



**DEPARTMENT OF ECONOMICS**

**THE POLITICAL ECONOMY OF  
FINANCIAL DEVELOPMENT**

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# The Political Economy of Financial Development

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## Abstract

Political economy theories of financial development argue that in countries where a narrow elite controls political decisions, financial development may be obstructed to deny access to finance to potential competitors. We use panel data on developed and developing countries from 1975-2000 to examine this hypothesis, as well as looking at the effect of regime stability on financial development. Our results show that the degree of democracy and political stability are significant explanatory factors in determining the speed of financial development. The banking sector benefits from regime stability and increasing democracy, while stock market capitalisation grows fastest in fully democratic regimes.

**JEL Classification:** G18; K0; O16; P16

**Keywords:** Financial markets, Financial Development, Politics, Law and Economics

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## 1: Introduction

The economic literature studying the effect of financial development on growth has provided ample evidence that financial development has a positive effect on long-run economic growth.<sup>1</sup> Establishing well-functioning financial markets and financial institutions, which attract savings and channel them to productive investment projects, should therefore be a policy priority for governments. In recent years the research agenda has turned to the question of why many countries nevertheless remain financially underdeveloped.

There are a number of potential explanations for and empirical studies of why financial development has been slow in a large number of countries. The research broadly falls into three interrelated groups. The first group stresses that financial institutions do not succeed in an institutional vacuum, but need a legal and regulatory environment in which contracts can be enforced and bankers are given strong incentives to behave honestly.<sup>2</sup> The second group looks at the links between law and finance, showing that specific types of legal system are more conducive to protecting investor rights and adapting the law to take into account financial innovations.<sup>3</sup> The third group looks at the political economy of financial development arguing that financial underdevelopment may be the outcome of political circumstances - protecting the interests of a narrow political / industrial elite.<sup>4</sup> Such an elite may have little interest in developing well-functioning capital markets, as they are served well by relationship banking and the absence of arms' length finance restricts potential competitors' access to finance.

This paper aims to contribute to the second and third of these arguments by empirically evaluating the influence of the political system and legal origin on financial development. For this we study the effect of political variables, which capture the degree to which a narrow elite controls the levers of power and the level of regime stability on the change in financial development. We use panel data from developed and developing countries during 1975 to 2000. We study a number of different aspects of financial development. We control for legal origin as well as for exogenous factors driving financial development and test whether the importance of political institutions differs between different time periods.

Our results show that both the degree of democracy and the stability of the political system have statistically significant effects on the speed of financial development. To the extent that democracy restricts the influence of elite groups and lobbies by widening political

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<sup>1</sup> See Levine (2003) and Demetriades and Andrianova (2004) for excellent recent overviews of the literature.

<sup>2</sup> e.g. Kaufmann *et al* (1999), Demirgüç-Kunt and Detragiache (1998), Andrianova *et al* (2003).

<sup>3</sup> La Porta *et al* (1997, 1998), see Beck *et al* (2001a) for a review.

<sup>4</sup> Rajan and Zingales (2003).

participation, our results provide evidence for the Rajan and Zingales (2003) proposition that political systems governed by narrow elites obstruct the development of the financial system.

The paper is organised as follows: Section 2 presents a brief review of the literature and section 3 describes the data used. The methodology is discussed in section 4 and results are presented and discussed in section 5. Section 6 concludes.

## **2: Literature Review**

The theoretical literature predicts that financial development is a positive function of real income and the real interest rate (which is often negative under conditions of financial repression).<sup>5</sup> A positive real interest rate increases the volume of savings to be intermediated by the financial sector. When credits are allocated according to the productivity of projects (rather than being allocated arbitrarily under credit rationing) and a high real interest rate discourages investment in low return projects, economic growth is boosted.<sup>6</sup> Economic development in turn creates demand for finance, so the likely causal effect between financial development and economic growth is bi-directional.<sup>7</sup> More recently, however, academic inquiry has turned to explanations of why in some countries the virtuous cycle of economic and financial development is slow to take off.

