

# Financial Liberalization

## SUMMARY

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*What accounts for the dynamics of financial reforms? This paper identifies the political regime as one of the main factors. Focusing on democratization and financial reform, it puts forward novel evidence for a U-shaped relation, across countries and over time, for different reform measures and a wide range of estimators. Partial democracy is a main obstacle to financial reforms and democratization, when incomplete, may lead to severe financial reform reversals.*

— *Nauro F. Campos and Fabrizio Coricelli*



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# Financial liberalization and reversals: political and economic determinants

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## 1. INTRODUCTION

Since the early 1990s, the processes of democratization and of financial liberalization have both accelerated at the world level. Furthermore, in 2010–11 a wave of democratization spread throughout Northern Africa and the Middle East, with uncertain outcomes. In light of the global financial and economic crisis that started in 2007, one pressing issue is whether the crisis could determine a slowdown or even a reversal in the process of financial liberalization around the world, and especially in emerging economies. Previous literature has indeed found a significant adverse impact on financial reform coming from recessions and banking crises (Abiad and Mody, 2005) and financial reform experienced a ‘great

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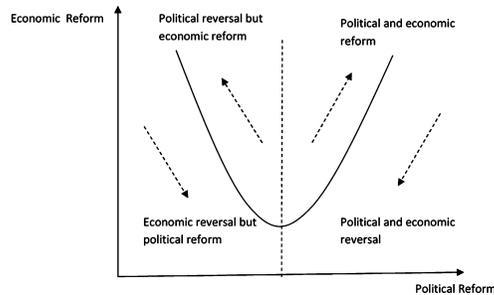
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reversal' in the aftermath of the great depression of the 1930s. Nevertheless, an optimistic picture arises from recent empirical literature and *de jure* reform indicators constructed by the IMF. For a large sample of countries, *de jure* financial reform has progressed continuously, with negligible episodes of backtrack and reversal (Abiad *et al.*, 2010). Furthermore, democracy is found to positively and monotonically affect economic reform, including financial reform (Giuliano *et al.*, 2010) and thus the continuous progress in democratization across the world would suggest little room for policy reversals. However, in this paper we suggest a more nuanced picture.

The political dimension of financial reform has been emphasized in the literature. Rajan and Zingales (2003b) argue that incumbent firms may block, or even reverse, financial reform as financial development improves the conditions for entry of new firms and thus increases competition, challenging rents of the incumbents. Incumbents can in turn form blocking elites and pressure governments to retard or reverse financial reform. Full-fledged democracy might be an antidote to the power of blocking elites, as under full democracy governments are accountable to the population as a whole. Less clear is what happens away from full-fledged democracy. Is the power of blocking elites monotonically increasing, or could there be a non-monotonic relationship between degree of democracy and power of economic elites? Is it conceivable that the power of economic elites reaches its peak in intermediate regimes, regimes of 'partial democracy', in which economic elites 'capture' the government? By contrast, in autocracies, political elites may have greater power than economic elites and thus may implement financial reforms if these increase their chances to maintain (or increase) their political power. Financial reforms, by benefiting a large share of the population, may be considered as public goods and thus provide consensus for the political elites. Moreover, as political elites aim at appropriating resources from the economy, they may have an interest in efficiency-enhancing reforms, which will increase the resources in the economy. These arguments play a role in explaining the experience of autocracies capable of implementing efficiency-enhancing reforms, as in the case of China. Political science and political economy have approached these experiences of efficient autocracies within the theory of 'selectorate' (Epstein and Rosendorff, 2004; Besley and Kudamatsu, 2007).

Therefore, away from full democracy, democratization may in fact slow down or even reverse economic reforms. We find strong evidence of a non-monotonic relationship between democracy and financial reform, which suggests that the lowest level of financial reform tends to occur in intermediate regimes of 'partial democracy'. The non-monotonicity also implies that during the democratization process, as the system travels from autocracy to partial democracy, financial reform is likely to go through reversals (Figure 1). The focus of this paper is on this non-monotonic relationship.

When this non-monotonicity holds, the effects of political regime changes on financial reforms depend crucially on initial conditions. Yet, cross-country analyses



**Figure 1: Dynamics of political and economic reforms**

involving countries with highly heterogeneous starting points may generate misleading results. To tackle the identification problem and related endogeneity and omitted variables concerns we complement the analysis on the full sample of countries with an analysis of a specific set of countries, the transition countries of Eastern Europe and the former Soviet Union. These countries provide a unique natural experiment situation. The variation in the level and type of political competition across these countries in the starting point of the sample, early 1989, is minimal and the same can be said of financial liberalization. Following such similar initial conditions, the sample displays significant variation in both political and financial variables over 1989–2005 as the countries in the sample followed radically different economic and political trajectories (Campos and Coricelli, 2002). It is worth noting that it is not our intention to give a strong causal interpretation to the main conclusions. Instead we argue, in line with previous research,<sup>1</sup> for the existence of important feedback effects in both directions but with the qualification, which is novel and unexplored in previous research, that this is largely because their relationship may be better described as U-shaped.

The main contributions of this paper are as follows. First, the paper brings to light evidence for an ‘unconditional’ non-monotonic association between economic and political reforms. This obtains using different measures of the two reforms, over time, across countries and in a panel setting. Secondly, it presents econometric evidence incorporating this U-shaped relationship into models of financial reform that have focused on economic determinants (Abiad and Mody, 2005). This strengthens the U-shaped relation (it provides ‘conditional’ support to this finding) and it improves the fit of previous models as the estimates of the other variables turn out to be significantly more precise (once the non-monotonicity is accounted for). Thirdly, and finally, this is the first paper to our knowledge to explore how *de jure* financial liberalization is an input to *de facto* financial liberalization. Political regimes still have a non-monotonic

<sup>1</sup> For example, Giavazzi and Tabellini argue that ‘the timing of events indicates that causality is more likely to run from political to economic liberalizations, rather than vice versa: many economic liberalizations are preceded by political liberalizations, while the converse is observed less frequently – although we cannot rule out feedback effects in both directions’ (2005, p. 1299).

effect on *de facto* financial reform even after controlling for the role of *de jure* measures.<sup>2</sup> This suggests that the political regime plays a fundamental role in the implementation and enforcement of legislation rather than solely on the legislation itself.<sup>3</sup>

Although our focus is on financial reforms, we provide evidence of the presence of a U-shaped relationship for other economic reforms, namely for trade liberalization. Although it is beyond the scope of this paper to analyse the whole set of possible economic reforms, our approach suggests that the relationship between democracy and economic reforms crucially depends on the type of economic reforms considered. Each economic reform has different characteristics in terms of the cost and benefits for different groups of society and economic elites.<sup>4</sup> Our focus has been on reforms that have some features of public good, as they benefit large parts of the population, as in the case of the financial sector, which offers services to both enterprises and households. Similarly, trade reforms may have these features. By contrast, labour market reform and privatization, among others, involve more narrowly defined and conflicting interests. For these reasons, we focus on specific reforms, such as financial reforms, while providing evidence as well for trade reform. An analysis of the relationship between democracy and other types of reforms is an important topic for future research.

In terms of policy implications, our results highlight a U-shaped relationship, which implies that democratization does not necessarily lead to economic reform, and indeed that partial or incomplete democratization may lead instead to economic reform reversals. Another important policy implication regards the importance of the implementation phase: there seems to be a larger gap than previously thought between *de jure* and *de facto* liberalization and one reason the pressure tools currently favoured by international organizations do not seem as effective is because they ignore the political system, for example, trying to implement structural reforms in partial democracies.

The paper is organized as follows. In Section 2, the data set and different measures of political and financial liberalizations are presented in order to assist in the search for the stylized facts. The main fact that emerges from this is the non-monotonic relationship between political and financial reforms. Section 3 discusses analytical issues and throws light on the conditions under which a country falls into a ‘reversals trap’, that is, a situation in which not only political and economic liberalization co-exist, but reinforce each other. Section 4 discusses the econometric evidence for the U-shaped relation between political and financial reforms and

<sup>2</sup> Yakovlev and Zhuravskaya (2011) analyse the gap between *de jure* and *de facto* liberalization for Russian regions and link such gap to different governance institutions across Russian provinces.

