the last month of birth for babies exposed to the coup in the womb. We do not consider babies born after the coup but not exposed in the womb because they may be affected by the coup through additional channels, for instance, the coup may have affected fertility. Following the standards in the literature (Quintana-Domeque and Rodenas-Serrano, 2014), we select singleton births with information on weeks of gestation and health outcomes, born to 15-49 years old mothers, reported to weigh 500 grams or more, and with at least 26 weeks of gestation (Currie and Rossin-Slater, 2013). In additional specifications, we also consider babies with no information on gestational weeks at birth, and we assign them 40 weeks of gestation (the median).[5] We also use additional data on late fetal deaths, publicly available from the National Statistical Institute webpage and, as before, we add restricted-access information on mothers' municipality of residence.[6]

We define several measures of neonatal health: birth-weight, an indicator for low birth-weight (under 2,500 grams), prematurity (less than 36 weeks of gestation at birth), and mortality during the first 24 hours of life.[7] Currie and Rossin-Slater (2013) report that measured effects of stressful events on birth weight, low birth-weight and prematurity may be unstable across econometric specifications, and it is preferable to use additional indicators of newborn health, such as the probability of abnormal conditions of the newborn ("normality"). We define exposure using estimated date of conception, and we estimate it by combining individual-level information on date of birth and number of gestational weeks at birth.[8] In alternative specifications, we use

[5] Babies with no information on gestational weeks are 42% of the total sample. We show regressions for the probability of having information on gestational weeks in Table A.2. The probability is lower for babies exposed to the coup in the first trimester.

[6] Out of the total number of pregnancies in our sample, 0.8% result in late fetal deaths.

[7] We show regressions for the probability of having information on birth weight in Table A.2. The probability is lower for babies exposed to the coup in the second trimester.

[8] We computed the date of conception starting from day 15 of the month of birth and counting back the number gestational weeks in the calendar to find the estimated day of conception.

date of birth rather than date of conception to define exposure to the treatment.

We construct our measure of intensity of exposure to the coup by computing the share of votes for self-defined socialist, communist and independentist parties over total number of votes in each municipality. The information on number of votes is publicly provided by the Spanish Home Office.

Table 1 contains the descriptive statistics for the sample included in the baseline regressions. The number of observations is 595,002. Average birth-weight in the sample was slightly less than 3.4 kilos, and about 3% of babies were born with less than 2,500 grams. Almost 5% of babies are born with abnormal conditions. 3% of babies were born with less than 36 weeks of gestation. Neonatal mortality rates were low, with about 4 deaths during the first 24 hours per 1,000 births.

The average municipality cast 55% of the votes for leftist and independentist parties. As for exposure to the coup, approximately 11, 13, and 10% of babies in our sample were exposed to the coup in the first, second and third trimester of pregnancy, respectively. Regarding family characteristics, most mothers are between 25 and 35 years old, 36% are younger than 25, and 9% over 35, 96% are married, and 6% have a high-skill occupation, while the corresponding figure for fathers is 12%.[9] Finally, the average baby in our sample is a second child.

V Results

Table 2 shows the results of regressing our birth outcomes (birth-weight, low birth weight, "normality", pre-term birth, and mortality) on exposure to the coup in each trimester, interacted with intensity of the exposure, and including all the controls (Equation 1). The results show that exposure to the coup during the first trimester of pregnancy is associated with significantly higher average birth-weight (and lower incidence of low birth-weight). Exposure during the first and second trimesters is associated with a higher fraction of "normal" births. These results suggest that average health at birth improved as a consequence to exposure to the coup during pregnancy. However, we also find that 24-hour mortality rates were higher among babies exposed in the third trimester.

The fact that the coup has an apparent positive effect on birth-weight (measured in grams and the probability of low birth weight) and normality could be explained by changes in the composition of the pool of babies. In particular, it may be that babies who would have been at

[9] We classified as skilled: managers, professionals and technicians.

the bottom of the weight and "normality" distributions are not born, due to the coup causing an increase in miscarriages (or stillbirths). In the first column of Table 3, we report the estimated effects of exposure to the coup during pregnancy on cohort sizes (the log of the number of children born live, by municipality and month). We find smaller cohorts of live births among women exposed to the coup during pregnancy, with statistically significant coefficients for the first and third trimesters, and large effect sizes for the first. Exposure to the coup is also associated with a higher proportion of mothers who are married or have a partner, two predictors of higher income and mental stability.[10]

The results on the impact of the coup on birth outcomes and number of babies in tables 2 and 3 are strong. However, they are estimated relying on a very refined level of variation (removing the influence of calendar month, year, municipality-specific characteristics, province trends, and individual heterogeneity). In order to check the robustness of our results to the choice of controls, we show specifications under alternative sets of controls in the Appendix. We start from a specification with exposure to the coup and intensity of exposure (main effects and interactions) and time dummies. Then, we progressively add municipality fixed effects, province-specific time trends and all individual characteristics. Results in Table A.1 show that point estimates are reasonably stable across specifications, but in some cases effects turn significant only after the inclusion of municipality dummies or province-specific time trends.

The reduction in the number of live births can be driven by a reduction in the number of miscarriages and/or late fetal deaths. Information on miscarriages is not available, but we can test directly for effects on late fetal deaths. We add the observations of late fetal deaths to those of live births and replicate the analysis in Table 2 on this larger sample. We also run a separate regression using late fetal births as an additional outcome. The results of this exercise are shown in Table 4. They closely replicate those in Table 2 with the exception of the mortality outcome which now includes not only mortality in the last 24 hours but also late fetal deaths. Late fetal deaths are negatively affected by the coup, which leaves miscarriages as the most plausible channel for the reduction in live births. Table 5 shows that the result that the coup reduced the number of births in the municipality arises also when including late fetal deaths. However, the coefficients for the proportion of married mothers and absent fathers become imprecise.

Figure 4 illustrates our main results. It shows time trends in birth outcomes in municipalities

[10]Early exposure to the military coup does not have significant effects on gender of the newborn, age of the mother or parental occupation.

where the shares of votes for leftist and independentist parties are higher and lower than the median.[11] The graph is particularly useful in the case of birth weight, which displays rather coincident trends for high and low vote shares municipalities starting in May 1980 that split after the coup. In the case of "normality", both lines evolve in parallel before the coup but only high vote shares municipalities experience an increase in "normality" rates after the coup. Finally, the case of late fetal death is similar to that of birth weight; both lines cross at the time of the coup.

A Robustness checks

We test the robustness of our results to the use of date of birth rather than date of conception to define exposure to the treatment. All babies are considered as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September 1981 and November 1981. They are exposed to the coup in the 2nd trimester if they are born between June 1981 and August 1981, and exposed in the 3rd trimester if they are born between March 1981 and May 1981. As can be seen in Table 6, point estimates for all regressions except for mortality have the same sign and similar magnitude to those in Table 4. In terms of statistical significance, the results for birth weight, low birth weight and "normality" become more significant, while those for mortality are not significant at conventional levels anymore. We replicate this exercise for the regressions exploring whether selection of babies could be behind our results. Table 7 shows that this is the case, although the coefficient for the third trimester becomes imprecise.

We also present results from our main specification expanding our sample to include children without information on weeks of gestation. Table 8 shows that again, only the point estimates of the mortality regression experience relevant changes. We attribute the instability of the coefficients for mortality to the imprecision of the estimates due to the fact that mortality in the 24 hours after birth is a rare event. Moreover, the birth weight estimates become smaller and more precise. Table 9 shows the result of addressing selection including also children without information on weeks of gestation. There is a reduction in the number of births for children exposed to the coup in the first trimestrer and an increase in the proportion of married mothers of children exposed in the second trimester. However, the proportion of children without declared father increases among those exposed in the third trimester.

In our main analysis, we use vote shares in the municipality as a proxy for the probability

[11] For expositional clarity, we display moving averages computed over 3 month ranges.

that the mother was leftist and/or independentist. However, votes shares also reflect the political environment in the municipality which could be inversely related to the level of maternal stress if women surrounded by leftist and independentists feel safer during the coup. We consider the latter a second order effect. Still, to address this concern, we use two alternative strategies: first, we additionally control for the interaction of exposure and the average demographic characteristics in the municipality. In particular, the list of municipality characteristics includes average age, proportion of individuals with each education level, proportion of inviduals in each occupation, and ratio of employed, unemployed, and out of labor force individuals in the municipality. The results of this exercise are displayed in Table 10. They are consistent with those obtained from the main specification. The correspoding results for the selection of babies are in Table 11. The coup reduces in the number of births of children exposed in the first trimester.