### **Institutional underdevelopment**

Economic development in general and financial development in particular relies on good governance.<sup>8</sup> Financial systems need to be regulated and supervised to ensure that saver confidence is not undermined by bank failures and that savings are channelled to the most productive investments rather than into the pockets of connected individuals, or gambled away on high-risk projects.<sup>9</sup> The empirical relationship between financial liberalisation and financial crises depends strongly on a country's institutional environment.<sup>10</sup> Respect for the rule of law, a low level of corruption and good contract enforcement are crucial for the effective functioning of a financial system. This literature therefore argues that booms and busts in the financial sector and the resulting financial underdevelopment are due to governments' inability to address

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<sup>5</sup> McKinnon (1973), Shaw (1973).

<sup>6</sup> Fry (1997).

<sup>7</sup> Demetriades and Hussein (1996).

<sup>8</sup> Kaufmann *et al* (1999), Hellmann *et al* (2000), Akerlof and Romer (1993).

<sup>9</sup> Hellmann *et al* (2000), also see Perotti (2001) on the case of Russia.

<sup>10</sup> Demirgüç-Kunt and Detragiache (1998).

institutional shortcomings or a lack of understanding of the foundations of a sound financial system and hence badly sequenced reforms.

### **Legal and institutional heritage**

The literature on law and finance, however, points to a more fundamental problem: some legal systems are not well suited to creating the preconditions for the successful development of financial systems and institutions.<sup>11</sup> Financial development (especially arms' length finance) depends on enforcement of outsiders' property rights. The “**static**” view of law and finance looks at differences in legal traditions regarding the comparative rights of individual investors vis-à-vis the state. Common law systems were designed to protect investor property against the Crown, creating systems in which individuals transact confidently. Civil law on the other hand sets the state above the courts and therefore the interests of politically connected heads of firms above individual investors.<sup>12</sup>

The “**dynamic**” view of law and finance looks at the adaptability of law to changing conditions, giving flexible legal systems an advantage in fostering financial development.<sup>13</sup> Common law emerges on a case-by-case basis, so the gap between an economy's needs and the law is quickly closed. On the other extreme is the immutable legal code of French civil law (though in practice French law has not been static). The more hurdles there are to legal reform, the less investor protection there is at the cutting edge of financial innovation, tending to slow down financial development.

There are two main critiques of this literature. Firstly some civil law countries performed very well in terms of financial development in the early 20<sup>th</sup> century.<sup>14</sup> The disadvantages of civil law only appear when studying countries after 1970.<sup>15</sup> Secondly there is as large a discrepancy in terms of financial development within as between legal origins. British legal origin does not appear to have been a panacea for Nigeria, Pakistan and Zimbabwe, while Luxembourg, Belgium and the Netherlands do not appear particularly encumbered by their French legal origin.

One way in which the second puzzle of diverging performance within legal origin groups has been addressed is to pay attention to the colonisation strategy employed in different countries. Acemoglu (2001) argues that in countries with high mortality rates for European

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<sup>11</sup> See Beck *et al* (2001a) for a review of the literature.

<sup>12</sup> La Porta *et al* (1997, 1998).

<sup>13</sup> Beck *et al* (2001b).

<sup>14</sup> e.g France, Germany, Argentina and Russia.

<sup>15</sup> Rajan and Zingales (2003).

colonisers, institutions were set up to allow a small elite to extract precious raw materials.<sup>16</sup> When the colonisers left, post-colonial elites took over the same institutions to continue to extract surpluses. In more benign climates, Europeans settled and established institutions to protect long-run economic interests.<sup>17</sup> Once a particular system has been set up, it advantages the interest groups benefiting from the system within the political process. Hence even inefficient systems are perpetuated; there is “path dependence”.<sup>18</sup> The “settler mortality” hypothesis has been directly applied to financial development in Beck *et al* (2003), providing empirical evidence that the institutional endowment matters.