<sup>3</sup> Although in this paper we stress the *de jure* versus *de facto* differences in terms of financial liberalization, we also note that recent studies contrast *de facto* to *de jure* political reform (Acemoglu and Robinson, 2006b). Our empirical analysis distinguishes between these two aspects but find that the differences are not strong enough to affect our results.

<sup>4</sup> Caselli and Gennaioli (2008) analyse the different political feasibility of deregulation and legal reform, which improves contract enforcement. Incumbents oppose deregulation but can favour legal reform. This implies that to buy support for deregulation, governments could implement first legal reforms.

argues that this relationship holds across countries, over time, in a panel setting as well as within a model of financial reform. Section 5 concludes.

## 2. POLITICAL AND FINANCIAL REFORMS: STYLIZED FACTS

This section presents the data put together to identify the stylized facts of the relationship between financial and political reforms. We construct objective and replicable indicators of financial liberalization as well as of political reform for a yearly panel of 26 countries from 1989 to 2005, using as wide an array of indicators as possible so as to reflect the multi-faceted nature of these two processes.

We first discuss the indicators used to capture the various dimensions of financial reforms (see Levine, 2005). In particular, we try to account for both the size of the financial sector and its efficiency (the latter is the favoured measure while the former is the measure that has been used more widely). We thus construct indicators for each of these dimensions.

The indicator of financial sector depth is based on three components: the ratio of liquid liabilities to GDP, the ratio of credit to the private sector to GDP, and the ratio of commercial and Central Bank assets to GDP.<sup>5</sup> In order to combine these variables into a single indicator, we normalize them by equating the maximum (for all countries and years) of each component to one. We calculate the distance from each country-year data point to the global maximum (normalized to one) by (a) subtracting each country-year data point from the overall minimum (by overall mean for all countries and all years), (b) calculating the range for each series (that is, maximum minus minimum), and (c) dividing the results from (a) by those from (b). Notice that this normalization is used for the political and economic (financial) reforms measures. In our view, this is superior to alternatives that use a subjective yardstick because, *inter alia*, there are a few countries in the last years of the sample (the new European Union members) that completed economic and political reforms and that are considered full-fledged market economies and liberal democracies.

The index of financial sector efficiency is based on two variables, obtained from the BankScope database. The first is the ratio of the bank overhead costs to total assets. The second is the net interest margin which is the bank net interest revenue as a share of its interest-bearing assets. Because in the two cases, larger values indicate less competition and 'less reform', for consistency in step (a) of the normalization described above we subtract each country-year data point from the overall maximum. We argue that the index of financial efficiency is preferable to the index that captures the depth of the financial sector.

Let us turn to the measures of political liberalization. The aim was again to put forward various measures capturing different aspects of political reform. The first

<sup>5</sup> Data are from the electronic version of the IMF's International Financial Statistics.

measure is political rights from The Freedom House. This variable is coded in a 1 to 7 scale (with 1 indicating highest level of political rights and 7 the lowest level of political rights) and covers three main areas: the electoral process, political participation, and the functioning of the government. The Freedom House civil liberties measure uses the same scale and reflects freedom of expression and association, organizational rights, rule of law and individual rights. Notice that in the cases of political rights and civil liberties, higher values of the index indicate less rights and liberties. We collected another, finer, democracy variable from the Nations in Transit report also published by Freedom House. The Nations in Transit democracy variable is coded in a scale of 1 to 7 (with 1 highest and 7 lowest) and reflects four dimensions: the electoral process, civil society, independent media and governance. Finally, we also use a measure of *de jure* presidential powers, the Presidential Power Index.<sup>6</sup>

We generate a composite index of political reform, using the same normalization applied to the financial reform measures, and combining Freedom House's Civil Liberties and Political Rights, Nations in Transit Democracy and the Presidential Power Index. In similar fashion, we conduct the analysis using both the index and its individual components.

Table 1 focuses on reform reversals. For comparability, the two reform indices are normalized to 0–1 and re-scaled so that higher values reflect more reform. We define reform as the changes in levels of the two indicators (first-differences), measured on a year-to-year basis. We associate a reversal to the case when the value of this change is negative. Using this definition, based on the 337 country-year cells for which data on the two reforms is available, we identify political reform reversals in 48% of the cases, we detect financial reform reversals in 35% of the cells, and joint political and financial reform ('twin') reversals in 17% of all possible cases. Reversals in political or in financial reforms are detected in every single country in the sample. Moreover, in only four countries do we not observe joint reversals (namely, Estonia, Kyrgyz Republic, Moldova and Romania).

Regarding the size of reform reversals and keeping in mind that both reform indices are on a 0 to 1 scale, the magnitude of the average change is 0.008 (for political reform) and 0.02 (for financial reform) with respective standard deviations of 0.09 and 0.07. In terms of ranges, the largest advance in a single year in financial reform (0.56) was for Croatia towards the end of the war in 1994 and in terms of political reform, the largest increase (0.77) was for Czechoslovakia in 1990. We find the largest reversal in a single year in terms of financial reform was for Russia in 1995 (−0.34) while in terms of political reform it is observed for Tajikistan in 1992 (−0.33). These suggest that reversals are more common than previously

<sup>6</sup> The index is unique in that it is based on whether 29 powers are established by the national constitution. Each of these is coded as follows: 1 – if the president holds exclusively a given power; 0.5 – if the president is sharing a power with another body; and 0 – if the president does not hold the power under question. See Armingeon and Careja (2006) for further details.

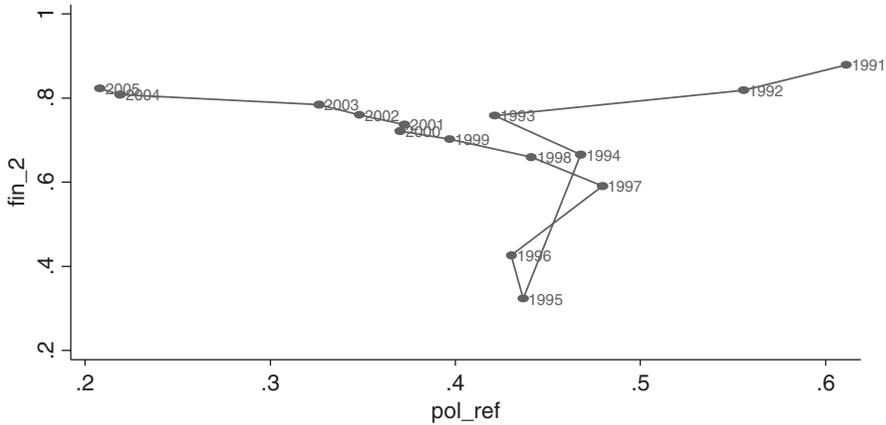
**Table 1. The occurrence of political and financial reform reversals over time and across countries**

	Political reform reversals	Percentage of political reform reversals	Financial reform reversals	Percentage of financial reform reversals
Albania	8	50.00	4	25.00
Armenia	8	50.00	12	75.00
Azerbaijan	6	37.50	4	25.00
Belarus	10	62.50	2	12.50
Bulgaria	10	62.50	5	31.25
Croatia	5	31.25	3	18.75
Czech Republic	2	12.50	7	43.75
Estonia	3	18.75	2	12.50
Macedonia	7	43.75	9	56.25
Georgia	3	18.75	6	37.50
Hungary	6	37.50	9	56.25
Kazakhstan	12	75.00	2	12.50
Kyrgyz Republic	8	50.00	0	0.00
Latvia	3	18.75	9	56.25
Lithuania	2	12.50	8	50.00
Moldova	8	50.00	0	0.00
Poland	7	43.75	6	37.50
Romania	4	25.00	1	6.25
Russian Federation	10	62.50	6	37.50
Slovak Republic	5	31.25	10	62.50
Slovenia	4	25.00	3	18.75
Tajikistan	4	25.00	ψ	ψ
Turkmenistan	12	75.00	ψ	ψ
Ukraine	7	43.75	4	25.00
Uzbekistan	10	62.50	14	87.50

*Notes:* This table shows, for political and financial reforms, the actual number of reversals between 1989 and 2007 and the share (percentage) of years in which they occurred. For example, there were 8 reversals in terms of political reform in Albania, which correspond to reversals occurring in half of the years (1989–2005). ψ indicates that time-series data on financial reform is unavailable for these two countries.

thought and that they tend to be rather severe. Reversals are at the root of the non-monotonic relationship among structural reforms. There are several countries' experiences that provide support for our hypothesis on the U-shaped relationship between democracy and financial reform.

