Political Regimes and Currency Crises*

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Forthcoming, *Economics and Politics*

Abstract: This paper examines the relationship between political regime type and currency crises. Some theories suggest that democratic regimes, owing to their greater political transparency and larger number of veto players, should have a lower risk of currency crisis than dictatorships. Alternative arguments emphasize the advantages of political insulation and rulers with long time horizons, and imply that crises should be most likely in democracies and least common in monarchic dictatorships. We evaluate these competing arguments across four types of political regimes using a time-series cross-sectional dataset that covers 178 countries between 1973 and 2009. Our findings suggest that the risk of currency crisis is substantially lower in monarchies than in democracies and other types of dictatorship. Further analyses indicate that the adoption of prudent financial policies largely account for this robust negative association between monarchies and the probability of currency crises. This suggests that political regimes strongly influence financial stability, and perverse political incentives help explain why currency crises are so common.

* An online appendix with supplementary tables and replication data will be made available on the author’s website upon publication. For helpful suggestions on earlier drafts, we thank Bill Bernhard, Jeff Colgan, Alison Gash, Andrew Kerner, Stormy-Annika Mildner, Maggie Peters, Molly Roberts, Will Terry, Dennis Quinn, Robert Walker, Rachel Wellhausen, and participants at the 2013 APSA, IPES, and ISA conferences. Josh Baker, Yongwoo Jeung, and Kevin O’Hare provided excellent research assistance on this project. David Steinberg is the corresponding author (steinbe2@uoregon.edu).
I. Introduction

The prevention of currency crises is a key challenge for policymakers in a globalized economy. Currency crises—typically defined as rapid losses in a currency’s external value—inflict an array of damages on national economies. Since currency crises make it costlier for citizens to import food, clothing, and other essentials, they often increase poverty rates (Baldacci et al., 2002). Currency crises also make it harder for financial institutions to make payments on their foreign debts, and contribute to national bank failures as a result (Kaminsky and Reinhart, 1999). These are among the reasons why currency crises are typically associated with large declines in national income (Hutchison and Noy, 2005). For example, Indonesia’s 1998 currency crisis was associated with a 16% drop in GDP per capita whereas Argentina’s crisis a few years later led to a 7% decline.

In spite of the tremendous economic costs of these events, currency crises are quite commonplace. Between 1973 and 2010, 465 currency crises occurred—an average of more than twelve per year.1 Currency crises have afflicted countries from all income levels and geographic regions. Moreover, the frequency of crises varies tremendously across countries even within the same region. In the Middle East between 1973 and 2010, Turkey had nine currency crises and Israel had seven while Jordan and Morocco had just one crisis and Kuwait avoided them entirely. Over the same four decades in Eastern Europe, Poland experienced nine crises while Hungary had none. In Latin America, Costa Rica experienced two currency crises during this period compared to Brazil’s thirteen.
Why have some countries been successful at avoiding currency crises while others are repeat offenders? Economists and policymakers suggest that vulnerability to financial crises depends as much on a nation’s politics as on its economics. India’s central bank governor, Raghuram Rajan, points out that “good economics cannot be divorced from good politics” (Rajan, 2010: 19). Similarly, former IMF chief economist, Simon Johnson, observes that “[f]inancial crises, at least in emerging markets, have political roots” (Johnson and Kwak, 2010: 48). While it is clear that politics matters for currency crises, the specific type of political structures that influence a country’s vulnerability to currency crises remain open to debate.² We thus ask a basic question: does a country’s political regime type influence its susceptibility to currency crises?

Political regimes determine the rules and procedures for which rulers are selected and removed from power. Regimes are often divided between democratic and authoritarian political systems. This distinction between democracy and dictatorship is crucial, but it is far from complete. As Barbara Geddes (1999: 121) writes, “different kinds of authoritarianism differ from each other as much as they differ from democracy.” Building on this insight, and a growing body of scholarship demonstrating that authoritarian sub-types are highly consequential for a number of political and economic outcomes,³ we examine whether the risk of currency crisis varies across four major types of political systems: democracies, monarchies, military dictatorships, and civilian dictatorships. Disaggregating authoritarian regimes into these various sub-types not only provides a more accurate picture of the authoritarian world, but also helps illuminate which attributes of political regimes are most critical for financial stability.
At present, there are competing theoretical expectations as to which political systems should be most successful at preventing currency crises. One common argument is that democracies are advantaged over authoritarian regimes, and over monarchic dictatorships in particular, because of their extensive checks and balances (North and Weingast, 1989). The democratic advantage is further amplified because high degrees of transparency within the political system are beneficial for investors (Hollyer et al., 2011; Leblang and Satyanath, 2006; Broz, 2002). The intuition here is that political constraints (checks and balances) make policymakers’ commitments more credible and regime transparency reduces uncertainty on the part of private investors. Thus, investors are less likely to speculate against a currency and generate a crisis when political leaders are constrained and their actions can be easily monitored. The democratic advantage thesis would therefore suggest that democracies experience fewer currency crises than dictatorships. By this logic, monarchic dictatorships, being the most centralized and opaque regimes, should be the most crisis-prone.

At the same time, some characteristics of authoritarian regimes are argued to promote economic stability. Specifically, autocrats are seen as being advantaged over democrats because they are more insulated from domestic pressure groups and have longer time horizons (Olson, 1993; Haggard and Kaufman, 1995). These autocratic attributes are important because they may discourage the adoption of imprudent economic policies that generate unsustainable economic booms and ultimately produce currency crises. Since monarchs tend to have longer tenures and are more impervious to distributive pressures than other types of autocrats, this argument would expect currency crises to be most frequent in democracies and least frequent in monarchic dictatorships.
In short, there are competing theoretical logics regarding which political systems should be most successful at avoiding currency crises. In this paper, we spell out these contrasting theories and then evaluate them empirically.

Our statistical analyses, based on a time-series cross-sectional dataset covering up to 178 countries for 37 years, confirm that political regime type strongly influences the risk of currency crises, but not in a manner that most would expect. Specifically, the risk of crisis is substantially lower in monarchies than in other types of political regimes. Monarchies continue to have a negative association with the probability of a currency crisis after controlling for a country’s level of development, its natural resource wealth, and many other potential confounders. This relationship also holds using various measures of regime type and currency crisis, and it is robust to a variety of estimation techniques, including fixed-effects, matching, and instrumental variables regression. We do not find any statistically or substantively significant differences in the risk of currency crisis between democracies, civilian and military dictatorships. In further analyses, we decompose the effect of political regimes into various components, and find that strong macroeconomic policies largely explain why monarchies experience fewer currency crises than other regimes. These findings suggest that political regimes that provide their leaders with highly stable tenures and insulate them from interest group pressures create strong incentives to adopt prudent financial policies that help prevent currency crises.

II. Theories of Political Regimes and Currency Crises

Political regimes organize how leaders acquire and maintain power. There are several reasons why political regimes may influence the risk of currency crises.
Economic policy is the first channel through which political regimes may contribute to crises. The argument here is that a country’s risk of currency crisis depends heavily upon the types of macroeconomic and financial policies that it adopts (Abiad, 2003; Frankel and Saravelos, 2012; Gourinchas and Obstfeld, 2012; Kaminsky et al., 1998). Regimes that incentivize leaders to adopt prudent financial policies should therefore reduce the risk of currency crises. Investors’ expectations and perceptions are a second channel through which political regimes might influence currency crises. Investors are more likely to speculate against a currency, and provoke a currency crisis, when they view the government as weak, unstable, and unwilling to respond adequately (e.g. Obstfeld, 1996). Thus, political regimes that improve governments’ reputations with speculators may lower the likelihood of a currency crisis (Block, 2003; Leblang, 2002; Leblang & Satyanath, 2006).