Second, we substitute vote shares by the estimated probability that the mother voted for a leftist or independentist party, estimated using the 1981 Census data. In particular, we regressed vote shares on age, married, number of children, occupation dummies, and province of residence indicators, and their interactions with a female dummy (all those characteristics that are present both in the Birth Register and Census data). Then, we predicted the probability of voting for a left or independist party, and assigned it to each mother according to her characteristics. Tables 12 and 13 show the results of these estimations for the effect of the coup on babies' health and selection of babies, respectively. They are in line with those from the main specification.

Finally, as explained above, our data comprises live births starting in January 1980. That was the first time in which hospitals collected the data required by this study. Given that hospitals may have needed some time to adapt to the new data requirements by the National Institute of Statistics, we replicate our regressions excluding the first month (January 1980) from our sample. Results displayed in Table A.3 are similar to those in Table 2. Table A.4 shows that the coup decreased the proportion of children born among those exposed in all three trimesters and reduced the proportion of babies without declared father for those exposed in the second trimester.

VI Conclusions

This paper contributes to the literature on the effects of (political) stressful events experienced during pregnancy on newborn health. We explore the effect of political instability while in the

womb on birth-weight, "normality", pre-term birth, and mortality. We also extend the literature on the effects of political instability, including economic growth (Alesina et al., 1996), income distribution and investment (Alesina and Perotti, 1996), environmental policy (Fredriksson and Svensson, 2003), and tourism (Seddighi et al., 2001), by showing that political instability can directly impact newborn health. In order to pin down the causal effect, we exploit the fact that a coup d'etat typically represents an unexpected (even if relatively common) shock to political stability, and that the probability of suffering reprisals clearly determines the intensity of the coup experience.

We chose the 23F military coup in Spain because it was unexpected (and unsuccessful), but it became known to virtually all the population within few hours, and had clear time limits. This combination of circumstances makes it useful to identify the babies that were exposed to it while in utero, and limits the presence of confounding factors. Using these premises, we show that the coup increased birth weight and "normality" rates, and reduced the number of live births, especially in municipalities with more support for left-wing parties. These effects are consistent with a change in the composition of the pool of live births induced by an increase in miscarriages. Our paper shows that pregnant women who experience extreme political instability shocks may be particularly sensitive.

References

[1] Alesina, Alberto, et al. "Political instability and economic growth." Journal of Economic growth 1.2 (1996): 189-211.

[2] Alesina, Alberto, and Roberto Perotti. "Income distribution, political instability, and investment." European economic review 40.6 (1996): 1203-1228.

[3] Almond, Douglas, and Janet Currie. "Killing me softly: The fetal origins hypothesis." The Journal of Economic Perspectives 25.3 (2011): 153-172.

[4] Aneshensel, Carol S., Carolyn M. Rutter, and Peter A. Lachenbruch. "Social structure, stress, and mental health: Competing conceptual and analytic models." American sociological review (1991): 166-178.

[5] Beydoun, Hind, and Audrey F. Saftlas. "Physical and mental health outcomes of prenatal maternal stress in human and animal studies: a review of recent evidence." Paediatric and perinatal epidemiology 22.5 (2008): 438-466.

[6] Brown, Ryan. (2012). "The Intergenerational Impact of Terror: Does the 9/11 Tragedy Reverberate into the Outcomes of the Next Generation." Duke University, mimeo.

[7] Camacho, A. (2008) "Stress and Birth Weight: Evidence from Terrorist Attacks," American Economic Review Papers and Proceedings, 98(2):511-515.

[8] Chen, Yuyu, and Li-An Zhou. "The long-term health and economic consequences of the 1959–1961 famine in China." Journal of health economics 26.4 (2007): 659-681.

[9] CIS (Centro de Investigaciones Sociológicas) "Investidura de D. Leopoldo Calvo Sotelo y II Congreso de UCD", Survey number 1273 (1981).

[10] Currie, Janet. "Pollution and Infant Health." Child development perspectives 7.4 (2013): 237-242.

[11] Currie, J. and M. Rossin-Slater (2013): "Weathering the storm: Hurricanes and birth outcomes," Journal of Health Economics, 32, 487–503.

[12] Currie, J. and H. Schwandt (2016) "The 9/11 Dust Cloud and Pregnancy Outcomes: A Reconsideration," Journal of Human Resources, 2016, Vol. 51 (4): 805-831.

[13] Fredriksson, Per G., and Jakob Svensson. "Political instability, corruption and policy formation: the case of environmental policy." Journal of public economics 87.7 (2003):

1383-1405.

[14] Powell, Jonathan & Clayton Thyne. (2011)."Global Instances of Coups from 1950-Present." Journal of Peace Research 48(2):249-259.

[15] Mansour, Hani, and Daniel I. Rees. "Armed conflict and birth weight: Evidence from the al-Aqsa Intifada." Journal of Development Economics 99.1 (2012): 190-199.

[16] Neelsen, Sven, and Thomas Stratmann. "Effects of prenatal and early life malnutrition: Evidence from the Greek famine." Journal of Health Economics 30.3 (2011): 479-488.

[17] Quintana-Domeque, Climent & Ródenas-Serrano, Pedro. "Terrorism and Human Capital at Birth: Bomb Casualties and Birth Outcomes in Spain," IZA Discussion Papers 8671 (2014).

[18] Roseboom, Tessa, Susanne de Rooij, and Rebecca Painter. "The Dutch famine and its long-term consequences for adult health." Early human development 82.8 (2006): 485-491.

[19] Seddighi, H. R., M. W. Nuttall, and A. L. Theocharous. "Does cultural background of tourists influence the destination choice? An empirical study with special reference to political instability." Tourism management 22.2 (2001): 181-191.

[20] Strauss, John, and Duncan Thomas. "Health over the life course." Handbook of development economics 4 (2007): 3375-3474.

[21] Williams, David, David T. Takeuchi and Russell K. Adair, "Marital Status and Psychiatric Disorders Among Blacks and Whites," Journal of Health and Social Behavior 33, (1992): 140-157.).

Figure 1: Lists of citizens that coup perpetrators intended to assassinate

LISTAS DE SANGRE (1ª parte) PARA EL 24-F

Si el intento de golpe de estado del 23-F hubiera triunfado y las delirantes huestes de Milans del Bosch y Tejero se hubieran hecho con el poder, de la *«noche de los transistores»* hubiéramos pasado al *«amanecer de los fusilamientos»*. En éstos muchas familias españolas llevarían un lacerante luto y el pueblo español todo una agonía de dolor y odio.

Los supuestos, que se quieren mentir, de un *«golpe incruento»* no cuelan; más de tres mil españoles hubieran sido muertos seguros en la mañana del 24-F que, por suerte, nunca llegó. ACTUAL ha tenido acceso a esa vergonzante *lista negra* de compatriotas condenados a muerte sin razón ni lógica; si es que hay alguna que pueda explicar tamaña condena.

De la misma forma que el 17 de octubre de 1980, en un piso de la Avenida de las Islas Filipinas de Madrid, se confeccionó una lista de personas «confiables» en las distintas provincias; en otra reunión del 22 de diciembre se concretó la lista de los españoles que debían ser *eliminados*.

La confección del documento parece ser que estuvo a cargo de las recién creadas «Milicias Populares Patrióticas», constituidas por elementos violentos escindidos de «Frente de la Juventud», «Fuerza Nueva», «Fuerza Joven», «Falange Primera Línea» y «Juventudes Nacionales Revolucionarias».

Intelectuales, periodistas y un largo etc...

Muchos de los nombres que figuran en las *listas* casi resultan «obligados» por la tradicional postura democrática y de repulsa de los extremismos de sus propietarios. En cambio, algunos otros *«condenados»* carecen de todo asidero para el lector desprevenido. Sin embargo, quien conozca cómo actuaron los golpes de la ultraderecha en Turquía o en América Latina, encontrará en el golpe de Tejero las mismas raíces y propósitos.

La persecución y eliminación de artistas e intelectuales se explica claramente por la natural aversión de la ultraderecha a todo individuo que tenga una actitud de apertura y una necesidad de libertad para realizar su labor creativa.

