

Political Credit Cycles – Myth or Reality?*

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Abstract

Just like a monetary or fiscal policy-induced political business cycle, policymakers seeking popular support may be inclined to support or even manufacture rapid credit expansion prior to elections. While recent research lends support for this “political credit cycles” hypothesis in single-country case studies, rigorous cross-country empirical evidence on this question is largely absent. This raises the question whether political credit cycles are a myth or reality. In order to answer this question, we use a large panel data set for 137 countries from 1970 to 2008 and examine the relationship between election dates and credit cycles. Focusing on deviations of credit from its country specific trend to measure systemic and likely policy-induced credit market shifts, we provide systematic evidence in support of the existence of a “political credit cycle.” In order to isolate different mechanisms at play, we differentiate between bank lending to the private and the public sector, the advantage of which is to study electoral patterns in domestic credit markets in a more nuanced fashion. Our findings support the notion that financial openness and the level of financial development have large conditional impacts on the likelihood that political credit cycles occur: the marginal effect of elections on government credit from the banking and financial sector is *smaller* in financially open economies and the electoral effect on government borrowing is *greater* in economies with a low level of financial market development. Accounting for these factors, we show that when office-seeking incumbents run in scheduled elections, government borrowing from the domestic financial sector significantly increased in the election year, an effect that we label the ‘rob thy banks’ effect. Our results are robust to different model specifications. Showing that political credit cycles exist beyond single-country cases and further demonstrating that incumbents’ ability to manufacture credit cycles depends on the degree of financial openness, our work contributes to the literature on context-conditional political business cycles literature and opens new avenues for future research.

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1. Introduction

There is an extensive theoretical and empirical literature on political business cycles, yet scholarly work on this topic has focused almost entirely on macroeconomic outcomes such as output and inflation, or monetary and fiscal policies. Recently there has been a growing interest in testing whether a similar pattern of electoral cyclical manipulation holds for the behavior of financial market variables such as bank credit and stock prices (e.g. Cole 2009, Dinc 2005, Santiso 2013). Are “political credit cycles” merely a fashionable myth that has emerged in the academic and policy debate since the Global Financial Crisis or does it represent a new (politico-economic) reality?

A wealth of political economy literature suggests the latter. Given that credit and money play such an important role in enhancing consumption and economic well-being, it seems plausible that there are electoral gains to be made when politicians encourage or manufacture rapid credit expansion prior to elections.³ Despite a general recognition of this cyclical dynamic, we are nowhere near a consensus on the factors that cause it. Several authors argue that interest group pressures play a crucial role, as they can push financial supervisors toward weak enforcement of existing prudential regulations.⁴ While this approach is certainly plausible, it does not completely capture the wider impact of private credit growth on aggregate macroeconomic outcomes and its redistributive implications. For instance, politicians have an incentive to ease credit conditions for households to mitigate income inequality, and therefore adopting loose credit market policies can substitute for the need to redistribute fiscally, which is politically harder to do.⁵

Using a large panel data set, we extend recent single-country studies of the political credit cycle hypothesis (e.g. Cole, 2009; Khwaja and Mian 2005; Lavezzolo, 2013) and test whether there is a systematic pattern of credit dynamics around election dates. Second, we focus on financial account openness as one explanation for the emergence of political credit cycles.⁶ The theoretical link between financial account openness and the propensity of office-seeking politicians to engage in pre-electoral redistribution is however, rather ambiguous. A financially open economy could either enhance or weaken the presence of political credit cycles. On the one hand, financially open economies face constraints in the use of monetary policy (if exchange rates are fixed and/or the economy is relatively small) and fiscal policy (if exchange rates are flexible) for pre-electoral manipulation.⁷ Following this logic, the occurrence of political credit cycles should

³ See e.g. Broz (2013)’s study which finds that right wing governments are more inclined to adopt loose credit market policies before elections to reward their constituents with asset price appreciations.

⁴ Analyzing the root causes of the Asian financial crises, researchers note that financial supervisors allowed politically well-connected firms to escape financial regulations, such as violations of the limitations on short-term foreign-currency borrowing (Auerbach and Willett 2009; Bongini et al.2000; Haggard, 1999).

⁵ Addressing redistribution concerns is one factor that can enhance an incumbent’s electability. Several authors argue that rising income inequality combined with the lack of political will to use fiscal instruments for redistributive purposes has led to an increase in private borrowing (Rajan, 2010, Chinn and Frieden 2011, Ansell and Ahlquist, 2014). By generating credit booms as a substitute for fiscal redistribution, it would follow that this might be more likely to occur in the run up to elections.

⁶ Of course there are other explanations for the emergence of political credit cycles. For example, electoral cycles in interest rates and/or money supply could also generate political credit cycles through the credit multiplier channel. However, we focus on financial account openness because policy choices election-motivating spending policies have different effects in a closed versus a financially open economy.

⁷See e.g. Clark and Hallerberg 2000, and Willett, Chiu, and Walter 2014.

become less frequent in open economies. On the other hand, several authors argue that rather than accepting these policy constraints placed by mobile capital, governments might be inclined to use other means to create employment and redistribute wealth such as through non-traditional macroeconomic instruments that relax regulations and borrowing constraints in the credit market (Demertzis et al. 2004). If this hypothesis was valid, we would expect to see more frequent occurrences of political credit cycles in financially open economies, and also less frequent occurrences of electoral cycles in monetary and fiscal policy. In order to elaborate these two competing views, we test the extent to which financial openness affects the likelihood of incumbents to engage in political credit cycles.

Drawing on time-series and cross-sectional data from 137 countries in the time span between 1970 and 2008, we examine the relationship between election dates and credit market dynamics. Rather than relying on aggregate macroeconomic measures (e.g. credit as a percent of GDP), we propose a more fine grained approach in detecting political credit cycles. In order to capture credit market dynamics, we measure these as the deviation of the log of real credit variable from a country specific trend (i.e. Hodrick Prescott Filter).⁸ Our approach also differs from prior contributions in the literature insofar as we use three measures of lending: bank and non-bank lending to the private sector, and also government borrowing from the domestic financial system into our analysis. We differentiate between lending dynamics that specifically emerge in bank based financial markets (where bank lending is the main source of credit) and more developed financial systems, where lending from non-deposit taking institutions or shadow banking constitutes an additional source of private credit, e.g. the United States of America.

We find that private credit in general (both from bank and non-bank financial institutions) tend to be higher in election years. However, this effect critically depends on the level of financial market development and the degree of financial openness of an economy. In fact, our findings indicate that political credit cycles are more likely to occur in countries with an intermediate and high level of financial market development. Furthermore, political credit cycles are conditioned by the level of financial market openness, underscoring the importance of international financial investors for private and public credit market outcomes. Interestingly, our results also indicate that government borrowing from the private banking sector follows an electoral cycle. Controlling for economic and other political and institutional factors, we find that when office-seeking incumbents run in scheduled elections, government credit/borrowing from the banking sector tend to be significantly higher in the election year and political credit cycles in private credit become a myth. This finding is broadly in line with an extensive political economy literature on political budget cycles and likely underscores the importance of the interaction between the financial industry and incumbent governments (see, for instance, Calomiris and Haber, 2014). Our emphasis on the importance of electoral cycles in credit aggregates places this work within a wider research program that investigates the electoral consequences of economic policies and the incentives that office-seeking politicians face. By showing that political credit

⁸ The advantage of this procedure is that we can detect more nuanced shifts in credit dynamics that are independent of the state of the business cycle and thus are likely policy induced shifts that would be overlooked otherwise. For this purpose, we use three separate measures of credit; bank credit to the private sector that captures lending operations by deposit taking financial intermediaries, credit to the private sector that is the sum of lending operations by deposit taking and non-deposit taking financial intermediaries (e.g. pension funds), and net claims on the government that captures lending to the governmental bodies by the financial sector.

cycles exist beyond single-country studies and further demonstrating that incumbents' ability to engage in credit cycles waxes and wanes depending on the degree of financial openness, our work contributes to the literature on context-conditional political business cycles and offers one potential explanation for what causes these political credit cycles to appear.

This paper is organized in the following way. Section 2 reviews the background literature on political business cycles, and the application and extension of this literature to credit and financial markets. Section three explores our hypotheses of how financial account openness affects the likelihood of observing political credit cycles. Section 4 presents the data and empirical results, as well as sensitivity tests. Section 5 concludes.

2. Literature Review

Background: Electoral Cycles in Macroeconomic Outcomes and Policies

The academic literature on business cycle dynamics derives from the idea that macroeconomic outcomes — e.g. output, unemployment, inflation — move through peaks-and-troughs; a political business cycle (PBC) contends that this cyclical behavior of macroeconomic aggregates is centered around election dates and are therefore driven by the actions of office-seeking politicians. The classic argument is that when elections loom, incumbent governments have an incentive to artificially boost the economy to secure electoral support, all the while being fully aware that this might come at a cost of higher inflation in the future. Early versions of the PBC theory (e.g. Nordhaus 1975) describe the phenomenon as a game between opportunistic politicians and myopic voters. Voters re-elect politicians who can produce good macroeconomic outcomes *today*, and this prompts policymakers to adopt monetary and fiscal policies that would deliver favorable economic outcomes ahead of an election. Assuming that expectations of inflation are backward-looking and adjust slowly, “incumbents would find it optimal to induce an inflation-unemployment cycle corresponding to the length of his term, with a boom just before an election and a recession afterwards” (Drazen 2001, p.78). In other words, the trick is to manufacture an economic boom just before the election date, so that inflation and thus the costs of macroeconomic instability occur after the election (Laney and Willett 1983). In his study of developed economies, Tufté (1978) found that there are hikes in fiscal transfers (e.g. social security and veteran payments) and economic growth, as well as drops in unemployment prior to U.S. elections.

With the advent of the rational expectations revolution in economics, early PBC theory received a sharp critique. The counter-argument from “second-generation” PBC theorists (e.g. Alesina and Roubini 1992, Rogoff 1990) is that voters cannot easily be fooled and instead will punish governments that run fiscal deficits. In their contributions, empirical support for PBC theory 1.0 is weak or at best short-lived when tested over a larger sample of countries and longer time-periods (see e.g. Alt and Chrystal 1983, Alesina and Roubini 1992, Franzese 1999). The reason is because forward-looking voters will adjust their inflation expectations more quickly in response to monetary and fiscal expansions, such that inflation accelerates and undercuts any gains from the economic stimulus afforded by expansionary monetary and fiscal policies. This view relied, however on a strong assumption, as voters may not be uniformly rational. In fact, voters often lack the incentive to seek out reliable information (“rationally ignorant” in the public

choice vernacular, see e.g. Buchanan 1987) regarding the effects of certain policies. As such, there are gains to be made still by incumbent governments from electoral manipulation, yet we would be more likely to see electoral cycles in fiscal rather than monetary policy, given the increasing trend in adopting independent central banks.⁹ Another reason to be skeptical of the rational expectations' view of electoral cycles is that while voters may be more forward-looking than Nordhaus or Tufte originally assumed, even rational voters might vote for incumbents who run fiscal deficits, given that there is imperfect information (Rogoff 1990). Voters are not able to observe the ability of incumbent governments, and thus would have to substitute competence for macroeconomic outcomes, which is an observable outcome. As high pre-election output signals a high-ability incumbent, voters expect better economic performance after the election from the incumbent rather than from the challenger, whose true ability is even more unknown to the voters (Drazen 2008).

Political business and budget cycle research has expanded over the years, yet the empirical support remains mixed. In fact, researchers have detected rather "context-conditional" electoral cycles (Franzese 2002) and added more nuanced layers of analysis to the discussion. In the political economy literature, variations of political and institutional features have been incorporated into the analysis to illuminate when and under what circumstances political budget and business cycles are more likely to occur. Among such factors are: the age of democracy (e.g. Brender and Drazen 2005), the partisan character of the government or partisan business cycles (e.g. Alesina and Rosenthal 1995, Ellis and Thoma 1994, Bartels 2008, Broz 2013), and whether these cycles are more likely to occur in presidential rather than parliamentary systems (e.g. Persson and Tabellini 2002). Another aspect that has received substantial attention is the level of economic development (Block 2002, Shi and Svensson 2006), which is believed to be important for young democratizing countries, a home to less-informed voters (Kaplan 2013) and to incumbents who face weak electoral competition and/or institutional constraints (Block 2002).¹⁰

Open Economy Political Business Cycles

While research on political business and budget cycles shows that there are often boom-and-bust patterns in macroeconomic outcomes (growth, inflation, unemployment)¹¹ that are centered on election dates, one of the short-comings of early approaches has been their disregard of international financial market integration. Despite an extensive comparative and international political economy literature that investigate the impact of international capital flows on domestic politics (e.g. Andrews 1994, Garrett and Lange 1995, Oatley 1999), how these international factors could constrain politicians' opportunistic behavior is largely under-studied (Clark and Hallerberg 2000). As discussed in the introduction, a financially open economy could either weaken or enhance the presence of electoral cycles, and we explore these channels in more detail here. We discuss three potential (inter-related) channels of how the interaction between international financial markets and domestic governments might impact politicians' opportunistic behavior.

⁹ Clark and Reichert (1998) find that political business cycles (PBCs) are almost entirely absent in states with independent central banks

¹⁰ Additionally, political parties tend to be less mature in emerging economies (Hanusch and Keefer 2013).

¹¹ Note that the literature suggests that these are attributable to cyclical manipulation in monetary and fiscal policies.

