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GGDC RESEARCH MEMORANDUM *175*

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February 2018

university of groningen / groningen growth and development centre

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January 2018

Abstract

We study how domestic politics affected the decisions of countries to adhere to the classical gold standard. Using a variety of econometric techniques and controlling for a wide range of economic factors, we demonstrate that political constraints were important in the decision of countries to adopt the gold standard as well as in the decision to suspend it. Specifically we find that the probability of adherence to the gold standard was ceteris paribus lower for countries in which domestic politics were organized in a more open and democratic fashion. This effect appears to be driven largely by the extent of domestic political competition and was particularly relevant for peripheral countries.

Keywords: First Globalization Era, Gold Standard, Democracy, Political Competition

JEL Codes: E42, F33, F50, N40.

*This paper has benefited from useful comments and suggestions by David Chilosi, Mauricio Drelichman, Rui Esteves, Giovanni Federico, Philip Fliers, Felix Graefenberg, Abe de Jong, Herman de Jong and Christopher Meissner. The authors would also like to thank seminar participants at the universities of British Columbia and Oxford as well as conference participants at the 2016 Summer School on Globalization and Inequality, the 2016 Posthumus RDC Meeting, the 2016 Sound Economic History Workshop, the 2017 EBHS Conference and the 2017 EHES Conference for helpful comments. Declaration of interest: none.

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1 Introduction

Today's highly globalized world, where goods, money, information and ideas can cross borders at low cost, has been the result of systematic efforts over decades to foster international economic integration. In recent years, however, the tide of public opinion has started to turn against globalization, as the benefits of unrestricted trade and capital flows do not appear to be shared equally between countries, or even within countries between socioeconomic groups. Recent developments, such as the Eurozone crisis, the decision of Britain to leave the European Union, and the political backlash against large multi-country trade agreements and other attempts to lower trade barriers in different parts of the world are all illustrative of this turn.

According to Rodrik (2011) the tensions created by globalization can be understood as a trilemma: out of the three goals of national self-determination, economic globalization and a democratic political system, at most two can be pursued at the same time. This paper provides the first systematic exploration of these tensions during the first era of globalization, a period also characterized by increasing speeds of communication and transportation, rapidly growing trade flows, and high levels of financial integration across borders (O' Rourke & Williamson, 1999). In the context of this early globalization era, we focus on the tension created between the democratic nature of domestic political institutions and the spread and stability of the gold standard, the prevailing monetary system and an essential pillar of global economic integration of the era (Bordo & Schwartz, 1984; Gallarotti, 1995).

The classical gold standard, as the system is often referred to, emerged as the global monetary system after 1870 and came to an abrupt end in 1914 with the outbreak of the First World War. The resurrected version that was established during the interwar period did not succeed in bringing stability to the world economy. In fact, the interwar gold standard was a key factor behind the severity of the Great Depression and it effectively only lasted from 1925 to 1936. One of the reasons for the failure of the gold standard during the interwar period was the fact that policy makers after 1918 faced increased power of trade unions and a more broadly enfranchised population. External stability, thus, had to be sacrificed in order to pursue domestic goals and this undermined the credibility of countries' promises to keep their currency convertible into gold (Eichengreen, 1992).

The spread of democratic institutions, however, was a process that had started well before 1914. According to Huntington (1991) the first wave of democratization can be traced back to the 1820s when the first calls for suffrage extensions began in many western countries. This process continued throughout the nineteenth century, largely in tandem with the emergence of the gold standard as a global monetary system. This is illustrated in Figure 1, which plots the share of countries world-wide that were part of the gold standard system and the global average of the polity score from the Polity IV project, a typical measure for democratization.

[Insert Figure 1 around here]

This figure presents a paradox: if the spread of democratic institutions eroded the stability of the gold standard, as is often argued for the interwar period, one would expect some signs of erosion well before 1914. Perhaps this stability had indeed been eroded and the fact that none of the core countries decided to suspend the gold standard was largely a consequence of the relative economic stability of the years before the First World War.[1] In fact, the benign picture of the stability of the classical gold standard may be deceptive and only viable when compared to the monetary turbulence of the interwar period. Crises of convertibility under the classical gold standard were not uncommon, especially in countries on the periphery of the world economy (Mitchener & Weidenmier, 2015; Mitchener & Pina, 2016), and forced several countries to abandon the gold standard already before 1914.[2] The gold standard was also contested in major economies, such as the United States in the 1890s, where a return to bimetallism was seriously considered as an alternative.[3]

These observations raise the question whether countries that suspended the gold standard before 1914 did so in response to increased domestic political pressure, as during the interwar period. A similar question can also be raised for the decision of countries to adopt the gold standard. Were the necessary monetary reforms easier in countries where policy makers faced weaker political constraints and, hence, had more degrees of freedom in determining economic policies?

These are the questions that we address in this paper. Specifically, we focus on the years between 1860 and 1913 and investigate whether the decisions of countries to adopt or suspend the gold standard can be partially explained by the democratic or non-democratic nature of their political systems. For this purpose, we construct a data set containing information for 30 countries regarding gold standard adherence at an annual frequency between 1860 and 1913. The database includes information on several key economic variables such as GDP per capita, debt levels and trade flows, as well as different political indicators that reflect each country's form of government. The countries in our database cover all major economies of the time and include all documented cases of pre-1914 suspensions of the gold standard.

Using this data set we assess the importance of the link between gold standard adherence and political institutions employing a variety of econometric techniques. For our baseline analysis we employ a dynamic discrete choice model based on which we compare the role of political institutions relative to other factors in determining the probability of gold standard adherence. In this context we provide clear evidence that more democratic countries were, other things equal,

[1] This is the view presented by De Cecco (1974): "[T]he tree felled by the [1914] crisis was already rotten" (p. 128).

[2] This happened for instance in Argentina (1876 and 1885), Greece (1885), Portugal (1891) and Chile (1898).

[3] According to Rodrik (2017), opposition to the Gold Standard in the United States during the 1880s constituted the "first self-consciously populist movement."

less likely to adhere to the gold standard. When we measure democracy based on the polity score, as we do in Figure 1, we find that a one standard deviation increase in democratization decreases the likelihood of gold standard adherence by about seven percent. This effect is conditional on other significant determinants of gold standard adherence such as the level of GDP per capita, involvement in wars or the extent of trade with other gold standard countries.

A deeper look at the mechanism behind our results reveals that the negative relationship between democratic political institutions and adherence to the gold standard is largely driven by one particular aspect of democratic politics: the degree of political competition. Other aspects such as the extent of institutional constraints faced by the executive, on the other hand, appear less relevant. Comparing the results across different groups of countries, we find that the importance of these domestic political constraints was larger for peripheral countries. Distinguishing further the determinants of gold standard adoptions from those of suspensions, applying a Cox proportional hazard model for each decision, we find the hypothesized negative effect of democratic politics to operate in both cases. Yet, the evidence statistically appears stronger in the case of adoptions.

The remainder of this paper is structured as follows. In the next section we outline the key considerations faced by countries in their decision whether or not to adopt and adhere to the gold standard. In the context of this discussion we highlight the role of domestic politics and develop in more detail the rationale behind our main hypothesis that democratic political constraints negatively affected adherence to the classical gold standard. Section 3 presents the approach based on which we conduct our analysis, while section 4 discusses the sources that we use for our data set. The main results of our empirical analysis can be found in section 5. Section 6 provides a series of robustness checks on our main results. The final section summarizes our results and draws some broader conclusions.

2 Factors Determining Gold Standard Adoption and Suspension

The emergence of the classical gold standard as a global monetary system is often viewed in the literature as a process of diffusion, ignited by the decision of the newly unified Germany to switch its monetary standard from silver to gold in 1871 (Gallarotti, 1993). Before that, the only countries using the gold standard were Britain, some members of the British empire, and Portugal. Following the German decision, most of the economically advanced countries in Western Europe and North America gradually adopted the gold standard during the 1870s, while several peripheral countries followed suit during the 1880s and 1890s.[4]

[4]See Friedman (1990), Gallarotti (1993), Eichengreen and Flandreau (1996), Flandreau (1996), and Meissner (2005) for further details.

Overall this process was facilitated by the improvements in monetary technology which came about during the nineteenth century and which allowed for higher-quality token coinage (Redish, 1990). This eliminated the need to use precious metal like silver or copper for small transactions and enabled a monometallic standard based on gold. Beyond these common technological developments, though, the decision of individual countries to adhere to the gold standard was influenced by various factors, some of which were of an economic nature and some of which were not. Below we briefly outline the most important ones.

2.1 Economic Factors

First of all, trade considerations were an important factor behind a country's decision whether or not to adopt the gold standard. As shown by López-Córdova and Meissner (2003), trade was higher among countries that were on the gold standard. Thus, a country's incentive to join the gold standard would increase as more of its trade partners participated in the system. Such incentives were, according to Meissner (2005), one of the key drivers of the diffusion of the gold standard after 1871.

In addition to trade flows, capital flows were also facilitated by the gold standard. As the system limited the ability of governments to use monetary finance to cover budget deficits, adherence to the gold standard was a credible signal that a government was committed to sound fiscal policy. This "good housekeeping seal of approval," provided by the gold standard, according to Bordo and Kydland (1995) and Bordo and Rockoff (1996), permitted the country's access to foreign capital.[5]

Another factor that made the gold standard more attractive was the increasing value of commercial transactions. As silver money is too bulky for large transactions, switching to a gold standard would reduce the costs of monetary transactions. For this reason, as argued by Eichengreen and Flandreau (1996), countries that were economically more advanced had stronger interests in adopting the gold standard.

Beyond these benefits, the gold standard system also implied significant costs for participating countries. First and foremost was that balance of payments deficits could not be absorbed through an adjustment of the nominal exchange rate, as with any fixed exchange rate regime. In case of sudden current or capital account reversals, therefore, strict adherence to convertibility would necessitate either more restrictive credit conditions or temporary deflation. This consideration was particularly important for peripheral countries, which were subject to large current account gyrations and where capital account movements were mostly determined by conditions in a small number of capital-exporting countries.[6]

[5] Whether or not adherence to the gold standard materially affected borrowing cost has been the subject of a long academic debate. See also Flandreau and Zumer (2004) for an alternative viewpoint.