Following Cheibub, Gandhi, and Vreeland (2010), we classify political regimes into four categories—democracies, monarchies, military dictatorships, and civilian dictatorships—according to the distinct institutional structures in place to acquire and maintain power. Democracies are political systems where the chief executive is routinely elected in competitive, free, and fair elections. Monarchies are regimes in which national leaders are selected solely on the basis of hereditary succession. Military dictatorships arise when a professional military overthrows a civilian government and rules. Civilian dictatorships are political regimes that do not use free and fair elections, a ruling family, or the military to retain power. Instead, most civilian dictatorships rely upon a dominant party or personal ruler to maintain a grip on power.
Political regimes differ in numerous ways. We focus on four important attributes that are theoretically relevant to the politics of currency crises: (1) credibility of commitments; (2) transparency; (3) insulation from societal pressures; and (4) the length of leadership tenures. Across these four attributes, there are certain trade-offs and competing expectations. More credible and transparent regimes tend to be those where leaders are least insulated from societal pressures and leadership turnover is most frequent. On the other hand, the same features that insulate leaders from popular pressures and reduce political turnover tend to compromise their regime’s credibility and transparency to outside investors. Consequently, it is unclear a priori which types of political systems should be most successful at delivering financial stability. The discussion now turns to how these four attributes vary across regimes and derives testable implications about the relationship between political regimes and currency crises.

A. Credibility of Commitments

The inability of autocracies, and monarchies in particular, to make credible commitments is one factor that may increase their vulnerability to currency crises. According to North and Weingast (1989), strong economic performance requires governments to credibly commit to avoid opportunistic policy changes. These commitments are more credible when multiple checks and balances are in place to limit a ruler’s ability to enact unilateral and capricious policy changes (Henisz, 2000).

 Democracies tend to have far more checks and balances (‘veto players’) than non-democracies, as shown in the first row of Table 1. Greater dispersal of veto authority limits the likelihood that democratic leaders will make erratic policy changes and
reassures private actors that their investments are safe. This is the main reason why democratic governments are believed to have easier access to credit (Beaulieu et al., 2012), attract more foreign direct investment (Jensen, 2003), and why shifts away from democracy reduce equity inflows (Frot and Santiso, 2013). Weymouth (2011: 213) applies this same logic to currency policy and argues that veto players “...constrain the ability of policy makers to opportunistically pursue policies that may lead to a depreciated domestic currency.” Similarly, MacIntyre (2001) suggests that a key reason why Malaysia and Indonesia suffered severe currency crises in the late 1990s was because their unconstrained autocrats behaved erratically, which undermined investors’ confidence. In short, to the extent that credible commitments hold the key to financial stability, democratic regimes should experience fewer currency crises than autocracies.

However, the logic of credibility would not expect all autocrats to face an equal risk of crisis. Some authoritarian regimes have institutional structures such as multiparty legislatures and limited electoral competition that expand the number of actors involved in decision-making (Boix, 2003: 210-13; Gandhi, 2008; Magaloni, 2008; Wright 2008b; Wright and Escriba-Foch, 2012). In authoritarian regimes like Singapore and Vietnam, business groups participate in the legislature, which gives the private sector an opportunity to prevent anti-business policy shifts (Jensen et al., 2014). Table 1 provides illustrative evidence that these types of institutional constraints have been especially common in civilian dictatorships. Checks and balances are less extensive in military regimes and are most limited in monarchies. The logic of credible commitment suggests that monarchies should have the greatest difficulty avoiding crises. Not only do they have the fewest checks on executive decision-making, but also the potential veto players
usually come from within the royal family (Herb, 1999). Indeed, North and Weingast’s (1989) seminal theory was based on the perceived deficiencies of absolutist monarchies in early modern Europe. Thus, if a lack of credibility contributes to currency crises, these events should be most common in monarchies and least common in democracies.

B. Transparency
A high degree of transparency is a second reason why democracies may have a lower risk of currency crisis than autocracies. Transparency refers to the ease with which investors and the public can monitor the government (Broz, 2002: 861). Greater transparency in democracies does not need a long introduction: these regimes tend to disseminate more information (Hollyer et al., 2011); they are more likely to pass legislation that permits the public to request government information (Berliner, 2014); and they place fewer restrictions on the media (Egorov et al., 2009). As a result, investors can predict and mitigate risks more easily (Jensen, 2008: 1042). Broz (2002) additionally suggests that transparency helps democracies avoid excessively rigid monetary regimes and Mosley and Singer (2008) hypothesize that transparency contributes to higher stock returns in democracies.

Some scholars further suggest that transparency helps democracies avoid currency crises. Block (2003: 294), for instance, posits that greater transparency of democracies should “lead markets to expect greater exchange rate stability (and hence reduce the likelihood of currency crises).” Leblang and Satyanath (2006) develop this logic in greater detail. Building off of Morris and Shin’s (1998) model of self-fulfilling currency crises, they suggest that speculative currency attacks become less likely when speculators
share common expectations about the state of the economy and government preferences. Leblang and Satyanath (2006: 249) hypothesize that highly transparent political regimes, such as democracies, reduce uncertainty on the part of speculators regarding other speculators’ beliefs, which makes currency crises less likely.

Extending this same logic to the authoritarian world, one would expect the risk of crisis to vary from one regime type to another. Row 2 of Table 1 presents data on Hollyer, Rosendorff, and Vreeland’s (2011) indicator of transparency: the fraction of economic variables that a country provides to the World Bank. This measure confirms that representative democracies are much more transparent than any type of dictatorship. And still, some autocrats are more of a black box than others. Once again, monarchies appear on the far end of the spectrum and make significantly less data available than either military or civilian dictatorships. Thus, if transparency reduces the risk of currency crisis, one would expect crises to be least common in democracies and most common in monarchies.

C. Insulation from Domestic Pressures

A third regime characteristic, insulation from domestic pressure groups, provides a competing set of expectations about which political systems should be most susceptible to currency crises. Insulation from societal pressures may help rulers avoid the types of expansionary macroeconomic policies that give rise to currency crises. Since democrats are most beholden to societal demands, they may suffer more crises than dictators.

As noted earlier, macroeconomic and financial policies influence the likelihood of a currency crisis. Previous research has identified three macroeconomic policies that
have a particularly strong influence on the risk of a currency crisis: low levels of international reserves; overvalued real exchange rates; and inflationary domestic monetary policy. Even though these three policies make currency crises more likely, many powerful domestic constituents benefit from these policies in the short term and may pressure ruling elites to adopt them.

Consider first the political appeal of inflationary monetary policies. Cheap credit policies make it easier for businesses to invest; help consumers finance large purchases; and push up asset prices, which benefits groups like pensioners and home owners (Ansell, 2014; Chinn and Frieden, 2011; Walter, 2013). Rajan (2010: 31) aptly summarizes the political incentives for inflationary monetary policies: “Easy credit has large, positive, immediate, and widely distributed benefits, whereas the costs all lie in the future. It has a payoff structure that is precisely the one desired by politicians, which is why so many countries have succumbed to its lure.” The second crisis-inducing policy—an overvalued real exchange rate—is almost as politically popular as the first. Although overvalued exchange rates harm some groups, such as exporters, there are more winners than losers from this policy (Frieden et al., 2001: 52; Bonomo and Terra 2005; Steinberg and Malhotra, 2014; Walter, 2013). Real exchange rate appreciation lowers the costs of imported products, which increases workers’ real wages; reduces firms’ imported input costs; and lowers the costs of foreign borrowing for both businesses and consumers. Third, holding large volumes of foreign reserves also tends to be politically unpopular. Foreign reserves are funds that the government is not investing in public goods or popular development projects (Rodrik, 2006). Hence, politicians that are concerned with maintaining the support of societal interest groups face strong temptations to “reduce
international reserve holdings…in order to maximise the current consumption of special
interest groups” (Aizenman & Marion, 2004: 570). In short, policymakers often face
pressures to adopt policies that make their economies vulnerable to currency crises.

