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ABSTRACT

The view put forth in the present paper is that economic fluctuations emerge to change the political landscape. In this context it is hypothesized that state defaults are associated with autocratic polity changes. To support this view we use a dataset of all state defaults from 1800 to 2004 and examine the empirical validity of the hypothesis that a state default leads to a decline in the level of democracy. Then we examine 3 case studies of state defaults that are consistent with our hypothesis: Spain in 1852, Greece in 1932 and Ecuador in 2000. The econometric results and the historical analysis of the three case studies are consistent with our main hypothesis.

Keywords: State Default, Autocracy, Political Transitions

1. Introduction

A large literature (e.g. Eaton and Gersovitz, 1981; Bulow and Rogoff, 1989; Reinhart et al. 2003; Borensztein and Panizza, 2006) has identified the economic cost of sovereign default. Besides this identified cost, one can argue that state defaults have severe political repercussions. In this paper we argue that episodes of default are associated with transitions to more autocratic regimes.

Our argument is based on econometric evidence from an unbalanced panel of 84 countries from 1800 to 2004. As we argue the events that follow sovereign defaults lead to a decline in the level of democracy. Specifically we show that within the first 3 years from a default episode there is a statistically significant decline in the level of democracy. This effect exists even when we control for the economic environment, therefore we argue that it is the default per se that results in declines in democracy rather than the unfavorable economic environment. This main result is robust across specifications and it is consistent in all time periods considered.

To our knowledge the only other paper that examines the political implications of sovereign default is Borensztein and Panizza (2008). This paper though only examines the effect of state default on the survival of the government and finds evidence that defaults lead to changes in the incumbent government. However these changes can only be loosely interpreted as social cost: assuming that voters are not fully informed about the correct policy, if the policy of the incumbent government led to a default, the change in the governing party reflects updated information on behalf of the voters. But even if we assume that voters are fully informed a state default may reflect a change in economic environment which requires a change in policy generated by a new government.

According to our argument a sovereign default has more severe implications for the political system. A default is associated with increased political conflict within the country

and external political isolation. Both these effects are associated with a lower cost for a coup, as the cost of democracy for a rich elite increases and the probability of sanctions from other democracies decline (Acemoglu and Robinson, 2006). Then it may be easier for the elite to use repression, either to prevent the creation (if the regime is initially autocratic) or the consolidation of democracy (if the regime is already a democracy).

To further support our thesis, after presenting our empirical results, we briefly discuss three historical cases which are in accordance to our story. These are the default cases of Spain in 1852, Greece in 1932 and Ecuador in 2000. Even though these cases occurred in different time periods and within very different institutional settings¹ they give a clear way in which the political changes take place.

The paper is structured as follows. In the following section we present our theoretical argument. In Section 3 we present the data for our statistical analysis. In Section 4 the results of the econometric model are presented. Section 5, then presents the three historical accounts that support the regularities identified in the empirical section. Finally Section 5 offers some concluding remarks.

¹ Greece in 1932 and for Ecuador in 2000 were democratic countries, whereas Spain in 1852 is classified as autocracy according to the Polity IV database.

2. Theoretical Motivation

The economic effects of sovereign default have been widely examined in the empirical and theoretical literature (see Borensztein and Panizza, 2008 for a review of the main findings). What appears as a consensus from this literature is the fact even though defaults come as a consequence of bad economic situation and sudden stop of capital inflow, there are important costs from a state default that further hurt the economy. In most cases this cost is associated and is the outcome of the economic and political isolation that follows a default. For example, according to Rose (2005) foreign trade is seriously disrupted after a sovereign default episode. Furthermore, the economy loses access to credit in the financial markets (Tomz, 2007).

Following Acemoglu and Robinson (2006), obstacles to trade and financial flows are expected to have adverse effects on the consolidation of democracy. Consider a country that has faced a sudden stop of capital flows and has defaulted in its external debt. Typically, this is a poor country, relatively abundant in labor. After the default the economy faces economic isolation, in terms of reduced foreign trade and no access to foreign credit. Standard trade theory then suggests that the returns to the relatively abundant factor, i.e. labor, fall whereas the return to the relative scarce factor, i.e. capital, increases. This in turns implies an increase in income inequality in the economy. In a democracy higher income inequality is associated with increased demands for redistributive policies. Therefore, democracy appears less appealing to the rich elite. As the rich elite has more to fear from democracy it is willing to use repression, either to keep the nature of an existing autocratic regime or to limit the power of the poor within a democracy. Thus it is the increase in political conflict that arises from the economic isolation of the country that creates the conditions for a decline in the level of democracy.

Besides the above effects of economic isolation, according to Acemoglu and Robinson (2006) political isolation may also explain why state defaults may result into lower democracy. As the literature has already shown a defaulting country faces political sanctions by its creditors (Bulow and Rogoff, 1989). As the country becomes politically isolated, the cost of a coup becomes lower, as there will be no additional political sanctions from other democratic nations. Then if coups are the outcome of a cost- benefit analysis on behalf of the elite, a reduction in the cost of the coup, even keeping its benefit constant, increases the probability that such an event will occur. In this case political isolation is associated with higher probability of repression and restrictions in political and civil liberties.

