Financial Development and Democracy: Does the Institutional Quality Matter

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Abstract

Empirical literature on growth and democracy gives no clear indication as to how political regime impacts growth. This paper raises the question of whether effects of democracy on financial development are influenced by the quality of economic and political institutions. We find that democracy enhances the financial development in countries with strong institutional framework; however it hampers the development of the financial sector when the country's institutional quality is poor. Further results indicate that to take full benefits from democracy, democratizing counties should promote economic institutions; otherwise transition to a democratic government will not shape their financial development.

Keywords: Democracy, economic institutions, political institutions, banking sector development

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1. Introduction

A large body of the literature underlines the importance of institutions in shaping economic and financial development (hereafter *FD*). In fact, troubles associated with institutional quality may lead to more uncertainty that sends bad signals to the market resulting into distortion in the productive economic process (North, 1990). On the other hand, there is a great debate dealing with the impact of political institutions, namely a democratic versus an authoritarian regime on growth. Particularly, the development view highlights the enhancing role of democratic institutions whereas the sceptical view emphasizes the inefficiencies of representative governments.

Existing literature highlights the effects of economic and political institutions on growth. However, regarding their effects on FD, qualities of the institutions and the political liberalization have been studied separately, thus missing the possibility that the two might interact. This paper aims to examine whether effects of democracy on FD are influenced by the quality of economic and political institutions.

We consider a large sample of developed and developing countries over the period 1984-2007. We use a random-effects panel regression model to see whether the relationship between democracy and *FD* is conditioned by the quality of institutions. Our results show that (i) democracy increases the *FD* when institutions are good, (ii) Democracy hinders the *FD* in countries with poor institutional framework (iii) In democratizing countries, transition to a democratic government will not affect the *FD* when economic institutions are weak.

Our research contributes to the related literature in several ways. First, it is the first paper that considers interaction effects between democracy and institutions in explaining financial outcomes. Besides, it contributes to the existing literature by examining FD in a political economy framework; actually, this research extends the relatively scarce literature on the political determinants of FD, as only a limited number of studies have investigated the democracy-financial growth nexus (Huang, 2005; Barth et al., 2006, Girma and Shortland, 2008; Yang, 2011). In addition, it is the first paper that considers the role of institutions in stimulating effects of democracy on FD during a period of democratic transition. Eventually, regarding studies in the new political economy of FD, our study presents a new empirical results showing what forms of democracy (rather than democracy vs. non democracy) helps to promote long-run FD.

The remainder of this paper is structured as follows. Section 2 reviews the literature on democracy, institutions and growth. Section 3 describes the data and variables used. The methodology is discussed in Section 4 and results are presented and discussed in Section 5. Section 6 presents robustness tests and Section 7 concludes.

2. Literature review

A large body of the literature highlights the importance of economic institutions in shaping the economic growth. It is argued that countries with more secure property rights and better institutions will invest more in physical and human capital, and will use them more efficiently to reach a superior level of income (North, 1990; Besley, 1995; Demetriades and Andrianova , 2003; Acemoglu et al., 2005).

On the other hand, the literature on the role of political institutions, namely a democratic vs. an autocratic regime, in stimulating economic growth was subject to a controversy. Particularly, the economic literature distinguishes two view points. The development view supports the growth enhancing effects of democracy. First, it is reported that the democracy enhanced competition between different interest groups, leads to the adoption of policies with net positive social welfare (Wittman, 1989) or at least their inefficiencies will be less than in autocratic regimes (Olson, 1993). Second, democratic institutions make markets more open, encourage greater foreign entrants and thus help new firms to more efficiently utilize productivity innovations resulting into greater economic performance (Acemoglu, 2003). Furthermore, according to the politics and finance view, elite groups' interests are much more satisfied in centralized and powerful political systems than in decentralized and competitive governments (North and Weingast, 1989; North, 1990; Olson, 1993; Acemoglu, 2000, 2001, 2003; Clague et al., 1996; Haber, 2008). Finally, according to Rodrik (2000), democracy generates higher quality of growth since it allows greater predictability and stability. The rationale behind this idea is that the presence of a broad range of decision makers results in greater diversification and hence less risk conducting to more stability and predictability. Similarly, the fact that democratic governments institutionalize the right to change leaders performing badly or making mistakes puts a continuous pressure on these later resulting into more efficient and stable growth (Siegal, et al., 2004).