Political regimes may influence leaders’ incentives to adopt or avoid these crisis-
prone policies. Leaders’ sensitivity to societal demands for cheap credit, overvalued
exchange rates, and low foreign reserves is likely to be greater in democracies than in
autocracies. Democratic leaders are highly accountable to domestic constituents and
sensitive to the preferences of a wider array of domestic groups (Bueno de Mesquita et
al., 2003; Milner and Kubota, 2005). Since “democratic governments will be less able to
withstand pressure for spending on current consumption,” they should be more likely to
implement “macroeconomic policies…[that] increase the likelihood of currency crises”
(Block 2003: 294). Authoritarian leaders, by contrast, should find it easier to ignore
societal demands, making it easier for them to adopt unpopular but prudent economic
policies (Haggard, 1990; Haggard and Kaufman, 1989; Haggard and Kaufman, 1995;
Johnson, 1987; Oatley, 2004).

Again, some autocrats are more insulated from societal pressures than others.
When it comes to sensitivity to interest group pressures, monarchies stand farthest apart
from democracies. There are two reasons for this. First, as noted earlier, political
decision-making in monarchies tends to be highly concentrated within one family or a
small consultative council. This type of extreme centralization of power means that
business, labor, and other societal groups have less influence and access than in other
types of dictatorship (Cheibub et al., 2010; Hertog, 2010; Lucas, 2004; Bueno de
typically justify their rule on economic grounds. Rather, monarchs tend to appeal to traditional or historical forms of legitimacy to rationalize their grip on power (Herb, 1999; Menaldo, 2012; Kailitz, 2013). This should make monarchies less likely to succumb to societal demands for expansionary economic policies than other regimes, such as civilian dictatorships, that justify their rule on the basis of economic performance and stability. If insulation from societal pressures reduces the risk of currency crisis, the risk of crisis should be lowest in monarchies, highest in democracies, and at intermediate levels in civilian and military dictatorships.

A related argument is that political regimes where power is vertically concentrated are less likely to experience currency crises because they can swiftly adjust their macroeconomic policies in response to external shocks, such as speculative attacks on the exchange rate. Conversely, when political authority is decentralized and horizontal, governments are less agile and more likely to delay needed adjustments, which makes them more susceptible to currency crises (Chiu and Willett, 2009; Leblang and Satyanath, 2008; MacIntyre, 2001). This argument too implies that democracies, being the most decentralized regimes, should experience currency crises most frequently and monarchies, being the most centralized polities, should suffer crises least often.

D. Political Turnover

The frequency of political turnover is a fourth characteristic that differs across regime types and may influence their crisis-propensity. Regimes that permit their leaders to have longer tenures are expected to experience fewer currency crises than those with frequent
leadership transitions. There are two different mechanisms through which turnover might increase the risk of currency crises.

The first is that executive turnover can influence the beliefs and actions of investors. Periods of political transition, or potential political change, are generally associated with declines in equity inflows (Frot and Santiso, 2013), greater exchange rate volatility (Hays et al., 2003; Leblang and Bernhard, 2006), and an elevated likelihood of speculative attacks and currency crises (Leblang, 2002; Leblang and Satyanath, 2006; Leblang and Satyanath, 2008). Leblang and Satyanath (2006; 2008) hypothesize that government turnover increases the variance in speculators’ expectations about government preferences, which heightens the risk of a speculative currency attack. This logic implies that, all else equal, regimes with less political turnover should suffer fewer currency crises than regimes where leaders alternate regularly.

Low turnover may also lower the risk of currency crises through a second mechanism: encouraging leaders to adopt policies that enhance long-run financial stability. Leaders with long time horizons have stronger incentives to implement policies that improve future economic performance (Clague et al., 1996; Olson, 1993; Hankla and Kuthy, 2013; Knutsen and Fjelde, 2013; Wright, 2008a). Rulers that expect to remain in office far into the future may be more forward looking, which encourages them to adopt measures that will lower the risk of future crises. By contrast, a short time horizon “is likely to induce governments both to adopt overly expansionary policies and to delay needed adjustments,” thus increasing the likelihood that their currencies will be crisis-prone (Chiu and Willett, 2009: 1006; Walter and Willett, 2012; Walter, 2013). This
argument expects regimes that provide their leaders with long and stable tenures to adopt more prudent macroeconomic policies and suffer fewer currency crises as a result.

Regime type directly influences the length of a ruler’s time horizon. The third row of Table 1 presents data on the proportion of years in which leaders alternate in office across each regime type. These differences are striking. Not surprisingly, given strict term limits and regular elections, democratic leaders tend to short tenures compared to autocratic leaders. Indeed, leadership changes occur more than once in every four years on average in democracies.

Autocrats exit office much less frequently, but there is also significant variation on this score. Civilian and military dictators tend to exit or are removed from power every tenth year. Monarchs do so far less often: leadership changes occur only 3 times a century on average, or roughly once every 33 years. Many civilian dictatorships, from China to Mexico (before 2000), have developed regularized mechanisms of succession that increases leadership turnover (Nathan, 2003). Military regimes tend to be vulnerable to factional splits that make it hard for military rulers to hold on to power for extended periods (Geddes, 1999; Hadenius and Teorell, 2007). By contrast, monarchs usually govern until death, and familial ties and expectations of future power mitigate the threat of overthrow (Herb, 1999; Magaloni, 2008). Given their long tenures, monarchs should have far longer time horizons than other types of rulers (Clague et al., 1996; Knutsen & Fjelde, 2013; Menaldo, 2012; Wright, 2008a). As Olson (1993: 572) writes, the imperative of “dynastic succession…give[s] monarchs more concern for the long run and the productivity of their societies.” If frequent turnover promotes currency crisis, either by increasing investor uncertainty or altering policymakers’ incentives, such crises
should be more frequent in democracies than in military and civilian dictatorships, and even less frequent in monarchies.

E. Summary

There are many reasons to think that the nature of a political system should affect a country’s risk of currency crisis, but there is no consensus about which types of regimes are most or least prone to crises. Due to their extensive checks and balances and transparency, some might expect democracies to have an advantage. On the other hand, since monarchies insulate their leaders and provide them with long stable tenures, others would predict that these regimes face the lowest risk of currency crisis. Finally, it is possible that military and civilian dictatorships, with their moderate degrees of centralization, may best resolve these trade-offs between credibility and insulation (e.g. MacIntyre, 2001).

There is also little agreement as to which causal mechanisms forge the most important links between political regimes and currency crises. Some theories focus on how regimes alter the incentives of rulers. Other theories argue that regimes matter primarily because they influence private investors’ expectations. These are, of course, empirical questions. The analyses that follow first evaluate which types of political regimes are most at risk of currency crises. We then explore which mechanisms best account for why some regimes do better than others in this regard.
III. Data & Methods

In order to evaluate the relationship between political regimes and currency crises, we constructed a time-series cross-sectional dataset that includes annual data for 178 countries over the period of 1973-2009. Our sample period begins in 1973, the beginning of the “post-Bretton Woods” international monetary system, which is characterized by flexible exchange rates, rising international capital mobility, and relatively frequent currency crises. The sample period ends in 2009 because this is the most recent year with data available on all the major variables of interest.