First, under perfectly mobile capital with no possibility of sterilizing capital inflows, the Mundell-Fleming model states that monetary policy is tied to external objectives. This implies that governments adopting fixed exchange rate regimes and facing an open capital account are hindered from redistributing wealth through populist monetary policies (Andrews 1994, Rodrik 1997). These constraints are more binding in situations where institutional arrangements, such as central bank independence and rules-based monetary policies, are present to limit political manipulation. Following this line of argument, Clark and Reichert (1998) find that opportunistic cycles are not likely to occur when capital is mobile and the exchange rate is fixed. As discussed by Clark and Hallerberg (2000), the Mundell-Fleming framework suggests that limitations placed by a financially open economy depend on the degree of capital mobility and the exchange rate regime of the country in question. While a very high degree of capital mobility limits monetary policy under fixed exchange rates, because fiscal expansion induces a reinforcing increase in monetary policy, the degree of capital mobility would limit fiscal policy under flexible exchange rates. As a result, the authors predict that fiscal cycles would occur under high capital mobility and fixed exchange rates, regardless of whether there is an independent central bank. Meanwhile, “electorally induced monetary expansions would occur if and only if the central bank is dependent, and the exchange rate is flexible” (Clark and Hallerberg 2002, p. 331).

Second, building off of this strand of the literature, several authors argue that the globalization of finance has made governments more dependent on international financiers, which in turn implies that governments might be more easily pressured into adopting the macroeconomic policy preferences of international investors (Kaplan 2013). International investors are mostly concerned about a stable macroeconomic environment (read: disfavor pre-electoral expansion) and can threaten domestic governments to withdraw funds in case conditions for ensuring a stable macroeconomic environment are not met. Consequently, fear of losing an external source of funding for government borrowing may act as a disciplining factor in suppressing temptations to generate pre-electoral booms.¹² More recent scholarship has highlighted that the preferences of international investors can be transmitted through the structure of loans (bond-financing versus bank-lending). According to Campello (2012) and also Kaplan (2013), international investors are more likely to exert influence over domestic agendas if financial markets are decentralized such as under a bond-financing scheme. The reason is that the ownership dispersion of bondholders creates a capital exit threat during elections that is not present under a syndicated bank loan with a small number of lenders. Therefore, domestic politicians are more likely to comply with conservative macroeconomic demands of their creditors. Empirically, Kaplan (2013) provides a systematic test of this hypothesis in 16 Latin American economies from 1961-2009 and finds that while elections have a negative and significant impact on budget balances, the marginal effect of elections is weaker when there is a high amount of global bond-issuance as a percentage of a government’s total public external debt, which is a proxy for

¹²All creditors benefit from steady, uninterrupted payments, and for this reason, lenders generally prefer government borrowers to pursue austere policies (Kaplan 2013), and would thus discourage a pre-electoral fiscal and monetary expansion that could increase the likelihood of borrower default. However, we note that whether financial markets provide discipline over government and private sector behavior is subject to debate. Willett, Chiu, and Walter (2014) illustrate that markets often fail to discipline bad financial policies in their early stages.

decentralized finance. In other words governments that rely on international bond markets for financing face a weaker temptation for fiscal electoral manipulation.

Third, a different view holds that globalization of financial markets has not substantially constrained, but rather enabled governments to manipulate macroeconomic outcomes (Oatley, 1999; Rodrik and Subramanian, 2009). Drawing their argument based on the ability of financially open economies to redistribute, it has been argued that once governments lose control over monetary policy (and potentially over fiscal policy), in order to secure popular support before elections, they will choose to implement expansionary policies in the form of financial market regulation and taxation policies (Kern, 2010; Anselm and Ahlquist, 2014). Combined with the tendency to weigh short-run economic growth against long run financial stability concerns, Kern (2010) points out that the implementation of such policy loosening is expected to create a lending boom prone environment, in which governments build up large prospective public deficits in terms of future bail-out costs. Once governments lose control over monetary and fiscal policy to run expansionary policies, they engage in arbitrating financial market regulations and capital taxation in order to boost short-run economic performance and thus secure popular support before elections. For example, governments might choose to implement preferential tax treatments to encourage credit-led household consumption and investment as part of the strategy of enhancing domestic demand without substantial and immediate effects on budgetary balances (Mohanty, Schnabel, and Garcia-Luna, 2006). In fact, Rae and van den Noord (2006) and Vadas (2007) find strong empirical evidence that credit subsidy schemes have significantly contributed to credit fueled housing booms in Ireland and Hungary. Furthermore Adams, Einav, and Levin (2009) show evidence that credit market conditions —the availability of short-term liquidity after the Tax Reform Act of 2001/2003 in particular — have substantially driven short-term credit demand in the US.

Political Credit Cycles: Electoral Cycles in the Credit and Financial Markets

Recently, there has been a growing interest in analyzing the role of elections in affecting the behavior of financial and credit market variables such as bank credit (Dinc 2005, Cole 2009, Jackowicz et al. 2013), bank profitability (Micco et al. 2007), stock markets,¹³ sovereign bond spreads (Akitoby and Stratmann 2009),¹⁴ and exchange rates (Stein et al. 2005). Although one would be tempted to dismiss this argument, as banks and publicly-traded corporations are corporate entities with a mandate to operate in a commercial manner (Cole 2009),¹⁵ there is ample evidence suggesting the contrary.¹⁶ In this respect, most existing studies concentrate on country-level studies, many of which make use of sub-national data¹⁷ to test the political credit

¹³ Claessens, Feijen, and Laeven (2008) show that Brazilian firms that provided contributions to (elected) federal deputies experienced higher stock returns than firms that did not.

¹⁴ Relatedly, Santiso (2013) finds that dummy variables for 1-3 months prior to elections are negatively and significantly related to the overall recommendation score that investment banks give to sovereign bonds in emerging markets (higher scores mean they view sovereign bonds more favorably).

¹⁵ . This means that in theory, banks and financial markets are free of political considerations, and thus their behavior should not follow an electoral pattern.

¹⁶ See e.g. Carvalho (2010), Stein, Streb, Ghezzi (2005), Baum et al. (2009)

¹⁷ These regional or sub-national level investigations into political cycles are quite valuable, as they can capture dynamics of election-motivated spending that are otherwise absent in the national level data. For example, while Nestor Kirchner kept a budget surplus during his administration, which he claims to be a testament of his

cycle hypothesis over regional elections. Studying banks in different districts in India, Cole (2009) finds that from 1992-1999, government-owned bank lending tracks the electoral cycle, with agricultural credit increasing by 5 – 10 percentage points in an election year, especially in districts in which the election is close. Lavezzolo (2013) studies the case of regional elections in Spain and tests the connections between regional elections and the amount of lending by Spanish Cajas. Khwaja and Mian (2005) find that Pakistani banks whose directors participate in elections obtain loans more easily than banks with no such political connections. Not surprisingly, these politically-connected banks are likely to default on their loans, compared to non-politically-connected banks.

From a cross-country perspective, few authors have addressed political credit cycles. Besides Dinc (2005) and Jackowicz et al. (2013), we are not yet aware of any other cross-country and time-series studies on elections and bank credit.¹⁸ Analyzing the lending behavior of government-owned banks in major emerging market economies between 1994 and 2005, Dinc (2005) finds that state-owned banks in emerging markets experience a hike in lending to the magnitude of 11 per cent of their loan portfolio during election years,¹⁹ while the lending behavior of private banks stayed largely the same. In this sense, politically-motivated actions of these banks would follow something of a principal and agent type of relationship, where state-owned banks act as the agent that will increase lending during election years to increase the principal (i.e. the incumbent's) chances of electoral success.²⁰ Similarly, Jackowicz et al. (2013) find that between 1992 and 2008, state-owned banks in 11 Central and Eastern European economies show significantly smaller profitability ratios (i.e. smaller net interest income ratios) during the years of parliamentary elections and during preceding election years. While this supports the view that state-owned banks may serve the political goals of the incumbent government, Jackowicz et al. find no significant pattern of electoral cycles in the aggregate loan volume. The authors conclude therefore that “political pressure in the CEE countries manifests itself through the interest rates charged by banks” (Jackowicz et al. 2013, p.3), rather than through aggregate bank lending. Relatedly, Micco et al. (2007) also investigated differences in bank profitability between state and private-owned banks. They first showed that state-owned banks tend to have lower profitability and higher costs than their private counterparts, and this pattern holds for emerging and developing countries, rather than advanced economies. More relevant for our purpose, they subsequently established that the divergence in the profitability of state- versus private-owned banks significantly widens during election years, which they attribute to the development mandate of many state-owned banks.

There are nonetheless, reasons to believe that electoral cycles in financial markets are also observed where private firms and private banks are concerned. In fact, a study by Baum et al. (2009) showed that during Turkish parliamentary elections, privately-owned and state-owned banks both exhibit meaningful differences in the financial performance across different stages of the parliamentary election cycle. In a study that makes use of firm-level data in Brazil,

commitment to macroeconomic discipline, it has been shown that he would reallocate his extra-budgetary surpluses to key sectors in provincial governments in Argentina (Kaplan 2013).

¹⁸ Micco et al. (2007) investigated the profitability of state-owned banks vis-a-vis private banks before and after elections, but they did not focus on bank loans.

¹⁹ In the case of developed economies, Dinc did not find any signs of political pressure.

²⁰ See also Rajan and Zingales (2003) who argue that politicians can maintain and increase their power through the control of financial resources.

Claessens' et al. (2008) found that firms which contributed to federal deputy candidates in Brazil have higher stock returns around the announcement of the election results compared to similar firms with no campaign contributions. They further attribute this relative increase in the stock performance of contributing firms to preferential future access to finance. In other words, politically-connected financial firms (i.e. those that contribute to successful re-elected officials) are in a better position to attain external funding compared to firms that did not make any such campaign contributions. This suggests that politicians may also use financial markets to reward banks and corporations which help them get elected. Relatedly, several studies show that during the Latin American lending booms of the 1980s, domestic private bankers were the direct financiers of government debt, as these banks acted as intermediaries that sold Latin American government bonds to individual investors (Drake 1989, Sachs 1989). Of all net loans made to Latin America from 1971 and 1981, 83 per cent were channeled to the public sector, 36 per cent of which were funneled directly to the government (Stallings 1987). However, one of the limitations of these studies is that they do not specifically address the importance of international capital flows in affecting the likelihood of observing political credit cycles.

3. Synthesis and Hypotheses

In order to bridge this gap in the literature, we propose a theoretical line of argument that explicitly considers international capital flows in the context of political credit cycles. Similar to Franzese (2002) we frame our central hypotheses based on the idea of a bank robbery. In this respect, a policy maker, like a bank robber needs to have a motive, a weapon or the instruments to rob the bank, and there must be also an opportunity (i.e. the bank must be willing to lend and also have sufficient funds). Using this analogy, we consider how an incumbent government is also subject to these three factors (incentives, instruments, and opportunity to implement credit enhancing policies during elections) and potentially generate an electoral credit cycle.

First, concerning the 'motive', empirical evidence supports the notion that enhancing public and private credit is conducive for electoral success. In fact, several authors have argued that households, firms, domestic banks, as well as the government (via cheaper refinancing conditions, easier to access to credit from the domestic banking system, and windfall revenues) alike benefit from loose credit conditions and low interest rates. According to recent empirical evidence these effects are more pronounced in developing and emerging market economies, where most firms and households are credit constrained (Steinberg et al. 2013). With respect to government borrowing, we expect this effect to be more pronounced in these economies, in particular if a lower level of economic development corresponds with a low level of financial market development. In addition, if credit constraints in form of collateralized lending play an important role (i.e. credit market frictions are pronounced), financial accelerator effects have a multiplying effect on asset price inflation, inflating the balance sheet of households, firms, banks and the government (Bernanke, Gertler, and Gilchrist 1998; Ansell 2012, Broz 2013). Moreover, addressing redistribution concerns is one factor that can enhance an incumbent's electability. Several authors argue that rising income inequality combined with the lack of political will to use fiscal instruments for redistributive purposes has led to an increase in private borrowing (Rajan, 2010, Chinn and Frieden 2011, Ansell and Ahlquist, 2014). By generating credit booms as a substitute for fiscal redistribution, it would follow that this might be more likely to occur in the run up to elections. Based on this line of argument, we can formulate our first hypothesis:

Hypothesis 1 Credit to the private and government sector increases during election years compared to non-election years, i.e. political credit cycles are a reality.

Second, it is far from trivial to identify the instruments through which an electioneering government can manipulate overall credit market dynamics, i.e. rob the banking system. Besides, expansionary monetary policies, several other instruments are available to a government to interfere in credit markets and thus manipulate credit market dynamics in the run up to elections. In this respect, we can differentiate between a direct and an indirect link.

First, the most direct case would be when the banks are state-owned banks and these facilitate additional credit, especially when private banks are unwilling or unable to fund additional lending in the run-up to elections (Dinc 2005). Second, it is well established that financial markets and in particular security markets in emerging market and developing countries are not well developed and likely not capable to absorb additional government debt (e.g Hauner 2008). For this reason, governments might find it attractive to borrow directly from the banking and/or non-deposit taking financial industry to meet short-term government expenditure targets or to fund expenditures for electioneering purposes. Besides a traditional targeted lending channel of government owned banks to the public sector, it might also be the case that this channel (e.g. government loans) is used by banks and the wider financial industry to support an incumbent government (Khwaja and Mian, 2005).