Otros nombres *«inexplicables»* pueden obedecer tanto al pensamiento macartiano que anida en los ultras —que en todo ven infernales peligros rojos— como a una planificada acción de inculcar el terror en la población. Si no hay ninguna explicación tangible para la muerte de alguien se adueña, de todos la idea que él mismo puede ser fusilado mañana. Eficiente práctica ya demostrada en Chile o en Uruguay.

No resulta extraño el comprobar cómo en las «listas negras» del 23-F figuran personalidades como Rafael Alberti, Manuel Andújar, Francisco Ayala, Jesús Vicente Chamorro, Miguel Delibes, Camilo José Cela, Francisco Bustelo, Amando de Miguel, Angel María de Lera, el profesor Grande Covián, Agustín García Calvo, Enrique Gimbernat, Antonio Gala, Ramón Garriga y Joan Marsé.

Y no digamos de los autores teatrales calificados como de «rojos de toda la vida»: Antonio Buero Vallejo, Francisco Nieva, Lauro Olmo y Jaime Salom. Junto a ellos, la «gentuza» del teatro y del cine y los «musiqueros»: Juan Antonio Bardem, Roberto Bodegas, Ana Belén, Aurora Bautista, Lina Canalejas, Quique Camoiras, María Cuadra, Juan Diego, Susana Estrada, Alberto Closas, Fernando Fernán Gómez, Pepa Flores, Antonio Gades, Lola Gaos, Montserrat Julió, Tony Leblanc, Julita Martínez, Esperanza Navarro, Antonio Mercero, Pilar Miró, Encarna Paso, Antonio del Real, Francisco y Damián Rabal, Paco Valladares, Conchita Velasco, M.ª Luisa San José y José Sacristán. Junto a éstos, por no citar a todos, los Luis Eduardo Aute, Luis Pastor, Paco Ibáñez, Luis Llach, Paco de Lucía, Manolo Sanlúcar, Ramoncín, Rosa León, Raimon, Miguel Ríos y un largo etcétera.

Como resulta lógico intuir, los «malditos periodistas» no se iban a librar de la depuración. En una larga lista ocupan puestos de «honor» los siguientes: César Alonso de los Ríos, Germán Alvarez Blanco, Consuelo Alvarez de Toledo, Antonio Alvarez Solís, Mercedes Arancibia, Teresa Aranguren, José Carlos Arévalo, Santiago Aroca, Adolfo Barricart, José Luis Balbín, Eliseo Bayo, Marius Cadón, Rafael Calvo Serer, Ricardo Cid, José Boloix, Antonio Asensio, Juan Bustos, Juan Luis Cebrián, Pedro Costa, Antonio Checa, Bernardo Díaz Nosty, Fermín Bocos, Angel de la Vega, Juan Tomás de Salas, Raúl del Pozo, Carlos Elordi, Rafael Fraguas, Isaac García, Félix Gil, Darío Giménez de Cisneros, Fernando González, José M.ª González Jerez, Ignacio Fontes, Antonio Guerra, Eduardo Hernáiz, Félix Infante, Armando López Salinas, José Luis Gutiérrez, Federico Melchor, Mercedes Milá, Antonio Mullor, Julián Lago, Xavier Nart, José Antonio Novais, Fernando Onega, Leónides Montero, Isaac Montero, Rosa Montero, Jesús Polanco, Enrique López Oneto, José Oneto, Antonio Ivorra, Andrés Salom, Fernando Reinlein, Carmen Rivas, Félix Santos, Claudio Sussoni, Horacio Sanglade, Enric Sopena, Carles S. Costa, José Luis Morales, José M.ª Sulleiro, Enrique Seijas, Miguel Veyrat, Enrique Lores, Eduardo Sotillos, Gonzalo de Lerma, Xavier Vinader, Alfonso S. Palomares, Justino Sinova, Eugenio Suárez, Ramón Pi, Pere Bonnin, José M. Gironès, Jorge Laplace, Santiago Riera, Javier Cambra, Ana M. Pintado, Carlos Otero, Rosa M.ª Baras, Sol Padilla, Antonio Machín, Carmen Rico-Godoy, Ricardo Utrilla, Ander Landaburu, Juan de Dios Mellado, Germán Losada, Luis Granell, Rafael Rubio, José M.ª Pagador, Silvia Llopis, Lorenzo Contreras, Carlos Taboada, Miguel Angel Aguilar, Fernando Jáuregui y José Luis Martín Prieto. Se incluyen en el rol los humoristas Forges y Peridis.

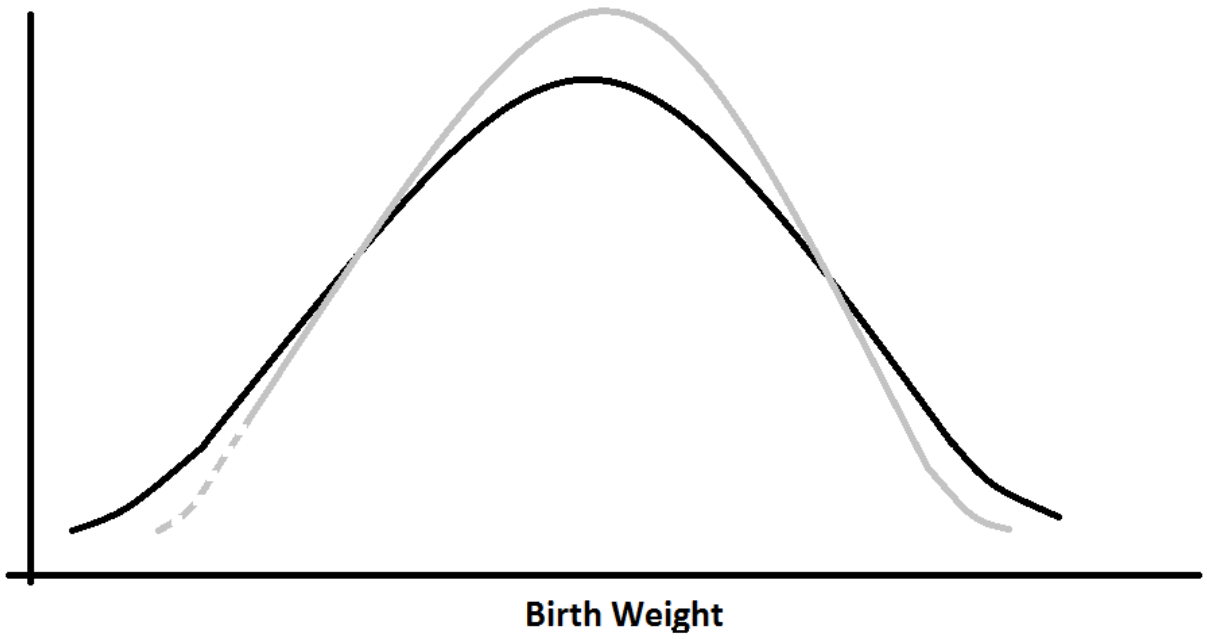
Antes de entrar en el capítulo de los políticos, digamos que el pintor Gregorio Prieto y los escultores Chillida y Pablo Serrano, además de los compositores Halffter y Luis de Pablo ocupan lugar preferente en la ira de los ultras.

Llegamos, finalmente, a la relación más importante. A la de los políticos, que vamos a dar por provincias, dando por sabido que deben darse por incluidos los líderes de los partidos de izquierda, de los partidos regionalistas y de las centrales sindicales Comisiones Obreras, UGT y USO, así como los del JOC y Ela-STV. Entre los políticos no de izquierdas sólo están incluidos el ex presidente Adolfo Suárez y el del Ministro del Interior Juan José Rosón, la larga lista se amplía con los tenientes generales Gabeiras Montero, Gutiérrez Mellado y Quintana Lacacci.

En la relación alfabética que por provincias publicamos a continuación, no aparecen ni Madrid ni Barcelona. La razón es obvia: el número de «condenados» es tan amplio que sería necesario un tercer número de ACTUAL para publicar la lista de ambas ciudades. Tanto en una como en otra, las personas que aparecen son diputados y senadores, miembros de las ejecutivas fundamentalmente de los partidos de izquierda, miembros también de izquierdas de las corporaciones locales y ejecutivos de las centrales sindicales.

This journal article was entitled "Listas de sangre del 24F", which means "Blood lists of February 24", in reference to the assassinations that coup perpetrators were planning for the day after the coup. They were published by the journal Actual Magazin, on August 20, 1982.