### **Political economy**

Another way of looking at the divergent performance of countries with similar legal systems over time is to look at the political system in which decisions about economic policies are made. North (1990) and Olson (1993) argue that those in power shape policies and institutions to stay in power and enrich themselves. Financial underdevelopment may therefore be a deliberate policy choice by incumbents. An established military / industrial elite may be advantaged in a system in which entry of new firms is restricted through limited access to financial capital by outsiders. For well-connected and well-capitalised firms access to finance would be available through a system of relationship banking, regardless of disclosure standards and contract enforcement.<sup>19</sup> At best, therefore there is no political pressure for the development of arms’ length finance leading to a policy of neglect regarding institutional fundamentals. At worst the development of financial markets could be actively sabotaged through state control over the financial sector.<sup>20</sup>

The political economy literature is therefore linked to the previous explanations of legal endowments and institutional underdevelopment. Countries in which extractive institutions were set up by colonial powers to avoid large-scale permanent settlement have often continued to privilege small elites. These post-colonial elites have continued to restrict suffrage in the political system and have limited access to economic resources to those within their own group.<sup>21</sup> In such systems there are no incentives to put into place a legal system that protects individuals’ rights against the state, to protect property rights and create regulatory and

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<sup>16</sup> E.g. Tropical Africa.

<sup>17</sup> E.g. Australia, Canada, New Zealand, the US

<sup>18</sup> Bebchuk and Roe (1999); Acemoglu (2001), Zanello *et al* (2003).

<sup>19</sup> Rajan and Zingales (2003).

<sup>20</sup> La Porta *et al* (2001), also see the literature on state ownership of banks.

<sup>21</sup> Aided in this perhaps by a civil law system that favours centralisation of power.

supervisory institutions – i.e. to create the institutional preconditions for successful financial development.

A first test of a political economy model of financial development was undertaken by Rajan and Zingales (2003). Their paper tests the hypothesis that during times of high international capital mobility and in countries with a high degree of trade openness there would be higher levels of financial development: Capital mobility and open trade undermine both the ability and the incentive of incumbents to suppress domestic financial development. Under conditions of trade openness incumbents need investment finance to remain competitive, while periods of high international capital flows offer incumbent firms the option to tap international financial markets. They show that the exogenous component of a country's trade as well as an interaction term between trade openness and international capital mobility have a significant and positive effect on financial development over the 20<sup>th</sup> century.<sup>22</sup> However, this methodology does not directly address the question of the importance of the domestic political system in financial development. There are no variables describing the political regime characteristics directly.

Therefore the focus of this paper is the effect of political regime characteristics on the speed of financial development. Our first hypothesis is that a democratic political process dilutes the degree of elite control over economic resources. In autocratic regimes the interests of a narrow elite consisting of those holding capital in labour-rich economies (and especially the owners of state-sponsored “infant industries”) may prevail against the interests of labour, the unemployed and potential new entrants. The more concentrated power and the more non-democratic the system the more likely it is, that a small industrial elite of the type described by Rajan and Zingales (2003) can use its control over policy-making to restrict financial development. We therefore examine the effect of the extent to which political system restricts participation and concentrates power on financial development. Secondly we aim to capture the effect of political instability on financial development. We would expect a negative effect from major changes in the polity, as social capital is destroyed and uncertainty creates incentives for financial disintermediation.

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<sup>22</sup> Both trade and financial openness variables are chosen to be exogenous to the political process: the decision to open trade and capital flows is in itself political. The trade openness proxy is based on a country's size and proximity to trade partners or purely on population size. Capital flows are measured at the systemic level.

### 3: Data

The focus of this paper is on the factors that facilitate, restrict or reverse financial development. We look at the change in financial development from year to year, rather than the level of financial development a country has achieved, to examine what types of regimes are most conducive to fast development. The aspect of financial development we are most interested in from a political economy point of view is how easy it is for **any** investor (not just the well-connected ones) to obtain finance for investment projects. That is we are looking for indicators of “arms-length finance”. We look at three indicators of financial development:

- Private sector credit /GDP<sup>23</sup>
- Stock market capitalisation / GDP
- Total stock market value traded / GDP<sup>24</sup>

We would expect the strongest results for stock market development, as bank lending can be relationship-based, preserving elite control over finance. Higher-level institutional requirements need to be in place for stock markets to function effectively and be trusted by small investors. We use the database of financial development from Beck *et al* (2003b), noting that there is a limited data-set for the stock market capitalisation and trade ratio:<sup>25</sup>

To proxy for the extent of incumbent power we use the “combined polity score” - *polity2*<sup>26</sup> - as measured by the Polity IV database (Marshall *et al* 2003).<sup>27</sup> The Polity variable was designed to record the regime's institutionalized authority characteristics. Firstly, the database records a *democracy score* (ranging from 0 to 10) for each country, based on the openness of the political process (i.e. the extent to which citizens can effectively express preferences about policies and leaders through elections) and the degree of restraints on the powers of the chief executive. The maximum score would be allocated to a democracy in which the executive is chosen in free and fair elections with universal suffrage and there are substantial

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<sup>23</sup> We do not want to capture financial flows to state-owned enterprises controlled by the elite. However, it is still possible that private sector firms are owned by politicians and other connected individuals.