[6] See Ford (1962), Llona Rodríguez (1997) or Reis (2000) for illustrations of how these balance of payments

A second important cost was related to the restrictions imposed upon fiscal and monetary policy. As with any monetary regime that involves a fixed exchange rate and free capital flows, the money supply is largely left beyond the control of policy makers.[7] Similarly, the restriction on fiscal policy, already discussed above, further limited the ability of the government to stimulate economic activity in the event of an economic downturn or to use monetary finance to cover deficits.

A third notable drawback of the classical gold standard was that, for much of the time, that the system generated prolonged deflation. As gold provided the basis for the money supply in all participating countries, this meant that the rate of money growth was limited by the growth of the world's gold stock. In the absence of large gold findings, therefore, a growing world economy can only be facilitated by a secular decline in prices, as was particularly the case between 1873 and 1896 (Capie & Wood, 1997).

2.2 Political Factors

Apart from the aforementioned economic factors, political factors were also important in the decision of countries to adopt the gold standard. Gallarotti (1993), for example, highlights how the German choice to replace its silver-backed currency with the gold mark was largely motivated by an effort to rival the hegemony of the British pound. This rationale was not limited to the German hegemonic aspirations. Many countries would have perceived negatively the loss of prestige associated with the use of a silver standard or inconvertible money. As Ford (1962) observes, this consideration was particularly important for the wealthier countries of Western Europe and North America.

Geopolitical considerations also influenced these decisions. Countries allied with Britain, such as Portugal or Japan, had an interest in sharing Britain's monetary standard. At the same time, Britain had also an interest in keeping its allies on the gold standard and tried to facilitate that, to the extent possible.[8]

More importantly the option of adopting the gold standard, however, should be seen as a fundamental choice between external and internal stability. This is because many of the benefits of the gold standard, such as exchange rate stability and access to foreign capital, would end up accruing to the governments and a relatively small share of the population, active

swings affected the gold standard in Argentina, Chile and Portugal respectively.

[7] While in practice adherence to the gold standard placed substantially more restrictions on monetary policy than an inconvertible paper currency, even under the gold standard central banks had some room for discretionary policy. This was firstly because the costs of international gold arbitrage implied a narrow range of fluctuation for exchange rates and secondly due to the so-called gold devices: the tools and tricks that governments or central banks used to maintain gold convertibility. See Bloomfield (1959) for more on these gold devices. Bazot, Bordo, and Monnet (2016) study the use of gold devices in detail for the Banque de France.

[8] See Pittaluga and Seghezza (2016) for further details on how these interests mattered in the case of Japan and Ferguson and Schularick (2006) for how they applied in the case of British colonies and dominions.

in sectors linked with international trade and investment. On the other hand, the domestic burdens associated with strict gold standard adherence would be borne by wider shares of the population.[9] Recognizing that adherence to the gold standard is tantamount to choosing external over internal economic stability, it is evident that the gold standard would be viewed as a less favorable monetary regime, other things equal, in more democratic countries. Put differently, as a country becomes more democratic, the median voter will shift increasingly towards individuals that put more weight on domestic economic stability.

Our main hypothesis stems from this rationale, which combines the median voter theorem with the view of the gold standard as a choice of external over internal economic stability. Beyond that, though, there is another way in which the extension of democratic institutions can make adoption or maintenance of the gold standard less likely. The process of democratization imposes further institutional constraints on the policy choices that can be made by the government. These constraints may make it harder for the government to adopt and adhere to the gold standard, as the adoption often required major institutional and legal overhauls.[10] The relative importance of these two alternative mechanisms is something that we explore in the context of our analysis below.

The nature of the relationship between domestic political institutions and gold standard adherence has never been systematically analyzed for the classical gold standard era. It has only been explored in a number of related studies in the context of the interwar period. Eichengreen's (1992) classic study on the instability of the interwar gold standard, for example, highlights the role of increased domestic political tensions, although it does not explore this relationship quantitatively.[11] Simmons (1994) shows that devaluations under the interwar gold standard were more likely for democracies, though she does not find this effect to be statistically significant across specifications. Other political factors are shown to matter as well: central bank independence from the government made devaluation less likely, whereas cabinet instability made this more likely. Three more recent studies of suspensions of the interwar gold standard — Wolf and Yousef (2007), Wandschneider (2008), and Wolf (2008) — all find evidence that the risk of suspension was higher for countries that were more democratic. In a similar vein, Bearce and Hallerberg (2011) show that for the post-Bretton Woods era, democratization is negatively related to de facto exchange rate fixity. In this case, however, the decision of maintaining a fixed exchange rate is a much less encompassing choice of monetary regime compared to the decision to participate

[9] Following Gallarotti (1993) (pp. 28-29), it can be said with a slight risk of overgeneralization that industrialists, bankers, and other urban interest groups were more in favor of the gold standard, whereas debtors, agriculturalists, and landowners would be relatively more in favor of a more inflationary monetary regime.

[10] Kemmerer (1916) offers an inside look at what these overhauls entailed for currency reforms in India, Mexico, Porto Rico, the Philippines and the Straits Settlements.

[11] In particular Eichengreen (1992) highlights two reasons for the contrasting experiences of the classical and interwar gold standards: the lack of credibility due to changing domestic political conditions and the absence of international cooperation after 1914, especially between central banks.

in the gold standard.[12]

These results for the interwar and post-Bretton-Woods eras, nevertheless, raise the question whether a similar mechanism operated during the classical gold standard era. The existing literature on the classical gold standard, though, has yet to explored this question. While Meissner (2005), and Esteves and Ploeckl (2016) investigate the role of different factors in affecting the choice of countries to participate in the gold standard, their analyses focus on economic factors. Recent work by Mitchener and Weidenmier (2015), and Mitchener and Pina (2016) looks at how global markets perceived the probability of different countries abandoning the classical gold standard based on currency risk spreads. They show that for peripheral countries these spreads were sizeable and that they were following the movements in the prices of the main commodities exported by these countries, but they do not link the behavior of these spreads with domestic political institutions.

3 Empirical Strategy

Having summarized the main factors determining the adherence to the classical gold standard, our aim is to evaluate their relative importance over the period from 1860 to 1913 and to assess more specifically the role of democratic political institutions. For this purpose, we construct a data set with annual information on the monetary regime of 30 major economies of the time as well as various economic and political variables. Based on our data set we estimate the effect of these explanatory variables on the probability of adherence to the gold standard over this period.

For our baseline analysis, we model gold standard adherence as a binary choice: in every year, every country makes a decision whether to adhere to the gold standard or not. We then estimate the adherence probability conditional on the choice made the previous year and the lagged values of the explanatory variables. We do so as a country's choice regarding its monetary regime is highly inertial and changes in that regime will take time to be implemented. Thus, the choice made in a given year will depend crucially on the conditions prevailing in the previous year.[13] Using lagged values of the explanatory variables also avoids biases due to reverse causality.

Formally, we estimate the following dynamic binary choice model,

$$\Pr(GS_{i,t} = 1|\mathbf{X_{i,t-1}}, GS_{i,t-1}) = F(\boldsymbol{\beta}\mathbf{X_{i,t-1}} + \gamma GS_{i,t-1} + \epsilon_{it}), \tag{1}$$

where $GS_{i,t}$ is an indicator variable equal to one if country i is on the gold standard in year t

[12] As Flandreau, Cacheux, Zumer, Dornbusch, and Honohan (1998) argue, the most fitting contemporary parallel to the gold standard would be either a target zone or a currency board.

[13] In Section 6 we also explore the robustness of our results to alternative lag structures. Although the use of first lags appears as most appropriate, considering contemporaneous values, second lags, or third lags of the explanatory variables does not qualitatively change our results.

and zero otherwise.[14] $\mathbf{X_{i,t-1}}$ is the vector of explanatory variables and $\epsilon_{i,t}$ is a stochastic error term, which we cluster at the country level. For the cumulative probability distribution $F(.)$ we consider three different alternatives and estimate equation 1 as either a linear probability, a probit or a logit model. In all cases we are interested in the vector of coefficients $\boldsymbol{\beta}$ which captures the conditional effects of the different explanatory variables on the probability of adherence to the gold standard in each year.

The main advantages of using the model of equation 1 are the relatively straightforward interpretation of the estimated coefficients and the use of all available observations in the estimation. Beyond estimating the probability of *adhering* to the gold standard, though, it may be instructive to estimate separately the determinants of *adopting* or *suspending* the gold standard in any given year and to check whether these determinants are symmetric. With that in mind, we also estimate the following duration model:

$$h(t|\mathbf{X_{i,t-1}}) = h_0(t) \cdot \exp\{\boldsymbol{\beta}\mathbf{X_{i,t-1}} + \epsilon_{it}\}. \tag{2}$$

Here $h(t|\mathbf{X_{i,t-1}})$ reflects the instantaneous probability or hazard rate of a particular event occurring, given the baseline hazard $h_0(t)$ and the lagged value of the vector of explanatory variables $\mathbf{X_{i,t-1}}$. In our setup, these events are either the adoption or the suspension of the gold standard. $\epsilon_{i,t}$ is a stochastic error term, which is again clustered at the country level. In line with previous literature, we estimate equation 2 as a Cox proportional hazard model, rather than a more restrictive parametric model.

Duration models similar to that of equation 2 have been used in the literature by Meissner (2005) to study the adoption of the classical gold standard and by Wolf and Yousef (2007), Wandschneider (2008), and Wolf (2008) to study the suspension of the interwar gold standard. Yet, in all of these papers the focus of the analysis is either on the adoption or on the suspension decision. Hence, a formal comparison of the determinants of these two processes is still absent from the literature.

4 Data

As already mentioned above, for our empirical analysis we use data for 30 countries covering the period from 1860 to 1913. The exact list of countries that we include in our analysis is reported in Table A1 of the Appendix. The inclusion of countries in the data set was largely based on data availability and on the condition that the country was de facto an independent polity during the years covered in the data.

Classifying adherence to the gold standard in each year is not always clear-cut, since in

[14] In Section 6 we also consider alternative indicator variables which capture also adherence to silver and bimetallic standards.

practice the implementation of this system differed slightly from country to country. For the purpose of our analysis we consider a country to be on the gold standard if its currency is freely convertible into gold and if there are no significant barriers to importing or exporting gold, or other financial assets.[15] The exact years during which each country is considered to have adhered to the gold standard can also be found in Table A1. Based on the same two criteria we also classify countries which were on a silver or a bimetallic standard. The exact sources based on which we classify monetary regimes are provided in the Appendix.