On the other hand, skeptical view highlights the risks linked to representative governments. Huntington (1968) evoked the negative effects of the populist pressure for increased consumption. Indeed, democracy will undermine investments because it generates higher consumption. Moreover, democratic systems may hold back economic growth because they are characterized by a larger role of interest groups that cause inefficient redistribution of resources by putting in place policies that favor specific business sectors or important voting blocs (Olson, 1982; Becker, 1983). Indeed, myopic decisions made by decision makers in order to gain future voting shares, make the democratic form of governance more susceptible to pressure from interest groups (Comeau, 2003). That's why; Alesina and Rodrik (1994) underlined the role of autocratic systems which are more efficient than democratic regimes to oppose pressure from vested interests and to redistribute income and resources. Indeed, autocratic regimes are protected from this pressure because politicians are better able to pass policies under authoritarianism (Wade, 1990). Finally, under democracy, there are several veto players and the possibility that potential losers may be veto players represents a threat since they are able to block reforms (Tsebelis, 2002).

Thus, we will show that democracies differ on the extent they are institutionalized then we will explain how economic institutions may influence the effects of democracy on growth. In fact, according to Zakaria (1997), democracy does not necessary bring about constitutional liberalism. In fact, the tendency of a democratic government to believe it has sovereignty, leads it to centralize his authority throughout extra- constitutional methods. Thus, governments produced by elections could be inefficient, corrupted, and dominated by special interests. These characteristics will produce an undesirable government but not a non democratic one. Besides, Hoff and Stiglitz (2004) developed a model where economic agents, perhaps even in a democracy, may decide to not establish the rule of law. In fact, they may have an interest in prolonging the absence of the rule of law to conduct asset stripping activities. Therefore, democratic governments are not necessary those where institutions are the best enforced[3].

On the other hand, we argue that institutions prevailing in the country will largely shape the democracy quality. First, we argue that constraints on government power are better enforced by stronger economic institutions that further restrict and border the government actions under a stricter legal framework. Therefore, good economic institutions consolidate positive effects of democracy by further reducing the state authority. Besides, good institutions permit to insulate democratic politicians and bureaucrats from pressure since elites are obliged to be more aligned with rules in the society unless they will be punished. Therefore, the quality of democracy seems to be shaped by institutions that govern the economy: rule of law and property rights will constrain the government action and thus reduce government domination, encourage the private initiative and reduce rent seeking.

Moreover, it is argued that democratic governments need strong institutions in order to maintain effective government institutional capacity. Particularly, Zakaria (1997) pointed out that democracy under poor law and order leads to the deterioration of the state institutional capacity since it reduces the government regulation effectiveness, including tax regulations. This leads to the development of the shadow economy and hampers the growth of government revenues. The decrease of public expenditures coupled with a decline in government effectiveness will lead to lower institutions since expenditure on public goods such as law and order, protection of investors rights will decrease. Weak institutions will lead to lower investments and slower economic growth. Furthermore, the author described a hypothetical mechanism of the democracy degeneration: after a rapid democratization, citizens will receive the right to vote that has no intrinsic value but may have a price since it is demanded by organized political groups. Temptations to sell votes will be strong, and if law and order is absent or weak many votes could be bought and used in orders of redistribution in favor of organized political groups. These destructive redistribution activities represent a danger on democracy conducting to serious disorder that may be prevented only if a strong order based on law is established in the society. Finally, studying democratizing countries, Kaplan (2000) concluded that democratic transitions are highly risky if carried in low income countries with poor institutions and ethnic divisions. Under these conditions, transition to a representative government will result in the rise of violence, crime, official corruption and anarchy.

To conclude, although economic institutions are developed to directly regulate and support the economic activities, they also shape the character of the political competition by maintaining a political order based

[3] This is further demonstrated by descriptive statistics.

on constitutional and not on arbitrary rules. But if strong or weak economic institutions can be found with democratic institutions, then how might the two interact to affect FD?

3. Data and variables used

The largest sample consists of 112 developed and developing countries selected on the basis of data availability and covering the period 1984-2007.

3.1 The measure and data for the financial development

Following Huang (2010), we construct an aggregate index since it provides more information on the *FD* than if one uses only a single indicator. The measure is based on three indicators: (i) bank's credit to private sector divided by the GDP. Previous studies (Levine et al., 2000; Beck et al., 2003; Bekaert et al., 2005) promoted the use of private credit as a consistent measure of FD. (ii) Deposit money bank assets to GDP. It is an indicator of the overall size of banking sector. (iii) Liquid liabilities to GDP. It is a general indicator of the size of financial intermediaries relative to the size of the economy. Our aggregate measure is based on the three indicators described above and accounts for 87% of their variation. Data on private credit are obtained from the World Bank database, while alternative measures are taken from Beck et al. database (2010).