<sup>24</sup> This measure of stock market liquidity distinguishes between stock markets in which there is a large degree of government / elite involvement and those in which trading is active, encouraging small investor participation.

<sup>25</sup> Data are available from 1975 at best, which determines the starting date for the regression analysis. Data availability for the banking sector is in general much better than for stock markets. The data availability for indicators of the development of the bond markets in the Beck *et al* (2003) database is too poor for the purpose of this analysis.

<sup>26</sup> Polity2 imputes normal ranges of polity scores for special polity conditions such as periods of transition and periods of collapse of the central authority. State failures due to occupations are left blank.

<sup>27</sup> See Polity IV project Data-set Users Manual. An alternative database would be the Freedom House index, which has broader coverage of countries (adding ten countries to the banking sector regressions and one to the stock market regressions). However, the Freedom House data do not cover the second regime variable (*durability*) described below.



checks and balances constraining the chief executive's power.<sup>28</sup> Secondly each country has an *autocracy score* (again ranging from 0 to 10) based on how political leaders are selected (e.g. by designation or chosen from closed lists), the constraints on their powers and the regulation and competitiveness of political participation.<sup>29</sup> Polities may have mixed authority traits and can have intermediate scores on both the democracy and authority scores.<sup>30</sup> Subtracting the autocracy score from the democracy score of a country creates the *polity2* variable. Higher scores of *polity2* therefore indicate a higher degree of democracy.

An incumbent elite is more likely to be able to block financial development by impeding reforms in more authoritarian systems, as opposition demands for more equal access to resources can be ignored.<sup>31</sup> In democracies the influence of lobbies is reduced through systems of checks and balances, as they increase the number of veto-players that have to be bribed. The *polity2* variable therefore appears to be a reasonable proxy of elite control over policies that advance or hinder financial development. We also experimented with concentration of power within the legislative as recorded by Beck *et al* (2001c) as an alternative proxy for elite control over the economy.<sup>32</sup>

It is possible that there is an aggregation bias in the polity variable, however. The effects of increasing democracy are not necessarily symmetric with increasing concentration of power in autocracies. We therefore experimented using the democracy and autocracy components of the *polity2* variable separately. However the effect of the two variables does appear to be symmetric, producing very similar coefficients of opposite sign and the null hypothesis that  $\beta_{\text{democracy}} + \beta_{\text{autocracy}} = 0$  cannot be rejected in any regression specification. We therefore use the combined *polity* variable in the regressions. Secondly we created a dummy variable for countries in which the system is perfectly democratic (democracy = 10), to examine whether there are additional benefits from a high level of democracy.

We do not include direct indicators of institutional quality (such as rule of law, corruption, government effectiveness and transparency) in our regressions, as these in part reflect political regime characteristics: the more democratic the political system, the more likely

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<sup>28</sup> The scale therefore discriminates between developed democratic systems on the basis of their limitation on the powers of the chief executive, for example France's democracy score increases with the onset of "cohabitation" during the Mitterrand presidency.

<sup>29</sup> Regulation refers to who participates in the political process (has the right to vote), competitiveness to whether the opposition is suppressed (single party states) or restricted.

<sup>30</sup> For example South Africa in the 1980s has a democracy score of 7 and an autocracy score of 3, reflecting that within a relatively democratic system political participation was restricted to white South Africans.

<sup>31</sup> Acemoglu (2003), Pagano and Volpin (2003).