To measure the democratic nature of each country's political institutions, we take the aggregate polity score, reported by the Polity IV project, as our baseline measure. We do so, not just because this is the most widely used indicator, but also because it is a composite indicator reflecting various characteristics of domestic political institutions. This enables us to also assess separately the extent to which the different sub-components of the polity score are related to gold standard adherence. As an alternative to this analysis we consider the binary democracy indicator constructed by Boix, Miller, and Rosato (2013). This allows us to explore the relative robustness of our results to the choice between binary and ordinal measures of democracy.

Beyond measures of political institutions, in our analysis we include two other key geopolitical variables. The first of these is a dummy variable which equals one if a country is involved in any kind of war in a given year. The other is a dummy variable which equals one if a country has some type of formal alliance with Britain in a given year. Both variables are coded based on data provided by the Correlates of War project (Gibler, 2009; Sarkees & Wayman, 2010). The inclusion of the war dummy is driven by the observation that outbreaks of war were often accompanied by fiscal and financial crises, and these eventually could lead to suspensions of the gold standard. The inclusion of the British ally dummy is motivated by the fact that the adherence of some countries to the gold standard was facilitated by the British government in exchange for geopolitical services, as already discussed in Section 2.2.

In terms of economic variables, first of all, we control for GDP per capita using data from Maddison (2013), as we expect wealthier countries to be more likely to adhere to the gold standard, in line with the discussion in Section 2. We further control for population using data from Maddison (2003) This is based on the argument of Eichengreen and Flandreau (1996) that the adoption of the gold standard would be easier for smaller countries, since these did not have to take into account the general equilibrium effects on global gold- and silver markets of a potential change of the monetary system. Moreover, we include in our analysis the ratio of government debt to GDP from Reinhart and Rogoff (2011), as countries with higher government

[15] In recent years, various authors have classified gold standard adherence using these or similar sets of criteria. These include Flandreau and Zumer (2004), Meissner (2005), Officer (2008), and Reinhart and Rogoff (2011). In most cases these classifications and ours are all aligned. In the few cases where there is disagreement across the different authors, we check carefully our classification against primary sources or country-specific studies. Further details about this are provided in the Appendix.

debt were less likely to be on the gold standard, since the temptation to default or to rely on seigniorage would be higher and their ability to attract additional foreign capital would be lower.

Adherence to the gold standard was also closely linked with the conditions in the balance of payments of each country. Current account reversals were often the prelude to suspensions of convertibility. As current account information is not widely available for most countries pre-1914, we follow the literature and employ data on trade balances, which can be measured consistently across countries. To capture trade linkages, we further consider two additional variables in our analysis. Firstly, we include the overall level of trade openness, measured as the sum of exports and imports over nominal GDP, following Klasing and Milionis (2014). We expect this ratio to be positively associated with gold standard adherence, since more open countries will find exchange rate stability more important. Secondly, using additional information on bilateral trade from Fouquin and Hugot (2016), we can measure the share of trade of a particular country is with other gold standard countries. The higher this share was, as emphasized by Meissner (2005), the larger would be the likelihood of a country wanting to be a member of the gold standard.

In our robustness analysis, we will also estimate a version of the model that includes three further explanatory variables. These are the inflation rate from Reinhart and Rogoff (2011), the central bank coverage ratio, measured as in Accominotti, Flandreau, and Rezzik (2011), and a dummy variable indicating whether a country had a central bank or bank of issue in the first place, based on information from the League of Nations (1942). Though these measures have often been used in similar studies, we choose not to include them in our baseline estimations for two main reasons. Firstly, adding these further controls substantially decreases the number of observations that can be included, since information for these variables can not be found for all countries and years. Secondly, the evolution of these variables over time may end up being direct outcomes of the decision to participate in the gold standard. For each of the explanatory variables Table A2 in the Appendix summarizes the key information by listing for each variable the main source of data and by providing some key descriptive statistics.

5 Main Results

Table 1 presents the estimation results for the dynamic binary choice model of equation 1 specified either as a linear probability model, a probit model or a logit model. The exact model is indicated on the top of each column. In all cases the estimation is based on the sample of countries listed in Table A1 in the Appendix. The sample covers the years from 1860 up to 1913 at an annual frequency with the dependent variable indicating adherence to the gold standard in each respective year. This is regressed on various explanatory variables including the gold standard adherence indicator lagged by one year. The specification also includes a full set of decade fixed effects to control for global trends in the evolution of the gold standard system.

[Insert Table 1 around here]

Looking across the three distinct econometric setups, first of all, we see that the coefficient estimates for the lagged gold standard dummy are positive, large, and highly statistically significant. This reflects the high degree of persistence in the gold standard as monetary arrangement. Once a country has decided to adopt the gold standard in given period, it is very likely to maintain it during the next period. Controlling for that effect, however, we see a clear negative and statistically significant coefficient for the polity score in all three columns. This suggests that conditional on all other control variables higher values for the polity score for a given country in a given year, which reflect more open and democratic political institutions, lower the probability of the country adopting the gold standard during the next period or increase the probability of suspending it if it has already joined.

Turning to the estimates for the other control variables, we see that the level of GDP per capita and the war dummy also have a statistically significant effect on the probability of adhering to the gold standard. As expected, the estimated probability is increasing in the country's level of economic development and is reduced by the outbreak of war. For all other control variables the estimated coefficients that we obtain are statistically insignificant. This suggests that their impact on triggering a change in the monetary arrangement for our sample countries into or out of the gold standard from one year to the next was rather limited. Nevertheless, the coefficients that we obtain in all cases have the expected sign. They suggest that adherence to the gold standard was more likely if a country had an alliance with Britain, a larger population size, a lower debt to GDP ratio, greater openness in terms of exports and imports, more extensive trade with the set of countries already on the gold standard, and a more positive trade balance.[16]

To properly assess the relative importance of all these variables in determining the probability of a country adhering to the gold standard, we compute the corresponding marginal effects in each of the three econometric setups. The computed marginal effects, which are reported in Table 2, indicate by how much the probability of adhering to the gold standard increases following an increase in each respective regressor by one standard deviation from the mean while all other regressors remain at their mean values. This is with the exception of the three regressors which are dummy variables: the lagged gold standard dummy, the war dummy and the British ally dummy. In these cases we report instead the result of an increase in the value of the dummy from zero to one.

[Insert Table 2 around here]

[16] We should note here that the statistical insignificance of the rest of the control variables is not driven by their high correlation. Pairwise correlation coefficients between our control variables do not exceed 60%. Also, dropping some of the significant controls from the specification does not alter the statistical significance for the other controls.

As the reported effects clearly highlight, the strongest predictor of a country's status regarding the gold standard in a given year is its status in the previous year. This result is not surprising given the costs involved in the adoption or the suspension of the gold standard. The magnitude of this effect also illustrates the importance of controlling for the lagged value of the gold standard dummy, given its high degree of persistence.

Comparing the computed marginal effects for the remaining variables we see that the second strongest predictor of gold standard adherence is the level of GDP per capita, followed by the war dummy. These effects appear in line with the qualitative observations by Eichengreen and Flandreau (1996). Following these effects in terms of their order of magnitude comes the effect of our main variable of interest, the polity score. Specifically, we find that an increase in the polity score by one standard deviation, which is around 6 points on a 21-point range, decreases a country's probability of adhering to the gold standard by about 1% in the linear probability model, slightly less than 7% in the probit model, and about 8% in the logit model. While these effects appear as modest, they are economically significant. This suggests that political events such as the French Revolution of 1848, which established the French Second Republic, or the Young Turk Revolution of 1908, which reinstated the parliament in the Ottoman Empire, can reduce the chance of a country remaining on the gold standard by 50% as much as the outbreak of the war.

Among all other regressors, for which the estimated coefficients are statistically insignificant, the highest marginal effect is estimated for the British ally dummy. For this variable, the implied marginal effect is similar to that of the polity score. Then come the effects of the population size, the trade share of the gold bloc and the openness ratio. For the other two variables, the debt to GDP ratio and the trade balance, the marginal effects are quantitatively very small.

Comparing the marginal effects across the three models we generally see that for all variables the obtained values are much smaller in the case of the linear probability model than in the case of the probit and the logit. Given the well-known limitations of the linear probability model (Horrace & Oaxaca, 2006), we believe that the obtained values in this case should only be treated as lower bound estimates. Looking at the two non-linear estimators, we see that the computed marginal effects are similar, although the values obtained in the logit case are slightly higher. Noting that, as well as the distribution of our dependent variable, in the rest of our analysis we focus on the probit model and use this as our baseline empirical setup.[17]

The results reported in Tables 1 and 2 overall suggest that a country's decision to adopt and adhere to the gold standard during the first globalization era, beyond economic considerations, was also affected by its political institutions. These results echo similar conclusions obtained for the interwar period by authors such as Wolf and Yousef (2007), Wandschneider (2008) and Wolf

[17] Following the suggestions by Chen and Tsurumi (2010) and discriminating the models based on the Akaike information criterion also tends to favor the probit model.

(2008), as well as for the post-1945 era by Alesina and Wagner (2006) and Bearce and Hallerberg (2011). Yet, as the polity score is a broad indicator of a country's form of political organization, this raises the question of exactly which dimensions of political institutions matter the most for the choice of a monetary regime. With that in mind, in Table 3 we aim to shed more light on the mechanism at play in our context by looking at different components of the polity score and other indicators of domestic political institutions.[18]

[Insert Table 3 around here]

In column 1 of Table 3 we replace in our specification the polity score with a dummy variable indicating whether or not a given country in a given year was a consolidated democracy. This dummy is obtained from the classification of Boix et al. (2012), as discussed in Section 4. The empirical setup is otherwise similar to column 2 of Table 1. While this dummy variable is highly correlated with the polity score and it enters into the specification with a positive coefficient, the coefficient is statistically insignificant.[19] This result suggests that the separation between political regimes that are democratic and regimes that are not, is not necessarily the crucial one for gold standard adherence.

A similar conclusion also emerges from a comparison of the estimates reported in columns 2 and 3. In this case the polity score in our baseline specification is replaced by its two sub-components: the democracy *(DEMOC)* and the autocracy score *(AUTOC)*, as indicated on the top of each column.[20] In both cases we find that the estimated coefficients for the two variables have the expected sign, which is negative for the democracy score and positive for the autocracy score. Yet, only for the latter variable we find the estimated coefficient to be statistically significant. Taken together the results of columns 1, 2, and 3 imply that our estimated negative effect for the polity score reflects primarily the increased probability of more autocratic regimes adhering to the gold standard. This suggests that autocratic governments were the ones most likely to have both the political will and the power to sacrifice domestic economic welfare in the short run in favor of sound money in the longer run.