The dependent variable in our models is the presence or absence of a currency crisis in a “country-year.” We define currency crises based upon changes in a country’s actual foreign exchange rate. We adopt Frankel and Rose’s (1996) widely used definition of currency crisis, which is an annual depreciation of the exchange rate that is greater than 25% if that depreciation is also at least a 10% increase in the rate of depreciation from the previous year. The importance of the first part of the definition, a 25% devaluation, is straightforward. At the same time, it is also important to exclude cases where devaluations have not increased in size to avoid identifying countries with crawling peg exchange rate regimes as experiencing persistent currency crises.

Political regime type is our main independent variable of interest. We focus on Cheibub, Gandhi, and Vreeland’s (2010) Democracy-Dictatorship dataset, which classifies political regimes into four main categories: democratic, monarchic, military, and civilian dictatorships. Cheibub et al. classify a regime as monarchic if the effective head of government bears the title of king and the king has a hereditary successor and/or predecessor. Importantly, their definition excludes constitutional monarchies, such as the
United Kingdom, where the monarch is not the effective head of government, and father-son successions as in Syria and North Korea (Gandhi, 2008: 29). According to this classification, seventeen countries were monarchies at some point in our sample window, making monarchies 8% of the observations in the dataset. Cheibub et al. classify countries as democratic if each of the following conditions is fulfilled: the chief executive is either selected through direct elections or an elected legislature; the legislature is elected; more than one party competes in elections; and power has alternated in a manner consistent with the rule of law. Military regimes are defined as regimes that are neither democratic nor monarchic (as defined above) and in which the effective head of state is a current or past member of the armed forces, such as General Suharto’s Indonesia or Chile under Pinochet. The remaining regimes are classified as civilian dictatorships, a category that consists primarily of single-party regimes (e.g. China) and “electoral authoritarian” regimes such as Malaysia and Zimbabwe that employ highly compromised elections.

Table 1, Row 4, provides a preliminary look at the frequency of currency crises in each regime category. Between 1973 and 2010, a currency crisis took place in about 7% of all country-years for democracies. That percentage is slightly larger for civilian and military dictatorships (9 and 11%, respectively). In contrast, monarchies experienced currency crises in less than 2% of all observations and less than a quarter as often as democracies. Thus, monarchical regimes appear to be the regime that is most successful at avoiding currency crises. These simple summary statistics provide a useful first cut at the data, but it is essential to control for potential confounders.

The next section uses a variety of multivariate techniques to provide a more robust assessment of the relationship between political regimes and currency crises.
Since our dependent variable is binary, we use a probit model. Our statistical models include variables for each of the three types of dictatorship and treat democracies as our baseline category. The models include one-year lags of the dependent variable because turmoil in currency markets often persists from one year to the next. To mitigate the potential for simultaneity or reverse causality bias, the explanatory variables are always lagged by one year. We use robust standard errors clustered by country because observations within individual countries may not be independent.

We begin with very simple model specifications. Our initial models control only for variables that are largely out of policymakers’ control (except, perhaps, over the very long run). Doing so allows us to estimate the net effect of political regimes on currency crises through a variety of potential channels. After establishing which regimes are most or least crisis-prone, we later add various “post-treatment variables” to the model, such as macroeconomic policies, to shed light on which factors are responsible for the association between regimes and crises.

Our baseline model includes real per capita GDP (in thousands of dollars) and real GDP (in billions of dollars) since we expect richer and larger economies to have a lower risk of currency crisis. We also control for the total number of currency crises in other countries in the previous year to capture “contagion” effects. Finally, we include a country’s trade-to-GDP ratio. Some posit that trade openness increases a country’s susceptibility to contagious currency crises whereas others maintain that trade openness reduces the risk of currency crises because it helps countries retain access to international capital markets (see, e.g., Glick & Rose, 1999; Cavallo & Frankel, 2008).
IV. Main Results

Table 2 presents our main results. The results confirm that there is a strong statistical association between political regimes and currency crises. The coefficient for monarchies is negative and statistically significant in Model 1. The military and civilian dictatorship variables return positive coefficients, though they are much smaller in absolute value than the monarchy variable, and they are not statistically significant. Model 1 also reveals that the risk of currency crisis increases when countries had a crisis in the previous year; when many other countries undergo crises; and when the national economy is smaller and less dependent on international trade.

Figure 1 presents the marginal effects of the three regime variables when holding the other variables at their means (medians for non-continuous variables). Monarchies reduce the predicted probability of crisis by three percentage points, from 4.6% in democracies to 1.6% in monarchies. When holding these other factors constant, the risk of a currency crisis is almost three times higher under democratic rule than under monarchic rule. Relative to democracies, civilian and military dictatorships are estimated to increase the probability of a crisis by 0.9 and 0.3 percentage points, respectively; neither of these effects is statistically significant. On the other hand, the probability of a currency crisis is significantly greater in military and civilian dictatorships than in monarchies, which implies that not all autocracies are equally effective at avoiding currency crises. The evidence indicates that monarchies are far less likely to experience crises than all other political regimes, but there appears to be surprisingly little difference in crisis-risk between democracies, military, and civilian dictatorships.
Further analyses reveal that the negative relationship between monarchies and currency crises is highly robust. Our first set of robustness checks examined whether the results are sensitive to different measures of the main independent and dependent variables. Monarchic regimes continue to have negative and statistically significant coefficients when we use Reinhart and Rogoff’s (2009) definition of a currency crisis (any depreciation that is greater than 25%) or Laeven and Valencia’s (2008) criterion for a currency crisis (a depreciation in excess of 30% that is also an increase in the rate of depreciation by at least 10%). We also obtained similar results using three alternative classifications of political regimes: Hadenius and Teorell’s (2007) typology, which distinguishes between single-party and multi-party dictatorships; Geddes et al.’s (2012) dataset, which treats personalist dictatorships as a fifth regime type; and Kailitz’s (2013) seven-fold classification of regimes. Regardless of the classification used, monarchies are the only political regime that returns a statistically significant coefficient.

The main results were also similar when alternative estimation strategies and samples were employed. Since currency crises are a relatively uncommon occurrence, we estimated the model using King and Zeng’s (2001) rare-events logistic regression. We tried modeling temporal interdependencies by including a natural cubic spline and by adding a cubic polynomial of the time since the last crisis (Beck et al., 1998; Carter & Signorino, 2010). We also tried excluding the 23 advanced industrial democracies from the sample and excluding countries that do not have their own separate legal tender. Finally, we used multiple imputation techniques to generate complete datasets of 7166 observations from 204 countries. This is potentially important because the amount of
missing data varies across political regimes (Hollyer et al., 2011). In all cases, the results were substantively similar.

While our results suggest that monarchies tend to out-perform democracies when it comes to currency crises, committed democrats might argue that this reflects the peculiar nature of certain democracies in our dataset. The Third Wave of democratization in the 1970s and 80s and the subsequent collapse of the Soviet Union created a number of new democracies during our sample period. Haggard and Kaufman (1989: 59-60; 1995: 151-152) argue that leaders of new democracies face especially strong pressures for expansionary policies and their time horizons are particularly short due to the uncertainties associated with political transition. Monarchies might therefore just differ in their crisis risk from transitional democracies but not more stable and consolidated democracies. To test this hypothesis, Model 2 adds Haggard and Kaufman’s (1989) measure of fledgling democracies—countries that have been democratic four or less years—to our basic model. The coefficient for this variable is positive and statistically significant, which suggests that young democracies are indeed more likely to experience a currency crisis than older ones. More important for our purposes, the coefficient for monarchy remains negative and statistically significant, which indicates that crises are less likely in monarchies than in established democracies. Holding other variables at their means/medians, Model 2 estimates the probability of crisis to be 4.3% for new democracies, 2.5% for old democracies, and 0.99% for monarchies. This suggests that monarchies are less vulnerable to currency crises than both types of democracies. Moreover, the differences in crisis-risk between young and old democracies provides further support for the hypothesis that regimes that have short
time horizons and are highly exposed to popular pressures are more vulnerable to currency crises.