Additional arguments that support our main argument may be presented. For example, one can argue that sovereign defaults may lead to a de- legitimization of the political regime, which creates a political spiral which leads to a regime switch. This argument however suggests that regime switches may not always be towards more autocratic regimes. Instead defaults may be associated with democratic transitions as well. Furthermore, one can claim that it is not the state default *per se* that leads to autocratic transitions but instead it is the bad economic environment within the country that favors these political changes. However to support such a claim one should find a negative association between bad economic conditions, i.e. the (current or past) growth rate of *GDP Per capita* , and the probability of an autocratic transition. If the effect of the bad economic environment is the only driving force, the inclusion of the economic variables in the estimated regression should either make the effect of default insignificant or at least reduce its magnitude/ significance. Therefore, in the empirical section we have to control of all the factors that influence democratic fragility in order to examine the empirical validity of the proposition that a state default is associated with a decline in the degree of democracy.

3. Data

The starting point of our analysis is the definition of a regime transition. For this purpose we use the Polity IV (2010) dataset, which provides the coding of the authority characteristics of states around the world and calculates various measures of how a country is governed from 1800 (or the year that the state gained its independence) onwards. The institutional features of a political regime are captured by the overall *Polity Score* which ranges on a scale from -10 to +10. A score equal to -10 (+10) indicates a strongly autocratic (democratic) state.² Always according to Polity IV (2010) a regime transition is defined as a 3- point change in the *Polity Score* variable, with this transition occurring (in the same general direction) within three years or less. Therefore, we construct the variable *Autocratic Trans* (*Democratic Trans*) to take the value of 1 when the *Polity Score* decreases (resp. increases) as indicated above.

According to the hypotheses developed in the previous section, our empirical model seeks to explain the changes of the polity regime or within the regime rather than characterizing it. Thus for example a change of *Polity Score* from 10 to 7 would be coded in our dataset as an autocratic transition, however according to most coding that the literature uses the regime remains a democracy. We expect sovereign defaults to bring autocratic changes even within a regime rather than leading to an altogether switch to an autocratic polity. Therefore, in the empirical section we employ a dichotomous variable to mark changes in the regime rather than the level of *Polity Score*. Moreover we should note that according to our definition of the dependent variable, for a democratic transition to occur an autocratic one does not need to precede and vice versa. A transition to one polity may take

² According to Polity IV, a democratic polity has three essential characteristics: (i) fully competitive political participation, (ii) presence of institutionalized constraints on executive power and (iii) secured political liberties. In contrast, absence of these three characteristics typifies an autocratic country.

time to occur, whereas the transition to the other regime may occur within two or three years. The first transition is not coded as a transition, whereas the later is.

To determine the date of a sovereign default we use the data of Standard & Poor's as documented in Borensztein and Panizza (2008), where default episodes from 1824 to 2004 are classified.³ We decided to include default episodes until 2004, in order to exclude yet unresolved cases of sovereign default, as well as exclude countries from our sample which have defaulted recently and political changes have not yet fully unraveled.

Our main interest in the following section is to estimate the effect of a sovereign default on the probability of a regime transition. We follow the methodology of Frankel (2005) and Borensztein and Panizza (2008) and estimate the probability of democratic and autocratic transitions in "normal" times and after years of default episodes. According to this methodology then, the difference in probability of a regime transition is wholly attributed to the default. However, this is a rather extreme assumption: other forces besides a default may lead to a regime transition. For this reason and since the variable that we want to explain, i.e. regime transition, is dichotomous we also estimate a Fixed Effects (Conditional) Logit model with a number of additional explanatory variables.

Severe economic downturns may have adverse effect on the survival of democratic institutions. Large deficits, and inability to service the outstanding debt which occurs before a default episode may be the driving force behind the autocratic transitions. As the literature on sovereign defaults shows (e.g. Calvo, 2003 Reinhart and Rogoff, 2011) a sovereign default is the outcome of a sudden stop in the inflow of capital. This sudden stop may be the outcome of a negative technology shock, negative fiscal conditions or debt overhang (Calvo, 2003). In

³ As Borensztein and Panizza (2008) show, there is variation on what different authors code as a default episode, due to differences in the methodology used to measure the length of default and on the definition of a default episode. Even though in the rest of the paper we use the Standard and poor's data documented in Borensztein and Panizza (2008) we also examine the robustness of our results when other definitions of default are employed, i.e. we use the default data from Beim and Calomiris (2000) and Sturzenegger and Zettelmeyer (2006)

any case all these shocks are correlated with a sharp decline in GDP. To disentangle these effects from the effect of sovereign default we introduce the variable *Growth*, which measures the growth rate of GDP per capita. We expect that an economic downturn will more likely result into tensions among political actors, which will be a destabilizing force for both an autocratic as well as for a democratic regime, and eventually will result into the demise of the regime.