3.2 The measure and data for the democracy

To measure the effects of democracy (*Polit*) on *FD*, we use the PolityIV Database (Marshall et al., 2009). The Polity indicator "*polity2*" measures the degree of democracy based on the competitiveness of political participation, the openness and competitiveness of executive recruitment, and constraints on the chief executive. It varies from -10 (strongly autocratic) to 10 (strongly democratic) and defined as the democracy score minus the autocracy score.

3.3 The measure and data for the economic institutions variables

Economic institutions are namely institutions covering the structure of property rights and perfection of markets (Acemoglu et al., 2005). In what follows, we measure the quality of economic institutions by the regulatory quality (*RQ*), the rule of law (*RL*), the control of corruption(*CC*) and the investment climate risk (*IR*) indexes. The (*RQ*) index measures perceptions of the ability of the government to implement regulations and policies that promote private sector development. The (RL) index reflects the quality of contract enforcement, the police and the courts, confidence that agents have on the rules of society as well as the likelihood of crime and violence. The (*CC*) index indicates the extent to which public power is used for private gain, including both soft and grand corruption as well as state capture. The various indicators are scaled between -2.5 to 2.5, with higher values indicating better quality of governance and are standardized so that they all have mean zero and a standard deviation of one. Data come from the World Governance Indicators compiled by Kaufmann et al. (2011). The (*IR*)[4] index contains different factors affecting the risk to investment other than political, economic and financial risks. It is the sum of three subcomponents (Contract Viability/Expropriation, Profits Repatriation and Payment Delays) and ranges from 0 to 12 with higher values indicating lower risk and hence better institutional quality. This later index is taken from the International Country Risk Guide (ICRG) Database (2009).

3.4 The measure and data for the political institutions variables

Political institutions shape economic growth through their influence on governments' economic policies (Rodrik, 1996; Persson and Tabellini, 2003). We use the following variables:

The bureaucracy quality (BQ): measures the independence of a bureaucracy from political power. The institutional strength of a bureaucracy makes it more independent from political pressure. Besides, strong bureaucracy allows more justice that reduces favoritism and other types of public corruption (Weber, 1968). Indeed, in strong bureaucracy, friendship and political clout should have no effect on access to funding. We argue that the quality of bureaucracy influences the impact of democracy on FD. In fact, under a democratic system, the dependence of the bureaucracy from political power has the consequence that votes could be bought and used in orders of redistribution in favor of organized political groups. These destructive redistribution activities would hinder the economic and financial development. Similarly, as democratic systems are characterized by a larger role of interest groups (Olson, 1982), heavy bureaucracy will further favor these groups by expanding their field of action and by giving them more

[4] The variable was centered in order to give the 0 value a meaningful interpretation.

power to influence administrative policies. The index ranges from 0 to 4[5] with higher values indicating better institutions. It comes from the (ICRG) database.

The political system (System): is a measure of the form of government. It is a binary variable that equals 1 if it is a parliamentary system and 0 if it is a presidential system. Besides to control for the other form of government, we introduce the variable (*Semi presid*) that takes the value of 1 when it is an assembly elected president form of government and 0 if else. Presidential and parliamentary regimes differ essentially regarding the separation of powers and the confidence requirement. This separation of power in presidential regimes increases credibility of political commitments and enhances public revelation of political processes (Keefer and Stasavage, 2003; Persson et al., 1997), thus improving political accountability which in turn boosts economic and financial growth. Besides, under a presidential system, both the executive and the legislature are veto players (Tsebelis, 2002). Therefore, presidential systems have more checks and balance on the executive, thus reducing power abuse behaviors. However, presidential systems suffer from several drawbacks. First, because of the strict separation of powers, legislature and executive powers are weakly bonded. These systems are more fragmented, institutionally, than parliamentary systems. Besides, Linz (1990) argued that this separation of powers may intensify rigidity in the political system. In addition, under presidentialism, parties in the executive and the legislature may be different, which could induce political deadlock resulting into a more complicated process of passing efficiently economic reforms. The second difference between the two forms of government is confidence requirement. In fact, presidential regimes do not require confidence since the elected executive can maintain his power requiring no advocacy among the legislative branch. Executive in parliamentary regimes needs instead the continuous confidence of the legislature. The confidence requirement generates legislative cohesion, that is stable majorities that vote together on policies and support the cabinet resulting into stable coalitions and more discipline within the majority. The confidence requirement helps to produce broad majority spending programs under parliamentarism compared to targeted programs in presidential systems (Persson and Tabellini, 2004). Therefore, presidential regimes outperform parliamentary regimes, under the separation of powers argument, since they are endowed with more checks and balances and thus less rent extraction. However, under the confidence argument, presidential systems should be associated with more targeted spending programs. On the other hand, it is commonly argued that the form of government influences the survival of the democracy. In fact, Cheibub and Limongi (2002) reported that parliamentary democracies are expected to live more than presidential democracies and thus are more stable. The authors explained this by the fact that individual legislators in the congress in presidential regimes have little incentive to cooperate. This would produce a decision making which is decentralized, thus making presidential regimes suffering from instability and eventual death. Besides, the authors reported that parliamentary democracies are more able to survive under economic crisis. Finally, Przeworski et al., (2000) reported that presidential democracies could rather be the fruit of military dictatorships than civilian dictatorships, and thus are more likely to die for this reason. Hence, as the above literature suggests, the direct as well as the interaction effect of the variable (*System*) is ambiguous. The variables[6] come from the Quality of governance database (2011).