Russia provides an interesting example of the U-shaped relationship between democracy and financial reform that we emphasize in the paper (Figure 2). The Russian transformation which occurred during the 1990s was an attempt to rapidly introduce a private economy and establish a democratic system breaking with the legacy of the communist period. President Yeltsin was in office from 1991 to 1999. He was liberal both on economic and political issues and followed a policy of dialogue and cooperation with Western countries. Summary indicators of political and economic reform confirm such ambitious transformation. However, despite Yeltsin's ideas and approach, *de facto*, the equilibrium achieved was far from ideal democracy and market economy. Privatization of the large natural resource sector put in the

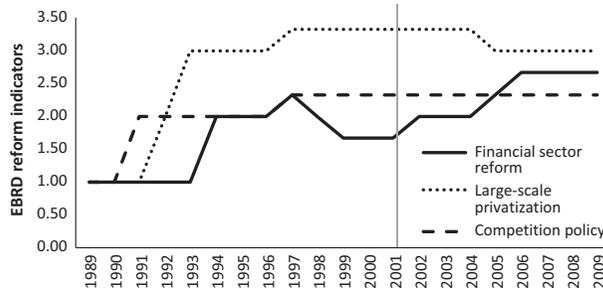


**Figure 2. Russia: Democracy (horizontal axis) and financial reform**

hands of a small group of people, the so-called oligarchs, a large part of Russian wealth. This economic elite controlled *de facto* the political sphere, through what has been defined as ‘state capture’ (Hellman, 1998). Economic reform and actual development in main economic areas, including financial sector development, stalled. Even though in 1999 Putin was selected as prime minister, and acting president, by Yeltsin himself with the objective of political continuity, he represented a significant break in Russian politics. Elected President of the Russian Federation in 2000, Putin introduced two main changes, both relevant to our analysis: first, he established the authority and power of the political executive over the oligarchs (i.e. economic elites); second, he centralized the political power away from the regions and from the state bureaucracy. These changes drove a switch of power away from economic elites to the state, or the political elite associated with Putin. According to measures of political freedom, there was a shift to a more authoritarian system, reflected by several political measures and by our indicator of political reform.

In spite of the setback in political freedom, financial reform sharply accelerated. According to EBRD economists (Berglof and Lehman, 2009), financial reform progressed quickly during the 2000s and became a fundamental source of economic growth in Russia. EBRD indicators suggest that during the 2000s financial sector reform showed the sharpest progress among all different reform areas. During the period of acceleration of financial reform, other reforms, such as privatization and competition policies stalled or even reversed, as in the case of large-scale privatization (Figure 3).

We contrast the Russian example with the experience of a country, Poland, that jumped immediately to a high level of democracy and followed thereafter a path of financial reform (Figure 4). At the start of transition Poland jumped to a political regime that can be classified as full-fledged democracy, and this coincided with a significant improvement in financial reform. After a continuing progress in financial



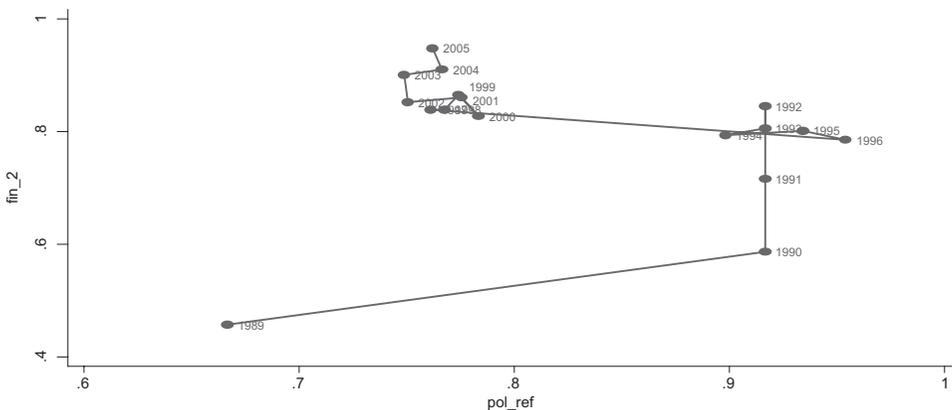
**Figure 3. Russia: Reform indicators (scale 1-4)**

Source: EBRD, Transition Report, various issues.

reform, towards the end of the 1990s Poland experienced a setback in the political regime. This did not lead to a significant setback in financial reform, as the level of democracy remained sufficiently high, well below the threshold that divides full-fledged democracies from ‘partial’ democracies.

### 3. EXPLAINING THE U-SHAPE

There exists a large literature on political determinants of financial reform and financial development. Haber and Perotti (2008) provide a thorough survey of such literature. From that survey Haber and Perotti identify three main forces shaping financial development, namely legal, cultural and political forces. According to Haber and Perotti, although legal and cultural forces may be relevant, they vary too little over time and thus cannot explain the time variation in financial development. Therefore, Haber and Perotti argue that political factors, which vary significantly over time, are the best candidate to explain the evolution of financial development. Such a view has been effectively put forward by Rajan and Zingales



**Figure 4. Poland: Democracy (horizontal axis) and financial reform**

(2003a): 'All this is not to suggest that structural theories are incorrect, but that they are incomplete. A theory with a more variable factor is needed to explain both the time-series variation in financial development as well as the cross-sectional differences. In our view, the strength of political forces in favor of financial development is a major variable factor'.

Haber and Perotti stress two elements in the political dimension: first, limited government is a major constraint on arbitrariness of political power and thus for the risk of private activities, in the form for instance of confiscation and nationalization (North and Weingast, 1989); second, lobbying by interest groups has a key influence on financial reform. This lobbying behavior may lead to coalition equilibria in which financial reform is stopped (Pagano and Volpin, 2001).

In countries with weak limited governments, economic and political elites form an alliance to block financial development that might endanger existing rents. In this approach, higher political participation and thus higher democracy foster financial development. However, the relationship between political participation, democracy and financial development may be non-monotonic. Passed a given threshold of political participation, broader political access does not necessarily foster financial development. This non-monotonicity is reminiscent of the 'excessive democracy' equilibrium studied by Barro in the context of the relationship between democracy and growth (Barro, 1996), although the focus of Haber and Perotti is different. One channel through which under democracy financial reform may be blocked or reversed is linked to the behaviour of the middle class in response to major shocks to their income levels. When subject to major adverse shocks, middle classes may shift their preference to corporatist policies, inducing reversals in financial development. Another channel that may lead to blocking or even reversal of financial reform is given by the ability of lobbies to capture governments. According to Haber and Perotti the two channels discussed above can in fact be linked, as special interest groups can ride the anti-financial development positions of middle classes that have been hard hit by economic shocks.

In connection with the ability of lobbies to capture governments, a main issue is why under democracy the population at large is not capable of stopping the influence of lobbies on governments. In this regard, Perotti and Volpin (2007) emphasize the importance of information for voters and especially the freedom in the media. Special interest groups may be able to capture the government without having the population understanding that policies implemented are in the interest of such lobbies at the expense of the population at large. This mechanism may be extremely relevant for our interpretation which stresses the likelihood of low financial reforms in weak democratic systems, 'partial democracies', often characterized by low levels of press and media freedom. Summing up, the literature surveyed in Haber and Perotti (2008) provides convincing evidence on the relevance of political factors in determining financial reform and financial development. Overall, democracy is seen as a key driver of financial development. However, there are potential

limits on the effectiveness of democratic regimes in fostering financial development and avoiding reversals in financial development. These limits are particularly severe when the middle class is hit by large adverse shocks and when lobbies become powerful enough to capture governments. Such literature does not envisage the possibility that when incomplete, democratization may actually lead to less financial reform and financial development than more autocratic regimes. Furthermore, it is likely that the power of lobbies and their ability to capture governments is especially strong in forms of partial and incomplete democracies, rather than full-fledged democracies.

Therefore, our contribution offers a complementary but novel view on the relationship between democracy and financial reform. Specifically, we emphasize that such relationship is likely to be non-monotonic, but with a U-shaped rather than inverted U-shaped relationship. It is to the left of a threshold of democratization, rather than to the right, that financial reform is likely to be low and prone to reversals.