Figure 2: The theoretical impact of selection on the birth weight distribution



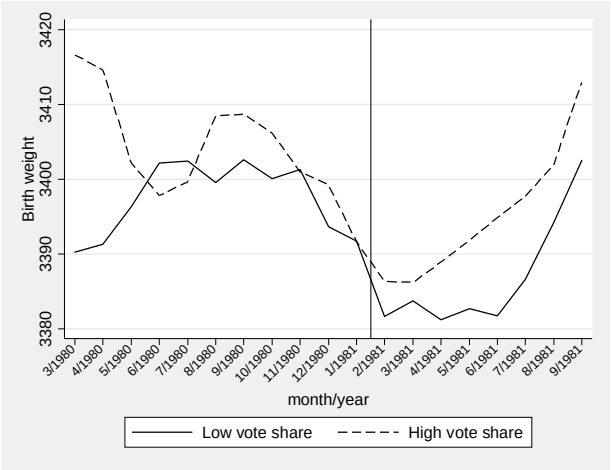
The black line represents the distribution of birth weights that would have been observed in the absence of the coup. The solid grey line represents the observed distribution of weights while the dashed grey line is the part of the distribution which is not observed due to selection.

Figure 3: The burst into the Spanish Congress of Deputies

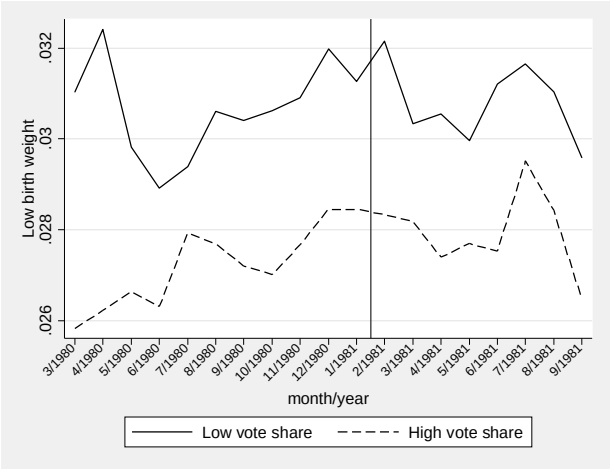
This photograph captures the moment in which Lieutenant Colonel Antonio Tejero addresses members of Spanish parliament after firing shots into the ceiling during the 23F coup. Source: https://www.theguardian.com/artanddesign/picture/2014/mar/26/23f-coup-spain-photography

Figure 4: Neonatal outcomes by month

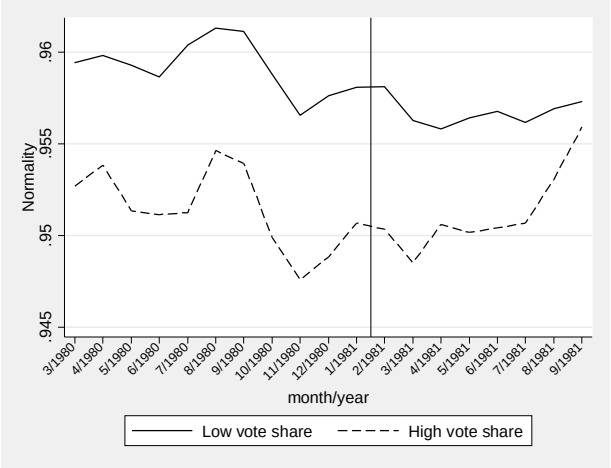
Panel A: Birth weight



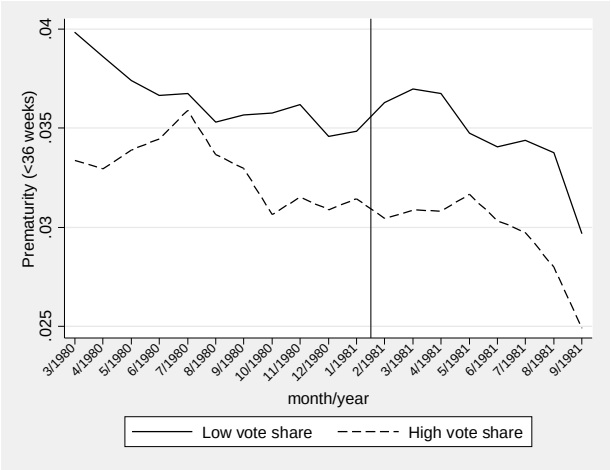
Panel B: Low birth weight



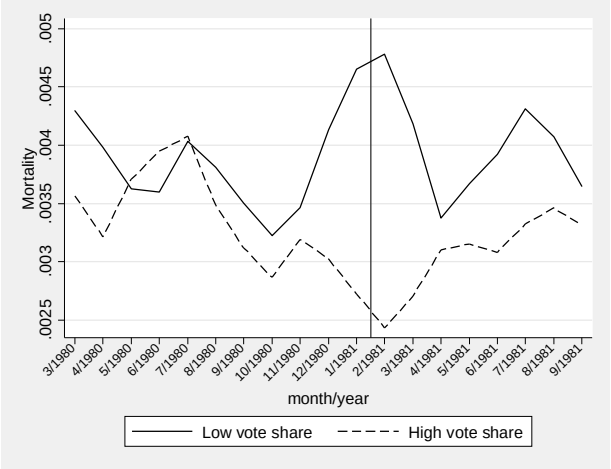
Panel C: Normality



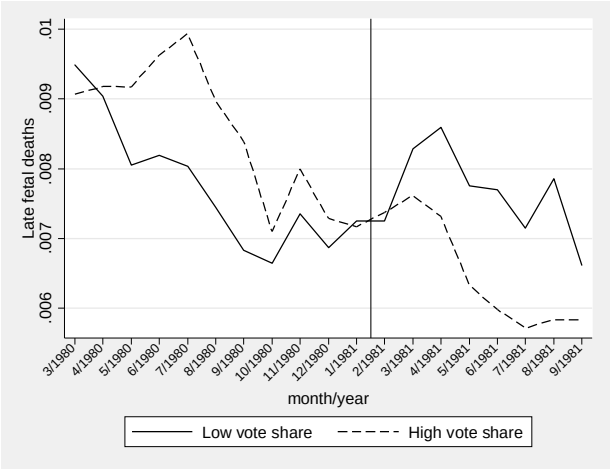
Panel D: Prematurity (less than 36 weeks)



Panel E: Mortality



Panel F: Late fetal death



Data are moving averages over three months. High (low) vote shares municipalities are those where the shares of votes for communist and independentist parties are higher (lower) than the median. The horizontal line indicates the month of the coup so babies born after that date are exposed to the coup.

Table 1: Descriptive statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Birth weight	3399.232	491.941	500	6000	496355
Low birth weight	0.028	0.166	0	1	496363
Normality	0.956	0.204	0	1	595002
Prematurity (less than 36 weeks)	0.029	0.168	0	1	595002
Mortality	0.004	0.061	0	1	595002
Male	0.518	0.5	0	1	595002
Votes to leftists and independentists (%)	0.554	0.154	0	1	595002
Exposure in 1st trim	0.111	0.314	0	1	595002
Exposure in 2nd trim	0.128	0.334	0	1	595002
Exposure in 3rd trim	0.099	0.298	0	1	595002
Mother under 25	0.363	0.481	0	1	595002
Mother between 25 and 35	0.546	0.498	0	1	595002
Mother over 35	0.091	0.287	0	1	595002
Married mother	0.963	0.189	0	1	595002
No info on father	0.022	0.148	0	1	595002
Mother in high skill ocupation	0.064	0.245	0	1	595002
Father in high skill ocupation	0.115	0.319	0	1	595002
Both parents high skill	0.035	0.184	0	1	595002
Birth order	1.971	1.119	1	5	595002
Year of birth	1980.412	0.492	1980	1981	595002
Month of birth	6.301	3.071	1	12	595002
Province of residence	25.672	14.687	1	52	595002
Municipality of residence	25756.545	14709.973	1000	52001	595002

The sample includes singleton births, born to 15-49 years of age mothers, no less than 500 grams and no less than 26 gestational weeks, born between January 1980 and November 1981 with information on health outcomes and weeks of gestation. Babies are defined as exposed to the 23F military coup according to their conception date calculated using month of birth and weeks of gestation. Data are from the Spanish Birth Register, with the exception of votes shares, which are obtained from the Ministry of Interior webpage (information is publicly available at http://www.infoelectoral.mir.es/infoelectoral/min/).