Second, many contributions analyzing credit boom dynamics have considered other supply side interventions, such as financial market reforms in combination with the implementation of arbitrating financial market regulation in form of implicit and explicit bailout mechanisms as key interventions that have also been associated with an upshot in credit aggregates (for a survey, see, Kern 2010). In particular, providing bail-out guarantees represent an effective tool for promoting risk taking in financial markets and spurring short-run economic performance without being explicitly included in budget balances (Krugman, 1999; Burnside, Eichenbaum, and Rebelo, 2001). Furthermore, governments have also been active in spurring credit demand and implemented preferential tax treatments of debt to encourage credit-led household consumption and investment as part of the strategy of enhancing domestic demand without significant, immediate effects on budgetary balances (Mohanty, Schnabel, and Garcia-Luna, 2006). For instance, Rae and van den Noord (2006) and Vadas (2007) find strong empirical evidence that credit subsidy schemes have significantly contributed to credit fueled housing booms in Ireland and Hungary, respectively. Furthermore Adams, Einav, and Levin (2009) present evidence that credit market conditions and especially the availability of short-term liquidity after the Tax Reform Act of 2001/2003 have substantially driven short-term credit demand in the U.S. Although the implementation of these measures leads to an improvements in gross public debt and thus ease sovereign borrowing constraints in international financial markets (due to windfall revenues for government during economic booms), these policies are expected to have no effect on current government solvency and represent 'prospective deficits' (Easterly, 2001; Burnside, Eichenbaum, and Rebelo, 2001).

***Hypothesis 2** Political credit cycles are more pronounced in countries at a lower level of financial development, whereby at lower levels of financial market development government borrowing cycles are more likely to occur.*

Third, an opportunity must arise. This raises the question why voters and financial market participants can be fooled. An explanation for why this might occur is the fact that, during lending boom episodes, voters unlikely to internalize the downside risks arising of their borrowing behavior. The reason for this is a pecuniary risk externality arising from financial market imperfections and subsequent collateralized lending. When making borrowing decisions, households and entrepreneurs do not incorporate the implicit costs of their borrowing behavior and its implications for financial and thus overall macroeconomic stability (Korinek, 2009; Jeanne, 2009). Although this kind of behavior has been described as the 'irrational exuberance' of financial market participants, neglecting this externality leads to a systemic bias in borrowing decisions towards excessive risk taking. In support of this argument, Aklin (2013) proposes that over-borrowing in private credit markets arises due to the fact that borrowers are not perfectly informed when making their borrowing decisions. Expanding on this argument, one could also think that in particular, less financially literate households and firms are more prone to engage in excessive borrowing and be more easily fooled by policy makers and corresponding credit market interventions (e.g. Bruhn, Legovini, and Zia 2012). From a political economy perspective this implies that even when voters have perfect foresight and rational expectations concerning the inflation-output trade-off (for a review, see, for instance, Drazen (2000b)), they do not internalize the adverse effects of increasing financial fragility when voting for populist policies.

As with domestic voters, policy makers also need to have the means to fool domestic banks and international investors, which is likely more difficult. Although one could argue that banks, similar to households and firms cannot internalize the consequences of their lending behavior, other bank and investment specific factors might play an important role during elections. In particular, banks and financial institutions might not only willing, but also able to fund these political credit cycles. A substantial share of the empirical literature finds that investors' anticipation of any form of electoral engineering leads to a reconsideration of investment positions (Hirschmann 1977, Mosley 2003, Campello 2012). In this respect, Balding presents empirical evidence that the price of credit default swaps increases during elections in Latin America, even when controlling for macroeconomic fundamentals. Bernhard et al. (2012) looked at how international bankers respond to risks associated with electoral politics and economic policies in developing countries. Assuming that international bankers watch elections and local political events quite closely, international investors "vote" with extending loans during election periods based on opportunistic and or partisan PBC considerations. Their analysis of international bank lending to 18 developing countries holding 45 presidential elections from 1992-2004 suggest that PBC frameworks should account for expectations of incumbent electoral victory and thus incumbency effects. They find that aggregate international bank lending as well as international lending to private firms and individuals decrease with dimming incumbent reelection prospects.

Given these contradicting findings it remains unclear whether opportunities in financially open economies are prevalent to a greater extent or not. In particular, it is unclear whether international capital flows and thus the presence of international investors are either *enabling* or *hindering* policy makers to engineer political credit cycles. On the one hand, governments in

financially open economies face a particular dilemma given little control over traditional monetary and fiscal policies. This potentially leaves the temptation to manufacture a pre-electoral boom through credit markets. If this is the case, we should see that financially open economies are more susceptible to political credit cycles. In this respect, it might also be the case that the likelihood for the emergence of electoral government borrowing cycles increases. As Santiso (2013) argues investment-bank perceptions deteriorate considerably around presidential elections and lead to an increase in bond spreads. This effect in turn might make it a more effective take on additional government debt through the domestic financial sector. On the other hand, economies that rely on foreign sources of funding are somehow keener to prevent the exit of capital. Governments in these economies therefore react to investors' expectations and the fear of losing a steady source of funds could act as a disciplining factor in suppressing temptations to engineer a pre-electoral boom. Meanwhile, relatively closed economies are not subject to as close a scrutiny, and therefore can more freely act on temptations to generate pre-electoral booms. If this is the case, we should see that financially open economies are less susceptible to political credit cycles. Building on these competing logics, we synthesize our theoretical prediction in Hypothesis 3.

***Hypothesis 3.** Political credit cycles are mediated by the degree of financial openness. The higher the degree of capital mobility the less likely would political credit cycles in private and government credit emerge. We expect the marginal effect of elections on private and government credit to be weaker, the higher the level of capital account openness.*

4. Data and Empirical Analysis

Dependent Variable(s)

In contrast to the vast literature on political business cycles and political budget cycles, we focus on credit as our main dependent variable. In order to capture private credit dynamics, we use line(s) 22d (lending by banking financial institutions) and where available, 42d (lending by non-bank financial institutions) from the International Financial Statistics database of the IMF from 1960 to 2010. Our approach differs from prior contributions²¹ in the literature insofar as we explicitly distinguish between bank and non-bank lending to the private sector in the analysis (IFS line 22d). This distinction is made to capture different lending dynamics that might exist in predominantly bank-based systems (such as emerging markets) and those where non-deposit taking institutions or shadow banking constitutes an important additional source of private credit, e.g. the United States of America. In addition, we also take IFS lines 22a and 42a in order to capture government borrowing from the bank and non-bank private financial sector, which is important to capture for two reasons. First, research on political budget cycles has shown that electoral cycles in fiscal policies is more pronounced in countries with a high degree of government ownership of banks and in countries with underdeveloped securities markets.

²¹ In fact, most contributions in the literature concentrate on analyzing the aggregate credit to GDP ratio (Gourinchas et al. 2001).

Second, it accounts for a potential crowding-out effect of government borrowing on private lending.²²

In order to capture discretionary shifts in credit and to eliminate the possibility that credit increases along the business cycle (i.e. cyclical upswing in credit), we estimate a country-specific long run trend of the natural logarithm of real credit and apply a Hodrick-Prescott filtering technique with the smoothing parameter set at 100, which has been commonly used for annual data in the lending boom literature (e.g. Mendoza and Terrones, 2008). As we are interested in deviations from the long run trend, which captures a ‘credit’ gap between actual credit outcomes and the long run trend, we calculate a threshold factor (ϕ), whereby higher values of the threshold indicate larger deviations from the trend and thus imply a larger credit gap.²³

This way of proceeding reveals several advantages compared to more conventional measures (e.g. Schularick and Taylor 2012, Gourinchas and Obstfeld 2012), such as the credit to GDP measure. First, concentrating on deviations from a long run trend, we are able to isolate discretionary private and government borrowing hikes during election years. We believe that this method is more precise as it captures even small shifts in lending and borrowing patterns, and thus credit market dynamics. Second, taking real credit instead of real credit to GDP, we can ensure that increases in credit are not context driven. For instance, it might be the case that GDP suddenly drops in one period whereby lending remains relatively stable at the same time. If we were to take a credit to GDP ratio, such a situation might be reported as an overall increase in lending, although this increase would be entirely driven by the drop in GDP and not by direct changes in lending patterns (for a similar argument, see Elekdag and Wu, 2011). For robustness, we also compare our results to estimations based on more traditional credit-to-GDP measures, and without considering deviations from their respective country specific trend.

Independent Variable(s)

As we are interested in the question of whether elections, in particular executive elections, are associated with lending cycles, we need a dummy variable to capture the timing of elections. The most common approach to operationalize election is by using the date of election taken from the Database of Political Institutions, which was originally assembled by Beck et al. (2001) and recently updated by Keefer and Hanuschek (2013). One of the key limitations of this database is its time coverage (it starts only in 1975). In order to address this issue and widen the analysis to incorporate election dates before 1975, we rely on the Political Institutions and Political Events (PIPE) data set compiled by Przeworski et al. (2013), which has a country and period coverage (1960-2008). This dataset includes a variable that directly captures the “number of elections in which the office of the chief executive was at stake during a year” (Przeworski et al. 2013, 17). Furthermore, we can easily isolate executive elections, which we believe are of first order

²² We interpolate missing values where possible (i.e. either one or two observations in one single row for a single country is missing) in order to close gaps in the observations. In addition, we also deflate these variables in order to account for inflation fluctuations. It has been argued that in emerging market economies, volatile inflation might bias nominal values of private and public borrowing (e.g. Rose and Frankel, 1996).

²³ We note however, that there are limitations in applying this type of filter, which assumes a linear trend. In particular, the trend line might be biased upward during times of high credit growth. We are currently investigating other possible filtering methods that might mitigate this problem.

importance in the context of credit markets.²⁴ In order to account for a potential bias arising from endogenous election timing, we remove all elections that have not been scheduled, i.e. when a government has been removed from office before a scheduled election. This is to say that we are excluding all unscheduled elections or those that are not exogenously determined. The reason is that incumbent governments might be inclined to call in early elections and ‘surf on a credit boom’, which would positively bias our results.²⁵

Our main argument relies on the assumption that financial and capital account openness limits the ability of governments to adopt populist (read: expansionary) monetary and fiscal policies. In order to capture this constraint, we use the *kaopen* index developed by Ito and Chinn (2008). In this paper, we use a standardized version of the index that ranges from 0 to 1, whereby higher values indicate freer cross-border capital transactions.

Additional Control Variables

In our baseline estimation, we take a cautious approach and avoid including a very large number of control variables. In fact, under the premise that including too many additional factors to analyze credit dynamics might inflate the effects of our political and institutional variables that we are aiming to isolate as driving forces behind electoral credit cycles (for a similar argument, see for instance, Leblang and Satyanath, 2006).²⁶

In line with prior literature on political business cycles, we include the log of real GDP per capita (IMF, IFS line 99b) and the real GDP growth rate as control variables. Controlling for GDP growth is essential, as upswings in private credit can be due to cyclical (up-)swings and/or might be induced by productivity shocks (e.g. Terrones and Mendoza, 2008). It is also essential in the context of government borrowing, as governments might benefit from windfall revenues during these economic booms and monetize on additional revenue (see, for instance, Jaeger and Schuknecht 2004).

We also include two additional political control variables. First, we add the durability of the political regime variable from the Polity IV project to control for the age of the current political regime and/or political system. In this respect, it has been well established that in particular young democracies are more prone to experience political budget cycles (Brender and Drazen 2004). In addition, a substantial literature indicates that an inflationary/expansionary policy bias might be more likely to be found in democratic countries, i.e. ‘Democracy-Financial-Crisis-Nexus’ (e.g. Steinberg et al. 2013, Lipsky 2011). Second, in order to account for this effect, we

²⁴ For robustness, we also cross-check our results with the election dates from the Database on Political Institutions.

²⁵ Another reason for removing these observations is that calling for early elections in our context can be also due to a ‘credit bust’ that leads to popular protest and forces an incumbent government to step down. Moreover, a fixed and constitutionally-mandated election-timing would minimize the endogeneity problem (Kaplan 2013).

²⁶ Most importantly, we exclude the real interest rate from the list of independent variables in our baseline model for three reasons. First, including the real interest rate leads to a dramatic drop in observations (approx. 2000 country years, which is approximately 50 per cent of all country observations) which reduces the statistical power of our analysis. Second, and more importantly, elections might be priced into asset prices and interest rates by domestic banks and financial intermediaries, leading to a bias in our statistical results. In fact, the real interest rate jumps by approximately 2.7 per cent in an election year. Third, even including the real interest rate, our results remain qualitatively very similar.

also include a measure of democracy that takes the value of 1 if a country is a democracy and 0 otherwise (Cheibub, Gandhi, and Vreeland, 2010).

Empirical Model

We follow the vast literature on political business and budget cycles in formulating our empirical model (e.g. Drazen and Brender, 2005; Hanuscsek and Kiefer, 2013), which can be written, such that:

$$C_{i,t} = \alpha + \beta_1 C_{i,t-1} + \beta_2 Election_{i,t} + \beta_3 KAOPEN_{i,t} + \beta_4 Election_{i,t} * KAOPEN_{i,t} + \sum \gamma' X_{i,t} + \mu_t + \theta_t + \varepsilon_{i,t} \quad (1)$$

whereby $C_{i,t}$ is our credit variable for country i at time t , $C_{i,t-1}$ is the first lag of our dependent variable and β_i is the coefficient on the independent variables. We include the first lag of the dependent variable in order to control for potential persistence effects in underlying credit market dynamics. The coefficient on additional control variables $X_{i,t}$ is denoted γ' . The variable $Election_{i,t}$ captures the date of an election country i at time t , in which the office of the executive was at stake and $KAOPEN_{i,t}$ measures the financial openness of an economy, i.e. the constraints on the government to exercise control over classic/traditional macroeconomic policy instruments.