The non-monotonic relationship between degree of democracy and economic reforms that we suggest implies that in intermediate regimes, regimes of so-called partial democracy, obstacles to reforms are at their peak. Analytically, our view is linked to two approaches that can be identified in the literature. One relies on the blocking power of economic elites, which perceive that reforms would reduce their rents. The other focuses on the role of 'political rents', which are associated with maintaining political power. Although in the real world the distinction between economic and political rents is likely to be blurred, differentiating economic and political elites is crucial for our analysis.

Within the 'economic rents' approach, potential losers try to defend their economic rents and lobby the governments to impede reforms. Depending on the monopoly rents threatened by reforms, there are different potential blocking interest groups. Parente and Prescott (2002) have formalized such an idea, previously advanced by various authors (Kuznets, 1968; Mokyr, 2000). The blocking power of interest groups operates as well under democracy. In fact, such blocking power could be the strongest in democracy. Therefore, autocracy could be a mechanism to reduce the power of interest groups and allow reforms to go through. Preszworski (1991) has used this approach to describe the reform process in Central and Eastern Europe.

Analysing the transition process in Central and Eastern Europe, Hellman (1998) has advanced a different view, arguing that the net winners of transition, rather than the losers, blocked completion of reforms.

These net winners did not oppose the initiation of the reform process, nor have they sought a full-scale reversal of reform. Instead, they have frequently attempted to block specific advances in the reform process that threaten to eliminate the special advantages and market distortions upon which their own early reform gains were based. Instead of forming a constituency in support of advancing reforms, the short-term winners have often sought to

stall the economy in a partial reform equilibrium that generates concentrated rents for themselves, while imposing high costs on the rest of society. (Hellman, 1998, p. 204)

This view goes under the heading of ‘state capture’ and suggests a dynamic relationship between political and economic reforms that could give rise to an intermediate equilibrium trap of partial reforms. From the political perspective, if one defines a situation in which the state is captured as one of partial democracy, this approach is consistent with a U-shaped relationship between democracy and specific economic reforms.

Although Hellman’s approach may offer an interpretation of the U-shaped relationship between democracy and economic reforms, an explanation based solely on the role of economic rents is likely to be incomplete. As argued by Acemoglu and Robinson (2006a), the relationship between political regime and economic reform is best understood by considering the role of political rents, rather than economic rents.<sup>7</sup>

Acemoglu and Robinson (2006a) model the non-monotonic relationship between political competition and economic reform (innovation) and find that ‘The impact of political competition on blocking is non-monotonic. Both elites that are subject to competition and those that are highly entrenched are likely to adopt new technologies’ (2006a, p. 116). The mechanism underlying the non-monotonicity rests on the political ‘replacement effect’. With high political competition governments tend to innovate to avoid being replaced. With low competition but high entrenchment incumbents innovate because there is very little risk of being replaced. Blocking of reforms takes place in intermediate regimes, whereby there is some competition and some entrenchment. To relate Acemoglu and Robinson’s view to our approach, note that systems with a high degree of political competition can be defined as fully democratic, whereas entrenchment tends to be high in autocracy. The novelty of the Acemoglu and Robinson approach is that innovation is blocked not because it implies destruction of economic rents, but because it involves the destruction of political power.<sup>8</sup>

In the political science literature, Epstein *et al.* (2006) emphasize the central role of partial democracies in the dynamics of political regimes. Such intermediate regimes can be associated to what Gates *et al.* (2006) defined as ‘institutionally inconsistent political systems’. These systems differ both from full-fledged, or ‘ideal’, democracies and strong, or ‘ideal’, autocracies. Such intermediate systems are characterized by the struggle among different elites for the control of political power, with the objective of maximizing elites’ short-term benefits. These systems are unstable and long-run objectives of maintaining political power do not play a key

<sup>7</sup> We present a simple formalization of these ideas in the Web Appendix to this paper.

<sup>8</sup> An analogous result is obtained by Bueno de Mesquita and Smith (2004) in their study of the effects of different degrees of concentration of property on corporate behaviour.

role. Economic power is sufficiently concentrated to induce elites to try to grab power and control government, as in the state capture literature. However, the concentration of power is limited and there is no political authority and/or consensus that can provide stability for such a regime.

In summary, although the distinction between the political and economic rents is not very strong in practice, the political approach emphasizes the presence of a political elite capable of appropriating political rents. This distinction is crucial for our view, as it may happen that there is less power for economic elites in autocracy than in partial democracy, a situation in which economic elites can capture the state.

A non-monotonic relationship between economic and political liberalization requires the presence of at least three political regimes. The introduction of a regime of partial democracy, an intermediate regime between autocracy and full-fledged democracy, is the key element of the non-monotonicity.<sup>9</sup> Only in a full-fledged democracy, the majority of the population determines the decisions of the government. Away from full-fledged democracy, economic elites exert a dominant power. Traditionally, autocracy has been defined as the regime in which the elites have the absolute political power. However, non-democratic regimes may be highly heterogeneous. Heterogeneity may characterize both the distinction between political and economic elites and the distinction between different economic elites. This heterogeneity allows the presence of multiple non-democratic political equilibria. Until recently, elite heterogeneity has received little attention in the political economy literature. One reason might be the difficulty in reaching general conclusions in models with heterogeneous elite. Indeed, in such a case political-economy equilibria depend on the specific nature of heterogeneity and on the specific dimensions of the political contest and economic reform areas.

A possible equilibrium under autocracy is one in which some elites form a coalition with the population in order to support a strong autocratic government that opposes the interests of other elites. We explore the possibility of emergence of a coalition between reform-oriented elites and the population to support a strong government capable of resisting the pressures for blocking reforms by other elites.<sup>10</sup> Such coalition may support an autocratic government, in which an independent political elite retains power. By contrast, we define partial democracy as a regime in which the government is fully captured by economic elites. The objectives and constraints of the government in the two non-democratic regimes are sharply different. A strong autocratic government needs support in order to maintain its power. This support comes both from some elites and from the population. The prefer-

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<sup>9</sup> We exclude cases of military dictatorship and repression, and focus on regimes based on universal voting rights and elected governments. This assumption implies that all regimes can be considered *de jure* democracies, defined as systems based on universal voting rights.

<sup>10</sup> Elite heterogeneity plays an important role also in Acemoglu (2008), who analyses the emergence of coalitions between the poor population and the backward (low-skilled) elites.

ences of the supporting elites and the population have to be taken into account by the autocratic government. By contrast, in partial democracy, the economic elites fully control the government. Therefore, the preferences of the dominant elites are the only ones that are taken into account in the decision making. This is the reason why this regime has been defined as ‘captured democracy’ (Acemoglu and Robinson, 2008).<sup>11</sup>

The definitions of the three political regimes are relevant to define the nature of policy reversals (Figure 1). We can indeed define a threshold level for an intermediate regime. To the right-hand side of this threshold, there is a region in which economic elites interfere with the political system and fully control the political process.<sup>12</sup> Moving left and crossing the threshold, there is a region in which the State may regain power against the economic elites by strengthening the position of the political elites. In this region, the political system relies on a coalition between some elites and the population. Therefore, depending on the relative position with respect to the threshold, a lower level of democracy may reflect two different configurations of power of economic elites. This is the hypothesis that we try to empirically verify in this paper.

In summary, the non-monotonicity between political regime and economic reforms arises because the power of interest groups may be weakened either in a full-fledged democracy or in a more autocratic regime. To maintain their power, autocratic governments may favour efficiency-enhancing reforms because these will increase consensus in the population and, at the same time, the resources at the disposal of the political regime to buy such consensus. Such efficiency-enhancing reforms may favour as well certain economic elites, which participate in a coalition with the population to support the autocratic government. Lacking support by some economic elites, the autocratic government will be overthrown by opposing elites. Heterogeneity of elites is a distinguishing feature of our analysis and helps to explain why autocratic governments tend to implement fundamental economic reforms concentrated in specific areas, rather than ranging over a broad spectrum as in democracy.<sup>13</sup> The financial sector is one of the areas in which autocratic governments have carried out significant reforms.

Although it is likely that there is a positive correlation between different economic reforms, such correlation is far from perfect. In fact, in autocracy, and even more in the intermediate region of partial democracy, there may be less

<sup>11</sup> The following quote from Epstein *et al.* (2006) effectively summarizes the relevance of partial democracy: ‘We also learn that the frontier of this line of inquiry has shifted away from the study of autocracies and democracies and toward the study of partial democracies. As we show here, the behavior of these systems largely determines the level, rate, and properties of democratization. While thus influential, partial democracies, being highly heterogeneous, are poorly understood. The study of democratization, we therefore conclude, should place them at its focus’ (p. 552).