Next, we addressed the possibility that it is not monarchy itself but other factors associated with monarchy that lower the likelihood of currency crises. Since many monarchies are oil producers, one might worry that it is really resource wealth that reduces the risk of currency crisis. Another possibility is that monarchies are capturing some dynamic of the Middle East and North Africa, and that there may be some important omitted regional effect. Third, religion may be important. Many monarchies have large Muslim populations and one might wonder if Islam, perhaps because of the prohibition on interest-bearing assets, accounts for their low crisis-risk. Finally, because many monarchies are former British colonies we examine whether their inherited British legal systems contribute to stronger economic performance (La Porta et al., 1999). To address these concerns, the third model in Table 2 includes four variables that control for these alternative explanations: a dummy for Middle Eastern and North African countries; oil and gas production per capita (logged); the percentage of the population that is Muslim; and a dummy denoting whether countries have a British legal system.¹⁵ None of these additional controls is statistically significant. Moreover, monarchy remains negative and statistically significant after controlling for the effects of these variables.

Given that monarchies are peculiar political regimes, a host of additional control variables were also considered. We estimated models that controlled for additional economic factors, including the degree of “economic freedom”; economic globalization; trade policy liberalization; financial openness; banking crises; and economic inequality. We also ran models that controlled for the quality of political institutions. To do so, we
used some encompassing measures of “government effectiveness” and the “quality of government,” as well as variables that measure particular components of institutional quality, such as judicial independence and the presence of constitutional courts. Variables measuring workers’ rights, ethnic fractionalization, and education were also considered in order to control for the quality of a nation’s social institutions. As the appendix shows, none of these additional variables altered the relationship between political regimes and currency crises.

We further examined whether oil wealth and monarchies have an interactive effect on currency crises. Figure 2 presents the main results from an interactive specification, where we added multiplicative interaction terms between oil production and each authoritarian regime type to the basic model. This figure shows that, irrespective of their oil wealth, monarchies are less susceptible to currency crises than all other political regimes (though the negative effect of monarchy falls slightly short of statistical significance, with p = 0.14, when there is zero oil). At the same time, the interaction reveals that oil appears to help monarchies further insulate themselves from the risk of currency crises—that is, monarchies with oil wealth have extremely low risks of crisis. For example, the petroleum-rich monarchies of Brunei, Kuwait, and Saudi Arabia did not experience a single currency crisis in the sample period. By contrast, other regimes receive no such benefits from oil, and may even become more prone to crises as their oil wealth increases. Angola, Mexico, Nigeria, Indonesia, and Venezuela are among the many non-monarchies with substantial oil wealth that have experienced numerous currency crises in recent decades. Thus, we can be confident that oil does not
alter the relationship between political regimes and currency crises, but it does magnify these differences.

Next, to more fully address the concern that there might be some other unmeasured factors that coincide with monarchies that are responsible for their low crisis risk, Model 4 adds a fixed effect for each unit to the previous specification.\textsuperscript{16} The fixed-effect estimator has one limitation in this application: since it estimates the effect of political regime type on crisis using only over-time variation, it relies solely on the small number of monarchies who experienced a regime change in the sample period. In spite of this limitation, it is potentially useful since it controls for all constant but unmeasured sources of variation in countries’ crisis-risk. Model 4 shows that monarchy is negative and statistically significant in the fixed-effects specification. This reflects the fact that several countries experienced far fewer currency crises when they were monarchies than when they were other regime types. Iran is a particularly clear example: the country had only one currency crisis during the monarchy’s 27-year reign between 1953 and 1979, but it experienced 7 crises between 1980 and 2010—an average of more than one in every five years.

As an additional robustness check, we used matching techniques to compare the probability of currency crises in monarchic and non-monarchic regimes. Here, we used a nearest-neighbor matching method to compile a dataset of 572 observations, which consists of 286 monarchic country-years and the 286 non-monarchies that are most similar to the monarchic observations on the basis of the covariates used in Model 3.\textsuperscript{17} Although the matching process provided reasonably good covariate balance, we use parametric estimation on the matched dataset in order to control for any remaining
differences between the treatment and control groups (Ho et al., 2007). Model 5 presents our probit model based upon this sample of 572 matched observations, which reveal that the monarchy variable is negative and statistically significant. Based on the estimates from Model 5, the average marginal effect of monarchy is -0.05, an effect that is similar in magnitude to those obtained in the previous models.

Finally, we used instrumental variables (IV) estimation to address the possibility that monarchy is endogenous to currency crises. As an instrument, we use a spatial lag variable that captures the prevalence of monarchic regimes in a country’s neighborhood. Specifically, our instrument is a weighted average of the monarchy variable for all other countries in the world, where the weight given for foreign countries is based on their geographic distance to the home country. When a country’s neighbors are monarchies, retaining monarchic rule at home should be more feasible and less costly, and therefore more likely. Consistent with this intuition, the spatial lag variable is strongly correlated with monarchic regimes in our dataset. Moreover, besides its influence on a country’s domestic regime type, there are no other mechanisms through which the spatial lag of monarchy is likely to influence currency crises. Thus, the spatial lag of monarchy should satisfy the exclusion restriction. The final column of Table 2 presents the results of an IV probit model. The estimated effect of monarchy is larger in the IV probit than in the simple probit model, and it is statistically significant. Predictably, however, the standard error and p-value for this variable are larger in the IV model. One caveat regarding the IV probit is that the Wald test of exogeneity suggests that monarchy is not, in fact, endogenous to currency crises. While the IV estimates provide further evidence that
monarchic regimes reduce the likelihood of a currency crisis, the estimates from the simple probit model in column 1 are probably more reliable than the IV estimates.

Taken together, the results show that military and civilian dictatorships are not significantly better or worse than democracies at avoiding currency rises. Monarchies, by contrast, are the political regime that is least likely to suffer from a currency crisis. These results hold across a variety of measures, model specifications, and estimation strategies. Holding constant some exogenous features of national and global economies, monarchies have a substantially lower risk of currency crisis than other political systems.

V. The Sources of the Monarchic Advantage

Having found robust evidence that currency crises are less likely in monarchies than in other regime types, our discussion now turns to why. Our theoretical discussion pointed to two different reasons why crises might be rare in monarchies. The first possibility is that monarchies face a lower risk of currency crisis than other regimes because they are better able to maintain the confidence of investors. In this argument, monarchies stand out because leadership turnover is exceptionally rare. Since government turnover increases investor uncertainty, the absence of leadership turnover in monarchic regimes might reduce investor uncertainty and lower the likelihood of currency crises in turn (e.g. Leblang and Satyanath, 2006; 2008). A second argument suggests that the “monarchic advantage” has more to do with the incentives of political leaders to adopt prudent macroeconomic policies. According to this logic, monarchs are likely to avoid crisis-prone policies because of their longer time horizons and greater insulation from societal pressures. This section examines the degree to which leadership transitions and
macroeconomic policies account for the low frequency of currency crises in monarchic regimes. The results suggest that both factors are important, though the latter has a larger effect.