In our third hypothesis, we predict that the more constrained governments are in exercising control over traditional macroeconomic tools (i.e. the higher the $KAOPEN$ Index), the less likely we will observe political credit cycles. To capture this effect, we include an interaction term, $Election_{i,t} * KAOPEN_{i,t}$. In order to control for time specific effects and to account for global liquidity and thus lending conditions, we incorporate time fixed effects that we denote θ_t . In addition, we include country fixed effects to eliminate unobserved country specific effects and to capture time invariant country specific characteristics that might affect the relationship between elections and credit market outcomes. In the context of credit dynamics, including time trends in combination with country fixed effects is important to capture unobserved country characteristics and to account for potential contagion effects. One of the limitations in our approach is that using a fixed effects regression with the lagged dependent variable introduces a dynamic panel bias, which leads to a downward correction of coefficients (Nickel, 1981).

In order to address this issue, the literature on political budget cycles proposes the use of Generalized Method of Moments (GMM) estimation techniques as proposed in Shi and Svensson (2003) and also Kaplan (2013). Although this way of proceeding has primarily been applied in the context of estimating general equilibrium effects in small T (i.e. short time horizons) and large N (i.e. large set of units) panels (Roodman, 2006), we rely on a one step system GMM estimation method for several reasons. First, our dependent variable(s) is highly persistent. In our case, the correlation coefficient between our central dependent variable(s) and its lagged value range between 0.4 and 0.7. These are also significant at the one percent level, which leads us to conclude that our main independent variable is auto-correlated and thus makes a dynamic panel

estimation method a reasonable choice. In fact, a system GMM approach complements first difference instruments by including level equations and thus allows us to control for this effect (see, for instance, Blundell and Bond, 1998). Second, similar to the approach in Hanushek and Kiefer (2013) our independent variables do not vary substantially over time, so that alternative dynamic panel estimations would lead to inferior outcomes. In selecting the optimal lag length, we rely on the literature and restrict the maximum lag for selecting instruments to three lags. The reason for this lag selection lies in the fact that in the unrestricted case, the estimator would allow the inclusion of an unlimited number of instruments leading to a large number of instruments, which in turn would excessively weaken tests for instrument endogeneity and thus weaken the robustness of our results.

Results

The main results of our empirical analysis are reported in Table (1). Table (1) is structured along different credit dimensions, whereby the first section features bank lending to the private sector (*Bank Credit*), the second section covers the estimation results concerning aggregate lending of the entire financial industry to the private sector (*Private Credit*), and the third section entails the results concerning government borrowing from the domestic financial industry (*Government Credit*). Column (1) contains the results of a pooled OLS regression analyzing the correlation between the deviation of our respective credit variable from its historical trend and the election dummy without any additional controls. In Column (2) we add the *KAOPEN Index* to account for constraints on the government that arise in the process of financial globalization and also include the interaction term between elections and the financial openness of the economy (i.e. Election*KAOPEN). In Columns (3) we add country fixed effects and complement these with time fixed effects in Column (4). Column (5) contains the results of estimating our baseline model with time and country fixed effects, in which we also include additional control variables, the log GDP per capita, the GDP growth rate, and a democracy variable. We re-estimate this model in Column (6), applying the aforementioned system GMM estimation technique.

[Insert Table 1]

Our results indicate that substantial deviations from a historic trend around executive elections exist in all segments of the credit market. The election dummy variable is positive and significant at the one percent level in close to all model specifications indicating a strong relationship between elections and credit market dynamics. We interpret this result as empirical evidence for the existence of political credit cycles, which supports Hypothesis 1.

As discussed in the hypothesis section, we predict that the effect of elections on our dependent variable is mediated by the degree of financial openness. In Table 1, the interaction term between *elections* and *KAOPEN Index* is negative and largely significant at the one or the five percent level. This effect is most pronounced concerning credit to the private sector, regardless of whether increased lending originates from the domestic banking and/or the entire financial sector. Interestingly, the coefficient is larger in size than the coefficient on our election dummy variable, which suggests that political credit cycles are far more likely to occur in financially closed economies. A potential reason for this occurrence might lie in the fact that international investors might pose a credible threat of withdrawing funds and have thus a disciplining effect

on incumbent governments to abstain from overly expansionary policies during election times (Oatley, 1999). In this respect, we believe our results are also in line with Santiso's (2013) finding that investment-bank perceptions deteriorate considerably around executive elections, implying that investors charge a mark-up on borrowers during election times. We interpret our findings such that governments have more freedom to pursue arbitrating credit market policies that go unpunished when capital controls are in place; potentially reinforcing the prominence of a classic monetary policy induced political business cycle in financially closed economies. Following the methods described in Brambor, Clark and Golder (2006), we calculate the marginal effect of elections on bank credit, private credit and government credit at varying levels of the *KAOPEN* Index is illustrated in Figure 1a, 1b, and 1c.

[Insert Figures 1a,b,c]

The downward sloping solid line in all three figures suggest that as the value of capital account openness increases, the marginal effect of elections on the three different types of credit falls. We also generate lower and upper bound 95% confidence intervals (the dashed lines), which enable us to examine whether the marginal effects of elections as capital account changes are significant. According to Brambor, Clark and Golder (2006, p.14), only when both the upper and lower bound of the confidence interval are above the zero line would the marginal effect be statistically significant. As Figure 1a, 1b, and 1c show, the effect of elections on government, bank, and private credit is only significant at low values of the *KAOPEN* Index (approximately below 0.2); for values of the *KAOPEN* Index greater than 0.2, the marginal effect of elections on credit (all three type) are not significant. This is further support for our third hypothesis, i.e. financial openness has the effect of weakening the propensity of governments to engage in political credit cycles.

Concerning private credit (Section I,II), financial openness appears to play an important role and this effect is positive and significant at conventional statistical levels, underlying the importance of international capital flows for fueling private credit growth (Amri et al., 2013). The coefficient on the *KAOPEN* Index concerning government borrowing is negative, but is not significant across all model specifications. We believe that this result underscores the importance of a sovereign borrower-domestic-bank link that is most prevalent in closed economies. In fact, it might be the case that sovereign borrowing is partially funded through state owned banks. An indication that this might be an important channel can be derived from the coefficient on the GDP per capita variable. One potential explanation behind this negative sign on the the *KAOPEN* Index coefficient (after regressing government credit on the *KAOPEN* Index) is that government borrowing from the banking system should be more pronounced in developing and emerging market economies that are reportedly home to less developed financial systems. These findings are also in line with a substantial empirical literature on the consequences of financial and bond market (under)development in low and middle income countries that forces governments to rely on direct borrowing from the domestic banking system to fund expansionary policies (Hauer, 2008).

Regarding the control variables, as expected the sign of the coefficient of the GDP per capita variable is positive concerning private credit and significant in all specifications indicating that higher levels of per capita income are positively associated with positive deviations of credit

from its long run trend. The coefficient on economic growth has the expected positive sign in the context of private credit and negative sign concerning government borrowing – that has been widely documented in the political budget cycle literature (Block 2002) - but is statistically not significant. The sign on our democracy variable is not significant in any single specification, whereby it is worth mentioning that the sign of the coefficient flips from negative to positive across different model specifications. Against the background of a substantial literature on the political economy of financial crises arguing in support of a ‘Democracy-Financial-Crisis-Nexus’ (e.g. Steinberg et al. 2013, Lipsky 2011), this finding appears to be surprising. It seems that our results support the notion that policy makers in democracies and autocracies alike are manufacturing political credit cycles. The coefficient of our regime durability variable has the expected positive sign on private credit, whereby the coefficient is negative concerning government borrowing. Although the results are not statistically significant, we believe these findings underscore the importance of political stability and regime durability in the context of private credit markets (see, for instance, Djankov 2004).

5. Sensitivity Analysis and Discussion

In order to further explore our results and to ensure that these are neither driven by misspecification errors, outliers nor any other form of statistical bias, we conduct a series of robustness checks.

The Devil’s in the Detail: Do political credit cycles exist in the aggregates?

First, we re-run our baseline model taking the deviation of credit-to-GDP from its long run trend as a main dependent variable. Introducing this measure of credit allows us to account for cyclical upswings in private and government credit that might be due to exogenous factors unrelated to actual policy decisions (e.g. forward consumption smoothing after productivity shocks). Our findings remain qualitatively similar, whereby the signs on the main independent variables and the statistical significance levels do not change in any model specification (see, Table A1). We also cross-check our results concerning shifts in aggregate real credit and the credit-to-GDP ratio. The results remain very similar when considering aggregate real credit, whereby the effect of elections in the context of government borrowing washes out (see, Table A2/A3). The results concerning the credit-to-GDP ratio are however substantially different (see, Table A4). The sign on our election variable is negative in almost all specifications when analyzing private credit and statistically not significant at any statistically meaningful level. The interaction term is also negative, but not significant, lending support to the notion that international financial investors might shy away from investments during election times. Our interpretation of these results is as follows. Political credit cycles are far smaller in terms of actual size as expected. The likely reason for this effect to occur is that an analysis of the credit to GDP ratio ‘overlooks’ small, but decisive discretionary shifts from the long term trend, so that these marginal, but meaningful shifts in credit aggregates remain unnoticed.

Different Levels of Financial Development

Second, as our initial results indicate the level of economic development - that is also related to the concept of financial market development - has a first order impact on the occurrence of political credit cycles, we also test for this potential source of bias. We run several subsample regressions that are organized around the level of financial market development and the overall level of economic development. As proposed in Aghion, Bacchetta, and Banarjee (2000), we divide our set of countries into three groups; a group that features economies at a low level of financial market development in which the credit to GDP is lower than 20 per cent of GDP, a medium level of financial development where the credit to GDP ratio lies between 20 and 80 per cent of GDP, and a high level of financial market development where the credit to GDP ratio exceeds 80 per cent of GDP.²⁷ We report our results in Table 2.

[Insert Table 2]

The private credit cycle effect is most pronounced in financial markets, where the private credit to GDP ratio ranges between 20 and 80 per cent of GDP, but washes out at lower and higher levels of financial market development. Interestingly, the electoral effect on government borrowing is most pronounced in economies with a low level of financial market development (read: when the credit to GDP ratio is below 20 per cent of GDP). These results seem to underscore the importance of the domestic banking system as source of government funding in financially less developed economies, in which governments have less opportunities to access domestic bond markets to fund government expenses (for a related argument, see Hauner, 2008). Overall, our findings indicate that political credit cycles appear to be more pronounced in middle income countries concerning private credit dynamics, whereby in low and middle income economies government borrowing seems to follow an electoral pattern. From a policy perspective, these results underscore the critical role of financial market - in particular domestic bond market development - in the context of eliminating electoral government borrowing cycles.

Political Credit Cycles: Is there a decade-by-decade difference?

Since a large portion of the political economy literature has focused on lending boom bust cycles in the early 2000s that culminated in the global financial crises (e.g. Lipscy2011, Broz 2013), we analyze whether political credit cycles have been more pronounced in the recent decade. In order to answer this question, we divide our sample into four time windows. The results are reported in Table 3

[Insert Table 3]

The results indicate that electoral bank credit and government borrowing cycles have been most pronounced between 1970 and 1980, which we interpret as a strong sign of the existence of a classical monetary policy induced political business cycle phenomenon. In fact, electoral

²⁷ Even considering different thresholds to determine the different levels of financial development our results stay qualitatively the same. In doing we take as a threshold measure for highly developed financial markets a credit to GDP ratio of 100 and 120 percent, respectively. Our results stay qualitatively the same. Also the magnitude on our coefficient remains very similar. These results are also reflected in our regressions across income groups (see, Table A5). In order to differentiate income groups, we are separating countries across three different groups that we construct according to the distribution of income across countries; low income, middle income, and high income (see, for instance, Aklin and Kern, 2014 for a similar approach).

monetary expansions could be reflected in private lending and government borrowing. Interestingly, when we are considering aggregate lending to the private sector, the largest electoral effect on electoral credit cycles can be observed between 1990 and 2000. Although smaller in magnitude, this effect pertains only to overall private lending, and not bank lending in the time span between 2000 and 2008, indicating the changing nature of political credit cycles across time. Whereby during the 1970s, expansionary monetary and macroeconomic policies have been the driving force behind credit market dynamics, it appears that this pattern has changed in the 1990s and 2000s. As our overall private lending variable also captures lending from non-deposit taking financial institutions for a subsample of countries, the increasing importance of the shadow banking system and the deregulation of financial markets might be central factor contributing to the occurrence of political credit cycles in recent years. In order to account for these changing dynamics, we further explore our results along several lines.

First, we test for the possibility that private credit market dynamics have been driven by shadow banking activities, particularly during the 1990s and early 2000s. In order to test for this possibility, we isolate credit from the non-deposit taking financial industry (i.e. shadow banks) in a separate specification of our base line model. The results indicate that indeed (see, Table A5) private credit from shadow banks follows an electoral pattern throughout the 1990s, whereby the sign on the interaction term is negative and significant at the one per cent level. In addition, the coefficient of our interaction term is substantially larger than the coefficient on our election variable. In fact, shadow banking activity and potentially a broadening of the financial system appears to be a source for the emergence of an electoral credit cycle. This effect seems to have become more important during the 1990s, which corresponds to a global trend towards a deregulation of financial markets and thus enhanced financial market innovation (Galbraith 1972, Rajan 2005). However, if these deregulation and liberalization efforts correspond with an opening of the domestic financial system to international investors, enhanced financial openness will have a first order negative impact on the emergence of political credit cycles. As such we believe that our results support the notion that the presence of international investors is constraining policy makers in manipulating credit market dynamics around elections and thus the reduced the likelihood of the occurrence of political credit cycles. However, due to the limited availability of data, the number of observations drops significantly to 855 observations, which leads us to be cautious about this finding.