<sup>32</sup> Herfindahl index: the Herfindahl index increases in the concentration of power within parliament with the highest score going to single-party states. This proxy again reflects the competitiveness of elections on the one hand and the restrictions on the power of the executive. The regression results are extremely similar to the ones using the *polity2* indicator and are available upon request.

it is that corrupt and ineffective politicians are voted out of power. Similarly the level of human capital in an economy, which might impact on financial development, is omitted from the regression due to the positive effect of institutionalised democracy and democratic history on human capital accumulation.<sup>33</sup> However, we include an indicator of political instability to reflect that financial development requires a certain level of social development, trust and reputation. Upheaval in the political system results in the loss of human and social capital, uncertainty and the breakdown of long-term economic relationships. Fear of confiscation due to frequent regime changes leads people to hold physical assets instead of financial assets. We use the number of years that have elapsed since a major regime transition, either a move towards democracy, a major clamp-down on civil rights or the foundation or independence of a state: the variable “*durable*” from Polity IV. We use the durability variable from the 2003 version of the database, in which durability has been re-calculated and extended back to the beginning of the data series. It now correctly displays state failure through occupation in continental Europe in the 1940s. However, the positive effect of regime stability on financial development may not persist indefinitely but recede once the regime and financial system mature. We therefore include an interaction term of durability and a dummy taking the value 1 for all regimes, which have existed for more than 25 years.<sup>34</sup>

Table 1a provides some summary statistics of the changes in the financial development indicators and the level of political variables employed in the paper. The countries with the fastest financial development are considerably more democratic and stable than the median, while those countries that experience financial disintermediation are on average highly autocratic and /or have unstable regimes.

We include lagged GDP growth as an independent variable to capture the effect of increased demand for financial services, in line with the theoretical literature on financial development discussed above. However, we omit the real interest rate from the reported regressions. Firstly whether the real interest rate is positive or negative is partially a political decision, linked to a policy of financial liberalisation. Secondly, data availability on the real interest rate is patchy, reducing our sample by one quarter on the banking sector variables and one-fifth on the stock market capitalisation variable, with missing entries concentrated among the more autocratic, less-developed countries.<sup>35</sup>

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<sup>33</sup> Feng (2003)

<sup>34</sup> We also experimented with a square term of *durability*, but encountered problems of multicollinearity. If the interaction term is based on periods of less than 25 years, it is not statistically significant.

<sup>35</sup> If the real interest rate is included in the regressions it has the expected positive effect on financial development, however, it is only statistically significant in outlier-robust regressions.

We control for trade openness as suggested by Rajan and Zingales (2003), again noting that a country's actual openness is partly endogenous to the political process. Therefore we prefer to use the exogenous component of trade determined by geographical factors rather than actual openness. Gravity models of trade argue that bilateral trade flows are a log-linear function of the sizes of and the distance between trading partners.<sup>36</sup> Small nations are less self-sufficient and are therefore predisposed towards greater openness. Frankel and Romer (1999) constructed measures of the geographic component of countries' trade based on: size (log area and log economically active population), distances from other countries (great circle distances between principal cities), whether they share a border and whether they are landlocked, plus some interaction terms. The reported estimate of the geographic component of a country's trade is the sum of the estimated geographic components of its bilateral trade with each other country in the world. Data are available for 150 countries in the early 1990s.<sup>37</sup>

In the Rajan and Zingales (2003) paper international capital mobility is measured at the level of the international system.<sup>38</sup> This is again to avoid the problem that the actual degree of capital mobility is a political choice – certain types of governments are more likely to liberalise capital flows.<sup>39</sup> In this paper, changes in international capital mobility, which affect all countries simultaneously, are captured through year and period dummies<sup>40</sup>.

We control for the origin of a country's legal system. We augmented the data presented in La Porta *et al* (1998) from the CIA World Factbook entry for the legal system. We excluded countries with entries that did not fit neatly into the five original legal origin categories and introduced a new category for post-Socialist civil law codes from 1990 for the same reason.<sup>41</sup>

Finally we control for whether a country has recently experienced a banking crisis. Widespread public loss of confidence may result in a discontinuity in financial development. We use a lagged dummy taken from data in Caprio and Klingebiel (2003) and Glick and Hutchinson (1999).

Table 1b provides preliminary evidence in favour of the hypotheses outlined above in the form of correlation coefficients between the variables. A higher democracy score is positively correlated with all proxies for the speed of financial development, with the expected negative

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<sup>36</sup> Linnemann (1966).