Furthermore, following the large literature on the modernization hypothesis (Lipset, 1959; Acemoglu et al., 2009; Csodás and Ludwig, 2011) we introduce the variable *Log GDP per capita*. According to this hypothesis, per capita income causes the creation and consolidation of democracy. Thus higher GDP per capita must be associated with lower probability of autocratic, and a higher probability of democratic transitions.⁴

Besides economic variables additional explanatory variables are introduced. To account for various aspects of the regime we introduce the variables *Durable* and *Polity Score* (both taken from Polity IV, 2010), which measure the total number of years since the last polity transition and the nature of the political regime respectively. We expect a negative association between *Durable* and the probability of a regime (either democratic or autocratic) transition, as higher regime consolidation is expected to make a transition to another regime more difficult. With respect to the *Polity Score* we introduce it to capture the effect of regime characteristics on the probability of polity transitions without having some priors for its value.

Armed conflicts and war may crucially affect the stability of the political regime. For this reason we include in our model the dummy variable *War* which takes the value of 1 when the country experiences an internal or external war (data taken from the Correlates of

⁴ The *Growth* and the *GDP per capita* variables are both taken from Bolt and Zanden (2013). As our sample goes back to the early 19th century, data on other economic variables are not available. However as a robustness test we introduce additional variables which may account for the effect of negative economic conditions on the probability of an autocratic transition. Even though this reduces our sample significantly it does not affect our main result (see Table 5).

War project, Ghosn et al., 2004).⁵ Finally to account for the prior history of the country we include as explanatory variables the number of previous polity transitions (variables *Number of Autocratic Trans* and *Number of Democratic Trans*) and defaults (*Number of Defaults*) respectively.⁶

As there are a number of important country specific characteristics not included in the set of explanatory variables (i.e. geography, religious background, initial inequality, cultural characteristics) we estimate a Fixed Effects (Conditional) Logit model in order to account for country specific fixed effects.

Our final dataset is restricted for a series a reasons. First as we want to include all institutional characteristics, geographical features or other country specific variables the proper specification is the Fixed Effects Logit model, which is a Conditional Logit model. The Conditional Logit uses only countries that exhibit changes in the dichotomous (dependent) variable. Therefore, all countries that do not experience an autocratic transition are automatically dropped from the sample. Moreover for most countries we have a incomplete time series for the GDP data for the years pre- 1916. Therefore our final dataset consists of 84 countries and 4538 observations.

According to our dataset there are 154 default episodes. The country with the highest number of defaults is Uruguay (seven episodes), with Austria, Brazil, Peru and Turkey in the second place (six episodes). In our sample the country that has spend most years in default is Greece (with a total of 87 years in default).

Regarding the regime transitions most countries have only a few autocratic transitions with only 13 countries experiencing more than 4 autocratic transitions. The highest number of autocratic transitions in our sample are in Guatemala (seven) and in Turkey (eight). On the

⁵ To be classified as a war, there should be at least 1000 battle related fatalities among all of the system members - states in interstate or two entities, government and/or non-government in intrastate wars-involved in sustained combat (see Ghosn et al., 2004 for more details).

⁶ The former variable also corrects for the violation of the independence assumption in cross sectional time series Logit regression (see Beck et al.,1998)

other hand, there are 32 countries with more than 4 democratic transitions in our dataset, with more democratic transitions in Chile (nine).

4. Results

Before estimating our main model, we follow Borensztein and Panizza (2008) and estimate the probability of a polity transition in “normal” times and then the probability of polity transition within 1, 2 and 3 years after a default.⁷ These results are presented in Table 1. In the first column we estimate the probabilities for the whole period under consideration (i.e. from 1800 to 2004). In columns 2 and 3 we split the sample in two periods :1800- 1970 and 1970- 2004. We split the sample in 1970 for several reasons. First of all, until the early 1970s all defaults prior and shortly after the Second World War were settled and there were only few new default episodes (Reinhart and Rogoff, 2011). Furthermore, after that period the “Bank Advisory Committee”, also referred to as the “London Club” emerged as a coordinated negotiating procedure for the restructuring of commercial bank debt (Sturzenegger and Zettelmeyer, 2007). Finally, it is the year that splits our sample more or less equally.

[Insert Table 1 Here]

According to Table 1, over the 1800- 2004 period, in tranquil periods the probability of an autocratic transition is 3.13%. However within the first 2 years after a default this probability increases to 5.05%, with the difference between the two probabilities being statistically significant (p-values in the parenthesis). If we take a 3 year or an one year window there is still a significant difference in the probabilities, however somehow lower.

⁷ This methodology is applied by Cooper (1971) and Frankel (2005) who estimate the political cost, i.e. changes in government after sharp currency devaluations.

Even though the above table is informative, it attributes the whole difference in the probability of regime transition on the default episode. As we have argued in the previous section this may not be a correct strategy. For this reason in Table we introduce a series of variables in a Logit model in order to account for all potential determinants of autocratic transitions. The results are presented in Table 2. Note that since the coefficients are odds ratios, a value of the coefficient below unity suggests a reduction in the probability that an autocratic transition will occur.⁸

[Insert Table 2 Here]

According to column (1) having a default within the last 2 years results in a statistically significant positive effect on the probability of a transition to a more autocratic regime. This effect is also quantitatively significant: countries that experience a sovereign default have *ceteris paribus* 2.3 times higher risk of having an autocratic transition. This effect is marginally higher than the effect of a war, suggesting that at least as the survival of a democratic regime is concerned a war and a sovereign default may have the same adverse effects. Similar effects are estimated even when we allow for 3 years after the default for the transition to take place (column (2)) or one year (column (3)).