In order to evaluate the sources of the monarchic advantage, we add measures of leadership turnover and macroeconomic policies to our models. To assess whether an absence of political turnover is responsible for the low risk of crisis in monarchies, we include a dummy variable that measures whether there was a change in the effective ruler in the previous year. We address the role of macroeconomic policies by controlling for the three policies that have received the most attention in the economic literature on currency crises: overvalued exchange rates, low holdings of foreign reserves, and inflationary monetary policies. Exchange rate overvaluation is measured, following Rodrik (2008), as the equilibrium real exchange rate, which is estimated as the real exchange rate that is predicted based upon a country’s (logged) GDP per capita and a set of year dummies, minus the actual real exchange rate. The ratio of foreign reserves to GDP measures the size of a country’s reserve holdings. The logged inflation rate is used as an indicator of loose and inflationary monetary policies. Although governments do not have perfect control over their inflation rates, government policies are a leading determinant of whether inflation is at a low rate, consistent with currency stability, or if inflation is high enough that problems in the foreign exchange market become likely. We focus on inflation because it has a much stronger relationship with currency crises than alternative indicators of this concept, such as domestic credit growth and money supply growth.
Table 1 presents summary statistics for these four “mediator variables” across each type of political regime. As discussed earlier, leadership turnover is far lower in monarchies than other regimes. Strikingly, the data also reveal that monarchies maintain noticeably larger stockpiles of foreign reserves, have less overvalued exchange rates, and have lower inflation rates than each of the other major types of political regimes. Interestingly, oil wealth does not appear to account for the strong outcomes in monarchies: both oil-rich and non-oil-rich monarchies perform strongly on these three policy issues. Since leadership turnover and macroeconomic policies differ considerably across political regimes, both factors are strong candidates for explaining why currency crises are relatively rare in monarchical regimes.

The models in Table 3 add these mediator variables to the baseline model in order to evaluate which, if any, of these factors are responsible for the monarchical advantage. To ensure that the results are comparable, all seven models in Table 3 focus on an identical sample of 4413 observations. The first model in Table 3 (Model 7) is our benchmark specification that does not include any of these mediating variables. The coefficient on the monarchy variable from this model provides an indication of the “total effect” of monarchy—that is, the effect of monarchy on the probability of currency crisis through all possible mechanisms. Models 8 through 11, include each of the four mediating variables individually. In Model 12, all three measures of macroeconomic fundamentals are added. The final model includes all four mediator variables. In Models 8-13, the coefficient for the monarchy variable provides an indication of the “direct effect” of monarchy: the effect of monarchy that is not accounted for by the mediator variables in that model. The difference between the coefficient for the monarchy variable
in Model 6 and that coefficient in the remaining models provides an indication of the size of the “indirect effect” of monarchy, the effect that is accounted for by the mediator variable(s) (see Breen et al., 2013). If one finds that political regimes are no longer statistically significant after controlling for these mediating variables, this does not imply that political regimes are unimportant; rather, it suggests that regimes exert their influence predominantly via the included mediator variables (see Leblang and Satyanath, 2006: 247).

On the basis of each model in Table 3, we decomposed the effect of monarchy into three separate components: the total effect, indirect effect, and direct effect. Table 4 presents the results of this decomposition exercise. These effects were calculated using Karlson et al.’s (2012) method.25

The results of Model 7, which does not include any mediator variables, are nearly identical to the earlier model, though the coefficient for monarchy is slightly smaller using this truncated sample. The average marginal effect of monarchy is -0.047 in Model 7. Model 8 controls for leadership turnover. Consistent with Leblang and Satyanath (2006; 2008), this variable is positive and statistically significant. It is also substantively significant: holding constant the other variables in the model, the probability of a currency crisis is 1.6% higher on average in a year following a leadership change. In Model 8, the estimated effect of monarchy is smaller, albeit only slightly, compared to the previous model. Table 4 shows that the indirect effect of monarchy—the portion attributable to leader turnover—is statistically significant. However, the indirect effect is only a fraction of the size of the also-significant direct effect of monarchy—i.e., the effect of monarchy on crisis through channels other than leadership turnover. These
results show that a lack of leadership change accounts for a small but statistically significant portion of the negative relationship between monarchies and currency crises.

Consistent with previous studies, overvalued exchange rates correlate positively with currency crises, as shown in Model 9. However, controlling for exchange rate overvaluation has almost no effect on the strength of the relationship between monarchy and currency crisis. Table 4 shows that the indirect effect of overvaluation is not statistically significant. This suggests that exchange rate policy does not account for much of the negative effect of monarchies on currency crises.

High foreign reserve holdings appear to be a much more important part of the reason why monarchies have a low risk of currency crisis. Model 10 confirms that large holdings of foreign reserves lower the risk of currency crisis. The inclusion of foreign reserve holdings in the model decreases the coefficient for monarchy and renders this variable statistically insignificant. Table 4 confirms that foreign reserves are an important mediating variable: the direct effect of monarchy is not statistically significant but the indirect effect is statistically significant.

In Model 11, we find that inflation increases the risk of currency crises. When inflation rates are held constant, the effect of monarchies on currency crises is smaller, and no longer statistically significant. The estimated direct effect of monarchy is not statistically significant but the indirect effect via inflation is significant. Low rates of inflation go a substantial way to explaining why monarchies experience fewer currency crises than other political regimes.

Monarchies have an even smaller effect in Model 12, which controls for all three macroeconomic variables. When holding all three of these macroeconomic variables
constant, monarchies are estimated to reduce the probability of a currency crisis by only 2.1 percentage points on average—less than half the size of the estimated effect from the original model—and this effect is not statistically significant. Table 4 shows that these three macroeconomic variables account for just under half of the total effect of monarchy on currency crises. When controlling for all four mediating variables, as in Model 13, the effect of monarchy shrinks further. The final row of Table 4 reveals that the indirect effect of monarchy through these four variables accounts for over half of the total effect, and the remaining direct effect fails to attain statistical significance.

Overall, these analyses indicate that low government turnover and strong macroeconomic fundamentals help explain the infrequency of currency crises in monarchic regimes. However, government turnover is less important than macroeconomic policies, especially foreign reserves and inflation. Prudent macroeconomic policies play a large, perhaps even dominant, role in explaining why monarchies experience fewer currency crises than other political regime types.

VI. Conclusions

This paper examined whether and how political regimes influence the risk of currency crises. There are compelling reasons to think that some political systems are more crisis-prone than others, and yet considerable disagreement remains about which regimes face the highest and lowest risk of currency crisis. Somewhat surprisingly, we find that currency crises are no more or less likely in democracies than in civilian or military dictatorships. However, one political regime stands alone for its superior ability to prevent currency crises: monarchies. Our data analyses uncovered a monarchic
advantage—that is, a robust negative correlation between monarchic regimes and the likelihood of currency crises. The results also demonstrated that a major reason why currency crises are exceedingly rare in monarchies is that this regime type adopts unusually prudent monetary and foreign reserve policies.

These findings have a number of important implications for the study of political economy. One is that it demonstrates how political regimes have an important influence on global financial stability. Regime type helps explain why some countries, like Mexico and Turkey, habitually experience currency crises while other countries, such as Morocco and Saudi Arabia, rarely do. Moreover, scholars of political economy have long recognized that political regimes matter, but previous research has focused almost exclusively on the Manichaean world of democracy versus dictatorship. Our analyses suggest that the differences within the authoritarian world can be just as striking for the global political economy. We hope that our findings encourage political economists to pay more attention to the ways in which authoritarian regimes differ.

A second implication is that monarchies may not be the poor economic stewards that they are often assumed to be. While monarchs may have done a poor job at managing public finances in the early modern era, as North and Weingast (1989) famously argue, our research suggests that they have been exceptionally skilled in preventing currency crises in recent decades. Our findings also complement a number of recent studies that have documented different dimensions of the monarchic advantage, including their strong protection of property rights, low levels of corruption, and well-developed financial systems (Menaldo, 2012; Knutsen & Fjelde, 2013). To be sure, there is little reason to think that a monarchic advantage carries over to all issue-areas and time
periods or that political regimes should be crowning sovereigns anytime soon. However, one fruitful direction for future research would be to examine how monar chies perform across other types of policy arenas and historical contexts.