Monetary Policy Constraints and Financial Development

Second, while we show a positive and significant link between election years and private credit extended by the financial sector, there is a possibility that these shifts in private credit are driven by electoral cycles in monetary policy. To show that this is not the case, we control for the possibility of electorally motivated monetary policy and introduce monetary policy constraints into our baseline model. If our results were purely driven by an electoral credit cycle, once we have accounted for monetary constraints, we should not see a significant effect of elections on private credit.

According to the Mundell Trilemma, monetary policy loses substantial degrees of autonomy, when capital is mobile (i.e. the KAOPEN Index is close to unity) and the exchange rate is fixed (i.e. exchange rate dummy equals one). To capture these combinations of policy constraints, we

follow Hallerberg and Clark (2000) and add a fixed exchange rate dummy (i.e. FX)²⁸ and an interaction term between this variable and the KAOPEN Index (i.e. $FX*KAOPEN$) to capture the degree of *de facto* monetary independence. Higher values of this interaction term are expected to correspond to more pronounced constraints on the government to use monetary policy instruments for electioneering purposes. We expect the sign of the coefficient to be negative, if political credit cycles are driven by monetary expansions. In addition, we introduce two additional interaction terms. The first interaction term represents an interaction between fixed exchange rates and elections (i.e. $Elections*FX$), whereby the second interaction term captures the interaction between elections and the KAOPEN Index and the *de facto* exchange rate arrangement (i.e. $Elections*FX*KAOPEN$). In this respect, we expect the sign on the interaction term $Elections*FX*KAOPEN$ to be negative; this is to say that more *de facto* monetary authorities are isolated from political pressures, the less likely political credit cycles become. We document our results in table 4.

[Insert Table 4]

The results on all variables remain qualitatively similar. The coefficients on our election variable have a similar size and are also significant at conventional statistical significance levels. This finding supports the notion that political credit cycles are likely not necessarily driven by a monetary policy channel. As expected the interaction term between our election variable and the KAOPEN Index is negative, whereby the interaction between the KAOPEN Index and the exchange rate regime ($FX*KAOPEN$) is positive for the case of private lending, but not so for government borrowing. This result is consistent with earlier findings in the literature that financially open economies pursuing a fixed exchange rate regime are more likely to experience credit booms (Terrones and Mendoza, 2008). In fact, recent empirical evidence also points to the fact that a fixed exchange rate regime might lead to an accommodative monetary policy, unintentionally fueling credit growth (Copelovitch and Singer, 2008). The interaction term between fixed exchange rate variable and the variable election (i.e. $Elections*FX$) has the expected positive sign for the case of private credit and is negative in the case of government credit. This is to say that political credit cycles are more likely to emerge in countries that pursue a fixed exchange rate regime. However, the coefficient is statistically not significant at any conventional levels in our baseline regression.

When considering different levels of financial development (see, Table A6), the coefficient on our election dummy variable remains positive and is now statistically significant concerning private credit at an intermediate and advanced level of financial development. The coefficient on the interaction term between $Elections*FX*KAOPEN$ is negative for the case of private credit, except for credit from the shadow banking system where it is positive and significant at the one percent level. The coefficient is also positive for government borrowing, but statistically not significant in our baseline specification. Again, accounting for the level of financial market development, this effect becomes significant and is most pronounced with respect to all credit measures at an advanced level of financial market development. Surprisingly the sign of the coefficient on the shadow banking system is positive and significant across all levels of financial market development.

²⁸ We construct our fixed exchange rate variable according to *de facto* measures Anderson (2008), who extend data from Bubula and Ötoker-Robe (2002)

We interpret these findings such that the presence of international investors plays a critical role in determining the magnitude of political credit cycles, whereby governments in most advanced financial markets are most constrained towards implementing populist ‘bank’ credit market policies around elections. However, this does not seem to apply to private credit that originates from the shadow banking system (i.e. non deposit taking financial institutions). In fact, the coefficient on the interaction term on *Elections*FX*KAOPEN* is positive and significant across all model specifications and levels of financial market development. We believe that this result is driven by a combination of financial governance reform in the run up to elections in combination with enhanced speculative activities around election times when monetary policy is constrained.

As Clark and Hallerberg (2002) argue accounting for the rigidity of the exchange rate regime might not be sufficient in determining the *de facto* degree of monetary policy independence. In order to account for this, we re-run the three-way interaction between *Elections*FX*KAOPEN* for different sub-samples that vary based on their degrees of central bank independence. In order to do so, we use the Central Bank Independence (CBI) Index²⁹ that has been compiled by Bodea and Hicks (2015) and ranges from 0 to 1. Higher values of the index correspond with a larger degree of central bank independence. In this respect, the authors argue that a countries with a CBI value greater than 0.4 can be considered to have an independent monetary authority. Our results concerning all variables remain qualitatively similar in comparison to our earlier model specifications. In particular, the sign and magnitude on government borrowing during election years seems to somewhat increase underscoring the importance of sovereign government borrowing when monetary policy is not available to fund additional government expenses. We believe that this finding supports the existence of ‘credit’ funded political budget cycles. Also, the effect concerning private credit from the shadow banking system (i.e. non deposit taking financial institutions) remains identical. In fact, the coefficient on the interaction term on our *Elections*FX*KAOPEN* is positive and significant across all model specifications and across all levels of monetary independence. Intuitively, this means that the more constrained governments are in implementing any form monetary manipulation, the more likely political credit cycles emerge. We believe that this finding is supporting the notion that arbitrating financial market governance and subsequent reform in the run up to elections has a first order impact on the likelihood of a political credit cycles, once monetary policy instruments are not available.

Financial Reforms Before and After Elections

In order to further explore these results, we also test for the possibility that deviations of credit during election times are driven by *a priori* domestic financial policy reforms or shifts. It has been abundantly argued that a relaxation of credit controls and reserve requirements, the removal of aggregate credit ceilings, and easing entry into banking sector might contribute to a sudden boost in credit aggregates (see, for instance, Dell’Ariccia et al. 2012). In particular, we are interested in the question whether financial market deregulations, such as removing entry

²⁹ The authors extend the data set on Central Bank Independence originally compiled by Cukierman et al. (1992), which is based on a reading of each country’s legal texts. The scores are a weighted average of 4 broad categories: Chief Executive Officer, Policy Formation, Objectives, and Limitations on Lending to the Government. Included in the questions are: who appoints the Governor of the Bank, how long is the Governor’s appointment, is price stability a stated objective of the central bank, and does the central bank set the terms of lending to the government.

barriers into the financial system, the removal of credit controls and credit ceilings might be strategically implemented in the run up to elections. In this respect, we concentrate our analysis on a selected set of dependent variables to capture these effects. In order to account for shifts in financial governance we rely on several index variables that we draw from the Abiad, Detragiache, and Tressel database on financial market reform (Abiad et al., 2010). All variables are coded on a 0 to 3 scale, whereby higher values represent more liberal financial governance practices and movements along the index can be interpreted as financial market deregulations. The aim is to analyze policy interventions that might also affect the supply of credit during election times. We also analyze whether external financial market liberalizations are more likely to be implemented before elections. We report our results in Table 5.

[Insert Table 5]

The results indicate that certain financial market reforms follow a distinct electoral pattern. In fact, the coefficients of our *election* dummy variable on all index variables are - as expected - positive, but not statistically significant for all variables. Strikingly, there seems to be a positive correlation between the timing of elections and the removal of entry barriers into to the banking system and an easing in capital account transactions. This result supports the notion that governments might be inclined to strategically relax international financial constraints to mobilize financial resources from outside of the country in the run-up to elections rather than relying on domestic sources for funding these cycles. Interestingly, if monetary policy is constrained (CBI Index > 0.4), this effect is even more pronounced (see, Table A7). This means that our results suggest that policy makers are more likely to ‘strategically’ relax policy constraints on the supply side of credit markets if they have an independent central bank (Table A7), lending support for the existence of non-monetary policy induced credit cycles.

Interest Rate Spreads: Accounting for International Investor’s Perceptions

As we found that countries with independent central banks also strategically relax regulatory constraints before elections, this raises the question whether domestic and international banks and financial intermediaries allow for the occurrence for these credit cycles. In order to isolate these effects, we also analyze the behavior of domestic and international interest rate spreads and international capital inflow patterns. In this respect, we construct five interest rate spread measures to capture price dynamics in credit markets during elections. First, we construct an interest rate spread measure that accounts for the differences between the U.S. T-Bill rates and the domestic interest rate on government bonds.³⁰ In addition, we include the difference between the domestic lending rate and the U.S. T-Bill rate, and three domestic lending spreads capturing the difference between the lending rate and domestic borrowing rate, the lending rate and the domestic government bond rate and finally the spread between the domestic deposit interest rate and the domestic government bond interest rate. Finally, we also include domestic real interest rates in our analysis. This allows us to analyze whether international and domestic investors alike respond to elections. We report our results in Table 6.

³⁰ We remove all observations where the interest rate between the U.S. T-Bill rate and the domestic government bond rate exceed 100 per cent for all model specifications. The data for the U.S. T-Bill rate and domestic government interest rate come from the IFS, whereby we take the data for the domestic borrowing and lending rate from the World Development Indicators.

[Insert Table 6]

The interest rate spread appears to increase across all specifications during election times. Although the coefficient on our election dummy variable has the expected positive sign, it is not significant at any conventional statistical level. Interestingly, the interaction term between the *KAOPEN* Index and the election variable is negative, which also holds for the coefficient on the *KAOPEN* Index and the coefficient on our regime durability variable. We interpret these results in the following way. International and domestic investors alike are pricing in elections and tend to charge slightly higher interest rates during election times, whereby this electoral price effect is less pronounced in open economies and more pronounced in newly established or young political regimes. For instance, when not accounting for the dampening effect of international capital inflows, the real interest rate increases by 2.7 per cent around an election year. The very reason is that domestic and international investors alike seem to price in political uncertainty about election outcomes when making their investment decisions. Due to the fact that electoral outcomes are harder to predict in relatively young political systems/regimes (Drazen, 2000), this effect might lead investors to charge an additional mark-up on recently established political systems.

Second, in order to see whether international investors adjust their behavior and ‘stay put’ with their investments until after the elections, we run a separate set of regressions, where the dependent variable captures a selected dimension of international capital inflows. In fact, analyzing international capital inflows allows us to implicitly account for the interest sensitivity of domestic borrowers during elections. On the one hand, if foreign indebtedness decreases during election times, this would be a clear indication that in these cases, domestic monetary policy and/or enhanced lending from the domestic banking system have to be a key driving force behind observed political credit cycles. On the other hand, if foreign indebtedness increases during elections, this result might indicate that domestic borrowers are less sensitive towards shifts in the price of credit, underscoring unobserved domestic factors such as credit subsidy schemes. In order to isolate these competing effects, we rely on the External Wealth of Nations Dataset that has been compiled by Lane and Milesi-Ferreti (2014). In this respect, we can differentiate between different sources of capital inflows. Instead of analyzing net positions (i.e. assets minus liabilities) in the capital account, our analysis focuses on shifts in the accumulation of debt liabilities across different financial inflow categories. It has been well documented that portfolio debt flows in contrast to foreign direct investment react relatively sensitive to political events, whereby FDI is rather sensitive towards shifts in the institutional and structural political factors (e.g. the protection of property rights). We complement this analysis by also including shifts in foreign reserves, financial derivatives liabilities, and also account for the change in total indebtedness and total liabilities.³¹ Our results are reported in Table 7.

[Insert Table 7]

Besides an expected negative effect of elections on foreign reserves, all coefficients concerning our election variable are positive, indicating that international capital inflows increase during election times, which stands slightly at odds with the finding that interest rate spreads also rise

³¹ All financial debt liabilities are measured as natural logarithm of the selected liability variable over GDP.

during elections. In particular, concerning portfolio debt liabilities and FDI, this effect is positive and significant at the one per cent level. Interestingly, the coefficient on our interaction term between the KAOPEN Index and our election variable is negative, indicating that a higher level of financial openness dampens the effect of elections on international capital inflows. In fact, as in our earlier model specifications the coefficient is larger than the coefficient on the election dummy, which supports our main finding that political credit cycles are less likely to occur in financially more open economies.

Although interest rate spreads increase during election times, capital inflows are also positively related to the election indicator. From a supply side perspective, this is hardly surprising as higher returns make it likely more attractive to invest. Interestingly, higher interest rates and spreads appear also to correspond to positive deviations of credit from its respective trend.³² There might be several explanations behind this finding. First, it has been well documented that borrowers, especially in emerging market economies are less sensitive towards interest rate movements, which might lead to this result. In fact, a large literature on microfinance documents that (developing country) borrowers' demand for credit is interest inelastic (Mohanty et al. 2006). Second, it might also be the case that targeted credit subsidy programs (e.g. a shift in mortgage deduction rates) impacting the effective price of a loan might drive our results. As we cannot control for this type of government intervention, we believe that this aspect would offer an interesting avenue for future research. Third, it might also be the case that targeted income transfers, such as tax credits in the run up to elections might improve the credit worthiness of households and thus lead to an expansion of credit demand, even in light of increasing interest rates (Kern 2010). Isolating such a second round effect of political budget cycles and disentangling these competing effects might represent an exciting avenue for future research.