With respect to the rest of the explanatory variables, they all turn out statistically significant (and correctly signed) with the exception of *Growth*. The negative effect of *Log GDP per capita* implies that an increase in the income of the economy results into lower probability of an autocratic transition. The same holds with the durability of the regime: long lasting democracies appear rather stable to regime changes. On the other hand, countries that experience more autocratic transitions in the past are more likely to experience a similar transition in the future. The odds ratio of *Number of Defaults* shows that countries that have

⁸ And thus the associated t- statistic is negative.

experienced many defaults in the past are less likely to have a destabilizing effect on their political regime with a default in the present time.⁹

The rest of the columns in Table 2 estimate the same model for 2 sub- samples, before and after 1970, following the rationale highlighted above. As the reader can easily verify qualitatively the results are the same. Moreover, there is an increase in the odds ratio of the default variable, which may be due to the fact that the full sample from 1800 to 2004 is highly heterogeneous with respect to time, with many events changing the underlying relationships. For this reason we explore this issue further in the robustness tests (Tables 4 and 5).

In table 3, we perform the same estimation, however this time the dependent variable is the variable *Democratic Transitions*. This variable is constructed using the same methodology as the variable *Autocratic Transitions* but it takes the value of 1 when the polity score increases by 3 points. Thus it measures whether there is a democratic change in the polity regime. In other words in Table 3 we examine whether defaults may have an opposite effect as well, i.e. lead to democratic changes in autocratic regimes. As the table shows this is not the case: in all cases the *Default* dummy turns out statistically insignificant, and the odds ratios are rather small (compared to the ones in Table 2).

[Insert Table 3 Here]

In Tables 4 and 5, we examine the robustness of our results. First in Table 4 we estimate our main model with all polity transitions (i.e. both autocratic and democratic transitions) as dependent variable. We find a positive and statistically significant effect. According to the above two tables (Table 2 and 3) this result is mainly driven by the autocratic transitions.

⁹ We have also examined whether the outcome of the war affects the probability of an autocratic transition. However our results showed that there is no difference in the associated probabilities for an autocratic transition when the war is lost or it is won by the respective country. These results are available from the authors.

However this column shows that the positive effect of defaults survives even if we pool together all regime transitions.

[Insert Table 4 Here]

In columns (2) and (3) we exclude from our sample the whole World War I, interwar and World War II period.¹⁰ We do this as this was a rather turbulent period, with many changes in all political regimes, the birth of new states and a general trend towards autocratic regimes. For this reason, we want to verify that our results are not driven by the events during that period. As column (2) and (3) indicate all our results remain robust even if we exclude this period. This is true both for our main variable of interest as well as the rest of the control variables.

In order to ensure that our results are not driven by waves of democratization, in columns (4) and (5) we perform the same estimation this time we use three dummies which correspond to the years of the three waves of democratization.¹¹ The results suggest that only the third wave of democratization is associated with reduced autocratic transitions, whereas the other two waves were associated with increased probability of democratic transitions. With respect to the rest of the results, there is no significant change in our main conclusions.

The exact dating of sovereign default is not always straightforward. For this reason there are various sources that classify default episodes. To establish that our results are not driven by the particular choice of the Standard's and Poor methodology (as documented in Borensztein and Panizza, 2008), we replicate our results by using the Beim and Calomiris (2000)- column (4)- as well as the Sturzenegger and Zettelmeyer (2007)- column (5)- dataset on sovereign defaults. As the reader can easily verify all our results remain qualitatively the same irrespective of the source used.

¹⁰ I.e. we exclude from our sample the years 1910-1945.

¹¹ The first wave from 1800 to 1922, the second wave from 1945 to 1962 and the third wave from 1974 onwards.

Since we want to make sure that our result about autocratic transitions is driven by the default *per se* and not by the bad economic situation which precedes the episode of default in Table 5 we present a series of additional results. First in columns (1) and (4) we introduce in our main regression the average growth rate 2 years before the transition episode. If it is the economic cycle rather the default episode that leads to an autocratic transition, we expect that the average growth 2 years before the default to be significant and the default dummy to lose significance. As it is evident the effect of default remains qualitative the same with the baseline model both for the autocratic transitions as well as the democratic ones. With respect to the average lagged growth rate, in the case of autocratic transitions is insignificant (column 1) but the democratic transitions it is negative and significant at the 5% level of significance. This implies that democratic transitions tend to occur in economic recessions which do not involve sovereign defaults. To further verify these results in columns (2) and (3) and (5) and (6) we introduce additional variables that account for the economic cycle. These variables are the unemployment rate (columns (2) and (5)) and the inflation rate and the change in the real effective exchange rate (columns (3) and (6)). All these variables are taken from World Bank's World Development Indicators.¹² These variables are available from 1970 onwards and with missing data for some countries and years thus their inclusion greatly reduces the original sample. However, the conclusions about our main variable of interest remain: the probability of an autocratic transition increases if there has been a default in the last two years.