3.5 The measure and data for the control variables

We include the following control variables:

Real GDP growth (Real growth): It is commonly argued that rapid growth should be linked to enhanced development of the financial sector. Data on real growth are obtained from the World Bank database.

Trade openness (TO): It is the sum of exports and imports to GDP. It is argued that international trade openness policies facilitate the *FD*. Indeed, trade liberalization will necessary carry new enterprises on the local market creating thus more competition and reducing the incumbents' rents (Rajan and Zingales, 2003). We therefore expect a positive coefficient for (TO). Data come from the World Bank database.

Capital openness (KO): It is the capital openness index developed by Chinn and Ito (2010). Theory advocates the positive effects of financial liberalization on the *FD*. First, capital account liberalization should reduce the repression in protected financial markets allowing real interest rates to rise to their competitive equilibrium. Second, financial openness allows investors to be engaged in more diversified activities. Eventually, it should reduce the cost of capital leading thus to increase its availability to investors.

[5] The variable was centered to give the 0 value a meaningful interpretation.

[6] For interpretation purposes, the original variable was divided into two sub-variables; each one is a binary variable considering the presidential form of government as the reference regime.

Government spending (Gov exp): It is the total government consumption expenditure divided by GDP. The effect is ambiguous. First, it is argued that government size is positively associated with government institutions (La Porta et al., 1999). Thus, increased government spending should enhance the development of the financial sector since it is linked to better property rights. Besides, increased government spending on economic and physical infrastructure will reduce production costs and encourage investments (Abdullah, 2000; Al-Yousif, 2000; Ranjan and Sharma, 2008; Cooray, 2009). However, when government finances its expenditure through borrowing (especially from banks), it will be done on the expense of the private sector, leading thus to reduced private investment (Laudau, 1986; Barro, 1991; Folster and Henrekson, 2001). Data on government expenditure are from the World Bank database.
Regime stability (RS): It is measured by the variable "*durable*" and defined as the number of years that have elapsed since a major regime transition. Its application is based on the evidence that investors in instable governments are scared from expropriation and thus prefer to hold physical assets rather than to invest in financial assets. So we expected political stability to have a positive effect on FD. Data come from the Polity IV database.
Ethnolinguistic fractionalization (Ethno frac): It is an index constructed by La Porta et al. (1998) and reflects the probability that two randomly selected individuals from a population belonged to different groups. High degree of ethnic fragmentation will prevent societies from efficiently implementing rules that aim to limit power abuse of the ruling elites (Alesina et al., 2003); hereby exhibiting a negative effect on FD. We expect the coefficient on this variable to be negative.

4. Methodology

In the empirical analysis, we focus on panel regressions. Particularly, as pooled regressions assume the homogeneous behavior of the dependent variable for all the individuals in the sample, we will use random and fixed effects estimations. Indeed, the FD variable varies considerably between countries and years[7], thus fixed and random effects estimations are better suited in this case. The Hausman test advocates the use of the random effect specification. Besides, random-effects regression model better capture the effects of institutional variables that vary very little over time and allows to control for observed and unobserved cross-country heterogeneity. Finally, estimation of how the effects of democracy, on FD, depend on the quality of the political and economic institutions is made through interaction effects.