In the next three columns of Table 3 we replace the overall polity score in our baseline specification with three distinct sub-component variables reported in the Polity IV database. These are the executive recruitment index ($EXREC$), the executive constraints index ($EXCONST$) and the political competition index ($POLCOMP$). These indexes are the three constituents parts of the polity score, but they reflect different aspects of each country's political institutions. The first one reflects how competitive, regulated and open the recruitment process is for the country's chief executive, i.e. its president, monarch or other ruler. The second reflects the presence and

[18] See Rota (2016) for a similar approach.

[19] The correlation coefficient within our sample of the democracy dummy and the polity score is around 0.7.

[20] It should be noted here the polity score reported in the Polity IV database for a given country in a given year is the difference between the separately computed democracy and autocracy scores.

extent of institutionalized constraints on the decision-making powers of the chief executive. The third one reflects the degree of openness for competition between individuals and parties in the political arena and the quality of the electoral process.

Looking at the estimated coefficients for these three variables in columns 4, 5 and 6, we see that for all three we obtain negative coefficients. Thus, the probability of adherence to the gold standard was lowered by a more regulated form of executive recruitment, more institutionalized constraints on the executive, and greater political competition. Nevertheless, only the coefficient on the political competition index is statistically significant. This suggests that among these different aspects of political institutions, it is competition by outsiders that mostly limited the ability or willingness of policy makers to maintain their commitment to a rigid global monetary system such as the gold standard.[21] This finding also explains the positive relationship between the autocracy score the gold standard dummy: political competition was clearly limited in autocratic regimes, while constraints on executive recruitment and executive decision-making could still be present.

6 Robustness Checks

6.1 Robustness to Sample Composition and Econometric Specification

Having established a clear relationship between the probability of a country adhering to the gold standard prior to the First World War and key dimensions of its political institutions, we proceed to assess the robustness of this relationship. Specifically we explore how our main results are affected by (a) changes in the composition of our sample, (b) changes in our specification and (c) changes to the econometric setup. In all cases we find our results to be largely unaffected by these changes. In this section we present the details.

Table 4 provides a first key set of robustness checks for our baseline probit specification. In column 1 we start by exploring the stability of our estimates when we expand the sample period to the years from 1850 to 1913. This allows us to also capture the determinants of early entries to the gold standard such as those of Australia, Canada and Portugal. In column 2 we do the opposite and shorten the sample period to the years from 1870 to 1913, the typical periodization of the classical gold standard. In both cases we find similar estimates for most

[21] A notable illustration of this mechanism would be Portugal's decision to suspend gold convertibility in 1891, after a series of capital- and current account shocks. In the words of Reis (2000): "In 1891, therefore, there were only two solutions: violent deflation or inconvertibility, in the hope that in time circumstances would allow a return to gold. Political constraints determined that inconvertibility was chosen" (p. 97). On the other hand, in the case of Japan's adoption of the gold standard, Mitchener, Shizume, and Weidenmier (2010) highlight how this mechanism operate in the opposite way as the support of the opposition was crucial in allowing the government to push the necessary reforms through the parliament.

regressors. Looking at the estimated coefficients for the polity score in particular, we see that they tend to rise as we exclude the years between 1850 and 1870. This result is not surprising given that most of the transitions in and out of the classical gold standard occur after 1870.

[Insert Table 4 around here]

Having documented that, we turn to explore the robustness of our main results to adjustments in our country sample. Specifically, we consider three variations in this respect. In column 3 we exclude from our sample the set of core countries. We consider a country to have been a core member of the gold standard, if during this period it participated actively in the Atlantic economy (O'Rourke & Williamson, 1999). Table A1 in the Appendix details for every country whether we consider it part of the core or the periphery.[22] Restricting our sample to non-core countries, does not qualitatively alter our main result. Quantitatively, though, it leads to a doubling of the coefficient estimate for the polity score.[23] This suggests that the political constraints that we are highlighting here were particularly important for peripheral countries for which commitment to the gold standard was not as firm as for core countries. This result is in line with the findings of Morys (2013) and Mitchener and Weidenmier (2015) regarding differences in the operation of the gold standard between the core and the periphery.

In column 4 we proceed to exclude from our sample the countries that there were part of a monetary union when joining the gold standard. These were the members of the Latin Monetary Union (Belgium, France and Switzerland) and the Scandinavian Monetary Union (Denmark, Norway and Sweden).[24] The rationale for doing so is that adherence to the gold standard for these countries involved some degree of official coordination with other countries. Hence, they were subject to constraints that extended beyond the domestic economic and political conditions. In column 5 we instead exclude from the sample Britain and its offshoots. Britain had a long history of commitment to the gold standard and the convertibility of the pound was beyond doubt.[25] In both cases we see that excluding these countries leads to qualitatively similar results while the coefficient estimate for the polity score again increases slightly. This suggests that our main result is strengthened as we focus on countries for which domestic political constraints were more relevant and for which a commitment to the classical gold standard was more questionable.

Turning to column 6, we explore the importance of additional variables that relate to the conduct of monetary policy in each country. These variables reflect the nature of the monetary

[22] An alternative to this would be to classify as core countries those countries that were able to borrow abroad in their own currency, a clear sign that international financial markets trusted their adherence to the gold standard. Using this criterion instead would lead to roughly the same set of core countries.

[23] In terms of the corresponding marginal effect, a one standard deviation increase in polity score is now associated with a 12% decrease in the probability of adherence to the gold standard.

[24] Italy left the Latin Monetary Union in 1868, well before France adopted the gold standard, and is therefore best seen as monetarily independent for most of the period. See also Tattara (2003).

[25] Additionally, as pointed out by Daunton (2006), the gold standard enjoyed wide popular support in Britain.

authorities, captured by a dummy variable indicating the presence of a central bank, the resources available to the monetary authorities to maintain a commitment to the gold standard, captured by the coverage ratio, and the overall price stability, captured by the inflation rate. Note that their inclusion in column 6 leads to a substantial drop in our number of observations from 1259 to 961.

Looking at the estimates in this case we see that the inclusion of these additional variables does not alter our main finding. The coefficient estimates for the main determinants of gold standard adherence are similar. Most importantly, the estimate for the polity score continues to be negative and statistically significant. This result implies that even when we control for differences in the specific monetary conditions that each country faced, the political constraints that we have already identified still have an effect on the probability of the country adhering to the gold standard.

Having reported these robustness checks for our baseline probit specification, in Table 5 we explore robustness with respect to our econometric setup. A first check, which we report in column 1, is to add further lags of the polity score to our specification. The idea behind the addition of further lags is to assess whether the estimated effect of the polity score is mostly a reflection of current political institutions or of those of the past. With that in mind we also control for the second and third lag of the polity score beyond the first one. Doing so reduces the magnitude of the estimated coefficient for the first lag, as was to be expected, given that the lagged values for the different years are highly correlated. Despite their high correlation we find that the estimated coefficient for the first lag is still larger in magnitude than the other two. This indicates that our estimated effect captures indeed a short-term effect of the current political environment.

[Insert Table 5 around here]

In addition to time lags we also consider the role of spatial lags. This is because the decision of each country to adopt and adhere to the gold standard is likely to be closely related to the decisions of other countries with which there is a high degree of economic interaction.[26] These countries could be close neighbors as well as large trade partners. Part of this effect, of course, is already captured by controlling for openness and the share of trade with the bloc of gold standard countries. Yet, as these variables may not reflect the full extent of spatial interaction, in columns 2 and 3 of Table 5 we add to our specification a spatial lag of the gold standard dummy to capture interactions that operate beyond the trade channel. Specifically, in column 2 we include in our specification the lagged gold-standard status of each country's five nearest neighbors from the sample, while in column 3 we include the lagged gold-standard status of each country's five largest trade partners from the sample.

[26] This type of interdependence has also been analyzed recently by Esteves and Ploeckl (2016) using empirical network analysis.

In both cases we find that the inclusion of these spatial lags does not alter our main findings. Our main variable of interest, the polity score, retains its magnitude and statistical significance. The same is true for the other significant controls. Moreover, we see that neither the lagged gold standard status of each country's nearest neighbors nor that of its largest trade partners has a statistically significant effect on its probability of adhering to the gold standard. This suggests that, beyond the effects already captured by our main controls, the role of spatial interactions in the decisions of countries to participate in the gold standard was limited.

Another important check to consider is what happens to our results when we extend beyond our binary gold standard classification. While our baseline classification does not distinguish between monetary systems based on silver or bimetallism, and systems based on fiat money, these systems are materially different. With that mind, in next columns of Table 5 we re-estimate our baseline specification using two alternative dependent variables. The first of these, in column 4, is dummy variable indicating adherence to any convertible monetary regime –gold, silver or bimetallic– versus having an inconvertible paper money regime. The second alternative dependent variable is an ordinal measure of monetary systems, similar to that of Esteves and Ploeckl (2016), with the gold standard being of the highest order (4) followed by a bimetallic standard (3), a silver standard (2) and finally an inconvertible paper money regime (1). In the latter case, thus, we estimate an ordered probit model which uses this ordinal measure but is otherwise similar to the binary choice model of equation 1.

The estimation in both cases reveals qualitatively similar results. The same factors predicting adherence to the gold standard appear to predict also adherence to convertible monetary systems more generally. In particular, we see that our main variable of interest, the polity score, continues to have a negative and statistically significant effect on the probability of adherence to any convertible regime monetary regime. Comparing the coefficient estimates with our baseline probit specification from Table 1, we see that the estimated coefficient for the polity in both columns 4 and 5 is a bit smaller. This suggests that political constraints may have been less important for silver and bimetallic regimes. Yet, given the more flexible nature of these regimes, this result is not entirely surprising. Looking at the estimated coefficients for the other variables, we see that the coefficient of GDP per capita is substantially smaller in column 4. This suggests that a country's level of development mattered less for adherence to silver and bimetallic regimes confirming the particular attractiveness of the gold standard for more developed economies, as discussed in Section 2.