<sup>12</sup> This is the region that Rajan and Zingales (2003b) have studied in connection with the role of interest groups in opposing financial development.

<sup>13</sup> Our approach has also some similarities with Rajan (2009), although our characterization of different political regimes is different.

convergence between different areas of reforms.<sup>14</sup> Economic elites may block reforms in specific areas, whereas reforms can proceed in areas where there are not strong vested interests.<sup>15</sup> The functioning of the financial sectors may affect asymmetrically different elites. The presence of heterogeneous elites seems to be a useful assumption to understand the political economy of financial sector reform.

We see the link between the financial sector and political reforms working through two distinct channels. One can be thought as the defence of rent-seeking through barriers to financial development (in line with Rajan and Zingales, 2003a, b). One elite benefits directly from blocking financial sector development. The other channel has to do with government revenues, as financial repression can be an important way for the state to raise revenue.<sup>16</sup>

While one elite benefits from financial repression, the other elite and the population are negatively affected. The elites controlling financial institutions have a direct interest in expanding their activities. Similarly, large manufacturing firms may need significant external finance and thus a developed financial sector. Finally, when the banking system is controlled by the State, political elites can use the banking sector as a powerful economic lever in their own interest.

From the above, it is apparent that we expect financial sector development to be faster (*ceteris paribus*) in dictatorships than in partial democracies. Both autocratic and democratic governments tend to foster financial development. Reversals in financial liberalization, however, are more likely in the transition from an autocratic regime towards a more democratic regime. Full-fledged democracy seems to be the best antidote against reversals. However, power groups may gain strength even in democracy and push for reversals of financial sector reform, in order to create barriers to entry and protect their monopoly positions as incumbents (Rajan and Zingales, 2003b). Furthermore, the nature of financial sector reform in dictatorships is likely to be different from the one in democracies. Rather than financial reform geared towards increasing competition in the system, dictatorship may aim instead at financial sector reforms that increase the power and the revenue of political elites in the economy.<sup>17</sup>

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<sup>14</sup> For instance in Russia, during the shift towards more authoritarian government under Putin, financial sector reform improved markedly, while competition policy stalled and large scale privatization reversed as a result of major re-nationalizations. Braga de Macedo and Olivera Martins (2008) analyse the complementarity of reforms.

<sup>15</sup> This phenomenon may be reinforced by external pressures arising from increased international integration of the economy. With economic integration there is less scope for barriers to reform and thus protection of monopoly rents tend to be concentrated in a smaller set of sectors.

<sup>16</sup> High reserve requirements or ceilings on deposit rates increase bank margins and thus taxable income from banks.

<sup>17</sup> An interesting area for future research is the analysis of the different nature of financial sector development in connection with democracy, economic opportunity and more open societies. Recent work in the finance literature (Demirgüç-Kunt and Levine, 2008) has emphasized the importance of the formal financial system in affecting the degree to which economic opportunities are defined by talent rather than by parental wealth and social connections.

#### 4. ECONOMETRIC EVIDENCE ON THE RELATIONSHIP BETWEEN POLITICAL AND FINANCIAL REFORMS

This section presents and discusses econometric results that help to shore up and evaluate the existence of a non-monotonic relationship between political and economic (financial) liberalization. The discussion below stresses results from fixed-effects estimates focusing on the cross-country, over time relationship between political and financial reforms, as well as from models that reflect the current literature on the political economy of financial liberalization (e.g. Giavazzi and Tabellini, 2005; Abiad and Mody, 2005), and instrumental variables estimates accounting for the relationship between *de jure* and *de facto* dimensions of financial liberalization.

Table 2 presents fixed-effects panel estimates for the relationship between political and financial reforms. The first column shows the results for the measure of financial depth and the second has the results for the index of financial efficiency, while the right-hand side has just the composite political liberalization index (the latter covering four different components as described in Section 2 above). As it can be seen, there is strong evidence for a U-shaped relationship between financial and political liberalizations with the turning points being reached at the area we call partial democracy. The minimum values for financial depth and for financial efficiency occur when the political reform indexes are at 0.31 and 0.37, respectively. It is worth illustrating these results by noting that the value of the political reform index in 1999, for instance, is 0.39 in Russia and 0.36 in the Kyrgyz Republic. One may think these values are somewhat ‘too low’ but this may largely be due to the possibility of omitted variables. Indeed, the results presented in the rest of this section confirm this suspicion and help place the turning points closer to the 0.5

**Table 2. Panel evidence for transition economies on the relationship between financial and political reforms fixed-effects panel estimates, yearly data covering 1989–2005**

	Financial depth	Financial efficiency
Political reform	–0.3297* [0.1736]	–0.5562** [0.2225]
Political reform squared	0.5328*** [0.1702]	0.7545*** [0.2256]
Constant	0.4538*** [0.0444]	0.7091*** [0.0536]
Observations	300	360
Number of countries	19	23
R-squared	0.071	0.043

*Notes:* This table shows fixed-effects panel estimates for the sample of transition economies for two measures of financial reform, one stressing depth and the other efficiency (both measured in the 0–1 range). Turning points (minimum) are within the ‘partial democracy’ zone, at 0.31 and 0.37, respectively. Standard errors in brackets: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ .

value, which may provide a better characterization of a situation of partial democracy.<sup>18</sup> The quantitative effects of changes in political reform on the levels of financial liberalization are large. Using the coefficients from estimates reported in Table 2 we compute the effects of a change from the level of political reform associated with partial democracy to 'full democracy'.<sup>19</sup> Such a change entails an increase of approximately 62% in the level of financial depth (the predicted values are 0.402 and 0.654) and of approximately 50% in the level of financial efficiency (the predicted values are 0.606 and 0.907).

It should also be mentioned that these simpler results obtain irrespective of which financial reform index we may concentrate on, irrespective of which individual component of any of the two financial reform indexes, and irrespective of which components of the political reform index we use (that is, the four underlying measures of political liberalization) as well as irrespective of other well-known measures of political reform such as the Polity index.<sup>20</sup> These econometric results are equally strong for *civil liberties* and for the Nations in Transit's *democracy index* as they are for *press freedom*. For these three aspects of political liberalization, a strong U-shaped relationship emerges whether we focus on any of the aggregate financial reform indexes or on any of their five individual components. The results for the *presidential power index* and for *political rights* are somewhat not as strong. For the presidential power index, the U-shape relationship obtains only for the case of the Index 2 of financial reform, the one capturing efficiency. For political rights, the U-shaped relationship actually obtains for the two aggregate financial reform indexes, but it is weaker for Index 1 than for Index 2 in that it fails to materialize for two individual components of Index 1 (financial depth).

A critic may argue that the results above only support an 'unconditional U-shaped' relationship between political and economic reform reversals. 'Unconditional' because it does not depend on any other potentially important explanatory variable. Yet one concern is that the omission of other important determinants of any of the two reforms may unduly bias these results. In order to minimize this concern, we draw from various important studies in the recent political economy literature on financial liberalization (see Giavazzi and Tabellini, 2005; Abiad and Mody, 2005, and references therein).

In order for the empirical model to nest the main hypothesis from the political economy of reform literature, it should cover the following categories: (a) *shocks*, such as crises of various types; (b) *learning* about the effects of previous reforms, (c)

<sup>18</sup> Note that the political reform index and the financial reform indexes are normalized to a 0 to 1 scale, with 1 indicating the highest level of liberalization.

<sup>19</sup> For partial democracy, we take the value of political reform associated with the minimum of financial reform in the sample, which corresponds to the turning point in the U-shaped curve.

<sup>20</sup> These are not shown for the sake of space, but are available from the authors upon request. For the sample of transition economies at the centre of our argument, the measures of political reform we use are finer and more extensively documented than the Polity index and these are the reasons we have to report these. However, because Polity is widely used it is important to note that its correlation with the measure above is 0.84. Unsurprisingly, the results are qualitatively the same as those discussed here.

*ideology* of those in charge of setting the agenda, negotiating political support and implementation, and (d) the *political and economic structures*, which affect the decision to adopt a given reform programme.