Another implication of this study is that macroeconomic fundamentals represent an important mechanism through which political regimes influence the risk of currency crises. Leblang and Satyanath (2006: 247) suggest that macroeconomic imbalances are an “obvious way” that institutions can influence the risk of currency crises. While this may be the case, the literature has largely overlooked this supposedly obvious mechanism. Most research on currency crises has focused on how institutions shape investors’ expectations (see, e.g., Block, 2003; Leblang, 2002; Leblang & Bernhard, 2006; Leblang & Satyanath, 2006), or how governments respond after speculators have already put tremendous pressure on the currency (e.g. MacIntyre, 2001; Sattler and Walter, 2010; Walter, 2013; Walter and Willett, 2012). Our results demonstrate that macroeconomic fundamentals are another important mechanism through which political institutions shape and sharpen the risk of financial crises.

One final implication from this study is the inescapable influence of domestic politics upon financial stability. No explanation of currency crises is complete without reference to politics and political incentives. Perverse political incentives bear much of the responsibility for why the global economy has witnessed so many financial crises over the last generation.
**Table 1: Summary Statistics for Four Political Regimes**

<table>
<thead>
<tr>
<th></th>
<th>All Countries</th>
<th>Democracy</th>
<th>Civilian Dictatorship</th>
<th>Military Dictatorship</th>
<th>Monarchy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Checks &amp; Balances</strong></td>
<td>2.51</td>
<td>3.76</td>
<td>1.65</td>
<td>1.31</td>
<td>1.14</td>
</tr>
<tr>
<td></td>
<td>[2.47, 2.55]</td>
<td>[3.69, 3.82]</td>
<td>[1.59, 1.70]</td>
<td>[1.26, 1.35]</td>
<td>[1.08, 1.19]</td>
</tr>
<tr>
<td></td>
<td>n = 5623</td>
<td>n = 2364</td>
<td>n = 1362</td>
<td>n = 1026</td>
<td>n = 422</td>
</tr>
<tr>
<td><strong>Fraction Reported</strong></td>
<td>0.78</td>
<td>0.85</td>
<td>0.72</td>
<td>0.79</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>[0.78, 0.79]</td>
<td>[0.84, 0.85]</td>
<td>[0.71, 0.74]</td>
<td>[0.77, 0.80]</td>
<td>[0.66, 0.70]</td>
</tr>
<tr>
<td></td>
<td>n = 5783</td>
<td>n = 2633</td>
<td>n = 1561</td>
<td>n = 1061</td>
<td>n = 473</td>
</tr>
<tr>
<td><strong>Leadership Change</strong></td>
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<td>0.27</td>
<td>0.10</td>
<td>0.11</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>[0.17, 0.19]</td>
<td>[0.25, 0.29]</td>
<td>[0.09, 0.12]</td>
<td>[0.09, 0.13]</td>
<td>[0.02, 0.05]</td>
</tr>
<tr>
<td></td>
<td>n = 6051</td>
<td>n = 2846</td>
<td>n = 1600</td>
<td>n = 1120</td>
<td>n = 485</td>
</tr>
<tr>
<td><strong>Currency Crisis</strong></td>
<td>0.07</td>
<td>0.07</td>
<td>0.09</td>
<td>0.11</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>[0.06, 0.08]</td>
<td>[0.06, 0.08]</td>
<td>[0.08, 0.10]</td>
<td>[0.09, 0.13]</td>
<td>[0.01, 0.03]</td>
</tr>
<tr>
<td></td>
<td>n = 6654</td>
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<td>n = 1568</td>
<td>n = 1084</td>
<td>n = 485</td>
</tr>
<tr>
<td><strong>Reserves/GDP</strong></td>
<td>0.15</td>
<td>0.12</td>
<td>0.15</td>
<td>0.11</td>
<td>0.20</td>
</tr>
<tr>
<td></td>
<td>[0.14, 0.15]</td>
<td>[0.11, 0.12]</td>
<td>[0.14, 0.16]</td>
<td>[0.09, 0.12]</td>
<td>[0.18, 0.22]</td>
</tr>
<tr>
<td></td>
<td>n = 5521</td>
<td>n = 2598</td>
<td>n = 1122</td>
<td>n = 958</td>
<td>n = 384</td>
</tr>
<tr>
<td><strong>Overvaluation</strong></td>
<td>0.00</td>
<td>0.01</td>
<td>-0.02</td>
<td>0.03</td>
<td>-0.12</td>
</tr>
<tr>
<td></td>
<td>[-0.01, 0.01]</td>
<td>[-0.001, 0.03]</td>
<td>[-0.05, 0.01]</td>
<td>[0.002, 0.06]</td>
<td>[-0.15, -0.08]</td>
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<tr>
<td></td>
<td>n = 6593</td>
<td>n = 2737</td>
<td>n = 1585</td>
<td>n = 1071</td>
<td>n = 433</td>
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<td><strong>Inflation</strong></td>
<td>34.93</td>
<td>32.41</td>
<td>48.13</td>
<td>54.17</td>
<td>6.42</td>
</tr>
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<td></td>
<td>[23.66, 46.20]</td>
<td>[20.41, 44.42]</td>
<td>[28.51, 67.75]</td>
<td>[0.40, 107.93]</td>
<td>[5.70, 7.04]</td>
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<tr>
<td></td>
<td>n = 5301</td>
<td>n = 2504</td>
<td>n = 1001</td>
<td>n = 887</td>
<td>n = 404</td>
</tr>
</tbody>
</table>

**Note:** Cell entries include the mean, 95% confidence interval of the mean, and sample size, for each political regime type. Our sample includes all countries with available data between 1973 and 2010. Cheibub et al.’s (2010) dataset was used to code political regimes and construct the indicator of leadership turnover. Checks and Balances is based upon Beck et al. (2001). Fraction Reported is from Hollyer et al. (2011), and refers to the proportion of economic variables for that country that are available in the World Bank’s Development Indicators database. Currency crisis was constructed by the authors following the definition of Frankel and Rose (1996), using data from Heston, Summers, and Aten (2012). Reserves/GDP is defined as central bank foreign reserves divided by GDP (Source: World Bank 2012). Overvaluation indicates the degree of real exchange rate over/undervaluation, and is constructed by the authors following the approach of Rodrik (2008) using data from Heston, Summers, and Aten (2012). Inflation is the percentage change in the consumer price index (Source: World Bank 2012).
Table 2: The Relationship Between Political Regimes on Currency Crises