<sup>37</sup> As the data are based on geography, there is no variation from 1975 – 2000, except in Ethiopia and Germany (and some post-Soviet states, which in any case have no data availability before the early 1990s).

<sup>38</sup> Proxied by the “mean absolute value of current account / GDP over five-year periods for a sample of 14 developed countries.” From Taylor (1998).

<sup>39</sup> e.g. Alesina *et al* (1994), Haggard and Maxfield (1996), Li and Smith (2003).

<sup>40</sup> Period 1 = 1976-1980, period 2 = 1981-1985, period 3 = 1986-1990, period 4 = 1991-1995, period 5 = 1996-2000.

<sup>41</sup> Examples are “Roman-Dutch law” (e.g. Namibia / Botswana) and “Mixture of French and British Law” (e.g. Mauritius, Vanuatu).

correlation between concentration of power and financial development. Greater regime stability is positively correlated with financial development, as is intrinsic openness to trade. Banking crises are correlated negatively with financial development, while lagged growth is positively correlated with banking sector development but negatively with stock market development.

#### 4: Methodology

We perform the regressions using annual data from 1975 –2000 in so far that they are available. Two variants of each model are estimated: in (i) and (iii) the effect of the political variable (*polity2*) is assumed to be the same across all periods (ii) and (iv) the effect of *polity2* is allowed to vary across periods.

##### Regression equations

Firstly we study how short-run financial development (FD) is affected by political and legal regime characteristics. The dependent variable is a difference variable, but the regime characteristics are mostly time-invariant (or in the case of the stability variable change by one every year) so they enter as levels variables.

$$\Delta FD_{it} = \beta_0 + \beta_1 \text{elite}_{it} + \beta_2 \text{stability}_{it} + \beta_3 \text{openness}_i + \beta_4 \text{legal origin}_i + \beta_5 \text{financial crisis}_{it-1} + \beta_6 \text{GDPgrowth}_{it-1} + \sum_{j=1}^{25} \gamma_j t + \varepsilon_{it} \quad (\text{i})$$

$$\Delta FD_{it} = \beta_0 + \beta_1 \text{elite}_{it} + \beta_2 \text{elite}_{it} * \text{period dummies} + \beta_3 \text{stability}_{it} + \beta_4 \text{openness}_i + \beta_5 \text{legal origin}_i + \beta_6 \text{financial crisis}_{it-1} + \beta_7 \text{GDPgrowth}_{it-1} + \sum_{j=1}^{25} \gamma_j t + \varepsilon_{it} \quad (\text{ii})$$

It is possible however, that changes in financial development are driven by unobserved country-specific factors. To check whether our results are robust, we look at the relationship between changes in financial development and the past level of financial development, which will pick up these unobserved country-specific effects.

$$\Delta FD_{it} = \beta_0 + \beta_1 \text{elite}_{it} + \beta_2 \text{stability}_{it} + \beta_3 \text{openness}_i + \beta_4 \text{legal origin}_i + \beta_5 \text{financial crisis}_{it-1} + \beta_6 \text{GDPgrowth}_{it-1} + \beta_7 \text{FD}_{it-1} + \sum_{j=1}^{25} \gamma_j t + \varepsilon_{it} \quad (\text{iii})$$

$$\Delta \text{FD}_{it} = \beta_0 + \beta_1 \text{elite}_{it} + \beta_2 \text{elite}_{it} * \text{period dummies} + \beta_3 \text{stability}_{it} + \beta_4 \text{openness}_i + \beta_5 \text{legal origin}_i + \beta_6 \text{financial crisis}_{it-1} + \beta_7 \text{GDPgrowth}_{it-1} + \beta_8 \text{FD}_{it-1} + \sum_{j=1}^{25} \gamma_j t + \varepsilon_{it} \quad (\text{vi})$$

**Financial Development:** We report regression results for

- 1) Private sector credit / GDP (*credit*),
- 2) Stock market capitalisation / GDP (*smcap*)
- 3) Stock market value traded / GDP (*smtrade*)

**Elite:** Degree of Democracy (*polity*), high democracy dummy (*highdemoc*)

**Stability:** Durability of regime (*durability*), interaction between *durability* and a dummy for *durability* > 25 years (*dur25*)

**Openness:** Geographical pre-disposition to trade (*trade*)

**Legal Origin:** Socialist Law and French, German, Scandinavian and Post-Soviet Civil Law dummies, Common Law as baseline)

For each model, three alternative estimation strategies are employed. The first is OLS with standard errors, which are robust to arbitrary heteroskedasticity and within country serial correlation. It is well known that heteroskedasticity is prevalent in cross sectional data sets and within country serial correlation is likely to be present because of unobserved country-specific heterogeneity. Secondly we use outlier robust regressions and thirdly we use a generalised method of moments procedure to test for the potential endogeneity of the polity variable.