Robustness to Different Election Measurements and Incumbency Effects

As elections are central to our line of argument, we further explore variations concerning the question whether there are any substantial incumbency effects concerning political credit cycles. First, we re-run our baseline model on electoral credit cycles incorporating unscheduled elections. Even when including these non-scheduled elections, our results remain qualitatively similar, whereby interestingly the statistical significance of our election variable and also its magnitude increase across all model specifications. Interestingly, the interaction term between our election variables and the KAOPEN Index behaves similarly with respect to private credit growth (Section I and II), but the effect of the interaction term vanishes when looking at government borrowing (see, Table A8 in the Appendix). We believe that this effect might be attributed to several circumstances.

With respect to private lending, a government might be inclined to call for early elections during a phase of loose credit and thus be inclined to 'surf on a (credit) boom' (for a related argument, see, Kayser, 2005). Moreover, it might also be the case that incumbents and parties have less of an incentive to implement expansionary policies that require an additional mobilization of resources and time to materialize. In fact, we believe that for the case of scheduled elections,

³² These results are robust across various model specifications and levels of financial market development, whereby portfolio debt inflows seem to become more important with an increasing level of financial market development. In fact, we believe that our findings underscore the importance of international portfolio debt inflows during elections.

policy makers are likely better prepared to electioneer *via* popular credit enhancing policies, which is anticipated by international investors, dampening credit dynamics. We believe that this effect should be most pronounced with respect to private lending from the banking and financial sector, which would explain the stronger dampening effect of international capital inflows in our baseline model. Furthermore, it has been widely documented, especially in the case of emerging market economies that executive elections are positively correlated with a financial crises or a credit crunch event (e.g. Kaplan, 2013). In order to test for these possibilities, we run a simple regression model, whereby the independent variable captures the likelihood of a non-scheduled election and the central independent variable is our credit measure (see, Table A9). The results seem to support the notion that unscheduled elections are far more common in democracies and that these elections are more likely to be called in early when private credit positively deviates from its historical long run trend, i.e. a surfing on the boom effect. Although the sign of the coefficient on our election dummy variable is positive for the case of democracies, the coefficient is not significant at any statistically meaningful level. However, restricting our sample to the case of executive elections in autocracies, early elections are positively associated with deviations of private credit from its long run trend and this effect is also statistically significant at conventional levels. As this is not the main focus of our paper we leave a more elaborate discussion of this aspect for future research.

In an additional step, we aim at isolating an incumbency effect and select the cases where the incumbent is running for re-election and differentiate between cases, in which the incumbent succeeds and cases where an oppositional leader or party wins the election (see, Table A10). In Table 8 we provide report the coefficients on our election dummy variable.

[Insert Table 8]

The effect on private credit is weakened and loses substantial statistical power. Interestingly, the coefficient on government borrowing is significant in close to all model specifications, whereby the sign on our private credit variables change their signs. Although the coefficient is not significant at any conventional statistical level, we believe that this effect might reflect a classic crowding out effect of private lending (i.e. the coefficient on government borrowing is positive and significant at the one per cent level). In fact, there seems to be a ‘rob thy banks’ effect, in so far that incumbents seem to spur government borrowing during elections and thus seem to literally rob their own banking system to enhance their chances of re-election. In line with our prior findings this effect is more pronounced in less open economies (i.e. the coefficient on the interaction term is negative) and at lower levels of economic and financial market development.

From a policy perspective, our findings are strongly supporting the notion that political budget cycles are primarily funded through the domestic financial system in developing and emerging market economies. In fact, this effect is more pronounced for scheduled elections and when the incumbent is running for office, indicating the presence of ‘bank’ financed political budget cycles. If the incumbent is not and/or cannot run for re-election, private credit cycles re-emerge, whereby electoral government borrowing cycles tend to be smaller than at baseline. Given our prior findings, this is not particularly surprising, as incumbents hardly have any incentives to

'rob' their banks or financial system before elections, i.e. lame duck effect.³³ Interestingly, political credit cycles also do not appear to be driven by partisanship considerations. This is to say that these electoral credit patterns occur even without controlling for specific partisanship considerations.

6. Concluding Remarks

While political business cycles have been extensively studied yet until recently, the main focus has been on macroeconomic outcomes that were triggered by ex ante expansionary monetary and fiscal policies, and not on financial market variables. More recent contributions test whether similar electoral patterns exist concerning financial market outcomes such as bank credit and stock prices (e.g. Cole 2009, Dinc 2005, Santiso 2013). For this reason we aim to answer the question of whether these "political credit cycles" are just an *en vogue* myth that has emerged in the academic and policy debate since the Global Financial Crisis or whether these are a (politico-economic) reality. Analyzing 137 countries in the time span between 1970 and 2008, we show that the answer to this question depends on a multitude of factors that has to be accounted for when analyzing political credit cycles. Assuming that governments have a clear motive for manufacturing electoral credit booms, it is less from well-understood, which instruments a government employs to spur credit growth in the run up to an election. We argue that the use of different instruments, such as credit subsidy schemes, arbitrating financial market regulation, and monetary policy is constrained by the level of financial market development and the presence of international financial investors. In order to allow for a more nuanced perspective of credit market dynamics around elections, especially with respect to these aforementioned differences, we differentiate between three different credit aggregates, namely domestic bank and aggregate credit to the private sector and government borrowing from the domestic financial system.

Our empirical findings indicate that political credit cycles in all three credit variables (bank, bank and non-bank, and government credit) are a reality. However, these political credit cycles are far smaller and thus harder to detect than political budget cycles. The likely reason for this effect to occur is that an analysis of the credit to GDP ratio 'overlooks' small, but decisive discretionary shifts of credit aggregates from their long-term trend paths, so that these marginal shifts remain unnoticed. For this reason, when analyzing political credit cycles through a credit to GDP lens, they appear to be largely absent (i.e. a myth). In addition, we find that political credit cycles do not occur solely in democratic settings, whereby autocratic leaders are more likely to call for early elections and thus surf on a credit boom. Moreover, our results underscore the importance of regime durability for private credit market activity. Beyond these interesting aspects that open the door for future research, we find that the magnitude of political credit cycles seems to critically depend on the level of financial market development and the openness of an economy.

For political credit cycles in private credit to occur a certain level of financial market development is necessary, whereby at lower levels of financial market developments governments seem to rob their own banking system to achieve favorable economic outcomes. From a policy perspective, these results underscore the critical role of financial market - in particular domestic bond market development - in the context of eliminating electoral

³³ As the timing of elections is central to our line of argument, we also test the robustness of our findings with the election dates from the Database on Political Institutions (Beck et al., 2001).

government borrowing cycles. However, if an economy surpasses a certain level of financial market development, international investors and thus the ability of tapping into international financial markets seems to become the critical factor in determining the room for maneuvering of governments in engineering political credit cycles. In fact, the magnitude of private and government credit cycles is significantly dampened when the economy is more open to international capital inflows. That is to say, governments have more freedom to pursue arbitrating credit market policies that go unpunished when capital controls are in place; potentially reinforcing the prominence of a classic monetary policy induced political business cycle in financially closed economies. Even when we are accounting for the independence of the central bank to exclude the possibility that our results are driven by *ex ante* monetary policy interventions, our findings remain qualitatively similar. In this respect, the results of our further analysis indicate that financial liberalizations, in particular the removal of entry barriers and a further opening of the capital account, coincide with the run-up phase to elections. These findings underscore the importance of arbitrating financial market governance reforms as a driving force behind political credit cycles. However, these liberalizations do not appear to coincide with a relaxation in lending conditions. In fact, interest rates and spreads increase during elections, whereby international portfolio debt flows increase indicating that international investors are charging an election mark-up on their investments. Surprisingly these worsening borrowing conditions do not seem to impact credit market outcomes, i.e. credit increases in light or rising interest rate spreads.³⁴

There might be several explanations for this effect to occur. First, it has been well documented that borrowers, especially in emerging market economies are less sensitive towards interest rate movements and the more abundant availability of credit is just simply absorbed. In fact, a large literature on microfinance documents that borrowers, especially in developing countries, are not reacting sensitively to interest rates and demand for credit is interest inelastic (Mohanty et al. 2006). Second, it might also be the case that targeted credit subsidy programs (e.g. a shift in mortgage deduction rates) impacting the effective price of a loan is complementing the financial market liberalizations and thus drives our results. As we cannot control for this type of government intervention, we believe that this aspect would offer an interesting avenue for future research. Third, it might also be the case that targeted income transfers, such as tax credits in the run up to elections might improve the credit worthiness of households and thus lead to an expansion of credit demand, even in light of increasing interest rates. Isolating these second round effects of political budget cycles and disentangling these competing effects might represent an exciting avenue for future research. In light of recent policy reforms that are aiming at a reduction of the free mobility of capital, our results indicate that these will also limit the ability of international investors to punish imprudent macro financial policy making and manipulation.

³⁴ This finding regarding interest rate spreads, however fits well with a related research topic, which is that financial markets often fail to provide much needed discipline.

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Table 0 – Descriptive Statistics

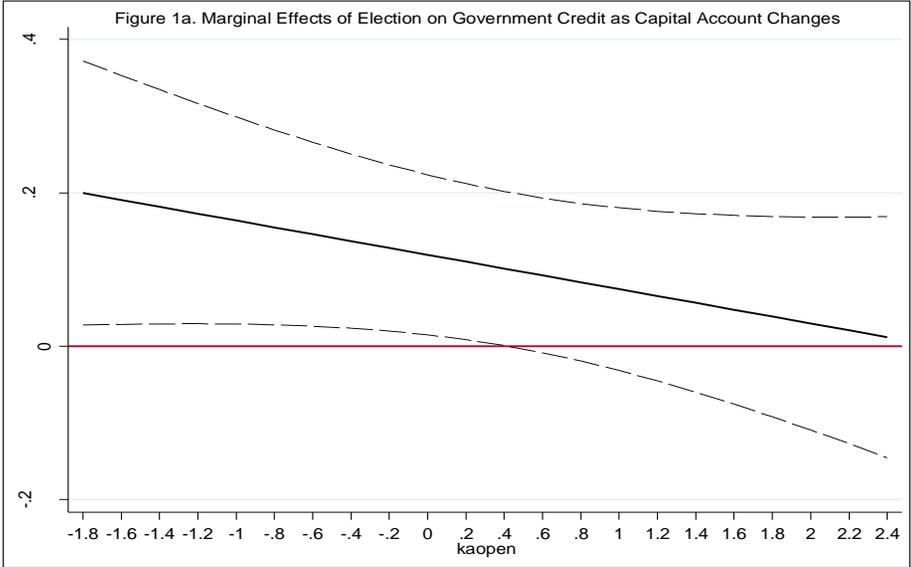
Category	Variable	Obs	Mean	Std. Dev.	Min	Max
Deviations from Trend	<i>Bank Credit, real</i>	6018	0.000286	0.985571	-6.73622	4.073068
	<i>Bank Credit, per GDP</i>	5565	4.08E-10	0.98497	-4.29624	5.414202
	<i>Private Credit, real</i>	6016	2.26E-10	0.985599	-6.73622	5.473765
	<i>Private Credit, per GDP</i>	5565	0.000249	1.112953	-7.44738	16.90275
	<i>Government Credit, real</i>	5945	-2.55E-10	0.985511	-5.69872	5.572238
	<i>Government Credit, per GDP</i>	5507	1.25E-10	0.984902	-3.86643	5.231515
	<i>Shadow Banking, real</i>	1189	0.005032	0.983638	-4.22218	4.550587
	<i>Shadow Banking, per GDP</i>	1143	-1.11E-09	0.982776	-2.86967	4.607209
Elections	<i>All Elections</i>	8065	0.201736	0.401321	0	1
	<i>Scheduled Elections</i>	8065	0.10527	0.30692	0	1
Control Variables	<i>KAOPEN Index</i>	6072	-0.01367	1.520329	-1.86397	2.439009
	<i>GDP per capita, log</i>	5374	11.09199	2.37192	5.436053	22.70227
	<i>Growth</i>	5944	0.039911	0.16678	-5.06988	7.058033
	<i>Regime Durability</i>	7305	21.88939	27.93685	0	201
	<i>Democracy</i>	7877	0.437222	0.496075	0	1
Interest Rate Spreads	<i>Spread 1</i>	2624	5.844598	15.63399	-11.2775	317.6343
	<i>Spread 2</i>	4327	43.55366	1854.937	-9.0375	121899.3
	<i>Spread 3</i>	4079	12.6044	232.2907	-1027.89	14526.86
	<i>Spread 4</i>	2223	5.976325	16.69703	-25.715	605.7333
	<i>Spread 5</i>	2238	-1.60876	6.797013	-94.0325	221.0583
	<i>Real Interest Rate</i>	4138	6.587987	21.08753	-97.8121	789.7989
	Capital Inflows	<i>Foreign Reserves, per GDP, lo,</i>	6346	-2.64343	1.20104	-9.39171
<i>Liabilities, per GDP, log</i>		6321	-0.37533	0.93258	-4.61697	4.786962
<i>Debt, per GDP, log</i>		6353	-0.77811	0.972455	-11.3709	3.54608
<i>Derivative Debt, per GDP, log</i>		512	-5.34845	3.460429	-22.6444	0.759587
<i>FDI, per GDP, log</i>		6252	-2.12227	1.453957	-9.70909	3.609388
<i>Portfolio Debt, per GDP, log</i>		1735	-2.91348	2.223964	-14.4053	2.243853
Financial Reform	<i>Credit Ceilings</i>	1600	0.649375	0.477315	0	1
	<i>Credit Controls</i>	2671	1.591539	1.110786	0	3
	<i>Interest Rate Controls</i>	2671	1.777611	1.324206	0	3
	<i>Entry Barriers</i>	2671	1.769375	1.179083	0	3
	<i>International Capital</i>	2671	1.667915	1.135475	0	3
	<i>Financial Reform</i>	2671	10.32085	6.332531	0	21