Table 2: Baseline health results: the effect of the coup on birth weight, prematurity and mortality

	birth weight	low weight	normality	prem 36	mortality
Exp. 1st trim*VS	45.178	-.018	0.021	-.0006	-.0007
	(23.297)*	(0.007)**	(0.009)**	(0.008)	(0.003)
Exp. 2nd trim*VS	22.001	-.003	0.015	-.0002	0.0005
	(20.525)	(0.006)	(0.007)**	(0.007)	(0.002)
Exp. 3rd trim*VS	29.064	-.005	0.007	-.004	0.004
	(18.717)	(0.006)	(0.007)	(0.006)	(0.002)*
Exp. 1st trim	-38.230	0.015	-.013	0.019	0.011
	(14.219)***	(0.005)***	(0.005)***	(0.005)***	(0.002)***
Exp. 2nd trim	-22.184	-.0008	-.009	0.003	0.007
	(13.795)	(0.004)	(0.004)**	(0.004)	(0.002)***
Exp. 3rd trim	7.098	-.016	-.007	-.023	0.004
	(12.787)	(0.004)***	(0.004)	(0.004)***	(0.002)**
Obs.	496355	496363	595002	595002	595002
R^2	0.052	0.021	0.037	0.025	0.02

* significant at 90%; ** significant at 95%; *** significant at 99%. The sample includes singleton births, born to 15-49 years of age mothers, no less than 500 grams and no less than 26 gestational weeks, born between January 1980 and November 1981 with information on health outcomes and weeks of gestation. Babies are defined as exposed to the 23F military coup according to their conception date calculated using month of birth and weeks of gestation. All regressions include municipality of residence dummies, binary indicators for year of delivery and month of delivery. Time trends are province-specific linear trends in months. Controls are dummies for mother age (under 25, 25-35 years old and over 35), binary variables for birth order, married mother dummy, an indicator for father absent, binary indicators for only mother high-skilled, only father high-skilled and both high-skilled.

Table 3: Selection of babies: number of births, maternal characteristics and information on gestational weeks

	Number of births in logs	Married mother	No father
Exposure in 1st trim*vote shares	-.491	-.001	-.003
	(0.065)***	(0.013)	(0.01)
Exposure in 2nd trim*vote shares	-.074	0.018	-.015
	(0.051)	(0.011)*	(0.008)*
Exposure in 3rd trim*vote shares	-.105	0.009	0.005
	(0.05)**	(0.011)	(0.008)
Exposure in 1st trim	-.279	-.019	0.012
	(0.036)***	(0.008)**	(0.006)**
Exposure in 2nd trim	-.367	-.022	0.018
	(0.031)***	(0.007)***	(0.005)***
Exposure in 3rd trim	-.425	-.018	0.007
	(0.032)***	(0.007)**	(0.005)
Obs.	62349	62349	62349
R^2	0.784	0.185	0.172

* significant at 90%; ** significant at 95%; *** significant at 99%. The unit of observation is municipality and time in months. The sample covers the period between January 1980 and November 1981. The dependent variables are the logarithm of the number of births to mothers residing in the municipality, the proportion of married mothers, and the proportion of non-declared fathers. Babies are classified as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September and November of 1981; exposed in the 2nd trimester if they are born between June and August of 1981, and exposed in the 3rd trimester if they are born between March and May 1981. All regressions include municipality of residence dummies, binary indicators for year and month of birth. Time trends are province-specific linear trends in months.

Table 4: Effects on birth outcomes including late fetal deaths

	birth weight	low weight	normality	prem 36	mortality	late fetal death
Exp. 1st trim*VS	46.640	-.018	0.022	-.004	-.005	-.003
	(23.684)**	(0.008)**	(0.009)**	(0.009)	(0.005)	(0.003)
Exp. 2nd trim*VS	28.638	-.006	0.014	-.003	-.007	-.006
	(20.893)	(0.007)	(0.007)**	(0.007)	(0.004)	(0.003)**
Exp. 3rd trim*VS	26.864	-.003	0.005	-.004	-.001	-.005
	(19.141)	(0.006)	(0.007)	(0.006)	(0.003)	(0.002)**
Exp. 1st trim	-42.428	0.017	-.016	0.029	0.026	0.014
	(14.337)***	(0.005)***	(0.005)***	(0.006)***	(0.004)***	(0.002)***
Exp. 2nd trim	-24.715	0.0005	-.010	0.009	0.021	0.012
	(13.743)*	(0.004)	(0.004)**	(0.005)*	(0.003)***	(0.002)***
Exp. 3rd trim	14.907	-.020	-.007	-.022	0.016	0.011
	(13.194)	(0.004)***	(0.004)	(0.004)***	(0.003)***	(0.002)***
Obs.	499857	499892	600332	600332	600332	600332
R^2	0.063	0.047	0.038	0.047	0.344	0.505

* significant at 90%; ** significant at 95%; *** significant at 99%. The sample includes singleton births, born to 15-49 years of age mothers between January 1980 and November 1981 with information on health outcomes and weeks of gestation. Babies are defined as exposed to the 23F military coup according to their conception date calculated using month of birth and weeks of gestation. All regressions include municipality of residence dummies, binary indicators for year of delivery and month of delivery. Time trends are province-specific linear trends in months. Controls are dummies for mother age (under 25, 25-35 years old and over 35), binary variables for birth order, married mother dummy, an indicator for father absent, binary indicators for only mother high-skilled, only father high-skilled and both high-skilled.

Table 5: Selection of babies including late fetal deaths

	Number of births in logs	Married mother	No father
Exposure in 1st trim*vote shares	-.490	-.00003	-.004
	(0.064)***	(0.013)	(0.01)
Exposure in 2nd trim*vote shares	-.075	0.016	-.013
	(0.05)	(0.011)	(0.008)
Exposure in 3rd trim*vote shares	-.099	0.005	0.008
	(0.05)**	(0.011)	(0.008)
Exposure in 1st trim	-.295	-.019	0.013
	(0.035)***	(0.008)**	(0.006)**
Exposure in 2nd trim	-.381	-.020	0.016
	(0.031)***	(0.007)***	(0.005)***
Exposure in 3rd trim	-.446	-.014	0.005
	(0.031)***	(0.007)**	(0.005)
Obs.	62806	62806	62806
R^2	0.785	0.186	0.172

* significant at 90%; ** significant at 95%; *** significant at 99%. The unit of observation is municipality and time in months. The sample covers the period between January 1980 and November 1981. The dependent variables are the logarithm of the number of births to mothers residing in the municipality, the proportion of married mothers, and the proportion of non-declared fathers. Babies are classified as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September and November of 1981; exposed in the 2nd trimester if they are born between June and August of 1981, and exposed in the 3rd trimester if they are born between March and May 1981. All regressions include municipality of residence dummies, binary indicators for year and month of birth. Time trends are province-specific linear trends in months.

Table 6: Effects on birth outcomes not using information on gestational weeks

	birth weight	low weight	normality	prem 36	mortality
Exp. 1st trim*VS	56.733	-.014	0.023	-.005	0.0009
	(22.123)**	(0.007)**	(0.009)**	(0.006)	(0.003)
Exp. 2nd trim*VS	44.154	-.005	0.01	-.006	-.001
	(20.817)**	(0.007)	(0.007)	(0.006)	(0.003)
Exp. 3rd trim*VS	21.875	-.003	0.015	-.006	0.003
	(18.772)	(0.006)	(0.006)**	(0.005)	(0.002)
Exp. 1st trim	-21.281	0.0009	-.013	-.003	0.007
	(13.758)	(0.004)	(0.005)***	(0.004)	(0.002)***
Exp. 2nd trim	-36.488	0.003	-.008	0.005	0.008
	(13.723)***	(0.004)	(0.004)*	(0.004)	(0.002)***
Exp. 3rd trim	-28.508	-.0006	-.012	0.008	0.006
	(12.573)**	(0.004)	(0.004)***	(0.003)**	(0.002)***
Obs.	496355	496363	595002	595002	595002
R^2	0.052	0.02	0.037	0.018	0.02

* significant at 90%; ** significant at 95%; *** significant at 99%. The sample includes singleton births, born to 15-49 years of age mothers, no less than 500 grams and no less than 26 gestational weeks, born between January 1980 and November 1981 with information on health outcomes and weeks of gestation. Babies are classified as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September and November of 1981; exposed in the 2nd trimester if they are born between June and August of 1981, and exposed in the 3rd trimester if they are born between March and May 1981. All regressions include municipality of residence dummies, binary indicators for year of delivery and month of delivery. Time trends are province-specific linear trends in months. Controls are dummies for mother age (under 25, 25-35 years old and over 35), binary variables for birth order, married mother dummy, an indicator for father absent, binary indicators for only mother high-skilled, only father high-skilled and both high-skilled.