A final part in our robustness analysis is to also consider the potential endogeneity bias that may be present in our estimated coefficient for the polity score. This bias could be due to the fact that the polity score is an imperfect measure of the domestic political institutions. Alternatively, a bias may arise from the omission of other important determinants of the gold standard adherence that may be correlated with the polity score. To correct for this potential

bias, we pursue an instrumental variable strategy where we use two instruments for the polity score: (a) the number of years since each country effectively became an independent polity and (b) an index of the state antiquity of each country provided by Bockstette et al. (2002).

Both instruments should capture the fact that countries which have longer histories as independent or autonomous polities are bound to have political institutions which were formed in the past. Because of the high degree of persistence of political institutions, such institutions are bound to be more autocratic. On the other hand, countries that became independent more recently, will tend to have more modern political institutions and to be more democratic. Either way, these two variables are bound to correlate with contemporary political institutions of each country, which are reflected in the polity score of each country. Yet, they should not relate to the probability of each country adhering to the gold standard, which was a monetary arrangement that only emerged in the second half of the nineteenth century, beyond their indirect effect via the country's political institutions.

Using this instrumentation strategy, we re-estimate our baseline probit specification in column 6 where instead of the actual polity score we use the predicted one from the first stage regression reported in column 7. As the second-stage estimates reveal, the instrumented polity score still has a negative and statistically significant effect on the probability of adherence to the gold standard controlling for all other baseline controls. The estimated coefficient in this case is smaller than the one reported in Table 1 which suggests the presence of some of endogeneity bias. Nevertheless, the estimated magnitude of the effect remains quantitatively important, which suggests that even when accounting for this bias, higher values of the polity score still have a negative effect on the probability of a country adhering to the gold standard.

Inspecting the first stage estimates in column 7 also confirms the strength and the validity of the instruments. Both instruments enter significantly in the first stage and the estimated coefficient is negative in line with the intuition expressed above. Countries in our sample with longer histories as independent states and generally discounted state histories, such as Austria-Hungary, China, Japan, Russia and the Ottoman Empire, tended to have lower polity scores compared to newly established states in this era such as Argentina, Belgium Canada, Greece and the United States. Moreover, the joint F-test for the validity of the instruments yields a value of 19.4 which is safely above the critical threshold of 10 suggested by Staiger and Stock (1997). Similarly, the Sargant test of over-identifying restrictions suggests that assuming the validity of at least one of the instruments should not lead to rejection of the validity of the other.

6.2 Separating Adoption and Suspension Decisions

Having established the robustness of our main results regarding the decision of countries to adhere to the gold standard, we now turn to investigate separately the role of domestic political institutions in the process of adoption and suspension of the gold standard. For this purpose

we estimate hazard ratios, based on the Cox proportional hazard model of equation 2, for the decision to adopt the gold standard and for the opposite decision to suspend it.

Since a country can only adopt the gold standard if it is currently using an alternative monetary system, the set of countries that are subject to a hazard of adoption in every year corresponds to those countries which do not yet adhere to the gold standard. The opposite is true for the case of gold standard suspension: only those countries already using the gold standard are subject to a hazard of suspension. Given that, the number of observations based on which we perform our estimation in these two setups is substantially smaller than in our baseline probit setup. In the context of this analysis we, furthermore, need to clarify how to treat countries that drop out of the sample following an adoption or suspension decision. In the case of the adoption setup, for example, a country leaves the sample once it has joined the gold standard. The same country, however, may end up in the future being subject to a renewed hazard of adoption, if in the meantime it ends up leaving the gold standard. As a priori it is not certain whether the determinants of adoption are similar for countries that have previously used the gold standard to those who never have, we estimate two versions of each hazard ratio: one based on all cases of adoptions or suspensions and one that leaves countries out of the risk-set permanently after the initial adoptions or suspensions.[27] Beyond these adjustments to our sample, we also stratify the sample into a core and a periphery group of countries, based on the classification reported in Table A1, to account for potential differences in the baseline hazard rates between these two groups of countries.

The estimates of the hazard ratios for the adoption and suspension decisions based on this empirical setup are presented in Table 6. The first four columns of the table report results for the adoption decision and the last two columns do so for the suspension decision.[28] Columns 1 and 2 provide the estimates for the hazard ratios from a specification of the adoption setup that includes all our control variables. The difference between the two specifications is that in column 2 we allow countries that first adopted and then suspended the gold standard to re-enter our sample. In both cases the obtained coefficient estimates tell a similar story as our main regression results from Table 1. The variables that were positively associated with the probability of adhering to the gold standard have estimated hazard ratios above 1. Similarly the variables that were negatively associated with the probability of adhering to the gold standard have estimated hazard ratios below 1. Our main variable of interest, the polity score, has an estimated hazard ratio of about 0.9. This hazard ratio is also statistically significant.[29]

[27] A related question here is about the effect that a previous participation in the gold standard system might have on the likelihood of re-adoption. Unfortunately, though, the number of cases in which a country adopts or suspends twice is far too limited to analyze this systematically.

[28] As in our baseline specification, we have lagged all regressors by one year. Thus, our estimates reflects how a change in any of the regressors in a given year would alter the hazard rate of a country adopting or suspending the gold standard during the next year.

[29] In terms of magnitude, our estimates are quantitatively larger than our baseline probit results: a one-point

[Insert Table 6 around here]

Since the number of cases in which a country suspended the gold standard before 1914 was fairly limited — there are nine cases in our sample — we cannot include all the independent variables when estimating the Cox model for suspensions, since the model would become over-specified. For this reason, in the specification of the suspension setup we omit those controls that have so far not shown up as statistically significant. Beyond the polity score, the specification therefore includes as only controls the war and British ally dummy variables, GDP per capita, and population. For the sake of comparison between the adoption and suspension setups, we also first estimate the former using only these control variables. The results are shown in columns 3 and 4. Doing so leads to different estimated hazard rates for some of the control variables. Interestingly, however, this does not alter the estimated hazard rates for the polity score. In column 3 we marginally lose statistical significance, but other than that the estimated hazard rate for the polity score is consistently around 0.9 in all adoption setups.

In columns 5 and 6 we provide the corresponding estimates for the suspension setup. As a result of the small number of suspensions, most coefficient estimates are statistically insignificant. Nevertheless we do find qualitatively symmetric results for those variables that were generally significant in the our probit regressions: war and GDP per capita. Moreover, for our main variable of interest, the polity score, we find that higher values are associated with an increased hazard of suspension. This appears qualitatively in line with our hypothesis, although the estimated hazard rates vary between the two versions of the exit model and confidence intervals are wide.

The results of Table 6 suggest some degree of symmetry in the determinants of gold standard adoption and suspension decisions. Estimating the exact hazard rates attributed to different factors with a satisfactory level of precision is hard, particularly in the case of suspensions. This is most likely due to the fact that the number of suspensions was fairly limited before 1914. By and large, however, the estimates that we obtain are consistent with our hypothesis that participation in the gold standard was, ceteris paribus, more difficult for countries where domestic political institutions were more open and democratic.

7 Conclusion

In the extensive literature on the classical gold standard the decision of countries to participate in the system is often analyzed in purely economic terms with the countries balancing the economic benefits in terms of trade and access to capital markets against the costs in terms of monetary and fiscal policy independence. The analysis presented in this paper highlights an alternative political economy mechanism that affected the decision of countries to participate in the classical

increase in the polity score is now associated with a decrease in the hazard of gold standard adoption of 10%. They are also estimated with a smaller degree of precision. This is largely, though, due to sample effects.

gold standard. For the period between 1860 and 1913, during which many countries saw a gradual extension of the franchise and an increase in democratization, we provide evidence that adherence to the gold standard was, other things equal, less likely in countries where domestic politics were organized in a more open and democratic fashion. This effect, which is typically associated only with the interwar period, is shown to be robust to changes in the sample composition and across different econometric specifications. It also appears quantitatively relevant. Controlling for various economic factors, a one standard deviation increase in the polity score of a country is associated in our baseline specification with a decrease of 7% in the likelihood of gold standard adherence.

Exploring further the pattern behind the main result, we see that the constraining factor regarding the ability of a country to adhere to the gold standard was not having a democratic political system per se, but particular aspects associated with democratic politics. Looking at the three key components of the polity score, related to the executive recruitment process, to constraints on the executive and to the extent of political competition, we see that only the last one has a negative and statistically significant relationship with gold standard adherence. Moreover, comparing the presence of autocratic versus democratic political institutions, we find that it is primarily the presence of the former that facilitates adherence to the gold standard. Finally, when separating the processes of gold standard adoption and suspension, we find that higher values for the polity score not only decrease the probability of adoption but also appear to increase the probability of suspension.

Synthesizing these results suggests that adherence to the gold standard was largely facilitated by institutions that sufficiently shielded the government from pressures of public opinion and populist movements that opposed the system. These pressures were important for policy makers in charge of managing each country's membership to this globally monetary regime, as they were forced to weigh this commitment against other, domestic, economic objectives. Naturally such pressures were stronger in countries where the political systems was organized in a democratic fashion. Yet, overall the evidence presented in this paper suggest that it was political competition rather than democratic political institutions per se that jeopardized a credible commitment to the gold standard.

What bearings do these findings have on policy issues in the present era? Would a revived gold standard be a feasible option for the international monetary system in the twenty-first century, as some have advocated? For this system to be credible in the eyes of international financial markets, it should require long-term commitments by policy makers to exchange rate stability, fiscal discipline and limited control over monetary policy. In democratically organized societies this implies that any government making these commitments would have to tie the hands of all future governments. As our results highlight, such a commitment may appear less credible in an evolving political environment where outsiders are free to challenge incumbent politicians in

contestable elections.

The aforementioned long-term commitments to exchange rate stability, fiscal discipline and limited control over monetary policy, however, do apply currently to the countries participating in the European Monetary Union (EMU). As a consequence of these commitments national governments of member states have limited flexibility in the design of their economic policies. These policy limits have become particularly relevant in the aftermath of the global financial crisis, as the trade-off between external and internal stability within the monetary union has become more acute. At the same time the domestic politics of the EMU's member states are organized in a democratic fashion. In the face of rising populism, democratically elected governments of EMU member states have so far shown occasional reluctance to make the reforms necessary to ensure external stability within the monetary union. This echoes our result that, under the classical gold standard, democratic governments were less likely to make similar commitments than their more autocratic counterparts. Thus, the important lesson from the experience of the classical gold standard in the EMU context is that the design of policy within the monetary union should acknowledge the constraints imposed by national politics on the policy commitments and the plans for reforms. Failing to do so may end up compromising democratic politics in member states or triggering an otherwise undesirable exit from the monetary union.