Table 1 – Political Credit Cycles

	Dependent Variable						Dependent Variable						Dependent Variable					
	<i>Bank credit to the private sector, Deviation from Trend</i>						<i>Credit to the private sector, Deviation from Trend</i>						<i>Credit to the government, Deviation from Trend</i>					
	Pooled OLS		Fixed Effects OLS		GMM		Pooled OLS		Fixed Effects OLS		GMM		Pooled OLS		Fixed Effects OLS		GMM	
Election	0.0664*	0.164**	0.166***	0.162***	0.181***	0.205***	0.0769**	0.181***	0.184***	0.180***	0.202***	0.229***	0.0807*	0.200***	0.204**	0.202**	0.196**	0.222**
Election*KAOPEN	-0.0386	-0.0652	-0.0544	-0.0514	-0.0549	-0.0641	-0.0385	-0.0655	-0.0551	-0.0524	-0.0577	-0.0659	-0.0417	-0.0753	-0.0807	-0.0807	-0.0896	-0.0964
KAOPEN		-0.162	-0.175	-0.175*	-0.204**	-0.249**		-0.176	-0.190*	-0.190*	-0.217**	-0.271**		-0.228*	-0.228*	-0.228*	-0.161	-0.174
		-0.12	-0.108	-0.101	-0.102	-0.114		-0.119	-0.11	-0.103	-0.105	-0.116		-0.137	-0.129	-0.128	-0.138	-0.155
GDP per capita, log		0.0199*	0.0384**	0.0454**	0.0352***	0.0189**		0.0209**	0.0395**	0.0481**	0.0385***	0.0208***		-0.0108	-0.0335*	-0.0221	-0.00465	-0.00069
		-0.0105	-0.0174	-0.0188	-0.0129	-0.00784		-0.0106	-0.0178	-0.0192	-0.0132	-0.00789		-0.0111	-0.0179	-0.0194	-0.0142	-0.00795
Growth					0.0374	0.00736***					0.0365	0.00716***					-0.0297***	-0.00438**
Regime Durability					-0.0362	-0.00188					-0.0361	-0.00186					-0.0113	-0.00171
Democracy					0.381	0.307					0.377	0.292					0.0283	0.0551
First Lag					-0.233	-0.204					-0.241	-0.213					-0.0705	-0.051
Constant					0.00307**	0.000266					0.00328**	0.000483					-0.00066	-0.00021
					-0.00135	-0.00035					-0.00139	-0.00035					-0.0013	-0.00038
					-0.0302	-0.00873					-0.0251	-0.0129					-0.056	0.00428
					-0.0498	-0.019					-0.0519	-0.0191					-0.0497	-0.0209
					0.565***	0.703***					0.546***	0.674***					0.478***	0.634***
					-0.0171	-0.0245					-0.0204	-0.0298					-0.0184	-0.026
Constant	-0.00473	-0.00815	-0.00702	-0.0834	-0.485	-0.119	-0.00668	-0.00911	-0.00811*	-0.0713	-0.464	0.0622	-0.0261*	-0.0352**	-0.0370***	-0.0318	0.277**	-0.108*
	-0.0141	-0.0156	-0.00447	-0.0772	-0.412	-0.0828	-0.0141	-0.0157	-0.00439	-0.0792	-0.41	-0.0892	-0.0138	-0.0162	-0.00564	-0.0452	-0.139	-0.0639
Time Dummies	-	-	-	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes
Sargan Test						564.4						615.6						499.9
AR(1)						0						0						0
AR(2)						0.0291						0.198						0.0872
Observations	5,635	4,658	4,658	4,658	4,115	4,115	5,635	4,658	4,658	4,658	4,115	4,115	5,573	4,633	4,633	4,633	4,090	4,090
Number of countries	163	161	161	161	144	144	163	161	161	161	144	144	163	160	160	160	143	143

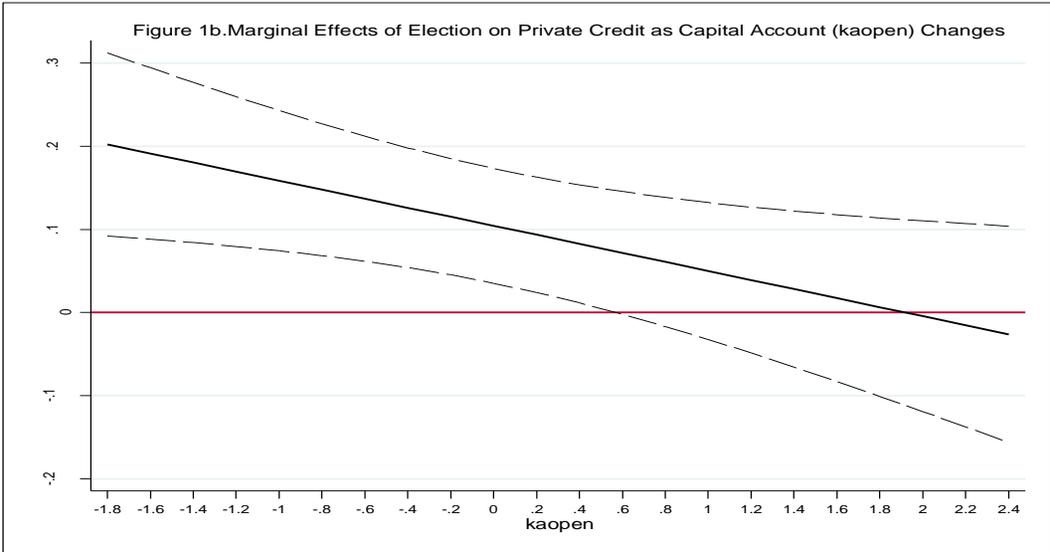
Notes: *** p<0.01, ** p<0.05, * p<0.1. GMM instruments are restricted to three lags. Endogenous GMM components are the first lag of the dependent variable and Growth. AR (1) and AR (2) are the p-values of the test statistics for first and second order serial correlation in first differenced residuals. Robust standard errors are clustered on country level for the fixed effects regressions.

Figure 1a. Marginal Effects of Elections on Government Credit as Capital Account (kaopen) changes



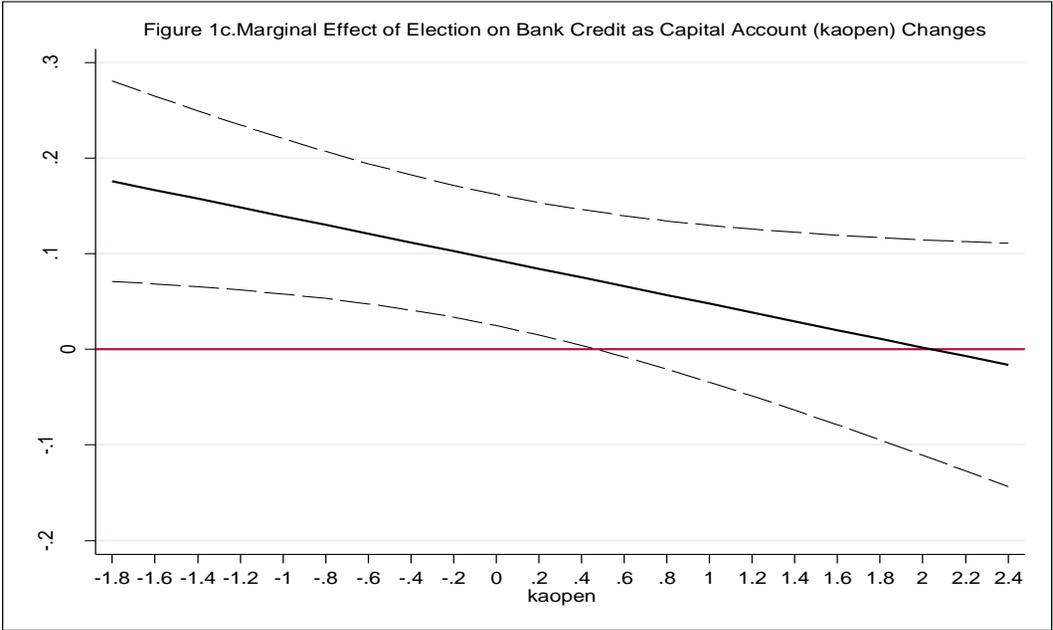
Notes: This figure plots the marginal effect of elections on the deviation in bank credit from trend (Y-axis), at varying levels of capital account openness or *kaopen* (x-axis). The graph is obtained from the regressions of column 17 of Table 1. The solid lines represent plots of the marginal effects coefficients; the dashed lines above and below the solid lines represent lower- and upper-bound estimates drawn from the 95% confidence intervals.

Figure 1b. Marginal Effects of Elections on Private Credit as Capital Account (kaopen) changes



Notes: This figure plots the marginal effect of elections on the deviation in bank credit from trend (Y-axis), at varying levels of capital account openness or *kaopen* (x-axis). The graph is obtained from the regressions of column 11 of Table 1. The solid lines represent plots of the marginal effects coefficients; the dashed lines above and below the solid lines represent lower- and upper-bound estimates drawn from the 95% confidence intervals.

Figure 1c. Marginal Effects of Elections on Bank Credit as Capital Account Changes



Notes: This figure plots the marginal effect of elections on the deviation in bank credit from trend (Y-axis), at varying levels of capital account openness or *kaopen* (x-axis). The graph is obtained from the regressions of column 5 of Table 1. The solid lines represent plots of the marginal effects coefficients; the dashed lines above and below the solid lines represent lower- and upper-bound estimates drawn from the 95% confidence intervals.

Table 2 – Political Credit Cycles vs. Level of Financial Market Development

	Dependent Variable <i>Bank Credit</i>			Dependent Variable <i>Private Credit</i>			Dependent Variable <i>Government Credit</i>		
	Low	Middle	High	Low	Middle	High	Low	Middle	High
Election	0.0752	0.261***	0.738***	0.0625	0.278***	1.019***	0.385***	0.157	-0.0331
	-0.0946	-0.0867	-0.271	-0.094	-0.0834	-0.286	-0.141	-0.117	-0.463
Election*KAOPEN	0.0705	-0.469***	-0.631*	0.124	-0.488***	-0.924***	-0.567*	-0.0504	0.166
	-0.224	-0.149	-0.323	-0.223	-0.149	-0.33	-0.295	-0.19	-0.486
KAOPEN	0.00259	0.0275**	0.0228	-0.0074	0.0269**	0.0232	0.00027	0.00831	-0.0189
	-0.0158	-0.0115	-0.0261	-0.0202	-0.0123	-0.0292	-0.0212	-0.0122	-0.0282
GDP per capita, log	0.00579	0.00684*	0.000175	0.00782	0.00581	0.0126	0.00544	-0.00539	-0.0241*
	-0.00519	-0.004	-0.0109	-0.00531	-0.00421	-0.0122	-0.00453	-0.00382	-0.0129
Growth	0.398*	0.914***	0.0997	0.286	0.883***	0.161	0.0922	0.137	-0.00658
	-0.227	-0.274	-0.109	-0.181	-0.272	-0.175	-0.161	-0.108	-0.0705
Regime Durability	0.00157	0.000396	-0.000822*	0.00121	-0.00034	-0.00013	-0.00017	-0.00052	0.000342
	-0.00123	-0.00065	-0.00044	-0.00144	-0.00072	-0.00051	-0.00134	-0.00053	-0.00071
Democracy	-0.0554	-0.0361	0.133**	-0.0541	-0.0364	0.106*	-0.00172	0.0293	0.0269
	-0.0435	-0.0283	-0.0582	-0.0429	-0.0296	-0.0635	-0.0378	-0.0313	-0.0621
First Lag	0.606***	0.674***	0.615***	0.573***	0.601***	0.568***	0.554***	0.645***	0.549***
	-0.0301	-0.0478	-0.0489	-0.0374	-0.0647	-0.0623	-0.0429	-0.034	-0.0607
Constant	-0.25	-0.241**	-0.0339	0.291*	-0.223**	-0.264	0.289**	0.0434	0.504***
	-0.159	-0.0952	-0.371	-0.164	-0.109	-0.335	-0.142	-0.0572	-0.188
Sargan Test	455.8	624.7	456.9	505.8	711.7	460	490.9	419.5	263.2
AR(1)	0.000	0.000	0.004	0.000	0.000	0.007	0.000	0.000	0.000
AR(2)	0.21	0.282	0.064	0.242	0.294	0.322	0.0888	0.519	0.83
Observations	1,574	2,031	510	1,574	2,031	510	1,581	1,996	513
Number of countries	104	117	43	104	117	43	105	116	45

Notes: *** p<0.01, ** p<0.05, * p<0.1. GMM instruments are restricted to three lags. Endogenous GMM components are the first lag of the dependent variable and Growth. AR (1) and AR (2) are the p-values of the test statistics for first and second order serial correlation in first differenced residuals. Low equals a private credit to GDP ratio below 20 per cent, Middle refers to a private credit to GDP ratio between 20 and 80 per cent and High refers to a private credit to GDP ratio that is higher than 120 per cent.