Table 7: Selection of babies not using information on gestational weeks

	Number of births in logs	Married mother	No father
Exposure in 1st trim*vote shares	-.249	-.010	0.0007
	(0.063)***	(0.013)	(0.01)
Exposure in 2nd trim*vote shares	0.025	0.016	-.008
	(0.053)	(0.011)	(0.008)
Exposure in 3rd trim*vote shares	-.002	0.012	-.001
	(0.049)	(0.01)	(0.008)
Exposure in 1st trim	-.057	-.012	0.007
	(0.035)	(0.008)	(0.006)
Exposure in 2nd trim	-.149	-.019	0.012
	(0.031)***	(0.007)***	(0.005)**
Exposure in 3rd trim	-.216	-.017	0.01
	(0.03)***	(0.007)***	(0.005)*
Obs.	62349	62349	62349
R^2	0.78	0.185	0.172

* significant at 90%; ** significant at 95%; *** significant at 99%. The unit of observation is municipality and time in months. The sample covers the period between January 1980 and November 1981. The dependent variables are the logarithm of the number of births to mothers residing in the municipality, the proportion of married mothers, and the proportion of non-declared fathers. Babies are classified as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September and November of 1981; exposed in the 2nd trimester if they are born between June and August of 1981, and exposed in the 3rd trimester if they are born between March and May 1981. All regressions include municipality of residence dummies, binary indicators for year and month of birth. Time trends are province-specific linear trends in months.

Table 8: Effects on birth outcomes including babies without information on gestational weeks

	birth weight	low weight	normality	prem 36	mortality
Exp. 1st trim*VS	11.214	-.003	0.039	-.0006	-.0008
	(16.412)	(0.006)	(0.01)***	(0.008)	(0.001)
Exp. 2nd trim*VS	7.991	-.002	0.021	-.0002	-.0008
	(14.285)	(0.005)	(0.006)***	(0.007)	(0.001)
Exp. 3rd trim*VS	5.923	-.003	0.009	-.004	-.0005
	(13.249)	(0.004)	(0.005)*	(0.006)	(0.001)
Exp. 1st trim	-8.296	0.004	-.004	0.019	0.0009
	(9.592)	(0.003)	(0.004)	(0.005)***	(0.0009)
Exp. 2nd trim	-8.556	0.0009	0.006	0.003	0.0004
	(8.244)	(0.003)	(0.003)*	(0.004)	(0.0008)
Exp. 3rd trim	16.853	-.011	0.007	-.023	-.0007
	(9.208)*	(0.003)***	(0.003)***	(0.004)***	(0.0008)
Obs.	704649	704688	1041148	595002	1041148
R^2	0.048	0.016	0.028	0.025	0.01

* significant at 90%; ** significant at 95%; *** significant at 99%. The sample includes singleton births, born to 15-49 years of age mothers, no less than 500 grams and no less than 26 gestational weeks, born between January 1980 and November 1981 with information on health outcomes. Babies are defined as exposed to the 23F military coup according to their conception date calculated using month of birth and weeks of gestation. For those without information on weeks of gestation: they are classified as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September and November of 1981; exposed in the 2nd trimester if they are born between June and August of 1981, and exposed in the 3rd trimester if they are born between March and May 1981. All regressions include municipality of residence dummies, binary indicators for year of delivery and month of delivery. Time trends are province-specific linear trends in months. Controls are dummies for mother age (under 25, 25-35 years old and over 35), binary variables for birth order, married mother dummy, an indicator for father absent, binary indicators for only mother high-skilled, only father high-skilled and both high-skilled.

Table 9: Selection of babies including babies without information on gestational weeks

	Number of births in logs	Married mother	No father
Exposure in 1st trim*vote shares	-.213	-.004	0.002
	(0.034)***	(0.008)	(0.006)
Exposure in 2nd trim*vote shares	-.018	0.012	-.006
	(0.028)	(0.007)*	(0.005)
Exposure in 3rd trim*vote shares	-.035	-.004	0.013
	(0.03)	(0.007)	(0.006)**
Exposure in 1st trim	-.011	-.001	-.003
	(0.017)	(0.005)	(0.003)
Exposure in 2nd trim	0.032	-.006	0.003
	(0.015)**	(0.004)	(0.003)
Exposure in 3rd trim	0.004	0.001	-.006
	(0.016)	(0.004)	(0.003)*
Obs.	87384	87384	87384
R^2	0.861	0.155	0.139

* significant at 90%; ** significant at 95%; *** significant at 99%. The unit of observation is municipality and time in months. The sample covers the period between January 1980 and November 1981. The dependent variables are the logarithm of the number of births to mothers residing in the municipality, the proportion of married mothers, and the proportion of non-declared fathers. Babies are classified as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September and November of 1981; exposed in the 2nd trimester if they are born between June and August of 1981, and exposed in the 3rd trimester if they are born between March and May 1981. All regressions include municipality of residence dummies, binary indicators for year and month of birth. Time trends are province-specific linear trends in months.

Table 10: Effects on birth outcomes controlling for the interaction of exposure and average demographic characteristics in the municipality

	birth weight	low weight	normality	prem 36	mortality
Exp. 1st trim*VS	56.270	-.022	0.025	0.002	-.001
	(29.219)*	(0.01)**	(0.011)**	(0.011)	(0.004)
Exp. 2nd trim*VS	43.036	-.008	0.018	0.004	0.001
	(26.053)*	(0.008)	(0.009)**	(0.009)	(0.003)
Exp. 3rd trim*VS	58.256	-.009	0.02	-.004	0.002
	(24.147)**	(0.007)	(0.009)**	(0.007)	(0.003)
Exp. 1st trim	-555.783	0.054	-.036	0.273	0.036
	(644.302)	(0.214)	(0.206)	(0.223)	(0.071)
Exp. 2nd trim	356.375	-.075	-.276	0.078	0.146
	(600.792)	(0.176)	(0.206)	(0.195)	(0.091)
Exp. 3rd trim	736.507	-.316	-.103	0.242	0.039
	(686.661)	(0.18)*	(0.232)	(0.152)	(0.049)
Obs.	496044	496052	594592	594592	594592
R^2	0.052	0.021	0.037	0.025	0.02

* significant at 90%; ** significant at 95%; *** significant at 99%. The sample includes singleton births, born to 15-49 years of age mothers, no less than 500 grams and no less than 26 gestational weeks, born between January 1980 and November 1981 with information on health outcomes and weeks of gestation. Babies are defined as exposed to the 23F military coup according to their conception date calculated using month of birth and weeks of gestation. All regressions include municipality of residence dummies, binary indicators for year of delivery and month of delivery. Time trends are province-specific linear trends in months. Controls are dummies for mother age (under 25, 25-35 years old and over 35), binary variables for birth order, married mother dummy, an indicator for father absent, binary indicators for only mother high-skilled, only father high-skilled and both high-skilled. Additionally, we control for average age, proportion of individuals with each education level, proportion of inviduals in each occupation, and ratio of employed, unemployed, and out of labor force individuals in the municipality and their interactions with exposure to the military coup.

Table 11: Selection of babies controlling for the interaction of exposure and average demographic characteristics in the municipality

	Number of births in logs	Married mother	No father
Exposure in 1st trim*vote shares	-.155	0.003	-.005
	(0.071)**	(0.016)	(0.012)
Exposure in 2nd trim*vote shares	-.062	0.018	-.008
	(0.059)	(0.012)	(0.01)
Exposure in 3rd trim*vote shares	0.03	0.013	0.005
	(0.061)	(0.014)	(0.01)
Exposure in 1st trim	1.362	-.076	-.073
	(0.973)	(0.343)	(0.212)
Exposure in 2nd trim	-.105	0.462	-.199
	(0.843)	(0.176)***	(0.116)*
Exposure in 3rd trim	-1.743	0.19	-.073
	(0.944)*	(0.278)	(0.231)
Obs.	62095	62095	62095
R^2	0.786	0.185	0.173

* significant at 90%; ** significant at 95%; *** significant at 99%. The unit of observation is municipality and time in months. The sample covers the period between January 1980 and November 1981. The dependent variables are the logarithm of the number of births to mothers residing in the municipality, the proportion of married mothers, and the proportion of non-declared fathers. Babies are classified as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September and November of 1981; exposed in the 2nd trimester if they are born between June and August of 1981, and exposed in the 3rd trimester if they are born between March and May 1981. All regressions include municipality of residence dummies, binary indicators for year and month of birth. Time trends are province-specific linear trends in months.