References

Accominotti, O., M. Flandreau, and R. Rezzik (2011): "The Spread of Empire: Clio and the Measurement of Colonial Borrowing Costs," *Economic History Review*, 64(2), 385–407.

Alesina, A., and A. F. Wagner (2006): "Choosing (and Reneging on) Exchange Rate Regimes," *Journal of the European Economic Association*, 4(4), 770–799.

Bazot, G., M. D. Bordo, and E. Monnet (2016): "International Shocks and the Balance Sheet of the Bank of France under the Classical Gold Standard," *Explorations in Economic History*, 62, 87–107.

Bearce, D. H., and M. Hallerberg (2011): "Democracy and De Facto Exchange Rate Regimes," *Economics & Politics*, 23(2), 172–194.

Bloomfield, A. I. (1959): *Monetary Policy under the International Gold Standard, 1880-1914*. Federal Reserve Bank of New York, New York, U.S.A.

Bockstette, V., A. Chanda, and L. Putterman (2002): "States and Markets: The Advantage of an Early Start," *Journal of Economic Growth*, 7(4), 347–369.

Boix, C., M. Miller, and S. Rosato (2013): "A Complete Data Set of Political Regimes, 1800-2007," *Comparative Political Studies*, 46(12), 1523–1554.

Bordo, M. D., and F. E. Kydland (1995): "The Gold Standard as a Rule: An Essay in Exploration," *Explorations in Economic History*, 32(4), 423–464.

Bordo, M. D., and H. Rockoff (1996): "The Gold Standard as a Good Housekeeping Seal of Approval," *Journal of Economic History*, 56(2), 389–428.

Bordo, M. D., and A. J. Schwartz (1984): *A Retrospective on the Classical Gold Standard, 1821-1931*. University of Chicago Press, Chicago, U.S.A.

Capie, F., and G. Wood (1997): "Great Depression of 1873-1896," in *Business Cycles and Depressions: an Encyclopedia*, ed. by D. Glasner, and T. F. Cooley, pp. 148–149. Garland Publishing, New York, U.S.A.

De Cecco, M. (1974): *The International Gold Standard: Money and Empire*. St. Martin's Press, New York, U.S.A.

Chen, G., and H. Tsurumi (2010): "Probit and Logit Model Selection," *Communications in Statistics - Theory and Methods*, 40(1), 159–175.

Daunton, M. (2006): "Presidential Address: Britain and Globalisation since 1850: I. Creating a Global Order, 1850-1914," *Transactions of the Royal Historical Society, Sixth Series*, 16, 1–38.

Eichengreen, B. (1992): *Golden Fetters: The Gold Standard and the Great Depression, 1919-1939*. Oxford University Press, Oxford, U.K.

Eichengreen, B., and M. Flandreau (1996): "The Geography of the Gold Standard," in *Currency Convertibility: The Gold Standard and Beyond*, ed. by J. B. de Macedo, B. Eichengreen, and J. Reis, pp. 113–143. Routledge, London, U.K.

Esteves, R., and F. Ploeckl (2016): "Gold and Trade: An Empirical Simulation Approach," Mimeo.

Ferguson, N., and M. Schularick (2006): "The Empire Effect: The Determinants of Country Risk in the First Age of Globalization, 1880-1913," *Journal of Economic History*, 66(2), 283–312.

Flandreau, M. (1996): "The French Crime of 1873: An Essay on the Emergence of the International Gold Standard, 1870-1880," *Journal of Economic History*, 56(4), 862–897.

Flandreau, M., J. L. Cacheux, F. Zumer, R. Dornbusch, and P. Honohan (1998): "Stability without a Pact? Lessons from the European Gold Standard, 1880-1914," *Economic Policy*, 13(26), 117–62.

Flandreau, M., and F. Zumer (2004): *The Making of Global Finance, 1880-1913*. OECD, Paris, France.

Ford, A. G. (1962): *The Gold Standard: Britain and Argentina*. Clarendon Press, Oxford, U.K.

Fouquin, M., and J. Hugot (2016): "Two Centuries of Bilateral Trade and Gravity Data: 1827-2014," CEPII Working Paper No 2016-14.

Friedman, M. (1990): "The Crime of 1873," *Journal of Political Economy*, 98(6), 1159–1194.

GALLAROTTI, G. M. (1993): "The Scramble for Gold: Monetary Regime Transformation in the 1870's," in *Monetary Regimes in Transition*, ed. by M. D. Bordo, and F. Capie, pp. 85–104. Cambridge University Press, Cambridge, U.K.

——— (1995): *The Anatomy of an International Monetary Regime: The Classical Gold Standard, 1880-1914*. Oxford University Press, Oxford, U.K.

GIBLER, D. M. (2009): *International Military Alliances, 1648-2008*. CQ Press, Washington DC, U.S.A.

HORRACE, W. C., AND R. L. OAXACA (2006): "Results on the Bias and Inconsistency of Ordinary Least Squares for the Linear Probability Model," *Economics Letters*, 90(3), 321–327.

HUNTINGTON, S. P. (1991): "Democracy's Third Wave," *Journal of Democracy*, 2(2), 12–34.

KEMMERER, E. W. (1916): *Modern Currency Reforms*. The MacMillan Company, New York, U.S.A.

KLASING, M. J., AND P. MILIONIS (2014): "Quantifying the Evolution of World Trade, 1870-1949," *Journal of International Economics*, 92(1), 185–197.

LEAGUE OF NATIONS (1942): *Money and Banking*. League of Nations, Economic Intelligence Services, Geneva, Switzerland.

LLONA RODRÍGUEZ, A. (1997): "Chilean Monetary History, 1860-1925 an Overview," *Revista de Historia Económica*, 15(1), 125–157.

LÓPEZ-CÓRDOVA, J. E., AND C. M. MEISSNER (2003): "Exchange-Rate Regimes and International Trade: Evidence from the Classical Gold Standard Era," *American Economic Review*, 93(1), 344–353.

MADDISON, A. (2003): *The World Economy: Volume 2 - Historical Statistics*. Development Studies Center, OECD, Paris.

——— (2013): "The Maddison-Project," http://www.ggdc.net/maddison/maddison-project/home.htm.

MARSHALL, M. G., T. R. GURR, AND K. JAGGERS (2017): "Political Regime Characteristics and Transitions, 1800-2016," Polity IV Project, Center for Systemic Peace.

MEISSNER, C. M. (2005): "A New World Order: Explaining the International Diffusion of the Gold Standard, 1870-1913," *Journal of International Economics*, 66(2), 385–406.

MITCHENER, K. J., AND G. PINA (2016): "Pegxit Pressure: Evidence from the Classical Gold Standard," NBER Working Paper No. 22844.

MITCHENER, K. J., M. SHIZUME, AND M. D. WEIDENMIER (2010): "Why Did Countries Adopt the Gold Standard? Lessons from Japan," *Journal of Economic History*, 70(1), 27–56.

Mitchener, K. J., and M. D. Weidenmier (2015): "Was the Classical Gold Standard Credible on the Periphery? Evidence from Currency Risk," *Journal of Economic History*, 75(2), 479–511.

Morys, M. (2013): "Discount Rate Policy Under the Classical Gold Standard: Core Versus Periphery (1870s-1914)," *Explorations in Economic History*, 50(2), 205–226.

Officer, L. H. (2008): "Gold Standard," EH.Net Encyclopedia, edited by Robert Whaples.

O'Rourke, K. H., and J. G. Williamson (1999): *Globalization and History: The Evolution of a Nineteenth Century Atlantic Economy*. The MIT Press, Cambridge, MA.

Pittaluga, G. B., and E. Seghezza (2016): "How Japan Remained on the Gold Standard Despite Unsustainable External Debt," *Explorations in Economic History*, 29, 40–54.

Redish, A. (1990): "The Evolution of the Gold Standard in England," *Journal of Economic History*, L(4), 789–805.

Reinhart, C. M., and K. S. Rogoff (2011): "From Financial Crash to Debt Crisis," *American Economic Review*, 101(5), 1676–1706.

Reis, J. (2000): "The Gold Standard in Portugal," in *Monetary Standards in the Periphery*, ed. by P. Martín-Aceña, and J. Reis, chap. 2. Macmillan Press, London, U.K.

Rodrik, D. (2011): *The Globalization Paradox: Democracy and the Future of the World Economy*. W.W. Norton, New York, NY.

——— (2017): "Populism and the Economics of Globalization," NBER Working Paper No. 23559.

Rota, M. (2016): "Military Spending, Fiscal Capacity and the Democracy Puzzle," *Explorations in Economic History*, 60, 41–51.

Sarkees, M. R., and F. Wayman (2010): *Resort to War: 1816 - 2007*. CQ Press, Washington, DC.

Simmons, B. A. (1994): *Who Adjusts? Domestic Sources of Foreign Economic Policy During the Interwar Years*. Princeton University Press, Princeton, NJ.

Staiger, D., and J. H. Stock (1997): "Instrumental Variables Regressions with Weak Instruments," *Econometrica*, 65(3), 557–586.

Tattara, G. (2003): "Paper Money but a Gold Debt: Italy on the Gold Standard," *Explorations in Economic History*, 40(2), 122–142.

Wandschneider, K. (2008): "The Stability of the Interwar Gold Exchange Standard: Did Politics Matter?," *Journal of Economic History*, 68(1), 151–181.

Wolf, H. C., and T. M. Yousef (2007): "Breaking the Fetters: Why Did Countries Exit the Interwar Gold Standard?," in *The New Comparative Economic History: Essays in Honor of Jeffrey G. Williamson*, ed. by T. J. Hatton, K. H. O'Rourke, and A. M. Taylor, pp. 241–266. MIT Press, Cambridge, MA.

WOLF, N. (2008): "Scylla and Charybdis. Explaining Europe's Exit from Gold, January 1928-December 1936," *Explorations in Economic History*, 45(4), 383–401.