A final robustness test is presented in columns (6) and (7) of Table 5. As our theoretical proposition seems to apply to countries with an unconsolidated democracy, we want to make sure that our results remain if we exclude from the sample the countries that have more developed democratic institutions. For this reason, we exclude the countries that before the

¹² We have experimented with various specifications and combinations of the above variables. In all cases the results remain qualitatively unchanged.

year of the transition had a polity score equal to 10 (column 6) and above 9 (column 7). Once again the results regarding our main variable of interest remain unchanged.

5. Case Studies

Even though case studies do not provide the robust statistical analysis of econometric models, they may shed more light to the issue of causality between the dependent and the explanatory variables. In this respect it is important to examine some cases where the course of events clearly supports the findings of the econometric model. These historical events may further support the empirical evidence presented so far, by establishing the underlying causal links and show that a true relationship between defaults and autocratic transition exist and that the results presented so far are not the outcome of statistical luck or outcome of omitted variable bias.

The selection of the case studies is by no means random. We have tried to examine cases in very different time periods and different institutional settings, i.e. countries that were considered democratic and autocratic before the default. In this way we have tried to show the generality of the argument, both through time as well as cross country. The three cases considered are Spain in 1851- 52, Greece in 1932 and Ecuador in 2000. In Spain on 1850 the polity score was -2. After the default it declined to -5 in 1852 and to -6 in 1859. For Greece the decline was even more pronounced: the polity score was 10 in 1932, it fell to 8 in 1934 and the next year eventually dropped to -8. Finally for Ecuador the index of democracy declined from 9 (in 1999) to 6 in 2000 where it remained until the end of our sample.

5.1 Spain 1851-52

After the 1808- 14 war of independence, Spain experiences a deep and long political crisis. This crisis, in tandem with an economic crisis eventually led to 8 default episodes

during the 19th century. Five of these episodes are classified as debt restructuring whereas the rest 3 cases were official debt defaults.

One of the above mentioned episodes of default took place in 1851. The political instability after the first Carlist War (Guerra Carlista, 1833-1841) led to high budget deficits financed with short term loans (Comín, 2012). The debt restructuring in July of 1844, allowed the treasury to carry out the 1845 tax reform but the debt level did not become sustainable (Comín, 1998). This was intended to be corrected with a new debt restructuring which was implemented when Juan Bravo Murillo became President of the Council of Ministers of Spain (1851).

The restructuring that took place acknowledged all existing debt and reduced it into two types of bonds: State and Treasury. Existing debt, with one or more capital discount, was converted into State Bonds whereas all floating and short term debt was converted into Treasury securities (Comín, 2012). Even though the results of the restructuring on the outstanding debt was only slight,¹³ foreign debt holders described Murillo's restructuring as "disguised bankruptcy", Spain was ranked as an insolvent country and the Paris stock exchange was closed to Spanish securities.

As a second step to correct the debt problem caused by high deficits Murillo undertook a series of reforms in the tax collection which extended the reforms that begun in 1845. In order to correct the inefficiency of administration he proposed a constitutional reform. Murillo was known for his despotic political views and his admiration for the French coup d'état of Napoleon III (Carr, 1982). And these views were reflected in the proposed constitution which would turn the parliament (Cortes) into an advisory body chosen by 25,000 electors with no control over the budget. Murillo was trying to draft an authoritarian constitution which could be applied rather than keeping a liberal one which in reality was

¹³ The interest rate decreased only by 33% and the face value of the debt declined by only 2.2% (Comín, 2012).

turned into an instrument of the powerful (military) elite. And in this attempt Murillo had no support from the generals, the press or the parties, so Murillo was dropped by the court in December 1852. After two short lived governments, the Cortes turned to Conde de Sain Luis to become Prime Minister. In July 1854, the Army and the popular insurrection in Madrid ultimately toppled the government and ended the decade of Moderates in power (Payne, 1967).

The above case exemplifies our main argument: in an autocratic country, as was Spain in 1852, a state default and the associated attempt to correct its causes resulted in a popular discontent and political unrest. This unrest allowed the elite to increase repression.

5.2 Greece 1932

Greece besides providing the first historically recorded case of state default¹⁴ as early as 377 BC, it is also the country that has spent almost half its time as sovereign nation in default.¹⁵ However it is one particular episode of default that is in complete accordance with our main argument.

The political scene in Greece during the interwar period is characterized by major changes spurred mainly by the events following the 1929 crisis. During the 1920s the growth in the Greek economy is mainly driven by the devaluation policy of the national currency (drachma). This policy lasted up to 1927, when it came to a halt after a loan agreement with the League of Nations. In the following year (1928) drachma enters the Gold Standard and it is pegged with the British Pound.

The Great Depression hits Greece as early as in 1930. The decline in migrant remittances, which is the major source of capital inflows for the Greek economy at that time,

¹⁴ When the 13 city- states defaulted on their loans from the Temple of Apollo in Delos.