Table 12: Effects on birth outcomes using predicted individual probability of having voted for leftists and independentists

	birth weight	low weight	normality	prem 36	mortality
Exp. 1st trim*PV	60.468	-.024	0.034	-.019	-1.00e-05
	(46.450)	(0.013)*	(0.019)*	(0.014)	(0.006)
Exp. 2nd trim*PV	18.995	-.010	0.029	-.014	0.0001
	(35.148)	(0.011)	(0.013)**	(0.011)	(0.005)
Exp. 3rd trim*PV	37.955	-.012	0.004	-.016	0.004
	(29.528)	(0.009)	(0.011)	(0.009)*	(0.004)
Exp. 1st trim	-48.507	0.019	-.020	0.029	0.01
	(26.491)*	(0.008)**	(0.01)*	(0.009)***	(0.004)***
Exp. 2nd trim	-20.542	0.004	-.016	0.01	0.007
	(20.324)	(0.006)	(0.007)**	(0.007)	(0.003)**
Exp. 3rd trim	0.45	-.011	-.005	-.017	0.004
	(18.248)	(0.005)**	(0.006)	(0.006)***	(0.002)
Obs.	475496	475503	569644	569644	569644
R^2	0.051	0.021	0.037	0.025	0.021

* significant at 90%; ** significant at 95%; *** significant at 99%. The sample includes singleton births, born to 15-49 years of age mothers, no less than 500 grams and no less than 26 gestational weeks, born between January 1980 and November 1981 with information on health outcomes and weeks of gestation. Babies are defined as exposed to the 23F military coup according to their conception date calculated using month of birth and weeks of gestation. All regressions include municipality of residence dummies, binary indicators for year of delivery and month of delivery. Time trends are province-specific linear trends in months. Controls are dummies for mother age (under 25, 25-35 years old and over 35), binary variables for birth order, married mother dummy, an indicator for father absent, binary indicators for only mother high-skilled, only father high-skilled and both high-skilled. The predicted individual probability of having voted for a leftist or independentist party is computed using Census data. In particular, we regressed vote shares on individual characateristics (age, married, number of children, occupation dummies, province binary variables and their interactions with a female indicator).

Table 13: Selection of babies using predicted individual probability of having voted for leftists and independentists

	Number of births in logs	Married mother	No father
Exposure in 1st trim*vote shares	-.385	-.0005	-.017
	(0.143)***	(0.022)	(0.016)
Exposure in 2nd trim*vote shares	0.101	0.022	-.028
	(0.104)	(0.017)	(0.013)**
Exposure in 3rd trim*vote shares	-.038	0.029	-.017
	(0.089)	(0.016)*	(0.012)
Exposure in 1st trim	-.317	-.011	0.014
	(0.074)***	(0.011)	(0.008)*
Exposure in 2nd trim	-.455	-.021	0.021
	(0.056)***	(0.009)**	(0.007)***
Exposure in 3rd trim	-.456	-.024	0.014
	(0.05)***	(0.009)***	(0.007)**
Obs.	61189	61189	61189
R^2	0.785	0.185	0.173

* significant at 90%; ** significant at 95%; *** significant at 99%. The unit of observation is municipality and time in months. The sample covers the period between January 1980 and November 1981. The dependent variables are the logarithm of the number of births to mothers residing in the municipality, the proportion of married mothers, and the proportion of non-declared fathers. Babies are classified as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September and November of 1981; exposed in the 2nd trimester if they are born between June and August of 1981, and exposed in the 3rd trimester if they are born between March and May 1981. All regressions include municipality of residence dummies, binary indicators for year and month of birth. Time trends are province-specific linear trends in months.

Appendix

Table A.1: Robustness of the effects on birth outcomes and number of births

Panel A: Birth weight

	basic	municipality	trends	controls
Exposure in 1st trim*Vote shares	-3.871	20.464	49.563	45.178
	(20.177)	(20.734)	(23.417)**	(23.297)*
Exposure in 2nd trim*Vote shares	-10.849	8.593	31.903	22.001
	(18.528)	(17.731)	(20.604)	(20.525)
Exposure in 3rd trim*Vote shares	-7.827	16.984	32.486	29.064
	(17.920)	(15.897)	(18.788)*	(18.717)
Exposure in 1st trim	-4.969	-21.152	-38.830	-38.230
	(12.208)	(12.221)*	(14.181)***	(14.219)***
Exposure in 2nd trim	0.42	-13.658	-26.858	-22.184
	(11.844)	(12.165)	(13.847)*	(13.795)
Exposure in 3rd trim	30.831	14.141	6.097	7.098
	(12.133)**	(11.388)	(13.062)	(12.787)
Obs.	496355	496355	496355	496355
R^2	0.0005	0.033	0.034	0.052

Panel B: Low birth weight

	basic	municipality	trends	controls
Exposure in 1st trim*Vote shares	-.008	-.011	-.018	-.018
	(0.006)	(0.006)*	(0.007)**	(0.007)**
Exposure in 2nd trim*Vote shares	0.005	0.002	-.004	-.003
	(0.005)	(0.005)	(0.006)	(0.006)
Exposure in 3rd trim*Vote shares	-.001	-.002	-.005	-.005
	(0.005)	(0.006)	(0.006)	(0.006)
Exposure in 1st trim	0.009	0.011	0.015	0.015
	(0.004)**	(0.004)***	(0.005)***	(0.005)***
Exposure in 2nd trim	-.005	-.004	-.0003	-.0008
	(0.004)	(0.004)	(0.004)	(0.004)
Exposure in 3rd trim	-.018	-.018	-.016	-.016
	(0.004)***	(0.004)***	(0.004)***	(0.004)***
Obs.	496363	496363	496363	496363
R^2	0.0008	0.019	0.019	0.021

Panel C: Normality

	basic	municipality	trends	controls
Exposure in 1st trim*Vote shares	0.023	0.012	0.021	0.021
	(0.011)**	(0.007)*	(0.009)**	(0.009)**
Exposure in 2nd trim*Vote shares	0.016	0.008	0.016	0.015
	(0.011)	(0.006)	(0.007)**	(0.007)**
Exposure in 3rd trim*Vote shares	0.013	0.003	0.007	0.007
	(0.012)	(0.007)	(0.007)	(0.007)
Exposure in 1st trim	-.011	-.007	-.013	-.013
	(0.007)*	(0.005)	(0.005)***	(0.005)***
Exposure in 2nd trim	-.007	-.004	-.009	-.009
	(0.007)	(0.004)	(0.004)**	(0.004)**
Exposure in 3rd trim	-.010	-.004	-.007	-.007
	(0.007)	(0.005)	(0.004)	(0.004)
Obs.	595002	595002	595002	595002
R^2	0.002	0.031	0.031	0.037

Panel D: Prematurity (less than 36 weeks)

	basic	municipality	trends	controls
Exposure in 1st trim*Vote shares	-.0005	0.002	-.0007	-.0006
	(0.006)	(0.006)	(0.008)	(0.008)
Exposure in 2nd trim*Vote shares	-.0008	0.002	-.001	-.0002
	(0.005)	(0.006)	(0.007)	(0.007)
Exposure in 3rd trim*Vote shares	-.010	-.005	-.004	-.004
	(0.004)**	(0.006)	(0.006)	(0.006)
Exposure in 1st trim	0.018	0.015	0.019	0.019
	(0.004)***	(0.004)***	(0.005)***	(0.005)***
Exposure in 2nd trim	0.003	0.0007	0.004	0.003
	(0.004)	(0.004)	(0.004)	(0.004)
Exposure in 3rd trim	-.019	-.023	-.023	-.023
	(0.003)***	(0.004)***	(0.004)***	(0.004)***
Obs.	595002	595002	595002	595002
R^2	0.003	0.023	0.024	0.025