5. Empirical results

First, we run a baseline model that includes the democracy variable, institutional variables and control variables without including interaction terms. The model aims to show that democracy continue to promote the FD after controlling for institutional variables. Since institutional indicators are highly correlated with each other; we introduce them individually. Then, to examine how effects of democracy on FD are influenced by the institutional quality, we augment the base model by interaction terms between democracy and institutions variables.

5.1 Stylized facts

Table (1) shows how country-year observations fall into different polity and institutions categories. If democracy is always associated with better institutions then we would expect that the most democratic countries (*polity* = 3 & 4) do not have observations on lower values of the different institutions variables. However, results show that there are indeed some democratic countries that have observations that fall in the category of poor institutions quality. There are about 393 country-year observations where a country was classified as a democratic (category 3 and 4) and nevertheless has a poor quality of regulations (category 1). This is approximately 35.5% of all cases, 45% of the cases where a country has been classified as democratic and 26% where it has been classified as fully democratic. Besides, regarding the rule of law, there are 443 country-year observations where a country was classified as a democratic but has a poor quality of rule of law. This is approximately 41.60% of all cases, 54% of the cases where a country has been classified as democratic and 35% where it has been classified as fully democratic. Moreover, regarding the control of corruption variable, there are 476 country-year observations where a country was classified as a democratic with low level of control of corruption. This counts for 45% of all cases, 58% and 39% respectively of the cases where a country has been classified as democratic and as fully democratic. Finally, regarding the investment climate variable, there are 403 country-year observations

[7] Hsiao test rejects the homogeneity of data structure.

where a country was classified as a democratic and nonetheless has a risky climate investment. This is about 25% of all cases, 33% of the cases where a country has been classified as democratic and 36% where a country has been classified as fully democratic.

Table 1. Distribution of Country-Year Observations

Polity categories	Economic institutions variables											
	RQ			*RL*			*CC*			*IR*		
	0	1	Total	0	1	Total	0	1	Total	0	1	Total
1	78	0	78	56	22	78	56	22	78	23	35	58
2	156	0	156	145	22	167	134	33	167	161	185	346
3	241	44	285	252	22	274	263	11	274	115	305	420
4	152	436	588	191	355	546	213	331	544	288	513	801
Total	627	480	1107	644	421	1065	666	397	1063	587	1038	1625

Polity category equals 1, if *Polit* = -10 to -6, equals 2 if *Polit* = -6 to 0, equals 3 if *Polit* = 0 to 6 and equals 4 if *Polit* = 6 to 10; various institutions variables equal 0 if the institutional index is <0 and equal 1 if the institutional index is >= 0.

5.2 Democracy and financial development

We estimate the baseline model:

$$Y_{it} = \alpha + \beta_1 Polit_{it} + \beta_2 P_{it} + \beta_3 X_{it} + e_{it} \quad (1)$$

Where *a* is the constant, e_{it} is the error term and the subscripts i and t are the country and the period, respectively. Y_{it} is the aggregate measure of banking sector development. $Polit_{it}$ is the democracy variable and P_{it} refers to the various institutions variables. X_{it} is the vector of control variables. Results are reported in Table (2).

Table2. Democracy, institutions and control variables regression on *FD*

	(1)	(2)	(3)	(4)	(5)	(6)
Polit	**0.0153*** **	**0.0131** **	**0.00973* **	**0.0166*** **	**0.0106*** **	**0.0172*** **
	(4.07e-06)	**(0.0191)**	**(0.0885)**	**(0.00327)**	**(0.00545)**	**(6.14e-06)**
RS	0.0144***	0.0124***	0.0121***	0.0133***	0.0156***	0.0180***
	(0)	(0)	(0)	(0)	(0)	(0)
KO	0.100***	0.137***	0.142***	0.147***	0.0439***	0.0720***
	(0)	(0)	(0)	(0)	(0.000592)	(1.22e-08)
Gov exp	0.0161***	0.0153***	0.0151***	0.0180***	0.0167***	0.0132***
	(5.24e-06)	(0.00784)	(0.00869)	(0.00225)	(0.000339)	(0.00524)
Real growth	-0.0161***	-0.0140***	-0.0140***	-0.0142***	-0.0211***	-0.0189***
	(0)	(1.64e-06)	(1.77e-06)	(1.53e-06)	(0)	(4.07e-10)
TO	0.00544***	0.00464***	0.00444***	0.00428***	0.00419***	0.00564***
	(0)	(2.96e-07)	(6.91e-07)	(2.54e-06)	(2.25e-07)	(0)
Ethno frac	-0.972***	-0.751**	-0.664**	-0.928***	-1.226***	-1.069***
	(0.00309)	(0.0295)	(0.0422)	(0.00736)	(0.000897)	(0.00405)
RQ		0.238***				
		(2.00e-05)				
RL			0.320***			
			(5.58e-07)			
CC				0.0222		
				(0.684)		
IR					0.0600***	
					(0)	
BQ						0.0704***
						(0.00192)
Constant	-0.861***	-0.739***	-0.702***	-0.720***	-0.559***	-0.765***
	(3.71e-07)	(0.000187)	(0.000228)	(0.000301)	(0.00399)	(8.55e-05)
Observations	2,254	1,232	1,232	1,230	1,929	1,929
No. of countries	112	110	110	110	94	94
R^2	0.4691	0.5706	0.6062	0.5178	0.4574	0.4819