The basic econometric specification also has financial reform as a function of a *learning* term reflecting the initial level of reform and the convergence effect between actual and desired level of reform.<sup>21</sup> In order to reflect the role of shocks, it should account for factors such as balance-of-payment crises, banking crises, recessions and high-inflation periods. The influence of international financial institutions is assessed through a dummy variable for participation in an IMF programme and that of global factors is proxied by the US interest rate. For the political orientation of the government, dummy variables for left-wing and right-wing governments ('centre' being the omitted category) are added. The political and economic structure is proxied by the degree of trade openness of the economy.

The above-mentioned literature finds that while banking crises hinder, balance-of-payment crises foster financial reform and that the initial level of reform matters. Declines in global interest rates exert a positive effect on domestic financial liberalization, but there is little evidence to suggest that recessions and high-inflation episodes are systematically associated with financial liberalization. Similar conclusions are reached with respect to participation in an IMF programme. Finally, the literature has so far found mixed evidence for the honeymoon political effect, for whether the government is left or right-wing and for the role of trade openness.

Table 3 presents estimates of our model of the determinants of financial reform. First we report the Tobit panel estimator because our financial reform index (the left-hand side variable) is constrained to the 0 to 1 interval. We report results for our financial efficiency index and our overall political reform index. In order to minimize obvious concerns about reverse causality, we lagged all variables by one period (except political reforms, although we find that also lagging these makes the estimates even more precise).

As can be seen in Table 3, in line with the findings from the literature discussed above, debt crises help financial reform, while banking crises hinder it. Lower US interest rates boost domestic financial reform, while recessions and high-inflation show a systematic negative effect on financial reform. The results also show that the coefficients on the IMF programme, left-wing and right-wing, are not statistically significantly different from zero.

Yet the more important result is that the two terms for political reform are significant throughout and carry the same signs as in Table 2 above. These results suggest that the relationship between financial and political reforms is indeed U-shaped. Moreover, minimizing potential omitted variables contributed to better placing the turning points inside the partial democracy zone. For example, while in

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<sup>21</sup> Learning from previous reforms is captured by the variable 'AMteta' which is calculated in the same way as in Abiad and Mody (2005) using one-period lag of financial reform.

**Table 3. Panel Tobit estimates for transition economies, 1989–2005, on the relationship between political and financial reforms**

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
AMicta	0.0148 [0.1684]	0.0725 [0.1669]	-0.0951 [0.1445]	-0.0667 [0.1441]	-0.0879 [0.1445]	-0.0737 [0.1447]	-0.0877 [0.1447]
Political reform	-0.8401*** [0.2433]	-0.8591*** [0.2395]	-0.6161*** [0.2357]	-0.6520*** [0.2319]	-0.6441*** [0.2313]	-0.6144** [0.2422]	-0.6470*** [0.2428]
Political reform squared	1.0698*** [0.2180]	1.0843*** [0.2148]	0.7202*** [0.2076]	0.7145*** [0.2046]	0.7102*** [0.2039]	0.6850*** [0.2121]	0.7125*** [0.2121]
Banking crisis		-0.0883*** [0.0280]	-0.0552** [0.0227]	-0.0533** [0.0222]	-0.0578*** [0.0224]	-0.0552** [0.0225]	-0.0577** [0.0225]
Debt crisis		0.1182** [0.0554]	0.1309*** [0.0446]	0.1203*** [0.0439]	0.1264*** [0.0441]	0.1215*** [0.0439]	0.1264*** [0.0441]
IMF Programme			0.02136 [0.0215]	0.01268 [0.0211]	0.01333 [0.0211]	0.01163 [0.0212]	0.01343 [0.0212]
U.S. interest rates			-0.0199*** [0.0044]	-0.0189*** [0.0046]	-0.0199*** [0.0046]	-0.0189*** [0.0046]	-0.0199*** [0.0046]
Recession			-0.1488*** [0.0161]	-0.0908*** [0.0219]	-0.0931*** [0.0219]	-0.0906*** [0.0219]	-0.0931*** [0.0219]
High inflation				-0.0695*** [0.0221]	-0.0693*** [0.0221]	-0.0700*** [0.0221]	-0.0692*** [0.0221]
Trade liberalization				0.0623 [0.0432]	0.0509 [0.0438]	0.0576 [0.0440]	0.0512 [0.0442]
Left-wing government						-0.0103 [0.0191]	0.0318 [0.0253]
Right-wing government					0.0314 [0.0229]		0.008 [0.0251]
Constant	0.7424*** [0.073]	0.7450*** [0.072]	0.9157*** [0.066]	0.9034*** [0.074]	0.9078*** [0.074]	0.9010*** [0.074]	0.9081*** [0.074]
Observations	353	353	345	345	345	345	345
Number of countries	23	23	23	23	23	23	23

*Notes:* This table shows Tobit panel estimates for the sample of transition economies for the measures of financial reform stressing efficiency (measured in the 0–1 range). All right-hand side variables are lagged one period, except political reform (although this has little effect on the main conclusions). AMicta uses the approach introduced in the Abiad–Mody (2005) paper to proxy for learning from the effects of previous reform, and it is calculated using one-period lag of financial reform. Standard errors are in brackets: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ .

**Table 4. Panel fixed-effects estimates for transition economies, 1989–2005, on the relationship between political and financial reforms**

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
AMteta	0.1917 [0.1721]	0.1932 [0.1713]	0.004181 [0.1469]	0.0239 [0.1472]	0.0022 [0.1482]	0.0143 [0.1478]	0.0007 [0.1485]
Political reform	-0.8690*** [0.2662]	-0.8831*** [0.2652]	-0.6070** [0.2606]	-0.6409** [0.2553]	-0.6365** [0.2552]	-0.5737** [0.2700]	-0.6094** [0.2726]
Political reform squared	1.0616*** [0.2540]	1.0707*** [0.2529]	0.6108*** [0.2353]	0.6081*** [0.2305]	0.6122*** [0.2304]	0.5541** [0.2411]	0.5896** [0.2440]
Banking crisis	-0.08131*** [0.0281]	-0.0909*** [0.02830]	-0.0591*** [0.0229]	-0.0572*** [0.0225]	-0.0612*** [0.0228]	-0.0600*** [0.0228]	-0.0619*** [0.0229]
Debt crisis		0.1111** [0.05611]	0.1270*** [0.0452]	0.1169*** [0.0446]	0.1225*** [0.0448]	0.1190*** [0.0447]	0.1227*** [0.0449]
IMF Programme			0.0262 [0.0217]	0.0168 [0.0216]	0.0172 [0.0215]	0.0154 [0.0215]	0.0165 [0.0216]
U.S. interest rates			-0.0206*** [0.0044]	-0.0194*** [0.0047]	-0.0201*** [0.0049]	-0.0194*** [0.0048]	-0.0200*** [0.0049]
Recession			-0.1481*** [0.0163]	-0.0880*** [0.0223]	-0.0898*** [0.0223]	-0.0877*** [0.0223]	-0.0895*** [0.0224]
High inflation				-0.0704*** [0.0225]	-0.0700*** [0.0225]	-0.0711*** [0.0225]	-0.0704*** [0.0225]
Trade liberalization				0.0683 [0.0441]	0.0589 [0.0448]	0.0615 [0.0451]	0.0572 [0.0453]
Left-wing government						-0.0153 [0.0198]	-0.0063 [0.0219]
Right-wing government					0.0285 [0.0239]		0.0252 [0.0265]
Constant	0.7448*** [0.0767]	0.7471*** [0.0764]	0.9422*** [0.0749]	0.9249*** [0.0772]	0.9267*** [0.0772]	0.9186*** [0.0777]	0.9240*** [0.0779]
Observations	353	353	345	345	345	345	345
Number of countries	23	23	23	23	23	23	23
R-squared	0.089	0.1	0.4	0.429	0.431	0.43	0.431

*Notes:* This table shows fixed-effects panel estimates for the sample of transition economies for the measures of financial reform stressing efficiency (measured in the 0–1 range). All right-hand side variables are lagged one period, except political reform (although this has little effect on the main conclusions). AMteta uses the approach introduced in the Abiad–Mody (2005) paper to proxy for learning from the effects of previous reform, and it is calculated using one-period lag of financial reform. Standard errors are in brackets: \*\*\* $p < 0.01$ , \*\* $p < 0.05$ , \* $p < 0.1$ .

column 1 the minimum is reached for the value of 0.39 of our 0–1 index of political reform which is not substantially different from the values obtained in Table 2, in the latter columns the minimum is reached at 0.45 (e.g. in Column 5) which provides a better fit to the situation of partial democracy that is central to the explanations we develop in Section 3 above.