Panel E: Mortality

	basic	municipality	trends	controls
Exposure in 1st trim*Vote shares	-.003	-.003	-.0005	-.0007
	(0.002)*	(0.002)	(0.003)	(0.003)
Exposure in 2nd trim*Vote shares	-.002	-.002	0.0005	0.0005
	(0.002)	(0.002)	(0.002)	(0.002)
Exposure in 3rd trim*Vote shares	0.0006	0.002	0.004	0.004
	(0.002)	(0.002)	(0.002)*	(0.002)*
Exposure in 1st trim	0.011	0.011	0.011	0.011
	(0.002)***	(0.002)***	(0.002)***	(0.002)***
Exposure in 2nd trim	0.008	0.008	0.007	0.007
	(0.002)***	(0.002)***	(0.002)***	(0.002)***
Exposure in 3rd trim	0.005	0.005	0.004	0.004
	(0.001)***	(0.002)***	(0.002)**	(0.002)**
Obs.	595002	595002	595002	595002
R^2	0.001	0.018	0.019	0.02

Panel F: Number of births in logarithms

	basic	municipality	trends
Exposure in 1st trim*Vote shares	-.233	-.412	-.491
	(0.057)***	(0.053)***	(0.065)***
Exposure in 2nd trim*Vote shares	-.043	-.004	-.074
	(0.052)	(0.043)	(0.051)
Exposure in 3rd trim*Vote shares	0.041	-.037	-.105
	(0.062)	(0.053)	(0.05)**
Exposure in 1st trim	-.114	-.270	-.279
	(0.034)***	(0.034)***	(0.036)***
Exposure in 2nd trim	-.200	-.365	-.367
	(0.032)***	(0.031)***	(0.031)***
Exposure in 3rd trim	-.240	-.436	-.425
	(0.035)***	(0.034)***	(0.032)***
Obs.	62349	62349	62349
R^2	0.071	0.775	0.784

* significant at 90%; ** significant at 95%; *** significant at 99%. The sample includes singleton births, born to 15-49 years of age mothers, no less than 500 grams and no less than 26 gestational weeks, born between January 1980 and November 1981 with information on health outcomes and weeks of gestation. Babies are defined as exposed to the 23F military coup according to their conception date calculated using month of birth and weeks of gestation. All regressions include binary indicators for year of delivery and month of delivery. In the second column municipality fixed effects are added. The third column includes also province-specific linear trends in months. Finally, the fourth column shows the complete specification with all controls.

Table A.2: Information on birth weight and gestational weeks

Panel A: Information on birth weight

	basic	munici	trends	controls
Exposure in 1st trim*Vote shares	0.121	0.087	-.049	-.047
	(0.03)***	(0.029)***	(0.035)	(0.034)
Exposure in 2nd trim*Vote shares	0.022	0.012	-.072	-.073
	(0.033)	(0.032)	(0.024)***	(0.023)***
Exposure in 3rd trim*Vote shares	0.07	0.058	-.013	-.015
	(0.034)**	(0.029)**	(0.02)	(0.02)
Exposure in 1st trim	-.434	-.357	-.282	-.282
	(0.022)***	(0.02)***	(0.021)***	(0.021)***
Exposure in 2nd trim	-.352	-.291	-.243	-.242
	(0.02)***	(0.021)***	(0.018)***	(0.018)***
Exposure in 3rd trim	-.289	-.244	-.204	-.203
	(0.021)***	(0.017)***	(0.016)***	(0.017)***
Obs.	1041148	1041148	1041148	1041148
R^2	0.102	0.397	0.404	0.409

Panel B: Information on gestational weeks

	basic	munici	trends	controls
Exposure in 1st trim*Vote shares	0.208	0.197	-.233	-.232
	(0.047)***	(0.051)***	(0.068)***	(0.067)***
Exposure in 2nd trim*Vote shares	0.226	0.223	-.038	-.038
	(0.04)***	(0.043)***	(0.045)	(0.045)
Exposure in 3rd trim*Vote shares	0.214	0.195	-.025	-.025
	(0.069)***	(0.07)***	(0.038)	(0.038)
Exposure in 1st trim	-.594	-.483	-.213	-.213
	(0.04)***	(0.04)***	(0.045)***	(0.045)***
Exposure in 2nd trim	-.592	-.499	-.326	-.326
	(0.023)***	(0.025)***	(0.027)***	(0.027)***
Exposure in 3rd trim	-.697	-.607	-.458	-.457
	(0.037)***	(0.041)***	(0.027)***	(0.027)***
Obs.	1041148	1041148	1041148	1041148

* significant at 90%; ** significant at 95%; *** significant at 99%. The sample includes singleton births, born to 15-49 years of age mothers, no less than 500 grams and no less than 26 gestational weeks, born between January 1980 and November 1981. Babies are defined as exposed to the 23F military coup according to their conception date calculated using month of birth and weeks of gestation. All regressions include binary indicators for year of delivery and month of delivery. Time trends are province-specific linear trends in months. Controls are dummies for mother age (under 25, 25-35 years old and over 35), married mother dummy, an indicator for father absent, binary indicators for only mother high-skilled, only father high-skilled and both high-skilled.

Table A.3: Effects on birth outcomes excluding babies born on January 1980

	birth weight	low weight	normality	prem 36	mortality
Exp. 1st trim*VS	43.911	-.017	0.021	-.0001	-.001
	(23.124)*	(0.007)**	(0.009)**	(0.008)	(0.003)
Exp. 2nd trim*VS	20.806	-.002	0.014	0.00009	0.00006
	(20.394)	(0.006)	(0.007)**	(0.007)	(0.002)
Exp. 3rd trim*VS	28.626	-.004	0.006	-.004	0.003
	(18.670)	(0.006)	(0.007)	(0.006)	(0.002)*
Exp. 1st trim	-35.656	0.015	-.011	0.016	0.003
	(14.219)**	(0.005)***	(0.005)**	(0.005)***	(0.002)*
Exp. 2nd trim	-19.573	-.001	-.006	0.00004	-.0008
	(13.908)	(0.004)	(0.004)	(0.004)	(0.002)
Exp. 3rd trim	9.210	-.016	-.004	-.026	-.004
	(12.943)	(0.004)***	(0.004)	(0.004)***	(0.001)***
Obs.	494311	494319	591548	591548	591548
R^2	0.052	0.021	0.037	0.025	0.02

* significant at 90%; ** significant at 95%; *** significant at 99%. The sample includes singleton births, born to 15-49 years of age mothers, no less than 500 grams and no less than 26 gestational weeks, born between February 1980 and November 1981 with information on health outcomes and weeks of gestation. Babies are defined as exposed to the 23F military coup according to their conception date calculated using month of birth and weeks of gestation. All regressions include municipality of residence dummies, binary indicators for year of delivery and month of delivery. Time trends are province-specific linear trends in months. Controls are dummies for mother age (under 25, 25-35 years old and over 35), binary variables for birth order, married mother dummy, an indicator for father absent, binary indicators for only mother high-skilled, only father high-skilled and both high-skilled.

Table A.4: Selection of babies excluding babies born on January 1980

	Number of births in logs	Married mother	No father
Exposure in 1st trim*vote shares	-.520	-.002	-.002
	(0.064)***	(0.013)	(0.01)
Exposure in 2nd trim*vote shares	-.097	0.017	-.015
	(0.051)*	(0.011)	(0.008)*
Exposure in 3rd trim*vote shares	-.136	0.008	0.005
	(0.051)***	(0.011)	(0.008)
Exposure in 1st trim	0.108	-.010	0.005
	(0.035)***	(0.008)	(0.006)
Exposure in 2nd trim	0.018	-.013	0.011
	(0.031)	(0.007)*	(0.005)**
Exposure in 3rd trim	-.039	-.009	0.00007
	(0.031)	(0.007)	(0.005)
Obs.	61371	61371	61371
R^2	0.799	0.189	0.175

* significant at 90%; ** significant at 95%; *** significant at 99%. The unit of observation is municipality and time in months. The sample covers the period between January 1980 and November 1981. The dependent variables are the logarithm of the number of births to mothers residing in the municipality, the proportion of married mothers, and the proportion of non-declared fathers. Babies are classified as exposed to the 23F military coup in the 1st trimester of pregnancy if they are born between September and November of 1981; exposed in the 2nd trimester if they are born between June and August of 1981, and exposed in the 3rd trimester if they are born between March and May 1981. All regressions include municipality of residence dummies, binary indicators for year and month of birth. Time trends are province-specific linear trends in months.