¹⁵ According to the data documented in the following section, Greece has been in default for almost 90 years since its independence in 1821.

together with the decline in agricultural prices and world demand for agricultural products¹⁶, are the channel through which the global economic crisis is transmitted to Greece. At the same time there was a huge rise in external debt at the level of 150% of GDP.¹⁷

Given these economic conditions and the fixed exchange rate regime imposed by the Gold Standard, Venizelos the liberal prime minister of Greece, has no option other than defaulting on the external debt. At the same time a series of unpopular economic policies in an effort to correct the situation, like drachmatization of all deposits in foreign currencies is undertaken by the government (Bank of Greece, 1978:96). The unpopularity of these measures lead to political unrest and a spiral where Venizelos eventually loses office in 1932. A referendum restores Monarchy in Greece in 1935. In 1936 King George II helped solidify the self- coup of Ioannis Metaxas rise. The nature of Metaxas' regime was evident by its intentions to abandon the existing mercantile/ capitalist system and replace it with a corporatist economic one, with the ultimate objective of promoting the national self- interest, and use corporatism as a process for the repression and co-optation of the labour movement (Moutos and Pechlivanos, 2015). Metaxas did not disguise his admiration for Nazism/ Fascism, however according to Clogg (1987) his regime can be more correctly categorized as paternalistic- authoritarian.¹⁸

It is clear from the above account that the highly popular Venizelos lost his political support due to the economic events following state default (Mazower, 2009: 369). However the political unrest that pursued obviously led to the delegitimatization of the democratic regime rather than a change in the party in power. The case of Greece shows another interesting

¹⁶ The events eventually led to a surge in the unemployment rate and to huge political unrest. Government officials in an attempt to correct this proposed a series of populist policies with no economic justification. For example according to newspapers of the time it was proposed to ban the inflow of foreign dancers as a cure to the high unemployment rate or to withhold one cigarette per package in order to give it as a transfer in kind to the unemployed (Kairofullas, 1988).

¹⁷ At the same level as in the years preceding the previous Greek default (1879- 89) (Reinhart and Rogoff, 2009).

¹⁸ The repressive nature of the regime was evident: books were confiscated from bookstores and homes and were later on burned, press was censored by law, and communists were sent to exile (Clogg, 1992).

aspect: the regime change is not instant. Instead it is a timely process that begins after the default. In fact for Greece in 1935 there has been a rise in output. However the political spiral that begun with the state default could not be reversed. The loss of the legitimacy of the democratic regime was such that an autocratic regime was established and lasted only to be changed by the outbreak of World War II.

5.3 Ecuador 2000

During the 1970s, Ecuador experiences a period of rapid growth mainly due to the utilization of the main oil reserves of the country. Oil exports on the one hand increase per capita imports and investment. However, this came at the cost of higher income inequality. Regarding the politics in Ecuador it is interesting to note that from 1979 to 2000 there have been nine different Presidents with different political views and a frequent involvement of the army in politics. This political instability has its roots on the structure of the economy and mainly on the heavy dependence of Ecuador on its oil reserves.¹⁹

In 1998 Jamil Mahuad became president of Ecuador. In that time he inherited an economy in sharp decline; falling oil prices, the decline in banana export revenues (the second most important exportable product of Ecuador), and the SE Asian financial crises led Ecuador in its worst economic crisis in a century. Its GDP declined by 35%, the currency depreciated by almost 195% and the unemployment rate doubled to reach to 17% (Jacome, 2004; Martinez, 2006).

On September 30, 1999, under these economic conditions Ecuador defaulted on its Brady bond obligations. In order to ensure financing from abroad, president Mahuad at the same time announced an austerity package, froze the savings of the population during the banking crisis and proceeded with the adoption of US Dollar as the national currency. These

¹⁹ The frequent changes in the political system has been attributed to the 1983 default, which was the outcome of the Dutch disease experienced by the Ecuadorian economy (for the Dutch disease and the Ecuadorian economy see Ismail, 2010).

measures generated fierce opposition to the government from the indigenous peasant population, which were already hit hard by the crisis.

The ensuing popular uprising on January 21, 2000 was supported by the armed forces.²⁰ Indian protestors marched on the National Congress, and the army which was supposed to guard the building stepped aside and allowed the opposition to overthrow the government and replace them with a People's Parliament. Soon a group of junior officials joined the indigenous group and a governing junta was formed. The democratically elected president Jamil Mahuad was sent into exile (Zamosc, 2007).

6. Conclusions

We have shown that episodes of sovereign default tend to have a close association with severe political changes. As the three case studies have shown and our econometric evidence verified, economic turmoil after a default episode together with the economic decline which eventually led to the default episode create important political dynamics. These dynamics appear to lead to suppression of political and civil liberties and to less liberal political regimes.

From a policy perspective these results have important consequences. Even if the economic cost of default is low, the political cost from the society's point of view is quite high. As long as lower political and civil liberties are associated with a decline in the welfare of the population, the welfare cost of a default may be very high and must be also included in the calculation of the cost of a sovereign default.

²⁰ President Mahuad lost the support of the army since the economic crisis had resulted in a 60% cut in the armed forces budget (Barracca, 2007).