Table 3 – Political Credit Cycles vs. Selected Decades

	Dependent Variable <i>Bank Credit</i>				Dependent Variable <i>Private Credit</i>				Dependent Variable <i>Government Credit</i>			
	1970s	1980s	1990s	2000s	1970s	1980s	1990s	2000s	1970s	1980s	1990s	2000s
Election	0.059	0.253*	0.340**	0.132	0.0362	0.249*	0.432***	0.163*	0.136	0.463***	0.132	0.224
	-0.179	-0.142	-0.142	-0.0966	-0.173	-0.146	-0.147	-0.0937	-0.11	-0.16	-0.126	-0.251
Election*KAOPEN	0.0501	-0.590**	-0.401*	-0.115	-0.0187	-0.590**	-0.514**	-0.123	-0.157	-0.810**	-0.107	-0.0526
	-0.34	-0.284	-0.216	-0.15	-0.337	-0.287	-0.223	-0.143	-0.264	-0.334	-0.229	-0.319
KAOPEN	0.0342	0.0151	0.0326*	0.00167	0.0534**	0.011	0.0347*	0.00101	-0.0321*	0.00295	0.0167	-0.015
	-0.0222	-0.0243	-0.0195	-0.0105	-0.0231	-0.0248	-0.0202	-0.0107	-0.0165	-0.0192	-0.0191	-0.0193
GDP per capita, log	0.0163**	0.00482	0.000587	0.00807	0.0202***	0.00233	0.00155	0.00867	-0.00356	-0.00389	0.00821	-0.0224***
	-0.00662	-0.00868	-0.00711	-0.00623	-0.00772	-0.009	-0.00714	-0.0064	-0.0046	-0.00864	-0.00704	-0.00597
Growth	1.155***	1.070***	0.165	0.463	0.161	1.409***	0.225	0.483	-0.581***	0.522	0.0630*	-0.263
	-0.422	-0.291	-0.126	-0.488	-0.688	-0.248	-0.188	-0.48	-0.219	-0.419	-0.037	-0.529
Regime Durability	0.000302	0.00157	-0.00038	0.000508	0.000404	0.00144	0.000409	0.000574	0.00109	-0.0013	0.000226	-0.00066
	-0.00098	-0.00097	-0.00086	-0.00049	-0.00106	-0.00096	-0.00106	-0.00058	-0.00083	-0.00083	-0.00072	-0.00111
Democracy	0.0658	-0.0188	-0.0337	0.0192	0.0417	-0.0184	-0.0391	0.025	-0.0205	-0.0551	0.00569	0.069
	-0.0508	-0.0481	-0.0433	-0.0432	-0.0496	-0.0482	-0.0446	-0.0418	-0.0515	-0.0585	-0.0474	-0.0499
First Lag	0.656***	0.744***	0.740***	0.714***	0.543***	0.750***	0.730***	0.674***	0.811***	0.643***	0.619***	0.600***
	-0.0815	-0.0462	-0.0312	-0.0392	-0.101	-0.0452	-0.0318	-0.0618	-0.0439	-0.0479	-0.0454	-0.0494
Constant	-0.303***	-0.224*	-0.0377	-0.0406	-0.227*	-0.215	-0.0522	-0.105	-0.0563	-0.0448	-0.265*	-0.074
	-0.117	-0.129	-0.11	-0.116	-0.127	-0.135	-0.118	-0.133	-0.0883	-0.128	-0.15	-0.178
Sargan Test	93.94	138.2	176.4	104.8	133.8	136.3	167.4	137.5	141.1	128	129.8	119.2
AR(1)	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
AR(2)	0.203	0.59	0.42	0.0997	0.264	0.758	0.56	0.0911	0.0726	0.0215	0.0329	0.885
Observations	764	952	1,235	1,094	764	952	1,235	1,094	754	952	1,228	1,086
Number of countries	83	107	137	143	83	107	137	143	82	107	136	142

Notes: *** p<0.01, ** p<0.05, * p<0.1. GMM instruments are restricted to three lags. Endogenous GMM components are the first lag of the dependent variable and Growth. AR (1) and AR (2) are the p-values of the test statistics for first and second order serial correlation in first differenced residuals.

Table 4 – Political Credit Cycles vs. Monetary Policy Constraints

	Bank Credit	Shadow Bank Credit	Private Credit	Government Credit
Election	0.189**	0.303**	0.220***	0.250**
	-0.076	-0.152	-0.077	-0.109
Election*KAOPEN	-0.247	-0.637**	-0.282*	-0.196
	-0.151	-0.276	-0.152	-0.196
Election*FX	0.010	-2.895***	-0.032	-0.135
	-0.171	-0.375	-0.171	-0.183
Election*FX*KAOPEN	-0.095	3.315***	-0.052	0.059
	-0.299	-0.486	-0.297	-0.320
KAOPEN	0.008	0.023	0.011	0.004
	-0.010	-0.018	-0.010	-0.011
FX	-0.045	0.217	-0.046	-0.024
	-0.048	-0.369	-0.049	-0.043
KAOPEN*FX	0.211**	-0.076	0.211**	-0.055
	-0.089	-0.458	-0.091	-0.101
GDP per capita, log	0.00610**	0.00749*	0.00576**	-0.001
	-0.003	-0.005	-0.003	-0.002
Growth	0.865***	0.465	0.822***	-0.058
	-0.188	-0.320	-0.205	-0.148
Regime Durability	0.000909**	0.001	0.00112***	-0.001
	0.000	-0.001	0.000	0.000
Democracy	-0.010	-0.010	-0.015	-0.010
	-0.021	-0.044	-0.022	-0.023
First Lag	-0.252*	-0.083	-0.210*	0.008
	-0.129	-0.113	-0.126	-0.062
Constant	0.705***	0.549***	0.674***	0.641***
	-0.026	-0.062	-0.033	-0.027
Sargan Test	488.5	434.1	547.2	419.3
AR(1)	0.0000	0.0000	0.0000	0.0000
AR(2)	0.0325	0.858	0.216	0.227
Observations	3,778	855	3,778	3,755
Number of countries	141	36	141	140

Notes: *** p<0.01, ** p<0.05, * p<0.1. GMM instruments are restricted to three lags. Endogenous GMM components are the first lag of the dependent variable and Growth. AR (1) and AR (2) are the p-values of the test statistics for first and second order serial correlation in first differenced residuals.

Table 5 – Political Credit Cycles vs. Monetary Policy Constraints

	Credit Controls	Interest Rate Controls	Entry Barriers	Capital Account	Financial Reform
Election	0.028	0.0476*	0.0566***	0.0605**	0.263***
	-0.028	-0.027	-0.022	-0.026	-0.066
GDP per capita, log	0.002	0.003	0.00811**	0.007	0.006
	-0.004	-0.005	-0.004	-0.005	-0.012
Growth	0.111**	0.105	0.0834*	0.085	0.303
	-0.054	-0.118	-0.048	-0.102	-0.206
Regime Durability	0.000465*	0.000512*	0.000	0.000880***	0.001
	0.000	0.000	0.000	0.000	-0.001
Democracy	0.005	0.0660**	-0.004	0.0878***	0.140**
	-0.017	-0.032	-0.016	-0.029	-0.065
First Lag	0.903***	0.847***	0.912***	0.831***	0.947***
	-0.021	-0.0247	-0.0176	-0.025	-0.0121
Constant	-0.0131	0.279***	-0.00209	0.047	0.139
	-0.0525	-0.0864	-0.0467	-0.0855	-0.221
Sargan Test	358.4	340.5	294.2	322.4	352.4
AR(1)	0.000	0.000	0.000	0.000	0.000
AR(2)	0.742	0.477	0.283	0.819	0.666
Observations	2,254	2,254	2,254	2,254	2,254
Number of countries	86	86	86	86	86

Notes: *** p<0.01, ** p<0.05, * p<0.1. GMM instruments are restricted to three lags. Endogenous GMM components are the first lag of the dependent variable and Growth. AR (1) and AR (2) are the p-values of the test statistics for first and second order serial correlation in first differenced residuals.

Table 6 – Political Credit Cycles vs. Interest Rate Spreads

	Spread 1 <i>Domestic T-Bill - U.S. T-Bill</i>	Spread 2 <i>Domestic Lending - U.S. T-Bill</i>	Spread 3 <i>Domestic Lending - Borrowing</i>	Spread 4 <i>Domestic Lending - Domestic T-Bill</i>	Spread 5 <i>Domestic Borrowing - Domestic T-Bill</i>	Real Interest Rate <i>Domestic Lending - Inflation</i>
Election	0.362	0.839	0.471	0.162	0.0466	2.733**
	-0.645	-0.887	-0.587	-0.573	-0.378	-1.302
Election*KAOPEN	-0.401	-0.549	-0.0549	0.257	-0.119	-2.35
	-0.927	-1.324	-0.768	-0.751	-0.593	-1.737
KAOPEN	-0.376**	-0.876**	-0.321	-0.176	0.167	0.641**
	-0.166	-0.36	-0.258	-0.136	-0.199	-0.301
GDP per capita, log	-0.0668	-0.142	-0.14	-0.174	-0.0127	-0.099
	-0.115	-0.234	-0.177	-0.11	-0.149	-0.157
Growth	-11.52**	-10.7	-7.532	-4.877	2.878	-19.28**
	-5.63	-9.255	-7.227	-5.738	-2.604	-9.067
Regime Durability	-0.0138**	-0.0387***	-0.0321**	-0.0174***	0.0109	-0.0239***
	0	0	0	0	0	-0.00833
Democracy	0.225	0.555	0.931	0.504	-0.537	0.822
	-0.625	-1.173	-0.817	-0.563	-0.668	-0.699
First Lag	0.632***	0.388***	0.308**	0.432***	0.0265	0.383***
	-0.0617	-0.0894	-0.156	-0.017	-0.124	-0.103
Constant	3.573**	7.112**	4.349*	4.511***	-0.216	1.721
	-1.455	-2.842	-2.255	-1.231	-1.7	-1.93
Sargan Test	1086	1638	1907	1414	2248	726.3
AR(1)	0.0488	0.467	0.566	0.186	0.503	0.000138
AR(2)	0.883	0.717	0.76	0.883	0.543	0.866
Observations	1,597	1,422	1,326	1,383	1,400	1,407
Number of countries	79	77	76	77	76	77

Notes: *** p<0.01, ** p<0.05, * p<0.1. GMM instruments are restricted to three lags. Endogenous GMM components are the first lag of the dependent variable and Growth. AR (1) and AR (2) are the p-values of the test statistics for first and second order serial correlation in first differenced residuals.

Table 7 – Political Credit Cycles vs. International Capital Inflows

	Portfolio	FDI	Derivates	Debt	Reserves	Liabilities
Election	0.284*	0.0525**	0.285	0.00286	-0.121**	0.0177
	-0.147	-0.0249	-0.358	-0.0213	-0.0521	-0.0205
Election*KAOPEN	-0.359*	-0.0555*	0.263	-0.00865	0.0276	-0.0228
	-0.185	-0.0335	-0.57	-0.033	-0.0618	-0.027
KAOPEN	0.128***	0.0144	0.275**	0.0221***	0.0132	0.0145***
	-0.0312	-0.0106	-0.125	-0.00806	-0.00989	-0.00263
GDP per capita, log	-0.015	-0.00684	-0.0701	-0.00107	-0.0113*	-0.00116
	-0.0154	-0.00524	-0.0556	-0.00332	-0.00583	-0.00137
Growth	0.0584	-0.0013	-4.057	-0.0313	0.172	-0.0281
	-0.698	-0.0627	-2.557	-0.0718	-0.138	-0.0738
Regime Durability	0.00113	0.000155	0.000619	-0.00018	-0.00164**	-7.27E-05
	-0.00102	-0.00029	-0.00614	-0.00029	-0.00064	-0.00012
Democracy	0.164	-0.00764	-0.716**	0.00249	-0.00717	0.00434
	-0.122	-0.0201	-0.312	-0.0163	-0.0254	-0.0069
First Lag	0.792***	0.856***	0.818***	0.874***	0.828***	0.964***
	-0.049	-0.046	-0.16	-0.104	-0.0439	-0.016
Constant	-0.610**	-0.439***	-1.626	-0.0106	-0.445***	0.0444
	-0.268	-0.127	-1.703	-0.1	-0.126	-0.0374
Sargan Test	531	1300	153.4	1600	748.3	767.5
AR(1)	0.0042	0.0000	0.0607	0.0001	0.0000	0.0000
AR(2)	0.536	0.674	0.387	0.955	0.712	0.917
Observations	1,235	4,036	296	4,098	4,098	4,098
Number of countries	95	144	49	144	144	144

Notes: *** p<0.01, ** p<0.05, * p<0.1. GMM instruments are restricted to three lags. Endogenous GMM components are the first lag of the dependent variable and Growth. AR (1) and AR (2) are the p-values of the test statistics for first and second order serial correlation in first differenced residuals.

Table 8: Political Credit Cycles vs. Incumbency

		Scheduled Election	All Elections
Incumbent Running	<i>Bank Credit</i>	-0.0498 (-0.102)	0.137 (-0.102)
	<i>Private Credit</i>	-0.00972 (-0.105)	0.188* (-0.105)
	<i>Government Credit</i>	0.326*** (-0.101)	0.377*** (-0.114)
Incumbent not Running	<i>Bank Credit</i>	0.270*** (-0.072)	0.140** (-0.0593)
	<i>Private Credit</i>	0.293*** (-0.0748)	0.146** (-0.0601)
	<i>Government Credit</i>	0.197* (-0.106)	0.112 (-0.07)

Notes: *** p<0.01, ** p<0.05, * p<0.1. Robust standard errors in parenthesis. GMM instruments are restricted to three lags. Endogenous GMM components are the first lag of the dependent variable and Growth.