***, **and * indicate significance at 1%, 5%, and 10% levels. Values in parentheses are p-values.

Interestingly, results show that coefficients estimates of the democracy variable are positive and significant across all the specifications. Results confirm previous studies that found a positive impact of democracy on *FD* (Huang, 2005; Barth et al., 2006; Rodriguez and Santiso, 2007; Miletkov and Wintoki, 2008; Girma and Shortland, 2008; Yang, 2011). Thus a political regime endowed with checks and balances, competition on executive recruitment and political participation helps to promote the *FD* since it contributes to diminish elite's control on the economy. Besides, various institutions variables present positive and significant coefficients. (*CC*) is the sole exception. Thus, good institutions shape the *FD* since they permit the efficient allocation of resources (Acemoglu et al., 2005).

5.3 Democracy, institutions and financial development: interaction effects

We rerun the baseline model and include separately interaction terms between democracy and the various institutions variables. We hypothesize that democracy enhances the *FD* in counties with good institutional quality; whereas it undermines the *FD* when the institutional quality is poor. We use binary institutional variables since they are more appropriate than continuous variables to test the later hypothesis. Besides, since institutional variables change very little over time, calculated turning points will not have a useful sense. Thus, institutional variables (*RQ, RL, CC, IR* and *BQ*) are rescaled and equal 1 if it is a high institutional quality and 0 if else. The group of countries with high quality of institutions includes countries with average institutional indicator greater than the sample average; and countries with poor institutions are those with an average indicator lower than the average. Finally, we consider the subsample of democratic countries in order to see what form of democracy is the most beneficial for *FD*. The model is as follows:

$$Y_{it} = \alpha + \beta_1 Polit_{it} + \beta_2 P_{it} + \beta_3 Polit_{it} * P_{it} + \beta_4 X_{it} + e_{it} \quad (2)$$

The empirical results are presented in Table (3). The (*Polit*) main effects are negative and significant whereas its interaction effects are positive across all the specifications. Specification four is the sole exception. Thus, democracy affects positively the *FD* in countries with strong institutional quality whereas it undermines the *FD* when institutions are poor. Particularly, when institutions, including (*RQ, RL, CC* and *BQ*), are poor; democracy will rather hamper the development of the financial sector. We give the following explanations. The fact that in democracies, potential losers may be veto players, presents a threat since these latter have the ability to block reforms. Under poor rules of law and a lot of corruption, their ability to manipulate the electoral rules, to influence economic and financial reforms according are unlimited since they are not constrained by rules that punish them in case they do not respect the law. Under these conditions, democracy will inevitably lead to a deterioration of the financial sector. In addition, it is argued that democracy under poor law and order leads to the deterioration of the state institutional capacity since it reduces the government regulation effectiveness, including tax regulations. This leads to the development of the shadow economy and hampers the growth of government revenues. The decrease of public expenditures coupled with a decline in government effectiveness will lead to lower institutions since expenditure on public goods such as law and order, protection of investors rights will decrease. Weak institutions will lead to lower investments and slower economic growth (Zakaria, 1997). Similarly, results reveal that democracy undermines the *FD* with heavy bureaucracy. Indeed, under a democratic system, the dependence of the bureaucracy from political power has the consequence that votes could be bought and used in orders of redistribution in favor of organized political groups. These destructive redistribution activities would hinder the economic and financial development. Similarly, as democratic systems are characterized by a larger role of interest groups (Olson, 1982), heavy bureaucracy will further favor these groups by expanding their field of action and by giving them more power to influence administrative policies.