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TABLES

Table 1: Autocratic Transitions

Autocratic Transitions	All defaults	1824-1970	1970-2004
Tranquil years	3.13%	3.30%	2.96%
Within 2 years after Default	5.05%	6.38%	4.44%
p-value	0.00	0.00	0.05
Tranquil years	3.11%	3.24%	2.99%
Within 3 years after Default	4.60%	6.47%	3.72%
p-value	0.01	0.00	0.23
Tranquil years	3.11%	3.31%	2.88%
When in Default	3.63%	3.91%	3.48%
p-value	0.24	0.29	0.27
observations	4916	2346	2570

Table 2: dep. Variable autocratic transitions

	(1)	(2)	(3)	(4)	(5)
	Full Sample	Full Sample	Full Sample	1800-1970	1970-2004
Log GDP per capita (-1)	0.442** (-2.289)	0.445** (-2.264)	0.439** (-2.303)	0.086** (-2.354)	0.766 (-0.327)
Growth Rate	0.196 (-1.195)	0.190 (-1.219)	0.191 (-1.226)	0.038*** (-2.764)	0.364 (-0.499)
Durability of Regime	0.931*** (-3.464)	0.931*** (-3.475)	0.931*** (-3.452)	0.725*** (-3.483)	0.994 (-0.350)
Democracy (-1)	1.092*** (4.567)	1.093*** (4.626)	1.091*** (4.574)	1.180*** (4.327)	1.154*** (3.498)
War	2.111*** (2.667)	2.099*** (2.646)	2.093*** (2.632)	1.041 (0.084)	4.941*** (3.279)
Default within last 2 years	2.362*** (2.887)			4.677*** (3.482)	3.968*** (3.025)
Number of Defaults	0.374*** (-3.540)	0.366*** (-3.639)	0.384*** (-3.497)	0.485 (-1.437)	0.095*** (-3.530)
number of autocratic transitions	2.089*** (3.714)	2.091*** (3.713)	2.081*** (3.703)	5.028*** (3.415)	7.077*** (4.908)
Default within last 3 years		2.166*** (3.101)			
Default in last year			2.775*** (2.590)		
Log-Likelihood	-520.605	-520.444	-521.094	-185.110	-210.692
obs	4538	4538	4538	2108	1555
wald	52.08	59.87	48.91	43.80	48.18
R2-p	0.13	0.13	0.13	0.34	0.19

coefficients in odds ratios; clustered t-statistics in the parenthesis; *, **, *** denote statistical significance at the 10%, 5%, 1% level respectively.

Table 3: dep. variable democratic transitions

	(1)	(2)	(3)	(4)	(5)
	Full Sample	Full Sample	Full Sample	1800-1970	1970-2004
Log GDP per capita (-1)	0.410*** (-3.329)	0.409*** (-3.308)	0.408*** (-3.332)	0.069*** (-3.579)	0.201* (-1.752)
Growth Rate	0.114** (-2.553)	0.112*** (-2.577)	0.113*** (-2.580)	0.401 (-0.722)	0.026** (-2.237)
Durability of Regime	0.953*** (-2.880)	0.953*** (-2.870)	0.953*** (-2.873)	0.961 (-0.946)	0.941*** (-2.687)
Democracy (-1)	0.897*** (-4.057)	0.897*** (-4.070)	0.896*** (-4.068)	0.924* (-1.885)	0.744*** (-6.084)
War	0.957 (-0.231)	0.955 (-0.245)	0.955 (-0.244)	1.320 (0.823)	1.037 (0.118)
Default within last 2 years	1.232 (0.686)			0.490 (-0.889)	1.708 (1.491)
Number of Defaults	0.906 (-0.574)	0.915 (-0.505)	0.921 (-0.497)	1.326 (0.957)	0.534*** (-2.947)
number of autocratic transitions	2.188*** (4.775)	2.181*** (4.748)	2.178*** (4.771)	2.348** (2.139)	6.795*** (7.231)
Default within last 3 years		1.072 (0.274)			
Default in last year			1.080 (0.188)		
Log-Likelihood	-778.879	-779.137	-779.161	-244.133	-408.668
obs	4973	4973	4973	1871	2383
wald	88.74	87.44	87.11	25.13	87.57
R2-p	0.12	0.12	0.12	0.11	0.24

coefficients in odds ratios; clustered t-statistics in the parenthesis; *, **, *** denote statistical significance at the 10%, 5%, 1% level respectively.