Table 4 uses the same specifications but now for the fixed-effects panel estimator. As can be seen, there is no main qualitative change in the main conclusions. Once again we estimate the turning point in the simplest specification (Column 1) to be approximately 0.41 while the minimum in the complete model is reached at 0.52, that is, well within the partial democracy zone.

The central claim of this paper is that the relationship between political and financial liberalizations follows a U-shaped pattern. In order to assess the strength of this claim, we focus our attention on the experience of the European periphery, more precisely on the group of countries known as the transition economies. All of these countries emerged from communism between 1989 and 1991 and as a group they provide a good setting to test these ideas because their levels of political and financial development were practically identical and effectively zero. Under communism, there was a dictatorship and hence no political rights and also there was very little financial development with, for example, no individual access to bank accounts. In this paper we have provided a conceptual account of this relationship and presented supporting econometric evidence. Yet a critic may charge that our findings may not be generalizable and that the U-shaped relation is a particularity of the transition process. For these reasons, in Table 4 we report results showing that the U-shaped relation between financial and political liberalizations also obtain for a much larger sample of developing and developed countries, using panel data with yearly frequency from 1973 to 2005.

The sources for the data set we assemble for this analysis are essentially the same as above but the time coverage is more extensive, starting in year 1973 and ending in 2005. The largest number of countries for which we have data on political and financial liberalization is 134 and this unbalanced panel gives us 1,463 observations. The data covers 23 industrial and 111 non-industrial countries. The regional distribution of the developing countries sample is as follows: the data covers 16 countries in Asia, 24 in Central Asia, 35 in sub-Saharan Africa, 24 in Latin America, and 12 in the Middle East and North Africa.

Table 5 shows panel estimates supporting the U-shaped relationship between financial and political liberalization for this large sample of countries. One difference worth mentioning between these results and those focusing on the transition countries above is that the turning points (minima) for the former, while still within the partial democracy zone, are reached at somewhat larger values. Specifically, while similar specifications for the transition economies support turning points at about 0.52 (Table 4), those for the larger sample of countries indicate turning points at around 0.64 (Table 5). One possible explanation for this is that

Table 5. Panel estimates for the whole world, 1989–2005, on the relationship between political and financial reforms

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
AMteta	0.4569*** [0.0258]	0.4528*** [0.0257]	0.4708*** [0.0282]	0.5738*** [0.0247]	0.5724*** [0.0257]	0.5740*** [0.0245]	0.5713*** [0.0255]
Political reform	-0.1088*** [0.0259]	-0.1068*** [0.0258]	-0.0963*** [0.0290]	-0.0612*** [0.0219]	-0.0611*** [0.0219]	-0.0628*** [0.0216]	-0.0636*** [0.0213]
Political reform squared	0.0858*** [0.0299]	0.0832*** [0.0298]	0.0774** [0.0330]	0.0445* [0.0255]	0.0436* [0.0258]	0.0449* [0.0252]	0.0431* [0.0255]
Banking crisis		-0.0194** [0.00966]	-0.0181* [0.0107]	-0.0175 [0.0158]	-0.0175 [0.0158]	-0.0174 [0.0158]	-0.0172 [0.0157]
Debt crisis		-0.0158 [0.0250]	-0.0209 [0.0421]	-0.0148 [0.0447]	-0.0154 [0.0447]	-0.0146 [0.0446]	-0.0158 [0.0447]
U.S. interest rates			-0.0008 [0.0008]	-0.0023** [0.0009]	-0.0023** [0.0009]	-0.0023** [0.0009]	-0.0021** [0.0009]
Recession			-0.0077 [0.0078]	-0.0035 [0.0089]	-0.0032 [0.0089]	-0.0041 [0.0089]	-0.0038 [0.0089]
High inflation				-0.0028 [0.0078]	-0.0031 [0.0079]	-0.0021 [0.0078]	-0.0022 [0.0078]
Trade liberalization				0.0144* [0.0079]	0.0141* [0.0079]	0.0146* [0.0079]	0.0142* [0.0079]
Left-wing government					-0.0021 [0.0041]		-0.0045 [0.0048]
Right-wing government						-0.0032 [0.0035]	-0.0051 [0.0043]
Constant	-0.0406*** [0.0039]	-0.0409*** [0.0039]	-0.0367*** [0.0055]	-0.0258*** [0.0046]	-0.0253*** [0.0047]	-0.0245*** [0.0049]	-0.0225*** [0.0052]
Observations	1463	1463	1097	668	668	668	668
Number of countries	134	134	107	97	97	97	97

Notes: This table shows panel estimates for a large sample of developing and developed economies for the measures of financial reform stressing efficiency (measured in the 0–1 range). All right-hand side variables are lagged one period, except political reform (although this has little effect on the main conclusions). AMteta uses the approach introduced in the Abiad–Mody (2005) paper to proxy for learning from the effects of previous reform, and it is calculated using one-period lag of financial reform. Standard errors clustered at the country-level are in brackets: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

these larger samples are much more heterogeneous than the transition economies, in particular regarding the levels of political reform (note that the sample starts in 1973 with a ‘democratization wave’ starting in the early 1980s). Regarding the other results, one observes the somewhat surprising finding that the roles of debt and banking crises have now inverted. For the larger sample, the effect of the former is never statistically significant, while that of the latter tends now to be positive (suggesting that banking crises propel financial liberalization, all else the same). It is also interesting to note that the role of the US interest rates, for the larger sample of countries since 1973, is significant and now carries the expected negative sign. In any case, the main message is that the U-shaped relationship between political reform and financial liberalization does not seem restricted to the European periphery. Evidence for this important non-monotonicity also obtains for a much larger sample of developing and developed countries, covering a substantially longer period of time.

In terms of additional robustness checks, we re-estimated these models with GMM and found that our main conclusions discussed previously are qualitatively unaffected, in particular the econometric support for a non-monotonic relationship between financial and political reform is undiminished. It should also be mentioned that although our focus on this paper is on financial liberalization and the transition countries, we have also studied whether the non-monotonic relationship obtains with other reforms and we find equally strong support for the relation between trade liberalization and political reform.

Finally, we also investigate whether accounting for *de jure* financial liberalization affects the non-monotonic relationship between political reform and *de facto* financial liberalization. Although we find evidence that political reform also affects *de jure* financial liberalization in a similarly non-monotonic fashion, as it affects *de facto* liberalization, the evidence underscoring the latter relationship is substantially stronger despite the fact that the change in financial laws and regulations (*de jure* liberalization) is an important determinant of (or input into) cross-country and over time variations in *de facto* liberalization (see the Web Appendix, Table A5). More importantly, we find evidence that the non-monotonic relationship between political and *de facto* financial reform is also robust to the inclusion of this potentially important additional determinant. The stronger effect of political reform on *de facto* rather than *de jure* financial reform suggests that the political regime plays a crucial role in the actual implementation of financial reforms. This has far-reaching policy implications, especially for the effectiveness of reform packages adopted by countries as part of programmes agreed with international organizations. Adoption of reform packages in the context of weak democracies are unlikely to be effectively implemented and thus are unlikely to lead to significant positive effects on the economy.

## 5. CONCLUDING REMARKS AND POLICY IMPLICATIONS

This paper presents novel theoretical motivation and robust econometric evidence for a non-monotonic, U-shaped, relationship between financial liberalization and political reform, which stresses the previously neglected yet crucial role played by reform reversals. We believe this to be a main contribution of the paper, which is supported by an identification strategy based on a selected group of countries, which shared remarkably similar initial conditions, characterized by extremely low levels of political and economic liberalization (thus with the pre-reform periods acting as control in the analysis of the reform periods). Furthermore, it introduces a new perspective on the relationship between *de jure* and *de facto* financial liberalization. Rather than choosing one of the two measures, we used the *de jure* liberalization as an input for the *de facto* liberalization. It turned out that political regimes play a crucial role in affecting the implementation stage, namely the effectiveness with which *de jure* reforms are transferred into *de facto* financial liberalization.