A problem frequently encountered in estimation relates to outliers. The inclusion or exclusion of outliers, especially if the sample size is small, can substantially alter the results of regression analysis. If useful generalisations are to be drawn, it is thus important to ensure that the results reflect what is going on in the majority of the sample rather than being driven by a few outlying observations only. Our sample has a number of extreme outliers, both positive and negative.<sup>42</sup> For this reason we deploy a second estimation strategy in this study: outlier robust regression (Rousseeuw and Leroy, 1987). This is essentially a three-step procedure. The first step involves estimating the regression and calculating Cook's distance measure of influence. Cook's distance (D) for the  $i^{\text{th}}$  observation is a measure of the distance between the coefficient estimates when observation  $i$  is included and when it is not, and it is defined as

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<sup>42</sup> See diagrams 1-3.

$$D_i = \frac{\hat{e}_{si}^2 (s_{pi} / s_{ri})^2}{k}$$

where  $\hat{e}_{si}$  refers to standardised residuals,  $s_{ri}$  to standard error of the residuals and  $s_{pi}$  to standard error of prediction.  $k$  represents the number of independent variables including the intercept term.

High values of Cook's D imply that the  $i$ th observation has significant influence on estimation results, therefore, can be deemed to be an outlier. The second step in robust regressions is to screen data points in search of such outliers and eliminates observations for which Cook's distance exceeds 1 – these are the gross outliers. Thereafter, robust regression involves an iterative weighted least squares method whereby outliers are identified and weights are assigned.<sup>43</sup>

The two estimation procedures outlined above (i.e. OLS and outlier robust regressions) assume that the political variables are exogenous to the model determining the growth of financial development. In the course of our empirical investigation we have relaxed this assumption and employ a generalised method of moments (GMM) procedure due to Hansen (1982). To this end twice lagged values of the *polity2* variable interacted with the legal origin dummies are used as instrumental variable candidates. We are careful to check the appropriateness of the instrumental variable candidates in two respects. First, their *validity* in the sense of having no correlation with the equation error is formally tested with the aid of Hansen's (1982) test for overidentifying restrictions (which is the robust version of the classical Sargan test statistic). Second, we ascertain that they are *relevant* in that they exhibit sufficiently strong correlation with the potentially endogenous regressor (i.e. *polity2*). It has been noted in the econometric literature that when the partial correlation between the instruments and the endogenous variable is low, instrumental variables regression is biased in the direction of OLS estimator (see e.g. Staiger and Stock, 1997). Staiger and Stock (1997) recommend that the F-statistics<sup>44</sup> (or the partial R-square values) from the first-stage regression be routinely reported in applied work. A high partial R-squared of the excluded instruments or a large F-statistic suggests the instruments are relevant, instrumental variable or GMM estimates are reliable in finite samples. By contrast, when the F-statistic is small or the partial R-square value is low, inference based on instrumental variable estimates would be unreliable. Reassuringly we find

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<sup>43</sup> When examining the weights it was found that the outlier-robust regression excludes or assigns lower weights to countries experiencing booms and collapses of the credit and stock markets, such as those experienced in the South East Asian countries in the wake of the 1997 / 1998 Asian crisis.

<sup>44</sup> The F-statistic tests the hypothesis that the instruments should be excluded from the first-stage regressions.

that our instruments are appropriate on both counts (see Table A of the appendix). A comparison of the OLS and GMM estimates via Hausman test statistics reveals that the two are not systematically different, suggesting that the assumption of exogeneity of the *polity2* variable is justified. For this reason we restrict our discussion to the results obtained from the OLS and outlier-robust regressions, and the GMM estimates are relegated to the appendix.