<table>
<thead>
<tr>
<th></th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
<th>(5)</th>
<th>(6)</th>
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<tr>
<td>Monarchy</td>
<td>-0.48***</td>
<td>-0.40**</td>
<td>-0.48**</td>
<td>-4.12***</td>
<td>-0.63**</td>
<td>-0.97*</td>
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<td></td>
<td>[0.17]</td>
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<td>[0.18]</td>
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<td>Civilian Dictatorship</td>
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<td>0.02</td>
<td>-0.15</td>
<td>0.019</td>
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<tr>
<td></td>
<td>[0.09]</td>
<td>[0.111]</td>
<td>[0.10]</td>
<td>[0.17]</td>
<td></td>
<td>[0.11]</td>
</tr>
<tr>
<td>Military Dictatorship</td>
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<td>0.13</td>
<td>-0.02</td>
<td>-0.10</td>
<td>-0.04</td>
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<tr>
<td></td>
<td>[0.08]</td>
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<tr>
<td>Lagged Currency Crisis</td>
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<td>0.62***</td>
<td>0.61***</td>
<td>0.21**</td>
<td>0.87***</td>
<td>0.61***</td>
</tr>
<tr>
<td></td>
<td>[0.09]</td>
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<td>[0.08]</td>
<td>[0.09]</td>
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</tr>
<tr>
<td>GDP Per Capita</td>
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<td>-0.01</td>
<td>-0.02*</td>
<td>-0.11***</td>
<td>-0.04</td>
<td>-0.01</td>
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<td>[0.008]</td>
<td>[0.01]</td>
<td>[0.03]</td>
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<td>Real GDP</td>
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<td>-0.0004***</td>
<td>-0.004**</td>
<td>0.00004</td>
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<td>-0.0004**</td>
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<td>Contagion</td>
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<td>0.02***</td>
<td>0.02**</td>
<td>0.02***</td>
<td>0.2</td>
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<td>[0.003]</td>
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<tr>
<td>Trade/GDP</td>
<td>-0.01***</td>
<td>-0.01***</td>
<td>-0.01***</td>
<td>-0.01*</td>
<td>-0.01***</td>
<td>-0.01***</td>
</tr>
<tr>
<td></td>
<td>[0.001]</td>
<td>[0.001]</td>
<td>[0.001]</td>
<td>[0.003]</td>
<td>[0.004]</td>
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</tr>
<tr>
<td>New Democracy</td>
<td>0.23*</td>
<td></td>
<td></td>
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<td>Oil Per Capita</td>
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<td>-0.01</td>
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<tr>
<td></td>
<td>[0.02]</td>
<td>[0.06]</td>
<td>[0.05]</td>
<td></td>
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<tr>
<td>Muslim Population</td>
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<td>-0.004</td>
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Note: Democratic regimes are the omitted regime category. Clustered standard errors are in parentheses. *p< .1 **p< .05 ***p< .01.
### Table 3: Leader Turnover, Macroeconomic Fundamentals, and Currency Crises

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Note: Democratic regimes are the omitted regime category. Clustered standard errors are in parentheses. *p< .1  **p< .05  ***p< .01.
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Note: Cell entries are the estimated effects of monarchy on the probability of currency crises. Estimates and significance levels were calculated using Karlson et al.’s (2012) method. Rows 1 through 7 in this Table correspond to models 8 through 13, respectively. *p< .1  **p< .05  ***p< .01.
Figure 1: Marginal Effects

Note: Squares indicate the difference in the predicted probability of currency crisis compared to democratic regimes. Lines indicate 95% confidence intervals of these first-differences.
Figure 2: Oil Wealth, Political Regimes and Currency Crises
References


World Bank. 2012. World Development Indicators online database.

Wright, J. 2008a. To invest or insure? *Comparative Political Studies* 41, 971-1000.
These figures are calculated from the authors’ dataset.

Although a few studies have examined the relationship between political democracy and currency crises, there is no consensus on the matter. Block (2003) finds that democracy lowers the risk of currency crisis. Leblang and Satyanath (2006) find the opposite.

This includes regime survival (Geddes, 1999), international conflict (Weeks, 2008), trade policy (Hankla and Kuthy, 2013), monetary policy (Steinberg and Malhotra, 2014), and the protection of property rights (Knutsen and Fjelde, 2013).

While we find Cheibub et al.’s (2010) fourfold regime typology most useful, our empirical analyses also consider the alternative regime classifications of Geddes (1999), Hadenius & Teorell (2007), and Kailitz (2013).

Frankel & Saravelos (2012) summarize 83 studies and find that foreign reserve levels and real exchange rate overvaluation are the two most important determinants of financial crises. They also report that many studies find that domestic credit growth and inflation, two indicators of inflationary monetary policies, are significant predictors of financial crises. Earlier surveys also highlight foreign reserves, overvalued exchange rates, and inflationary monetary policies as key determinants of currency crises (e.g. Kaminsky et al., 1998; Hawkins & Klau, 2000). Perhaps surprisingly, budget deficits do not appear to have much impact on the risk of a currency crisis (see Frankel & Saravelos, 2012; Frankel & Rose, 1996; Kaminsky & Reinhart, 1999).
Others operationalize currency crises more broadly to include speculative attacks on the currency even if no devaluation occurs. These “exchange market pressure” indices, however, are less consistent with our objective, which is to understand exchange rate depreciations, and can only be constructed for relatively small numbers of countries.

Data on exchange rates are obtained from Heston et al. (2012).

These monarchies are Afghanistan, Bahrain, Bhutan, Brunei, Ethiopia, Iran, Jordan, Kuwait, Morocco, Nepal, Oman, Qatar, Samoa, Saudi Arabia, Swaziland, Tonga, and United Arab Emirates.

Clarify software (Tomz et al., 2003) was used to generate the figure.

The 95% confidence interval for the difference between monarchies and military dictatorships is -0.01 to -0.05. The equivalent confidence interval for the difference between monarchies and civilian dictatorships is -0.02 to -0.06.

These results are not included for reasons of space, but are available in a supplementary appendix that will be placed online upon publication.

In the appendix, we additionally examine an altogether different approach to political regimes: continuous measures of democracy. Five such variables were utilized, but none was statistically significant. Moreover, in three cases, democracy was positively correlated with the probability of a currency crisis, but the correlation was negative for two of the measures. These weak results provide some evidence that our categorical approach to political regimes does a better job in accounting for variation in the risk of a currency crisis than the more traditional, continuous, approach to regime type.

Multiple imputation was conducted with Amelia II (Honaker et al., 2011).
The difference in crisis-probability between monarchies and new democracies is statistically significant. The difference between new democracies and either civilian or military dictatorships is not statistically significant.

Oil data are from Ross (2012). Data on Muslim share of population and legal origin are from La Porta et al. (1999). We also included oil per capita and its square in the model to test for a quadratic relationship. The oil variables are not statistically significant in this specification, and they do not alter the effect of monarchy.

Several of the time-invariant explanatory variables are dropped due to perfect collinearity with the country fixed-effects. A random-effects probit model produces similar results.

Matching was conducted using MatchIt (Ho et al., 2007).

The appendix presents more information about covariate balance before and after matching.

More formally, Spatial Lag of Monarchy, is defined as $\sum Monarchy_{jt} \times \frac{Distance_{ij}}{\sum Distance_{ij}}$, where Monarchy refers to whether country j is a monarchy in year t, and Distance equals 1 divided by the geographic distance between the capitals of countries i and j.

Several studies show that the likelihood of democracy is influenced by the degree of democracy in neighboring countries (Brinks and Coppedge, 2006; Gleditsch and Ward, 2006; Wejnert, 2005).

The pairwise correlation between these two variables is 0.46 (p < 0.001). Furthermore, the t-statistic associated with the instrumental variable in the first-stage model is 4.0, which exceeds the standard benchmark for a strong instrument (see, e.g., Sovey and Green 2011: 199)
Heston et al.’s (2012) data were used to construct the real exchange rate index. Data on inflation and foreign reserves are from World Bank (2012). To preserve all observations, we recoded all countries with negative inflation rates as having zero inflation, and added one to all countries’ inflation rates prior to the log transformation.

The pairwise correlation between currency crisis and inflation ($r = 0.25$) is far stronger than the correlation between currency crisis and either domestic credit growth ($r = -0.003$) and money supply growth ($r = 0.05$).

We divided monarchies based upon their median level of oil production per capita. The average reserves-to-GDP ratio is 0.21 for monarchies below median oil wealth and 0.19 for those above the median. Inflation rates average 7.49 and 5.56 for these two sub-groups, respectively. Monarchies below the median of oil production per capita average 5% undervaluation of the real exchange rate while oil-rich monarchies average 17% undervalued, both of which are below the average for other political regimes.

Karlson et al.’s (2012) method is designed for mediation analysis with logit/probit models. An additional advantage of this method is its ability to accommodate multiple mediating variables in a single model.

Hankla and Kuthy (2013), Steinberg and Malhotra (2014) and Wright (2008a) are notable exceptions.