What are the main policy implications from these results? A U-shaped relationship implies that democratization does not necessarily lead to economic reform, and indeed that partial or incomplete democratization may lead to economic reform reversals. The key challenge in the initial phases of democratization is to reduce the power of economic elites. A second implication regards the importance of the implementation phase: there is a long way from *de jure* to *de facto* liberalization and one reason the pressure tools, currently favoured by international organizations, are not as effective is because they ignore the implementation phase in partial democracies. Last, but far from least, there is some agreement between our results and those in Giavazzi and Tabellini (2005), in the sense that there is some indication that sequencing matters and that there might be pay-offs to try to implement as much economic reform as possible before opening up the political process. However, our results suggest that any conclusions on the optimal sequence should be understood very carefully because even in a relatively homogenous group of countries at the outset, we find difficult evidence for one direction of causality or the other. We envisage three main directions to extend the analysis: towards a deeper understanding of the nature of the political and of the economic reversals, on how complementarity among reforms (or the lack of) affects the occurrence and severity of reversals, and the impact that financial and economic liberalizations have on overall economic performance (taking into account the role of reversals in defining their joint dynamics). On the nature of reversals, we are interested in assessing whether their size and duration systematically vary across political regimes and types of economic reforms. In addition, the analysis should be carried out more systematically for a larger set of economic reforms (including, for instance, privatization and regulatory reforms) and study as well the complementarity between different reforms. Our conjecture is that different political regimes may not only imply a different depth of specific reforms but also a different range or choice of reforms.

## Discussion

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The recent financial crisis cast some doubts on the merits of financial liberalization. Still, most economists agree that access to financial services is a prerequisite for growth, and that financing constraints for firms and households seriously inhibit growth opportunities in many countries around the globe. Providing access to finances to the broad population at a reasonable cost is the kind of financial liberalization that Campos and Coricelli analyse in this paper. Understanding what explains the evolution of financial liberalization in different countries is therefore of immediate relevance.

Campos and Coricelli provide different new aspects to this question in their analysis. First and foremost, they focus on the interplay between political and financial reforms. Secondly, they differentiate between *de jure* and *de facto* liberalization. Last, they show evidence for a large set of countries, but put special evidence on the experience of the transition economies. I will address these three aspects in my discussion.

The most important question addressed in this paper is whether democratization univocally fosters financial liberalization. Campos and Coricelli put forward different theories that might explain a U-shaped relationship between democratization and financial liberalization. In an autocracy, the political elite relies on the economic contentment of the broad population in order to keep its power, and therefore is willing to establish economic reforms that benefit the masses. Under full democracy, special interest groups should have the least power, and thus economic reforms which are beneficial for a large part of the population will be implemented by popular vote. It is in a regime of partial democracy in which economic elites can gain the largest importance and block economic reforms that would lower their rents, since the political elites are not strong enough to avert this. This can be called 'state capture' by the economic elites.

The first empirical evidence shown in Table 1 indicates that reversals of financial and political reforms are both common in the data. Some more summary statistics and suggestive evidence about reversals, apart from the case study on Russia, would be interesting. Given the obvious measurement error in the construction of the reform indices, it would be preferable to include an inactivity range and only count as a reversal in Table 1 an episode in which the measures change beyond a certain threshold. I am curious at which level of the democratization index the reversals of financial reforms occur in the raw data.

Campos and Coricelli then present econometric evidence that indeed the data support a U-shaped relationship between financial liberalization and political reform. Interpreting this U-shaped relationship is, however, somewhat difficult. First, the authors do not provide any summary statistics regarding the measure of

democratization. While they state the exact number of the political reform index for the turning point, we do not know how to interpret this number: which percentile of the distribution does it represent? Secondly, if country-fixed effects are included in the regression in Table 3, the turning point cannot be meaningfully interpreted anymore, given that the average political reform level of a country is controlled for through the fixed effects. Therefore, this turning point cannot be compared to the one in the regressions without fixed effects.

In order to really convince the reader of the theory, it would be very nice if one could get independent evidence that is more micro-related in support of the theory of capture. In some countries, economic and political elites coincide, in others not; this would matter for the theoretical predictions of the effect of democratization on financial liberalization. Also, measures of press freedom, etc., would add independent evidence on the theory. In my opinion, this pure macroeconomic evidence is a very important first step towards providing evidence of a theory of capture in partial democracies, and hopefully this paper will spur more research adding some country-specific information on the heterogeneity of economic and political elites and other factors relating the theory to this cross-country regression. Another way to go might be to follow the route that the authors suggest and analyse the possibly non-linear relationship between democratization and economic reforms for different types of economic reforms (e.g. trade reforms, labour market reforms) whose overall impact on the broad population differ, such that the theory would give different predictions about the effect of democratization on these reforms.

The second major contribution of the paper is that the authors are careful to use *de facto* measures of financial liberalization. They very rightly argue that *de jure* liberalization is not meaningful if laws are not implemented, and that democratization might impact the implementation of rules just as it might impact the issuance of rules. The financial liberalization measures that the authors construct encompass both financial sector size and financial sector efficiency. Why financial sector efficiency should be more important than financial sector size is not entirely clear; a cost-efficient sector that only services very few people will not foster growth. Combining the two measures into one would give the broadest picture of financial liberalization. When it comes to democratization, the authors combine the widely used Freedom House index with some other measures of democratization, encompassing among others a *de jure* measure of presidential powers. This seems somewhat inconsistent, given that before they convincingly argue that *de facto* measures are more appropriate than *de jure* ones. These arguments also apply to democratization measures.

Third, the authors present empirical evidence first for the sample of transition economies, and then for a larger sample of countries. The transition economies provide a nice piece of evidence since both democratization and financial liberalization developed tremendously in the last 20 years, generating a lot of action in the data. One thing that remains puzzling, however, is that these countries all started with low levels of democratization and financial liberalization in the late 1980s. Is

that not in contrast to the theory that would predict a high degree of financial liberalization in autocracies? Given the communist history of these countries, one can understand their experience, but still it is hard to be brought in line with the underlying theory that the authors state. Unfortunately, the regressions run on the large sample of countries do not include country fixed effects.

Summarizing, this paper provides interesting and novel evidence on the non-linear relationship between democratization and financial liberalization. Given the importance of financial liberalization for growth, this is a very relevant piece of evidence. Understanding the forces behind the non-linear relationship better will be an important next step on the research agenda.

## Panel discussion

Opening the panel discussion, Thorsten Beck was not convinced of the existence of a U-shaped relation between democratization and financial reform both on theoretical and empirical grounds. Beck argued that an autocrat might undertake financial sector reforms *de jure* but with no resultant effects on outcomes such as depth or outreach of the financial system. According to Beck, there certainly appears to be enough evidence for this claim in the authors' sample. In particular, further analysis of the cases of Tajikistan, Turkmenistan and Uzbekistan would shed more light on the issue. Johannes Spinnewijn contended that establishing whether time or cross-country variation is the prominent force is crucial to the interpretation of the results. Second, he mentioned that even if Turkmenistan and Uzbekistan are not considered as outliers in the data, they are still highly correlated observations. Consequently, this should be controlled for empirically. Alex Popov suggested that the large financial reforms that took place at the beginning of the sample in 1990 were not the result of autocrats pursuing such targets. Rather, these developments reflected the initial stages of democratization, a stage at which there was plenty of enthusiasm. Andrea Ichino thought the story was appealing but at the same time was able to put forward a number of counterfactuals. He asked the authors how we should think about the cases of China, a country with no democracy but a significant amount of liberalization, and Italy, an advanced democracy with no apparent willingness to conduct reforms. Francis Kramarz was sceptical about the measure used for democratization. Using the US and France as examples, he argued that countries can be defined as highly democratized yet still exhibit dysfunctional democracies. In his response, Fabrizio Coricelli noted that the U-shaped relationship does not disappear in most of the regressions. He admitted that a reinforcing mechanism can exist between democratization and liberalization in equilibrium. He also encouraged panel members to examine the case of Russia (a very important transition economy to which an entire page is devoted to in the

paper) which fits their story quite well. Regarding the potential driving effects of the outlier observations, he clarifies that in some of the panel regressions countries like Uzbekistan were excluded from the analysis due to a lack of data and the U-shaped relation still held firm. Lastly, the author replied to Ichino by saying that we certainly must gain a better understanding of the role of elites in blocking interest groups in societies.

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