Figure 1: Evolution of the Gold Standard and Democracy

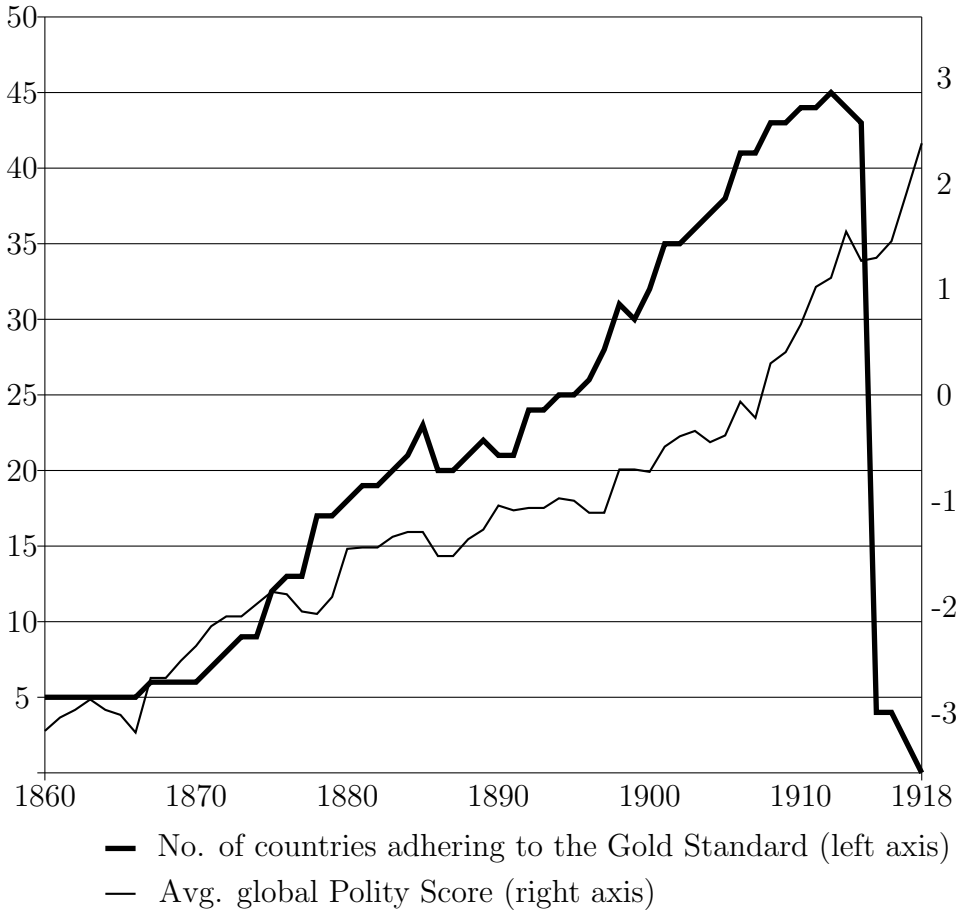

Table 1: Determinants of Gold Standard Adherence

	Linear	Probit	Logit
Polity Score	-0.00171*	-0.0307**	-0.0690**
	(0.000856)	(0.0148)	(0.0349)
War	-0.0196**	-0.499***	-1.031**
	(0.00895)	(0.168)	(0.427)
British Ally	0.0134	0.204	0.508
	(0.0108)	(0.155)	(0.359)
GDP per capita (log)	0.0516***	0.952***	2.163***
	(0.0105)	(0.192)	(0.469)
Population (log)	0.00254	0.0794	0.162
	(0.00393)	(0.0742)	(0.174)
Debt to GDP	0.000803	-0.0130	-0.0590
	(0.0145)	(0.234)	(0.586)
Openness	0.00503	0.115	0.367
	(0.0100)	(0.197)	(0.504)
Trade Share with Gold Block	0.0167	0.349	0.887
	(0.0358)	(0.592)	(1.340)
Trade Balance to GDP	0.0603	-0.212	0.867
	(0.105)	(1.891)	(4.635)
Gold Standard (t-1)	0.919***	3.817***	7.235***
	(0.0141)	(0.208)	(0.524)
Constant	-0.367***	-9.667***	-21.28***
	(0.110)	(2.008)	(4.929)
Observations	1,259	1,259	1,259
Countries	30	30	30
(Pseudo) R-squared	0.905	0.854	0.854

Estimates of the baseline specification using linear probability, probit and logit models for the full country sample, spanning the period 1860-1913. The dependent variable is a dummy variable indicating adherence to the Gold Standard in the corresponding year. All regressors are lagged by one year. The specifications also include decade fixed effects. Standard errors are clustered at the country-level. *** p<0.01, ** p<0.05, * p<0.1.

Table 2: Marginal Effects for Baseline Specifications

	St. Dev.	Linear	Probit	Logit
Polity Score	6.169	-1.06%*	-6.66%**	-8.10%**
War	–	-1.96%**	-17.56%***	-19.62%**
British Ally	–	1.34%	7.19%	9.66%
GDP per capita (log)	0.586	3.02%***	19.64%***	24.12%***
Population (log)	1.425	0.36%	3.99%	4.39%
Debt to GDP	0.410	0.03%	-0.19%	-0.46%
Openness	0.403	0.20%	1.64%	2.81%
Trade Share with Gold Block	0.268	0.45%	3.29%	4.52%
Trade Balance to GDP	0.068	0.41%	-0.51%	1.12%
Gold Standard (t-1)	–	91.85%***	134.36%***	137.68%***

Marginal effects at the mean for each regressor, based on the estimates shown in Table 1. Numbers represent the increase in probability of adherence to the Gold Standard in a given year following an increase by one standard deviation of the respective regressor for the continuous independent variables, and for an increase from zero to one for the dummy variables. Statistical significance as per table 1: *** p<0.01, ** p<0.05, * p<0.1.

Table 3: Comparison of Different Political Indicators

	dummy	democ	autoc	exrec	exconst	polcomp
Indicator from Header	0.0416	-0.0326	0.0850***	-0.0403	-0.0475	-0.0675***
	(0.179)	(0.0276)	(0.0278)	(0.0326)	(0.0462)	(0.0220)
War	-0.448***	-0.482***	-0.506***	-0.474***	-0.474***	-0.528***
	(0.171)	(0.170)	(0.168)	(0.168)	(0.176)	(0.179)
British Ally	0.244	0.218	0.207	0.218	0.273*	0.150
	(0.195)	(0.161)	(0.155)	(0.157)	(0.159)	(0.155)
GDP per capita (log)	0.696***	0.832***	1.072***	0.836***	0.849***	0.854***
	(0.191)	(0.192)	(0.187)	(0.197)	(0.204)	(0.172)
Population (log)	0.0861	0.0873	0.0621	0.0752	0.0873	0.0757
	(0.0782)	(0.0745)	(0.0754)	(0.0793)	(0.0704)	(0.0747)
Debt to GDP	0.00184	-0.0113	-0.0201	-0.00308	-0.0181	-0.0538
	(0.248)	(0.242)	(0.220)	(0.241)	(0.237)	(0.233)
Openness	0.214	0.176	0.0375	0.172	0.166	0.113
	(0.187)	(0.196)	(0.203)	(0.213)	(0.187)	(0.211)
Trade Share with Gold Block	0.267	0.395	0.281	0.454	0.385	0.230
	(0.594)	(0.586)	(0.598)	(0.588)	(0.579)	(0.634)
Trade Balance to GDP	0.309	-0.171	0.0254	0.145	-0.288	0.116
	(1.857)	(1.893)	(1.863)	(1.795)	(1.933)	(1.829)
Gold Standard (t-1)	3.822***	3.828***	3.808***	3.835***	3.834***	3.804***
	(0.215)	(0.206)	(0.209)	(0.211)	(0.203)	(0.209)
Constant	-7.891***	-8.833***	-10.58***	-8.782***	-8.868***	-8.375***
	(1.942)	(1.979)	(1.928)	(1.946)	(1.983)	(1.924)
Observations	1,196	1,259	1,259	1,259	1,259	1,259
Countries	29	30	30	30	30	30
Pseudo R-squared	0.850	0.853	0.855	0.853	0.853	0.854

Estimates of the baseline specification using probit models for the full country sample, spanning the period 1860-1914. The dependent variable is a dummy variable indicating adherence to the Gold Standard in the corresponding year. First-row estimates correspond to each of the different political indicators listed in the header. The first column uses the binary democracy variable of Boix et al. (2012), while the other columns use sub-indices of the Polity score reported in the Polity IV database, as explained in the text. All regressors are lagged by one year. The specifications also include decade fixed effects. Standard errors are clustered at the country-level. *** p<0.01, ** p<0.05, * p<0.1.

Table 4: Robustness Checks with Alternative Samples and Additional Controls

	Alter. Year Sample		Alternative Country Sample			More Controls
Polity Score	-0.0283**	-0.0311**	-0.0632**	-0.0363**	-0.0367**	-0.0300*
	(0.0136)	(0.0156)	(0.0247)	(0.0163)	(0.0181)	(0.0170)
War	-0.440**	-0.502***	-0.651***	-0.439**	-0.521***	-0.498***
	(0.176)	(0.160)	(0.191)	(0.188)	(0.172)	(0.180)
British Ally	0.313**	0.152	0.0268	0.0376	0.250	0.0722
	(0.134)	(0.185)	(0.168)	(0.160)	(0.158)	(0.189)
GDP per capita (log)	0.908***	0.993***	0.468**	0.871***	0.894***	0.980***
	(0.181)	(0.204)	(0.222)	(0.194)	(0.203)	(0.191)
Population (log)	0.0814	0.0778	-0.121	0.0733	0.0468	0.157*
	(0.0732)	(0.0762)	(0.128)	(0.0840)	(0.0936)	(0.0898)
Debt to GDP	-0.0613	0.00455	0.300	0.0745	0.00488	-0.156
	(0.199)	(0.254)	(0.235)	(0.254)	(0.236)	(0.291)
Openness	0.117	0.135	-0.292	0.0515	0.0877	0.185
	(0.199)	(0.204)	(0.199)	(0.170)	(0.195)	(0.250)
Trade Share with Gold Block	0.586	0.251	-0.743	0.00794	0.320	-0.121
	(0.708)	(0.574)	(1.091)	(0.729)	(0.721)	(0.806)
Trade Balance to GDP	-0.320	-0.0511	2.384	0.415	-0.337	0.948
	(1.841)	(1.889)	(2.285)	(1.821)	(1.991)	(1.742)
Inflation Rate						0.0422
						(0.254)
Coverage Ratio						0.0345*
						(0.0176)
Central Bank						0.182
						(0.266)
Gold Standard (t-1)	3.853***	3.714***	3.538***	3.754***	3.714***	3.642***
	(0.206)	(0.195)	(0.235)	(0.221)	(0.213)	(0.207)
Constant	-9.608***	-9.819***	-3.000	-8.704***	-8.873***	-10.17***
	(1.950)	(2.090)	(3.162)	(2.228)	(2.495)	(2.151)
Observations	1,346	1,151	739	989	1,090	961
Countries	30	30	22	24	25	23
Sample Period	1850-1914	1870-1914	1860-1914	1860-1914	1860-1914	1860-1914
Country Sample	All	All	Periphery	Excl. Mon. Unions	Excl. Br. Empire	All
Pseudo R-squared	0.858	0.841	0.806	0.841	0.840	0.831

Robustness checks for the baseline probit specification with alternative samples and additional controls, as indicated in the header. Country sample and time period are as indicated in the bottom of the table. The dependent variable is a dummy variable indicating adherence to the Gold Standard in the corresponding year. All regressors are lagged by one year. The specifications also include decade fixed effects. Standard errors are clustered at the country-level. *** p<0.01, ** p<0.05, * p<0.1.