Table 4: Robustness I

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
				Waves of Democra cy- Autocratic Transitions	Waves of Democracy- Democratic Transitions	Defaults from Baim and Calomiris(19 92)	Defaults from Sturzenegg er and Zettelmeyer (2007)
	All polity transitions	Autocratic Transition s,no interwar	Democratic Transitions, no interwar				
Log GDP per capita (-1)	0.682** (-2.533)	0.426* (-1.868)	0.321*** (-4.292)	0.622 (-1.315)	0.707 (-1.144)	0.190*** (-4.016)	0.428** (-2.283)
Growth Rate	0.286* (-1.715)	0.625 (-0.306)	0.092** (-2.368)	0.105* (-1.653)	0.210 (-1.623)	0.154 (-1.516)	0.131 (-1.566)
Durability of Regime	0.939*** (-4.107)	0.950*** (-2.777)	0.948*** (-3.086)	0.943*** (-2.770)	0.942*** (-3.459)	0.906*** (-3.122)	0.934*** (-3.324)
Democracy (-1)	0.992 (-0.812)	1.102*** (4.253)	0.883*** (-3.762)	1.120*** (5.133)	0.871*** (-5.302)	1.118*** (5.038)	1.097*** (4.435)
War	1.344** (1.972)	2.584*** (3.127)	0.976 (-0.113)	2.304*** (3.001)	0.941 (-0.303)	1.817* (1.763)	2.027** (2.414)
Default within last 2 years	1.454** (2.065)	2.080** (2.004)	1.389 (1.047)	2.938*** (3.526)	1.167 (0.496)	2.205** (2.231)	2.289** (2.055)
Number of Defaults	0.943 (-0.550)	0.342*** (-3.021)	0.899 (-0.614)	0.427*** (-2.648)	1.020 (0.114)	0.458*** (-3.016)	0.340*** (-3.783)
Number of Transitions	1.200*** (3.988)						
Number of autocratic transitions		2.176*** (3.246)		2.962*** (4.494)		2.610*** (4.028)	2.274*** (3.776)
Number of Democratic transitions			2.343*** (4.576)		2.244*** (5.463)		
1st Wave				1.120 (0.128)	14.469*** (3.649)		
2nd Wave				0.956 (-0.155)	2.046** (2.558)		
3rd Wave				0.154*** (-6.108)	1.557 (1.362)		
Log-Likelihood	-1209.05	-433.923	-689.133	-499.964	-756.759	-399.123	-506.573
obs	5072	3368	4260	4538	4973	3566	4431
wald	91.16069	39.37591	113.0633	82.47813	92.71762	58.51286	47.79494
R2-p	0.074454	0.116065	0.1349986	0.16827	0.1466243	0.1807978	0.1399541

coefficients in odds ratios; clustered t-statistics in the parenthesis; *, **, *** denote statistical significance at the 10%, 5%, 1% level respectively.

Table 5: Robustness II

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Autocratic Transitions	Autocratic Transitions	Autocratic Transitions	Democratic Transitions	Democratic Transitions	Democratic Transitions	Autocratic transitions, polity<10	Autocratic transitions, polity<9
Log GDP per capita (-1)	0.424** (-2.205)	0.133* (1.724)	0.002** (-2.267)	0.453*** (-2.923)	0.085 (-0.924)	0.001* (-1.921)	0.551* (-1.693)	0.619 (-1.350)
Growth Rate	0.313 (-0.775)	0.054 (-1.011)	0.000 (-1.621)	0.177** (-1.984)	0.014 (-1.309)	0.810 (-0.035)	0.331 (-0.790)	0.382 (-0.676)
Average Growth 2 years before	5.544 (0.964)			0.009** (-2.481)				
Durability of Regime	0.935*** (-3.362)	0.872 (-1.482)	1.201*** (3.117)	0.953*** (-2.907)	0.918* (-1.682)	0.971 (-0.690)	0.929*** (-3.622)	0.920*** (-3.474)
Democracy (-1)	1.092*** (4.432)	1.270** (2.193)	1.561*** (4.029)	0.893*** (-4.223)	0.413*** (-3.430)	0.570*** (-4.142)	1.100*** (5.006)	1.101*** (5.171)
War	2.331*** (2.904)	65.756*** (3.305)	43.864* (1.798)	0.941 (-0.325)	0.639 (-0.852)	0.176*** (-3.804)	2.110*** (2.734)	1.981** (2.571)
Default within last 2 years	2.593*** (2.823)	39.590*** (2.879)	14.962*** (3.514)	1.167 (0.519)	4.137* (1.933)	1.099 (0.108)	2.525*** (3.061)	2.337** (2.507)
Number of Defaults	0.344*** (-3.538)	0.002*** (-3.665)	0.011*** (-4.681)	0.826 (-1.112)	0.090** (-2.413)	0.154*** (-2.941)	0.333*** (-3.830)	0.332*** (-3.733)
Number of autocratic transitions	2.233*** (3.698)	26.926*** (4.002)	154.475*** (2.872)				2.137*** (3.668)	2.042*** (3.616)
Unemployment		0.844 (-1.023)			0.957 (-0.346)			
Inflation			8.012 (0.929)			12.748 (1.296)		
Change in REER			1.000 (0.384)			1.000 (0.657)		
Number of Democratic transitions				2.257*** (4.937)	66.331*** (5.950)	46.274*** (5.927)		
Log-Likelihood	-486.757	-40.056	-25.589	-753.66	-96.141	-89.095	-506.991	-482.682
obs	4281	321	340	4798	684	644	4262	4163
wald	46.70	21.48	643.19	89.65	61.99	119.09	58.91	55.69
R2-p	0.14	0.43	0.54	0.13	0.48	0.42	0.14	0.14

coefficients in odds ratios; clustered t-statistics in the parenthesis; *, **, *** denote statistical significance at the 10%, 5%, 1% level respectively.