Surprisingly, in specification (4), the democracy main effect is positive whereas its interaction term is negative. Hence, democracy boosts the *FD* in countries with risky investment climate risk; whereas it hinders the FD when the investment climate is less risky. We argue that, when the investment climate is risky, domestic and foreign investors may see in democratic governments the pledge to guarantee individual and contract rights as well as the commitment to reduce expropriations behaviors. Under these conditions, investors are more encouraged to conclude contracts promoting there by the *FD*. On the other hand, the evidence that democracy holds back the *FD* when the investment climate is less risky may be explained as follows. We argue that the view stating that democracy undermines the investment because of the populist pressure for increased consumption is especially true when the investment climate is not risky. Indeed, a less risky investment climate will encourage investors to invest resulting into higher production and thus higher income. On the other hand, according to the permanent income hypothesis, consumption is mainly driven by the permanent income. Thus, the resulting greater income will raise the consumption and hence will further consolidate the negative channel of consumption trough which democracy is argued to undermine investment and growth.

Finally, results show that compared to presidential democracies, parliamentary democracies tend to better promote the *FD*. In fact, unlike presidential systems, the presence of the confidence requirement in parliamentary regimes fosters stable coalitions and more discipline within the majority. Thus, it helps to produce spending programs that better serve the broad majorities of votes (Persson, Roland, and Tabellini, 2000). Another plausible explanation is the greeter stability provided by parliamentary democracies. Indeed, these later are expected to live more and thus are more stable than presidential democracies (Cheibub and Limongi, 2002).

Table3. Democracy and institutions interaction effects regression on FD

	(1)	(2)	(3)	(4)	(5)	(6)
Polit	**-0.0127*** **	**-0.00974*** **	**-0.00649** **	**0.0182*** **	**-0.0125** **	**0.0312* **
	(0.000331)	**(0.00323)**	**(0.0482)**	**(0.00173)**	**(0.0480)**	**(0.0864)**
RS	0.00962***	0.00984***	0.00988***	0.0147***	0.0140***	0.0283***
	(0)	(0)	(0)	(0)	(0)	(0)
KO	0.0288***	0.0294***	0.0324***	0.0204*	0.0207*	0.00698
	(0.00802)	(0.00693)	(0.00304)	(0.0815)	(0.0767)	(0.737)
Gov exp	0.0217***	0.0191***	0.0190***	0.0212***	0.0189***	0.0252***
	(0)	(7.25e-09)	(1.02e-08)	(4.10e-07)	(6.92e-06)	(0.000183)
Real growth	-0.0154***	-0.0154***	-0.0157***	-0.0202***	-0.0198***	-0.0229***
	(0)	(0)	(0)	(0)	(0)	(6.54e-07)
TO	0.00273***	0.00250***	0.00249***	0.00235***	0.00234***	0.00171
	(7.39e-06)	(3.86e-05)	(4.44e-05)	(0.00213)	(0.00235)	(0.223)
Ethno frac	-0.397	-0.405	-0.387	-1.336***	-1.446***	-0.435
	(0.239)	(0.195)	(0.233)	(0.000323)	(0.000130)	(0.347)
HighRQ	1.203***					
	(8.32e-09)					
*Polit*Pi*	**0.0355*** **	**0.0426*** **	**0.0253*** **	**-0.0249*** **	**0.0194*** **	**0.187*** **
	(1.68e-07)	**(6.49e-08)**	**(0.00273)**	**(0.000293)**	**(0.00733)**	**(3.72e-09)**
HighRL		1.279***				
		(1.95e-10)				
HighCC			1.362***			
			(2.03e-10)			
HighIR				0.297		
				(0.189)		
HighBQ					0.249	
					(0.287)	
Semi-presid						0.209
						(0.548)
System						-1.162***
						(0.00326)
Constant	-1.311***	-1.236***	-1.173***	-0.508**	-0.388*	-1.761***
	(1.94e-10)	(0)	(4.09e-10)	(0.0297)	(0.0962)	(4.49e-08)
Observations	2,254	2,254	2,254	1,934	1,934	850
No. of countries	112	112	112	94	94	73
R^2	0.5263	0.5638	0.5482	0.4290	0.4213	0.3878