Table 5: Robustness Checks with Alternative Econometrics Setups

	Further Lags	Spatial Models		Alt. Mon. Regimes		IV analysis	
		Neighbors	Trade Partners	Convertible	G–B–S–P	2^{nd} Stage	1^{st} Stage
Polity Score	-0.0666	-0.0266*	-0.0273**	-0.0238*	-0.0242*	-0.167***	
	(0.0464)	(0.0145)	(0.0144)	(0.0137)	(0.0137)	(0.0505)	
War	-0.486***	-0.507***	-0.488***	-0.535***	-0.267**	-0.418***	0.0956
	(0.168)	(0.182)	(0.184)	(0.178)	(0.128)	(0.154)	(0.307)
British Ally	0.216	0.177	0.203	-0.0301	0.218	-0.142	-1.127***
	(0.160)	(0.162)	(0.157)	(0.151)	(0.181)	(0.238)	(0.313)
GDP per capita (log)	0.951***	0.917***	0.979***	0.585***	0.805***	1.893***	7.703***
	(0.195)	(0.200)	(0.205)	(0.186)	(0.144)	(0.352)	(0.250)
Population (log)	0.0815	0.0756	0.0949	0.0663	0.0636	0.0326	0.0369
	(0.0751)	(0.0786)	(0.0768)	(0.0674)	(0.0656)	(0.0649)	(0.118)
Debt to GDP	-0.0106	-0.0268	-0.0339	-0.143	-0.0660	-0.0145	0.141
	(0.232)	(0.243)	(0.242)	(0.183)	(0.134)	(0.163)	(0.383)
Openness	0.108	0.145	0.178	0.0437	0.214	-0.517	-4.174***
	(0.196)	(0.214)	(0.188)	(0.196)	(0.232)	(0.366)	(0.311)
Trade Share with Gold Block	0.333	0.303	0.740	-0.785	0.240	0.0470	-3.875***
	(0.592)	(0.344)	(0.619)	(0.533)	(0.484)	(0.497)	(0.915)
Trade Balance to GDP	-0.232	0.179	0.166	-0.329	0.0865	-1.950	-16.53***
	(1.941)	(1.860)	(1.775)	(1.738)	(1.545)	(1.763)	(2.628)
Polity Score (t-2)	-0.0121						
	(0.0524)						
Polity Score (t-3)	0.0490						
	(0.0431)						
Years since Independence (log)							-0.365***
							(0.128)
State Antiquity Index							-2.478***
							(0.710)
Gold Standard (t-1)	3.818***	3.768***	3.795***			2.710***	-2.141***
	(0.206)	(0.197)	(0.189)			(0.809)	(0.308)
Convertible (t-1)				3.780***			
				(0.227)			
G–B–S–P (t-1)					1.653***		
					(0.150)		
Spatial Lag		0.145	-0.344				
		(0.342)	(0.531)				
Constant	-9.647***	-9.398***	-10.05***	-5.591***		-15.05***	-47.49***
	(2.024)	(1.747)	(1.717)	(1.792)		(2.257)	(2.832)
Observations	1,251	1,259	1,259	1,259	1,259	1,259	1,259
Countries	30	30	30	30	30	30	30
(Pseudo) R-Squared	0.854	0.852	0.852	0.813	0.661	0.791	0.528

Robustness checks for the baseline probit specification using alternative econometric setups, as indicated in the header. The dependent variable is a dummy variable indicating adherence to the Gold Standard in the corresponding year, except for the columns "Alt. Mon. Regimes". For these columns, the dependent variable is respectively a dummy for any convertible monetary system (gold, bimetallic, silver) and a variable where 1=inconvertible, 2=silver, 3=bimetallic, and 4=gold. All regressors are lagged by one year. The specifications also include decade fixed effects. Standard errors are clustered at the country-level. *** p<0.01, ** p<0.05, * p<0.1.

Table 6: Survival Models for Gold Standard Entry and Exit

	Entry				Exit	
Polity Score	0.903*	0.874***	0.955	0.916**	1.266	1.087
	(0.0523)	(0.0394)	(0.0558)	(0.0408)	(0.248)	(0.109)
War	0.279*	0.211**	0.594	0.437	1.525	1.536
	(0.201)	(0.159)	(0.447)	(0.299)	(1.863)	(1.382)
British Ally	2.575	0.728	3.376***	1.069	0.813	0.820
	(1.816)	(0.478)	(1.216)	(0.653)	(0.579)	(0.514)
GDP per capita (log)	2.534	1.925	2.114	1.881	0.0641*	0.494
	(3.019)	(1.034)	(2.360)	(0.749)	(0.103)	(0.572)
Population (log)	0.555**	0.680*	0.654*	0.793*	0.642	0.857
	(0.133)	(0.149)	(0.143)	(0.110)	(0.371)	(0.373)
Debt to GDP	2.338	2.905***				
	(1.521)	(1.163)				
Openness	0.605	0.771				
	(0.282)	(0.424)				
Trade Share with Gold Block	1.676	0.703				
	(1.824)	(0.688)				
Trade Balance to GDP	0.186	150.6				
	(1.001)	(481.1)				
Observations	429	560	564	708	487	515
Countries	21	24	23	24	21	22
Entries / Exits	19	23	21	25	8	9
Only first occurrences	Yes	No	Yes	No	Yes	No

Estimates of the hazard ratios for a Cox Proportional Hazard model for the full country sample, spanning the period 1860-1913. In the first four columns a failure corresponds to an adoption of the Gold Standard, while in the last two columns a failure corresponds to a suspension of the Gold Standard. All regressors are lagged by one year. The baseline hazard is stratified into a core and a periphery group. Standard errors are clustered at the country-level. *** p<0.01, ** p<0.05, * p<0.1.

Table A1: Country Sample

Country	Years on Gold Standard	Core / Periphery	Country	Years on Gold Standard	Core / Periphery
Argentina	1867-76, 1883-85, 1900-14	Periphery	Japan	1897-1917	Periphery
Australia	1852-1914	Periphery	Mexico	1905-13	Periphery
Austria-Hungary	1892-1914	Periphery	Netherlands	1875-1914	Core
Belgium	1878-1914	Core	*Norway*	1875-1914	Core
Brazil	1888-89, 1906-14	Periphery	Ottoman Empire	1881-1914	Periphery
Bulgaria	1906-12	Periphery	Portugal	1854-91	Periphery
Canada	1854-1914	Core	Romania	1892-1914	Periphery
Chile	1895-98	Periphery	Russia	1897-1914	Periphery
China	-	Periphery	South Africa	1821-1914	Periphery
Colombia	1880-85	Periphery	Spain	-	Periphery
Denmark	1872-1914	Core	*Sweden*	1873-1914	Core
France	1878-1914	Core	*Switzerland*	1878-1914	Core
Germany	1871-1914	Core	United Kingdom	1821-1914	Core
Greece	1885, 1910-14	Periphery	United States	1878-1916	Core
Italy	1884-94	Periphery	Uruguay	1876-1914	Periphery

List of countries used in our analysis. Countries in *italics* are those countries that were a member of a currency union while they were on the gold standard. See main text for details on when we consider countries to be on the gold standard, and for details on the core-periphery distinction.

Table A2: Descriptive Statistics

Variable	Main Source	Observations	Mean	St. Dev.	Min	Max
Gold Standard	Various Sources	1,620	.509	.500	0	1
War	Sarkees and Wayman (2010)	1,620	.187	.390	0	1
British Ally	Gibler (2009)	1,620	.122	.328	0	1
GDP per capita (1990 US$)	Maddison Project (2013)	1,586	1,945	1,150	530.0	7,212
Population (millions)	Maddison (2003)	1,609	29.80	70.29	.203	432
Debt to GDP (ratio)	Reinhart and Rogoff (2011)	1,376	.540	.410	.001	2.438
Openness (ratio of GDP)	Klasing and Milionis (2014)	1,464	.413	.403	.011	2.974
Trade Share with Gold Block	Fouquin and Hugot (2016)	1,608	.677	.268	0	1
Trade Balance (ratio of GDP)	Klasing and Milionis (2014)	1,464	-.028	.068	-.441	.305
Democracy Dummy	Boix et al. (2013)	1,676	.214	.410	0	1
Inflation Rate	Reinhart and Rogoff (2011)	1,620	.078	.374	-.4	.4
Coverage Ratio	Accominotti et al. (2011)	1,026	.954	3.049	0	61.67
Central Bank	League of Nations (1942)	1,620	.519	.500	0	1
Years since Independence	CIA World Factbook (2017)	1,620	372.7	449.0	0	1691
State Antiquity Index	Bockstette et al. (2002)	1,620	.540	.278	.052	.942
Polity IV Variables:	Marshall et al. (2017)					
Polity Score		1,494	-.499	6.169	-10	10
Democracy (`democ`)		1,494	3.604	3.390	0	10
Autocracy (`autoc`)		1,494	4.102	3.007	0	10
Executive Recruitment (`exrec`)		1,494	3.832	2.630	0	8
Executive Constraints (`exconst`)		1,494	4.276	2.409	0	7
Political Competition (`polcomp`)		1,494	5.262	2.785	0	10

Descriptive statistics for variables used in our analysis, for the period 1860-1913. In several cases, data from mentioned "Main Source" are cross-checked against, and supplemented with, data from other sources. See text for more details.