***, **and * indicate significance at 1%, 5%, and 10% levels. Values in parentheses are p-values.

6. Robustness checks

Many robustness checks were implemented[8]. First, effects of democracy on *FD* were reexamined with alternative and individual measures of *FD*. Second, we include foreign direct investment (*FDI*) to control for omitted variables bias and for the possibility that greater (*FDI*) accompanying democratizations are the true catalyst for higher *FD*. Besides, it is interesting to assess to what extent our methodology produces different results, using five years average of our data. Moreover, to check that our results are not driven by the inclusion of a number of developing countries which have been very developed financially and which are mostly democratic; we exclude high income countries. Besides, we use other institutional proxies. Particularly, we employ the (*RL*) variable coming from the Freedom House (2008) database and the (*CC*) from international transparency database. Moreover, median value cut off was also tested to classify countries as having poor or good institutional quality. Finally, we consider the subsample of countries that

[8] For space concerns, tables are not reported but are available from the authors upon request.

have transit to a democratic system during the period 1984-2007 and we took for each country the 10 years after the democratic transition. To select which countries have moved from autocracy to democracy, we primary located significant changes in the "*Polity2"* indicator over the sample period i.e. the *Polity2* index increases from a negative to a positive value. Then, to avoid potential bias due to instability or lack of consolidation, we considered only episodes of transitions for which the pre-democratic era lasted at least five years and the democratic period continued at least for five years.
Results show that whatever indicators of *FD* used the outcome that democracy hampers the development of the financial sector in countries with poor institutions quality; whereas it boosts the *FD* when the institutional environment is good, remains true. (*BQ*) is the sole exception. Similarly, our main results are unchanged when: we include the (*FDI)* variable, we average the data over five periods, we use the median value as a cut off criteria, we employ various institutions measures. Finally, excluding high income countries from our sample, produce the same result. (*IR*) is the sole exception. Indeed, we found that democracy no longer explain the *FD* in countries where the investment climate is risky. This result is not very dramatic for the conclusion above, given that in both cases (whether democracy affects positively or do not affect the *FD*) democracy does not undermine the *FD* when the investment climate is risky.
Regarding the democratic transition subsample, democracy interaction effects with the various institutions variables remain unchanged; that is transition to a democratic government helps to boost the *FD* in countries with strong institutions. However, democracy main effects lost significance. Thus, democracy does not impact the *FD* in democratic transition countries with poor institutional framework. These findings indicate that economic institutions fundamentally matter for incipient democracies. Particularly, in democratic transition countries, democracy needs strong quality of regulation, strong rules of law, greater control of corruption and higher bureaucracy quality in order to enhance the *FD*. Such result may explain the heterogeneity among countries' *FD* performances during the post-democratization period as evoked by Huang (2010). Thus, we argue that economic institutions present good mechanisms that reduce temporary instability and unpredictability and thus permit to diminish the waiting time to take full advantages of democracy.

7. Concluding remarks

This paper raises the question of whether effects of democracy on financial development are influenced by the quality of economic and political institutions. Looking at a large sample of developed and developing countries over the period 1984-2007, we confirm the evidence that democracy enhances the *FD* in countries with strong institutional framework. However, it hampers the development of the financial sector when the country's institutional quality is poor. Indeed, a low regulatory quality, weak rules of law, a less control of corruption and a heavy bureaucracy are reported to undermine benefits of democracy in stimulating the *FD*. Moreover, we found that democracy boosts the *FD* when the investment climate is risky whereas it undermines the *FD* when the investment climate is less risky. This is evidently not to recommend to countries should institute risky investment climate in order to increase the benefits of democracy. But it implies that effects of democracy can differ across countries depending upon the characteristics of the climate of investment within the country. Not considering these divergences could lead to misleading conclusions as to the benefits of democracy. Furthermore, results indicate that parliamentary democracies tend to outperform presidential democracies in promoting the development of the financial sector.
Finally, further results indicate that to take full benefits from democracy, democratizing counties should promote economic institutions; otherwise transition to a democratic government will not affect their financial development. Such result may explain the heterogeneity among countries' *FD* performances during the post-democratization period as evoked by Huang (2010). Thus, we argue that economic institutions permit to diminish the waiting time to take full advantages of democracy.
Our findings have important implications. From a theoretical standpoint, this is part of a larger problem of institutional transplantation, and our study intends to facilitate its understanding. It offers direct support to the development theories of democratic government that emphasize the beneficial aspects of representative institutions. From a policy perspective, our results suggest that beyond the establishment of a democratic government, countries should pay attention to the quality of the institutional environment. Indeed, while the political economy theory of FD holds that democratic systems may spur FD giving that representative governments encourage systems of political checks, protect citizen's individual rights and

property rights and reduces the abuse of power by the interest groups; this study suggests that, to take full advantage of a democratic system, countries need to develop their economic and political institutions.

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