The final part of the results section discusses sample-selection issues in the stock market regressions. It uses panel logits to examine which countries report stock market data. Panel Tobit analysis including the missing observations is then used to address the sample selection bias.

## 5: Results

### Baseline regressions

Table 2 presents results for equation (i), in which the pure polity indicator is used. The polity proxy has a positive coefficient in 5 out of the six regressions, indicating that more democratic countries tend to have faster financial development, as predicted by the political economy literature. The proxy is only statistically significant in the banking sector regressions, but insignificant in the four stock market regressions. However, the high democracy dummy is significant in the regressions on stock market capitalisation, indicating that while small improvements in democracy do not promote stock market development, stock markets flourish in fully democratic regimes.

The second political regime proxy, durability, has a positive coefficient: countries which have not experienced a major regime transition for a long time tend to have faster financial development than those, which have more recently gone through major upheaval. Durability is statistically significant in 3 regression specifications, but never in the stock market capitalisation regressions. Any positive effects of durability tend to disappear after 25 years, indicated by the negative coefficient on the interaction term.

Of the different legal origins, there is some evidence that countries with German civil law systems outperform common law countries (which serve as the baseline), while Scandinavian countries have fared worse. The French civil law dummy is not significant once political regime characteristics are controlled for. Socialist legal origin on the other hand enters as a significant variable with an unexpected positive coefficient.<sup>45</sup> Post-socialist civil law

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<sup>45</sup> However, these results are based on a very narrow set of data. Only China reports on its burgeoning stock market in the 1990s and the banking sector observations are based on observations from Poland and Hungary in the 1980s

systems have on balance performed worse than common law countries, but this performance may be due to a range of factors associated with economic transition rather than the choice of legal system.

Of the control variables the lagged banking crisis has the expected negative effect on the banking sector and stock market capitalisation, but did not have statistically significant effects on stock market trade. Lagged GDP growth appears to have the expected positive effect on the banking system variable (significant at the 1% level), but none on stock market development. Finally there is some evidence that countries naturally more open to trade have slower stock market development.<sup>46</sup>

The year dummies show a pattern of strong expansions in private sector credit in the late 1970s and early 1980s and again in 1996-1999. Stock market development was particularly strong in the mid 1990s.

### **Interaction terms**

Table 3 looks at the effect of the degree of democracy in different time periods (regression ii). It appears that the effect of democratic governments on financial development was strongest in the period from 1996-2000, contributing to both banking sector and stock market growth.<sup>47</sup> It was also positive and significant in other periods, but there is no clear pattern across all indicators of financial development. The high democracy dummy retains its highly significant effect on the growth of stock market capitalisation. Durability again has positive and significant effects on the speed of banking sector development.

The pattern of the legal origin dummies discussed above is reproduced. Financial crises disrupt financial development in the following year. Trade and lagged GDP growth again spur banking sector development. The effect of trade on stock market development appears to be negative, while there is no link between lagged GDP growth and stock market capitalisation and trade.

The year dummies show a pattern of strong expansions in private sector credit in the late 1970s and early 1980s and again in 1996-1998. Stock market development was particularly

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and China in the 1990s. Most Socialist countries did not have stock markets or access to credit for the private sector. We address this sample selection issue below.

<sup>46</sup> Small countries have a high geographic predisposition to trade. The positive coefficient for banking sector development may be driven by a number of small nations specialising as banking centres (e.g. Bahamas, Luxembourg, Singapore and Switzerland). Stock markets on the other hand may benefit from being located in large countries with diverse production structures.



strong in 19986/87, 1994/95 and 1997. This lends some support to the Rajan and Zingales (2003) hypothesis that financial development is stimulated by international capital mobility, which started in the late 1980s with capital account liberalisation in Europe and beyond.

### **Including Lagged Levels**

When we include the lagged level of the financial development indicators among the explanatory variables (regressions (iii)-(iv)), it is a highly significant explanatory variable of the change in financial development in all of the outlier robust regressions.<sup>48</sup> The positive coefficient indicates that the lagged level is picking up unobserved country effects, which raise both present and past financial development. Of the political regime variables the positive effect of *polity2* on the banking sector and the effect of the high democracy dummy on stock market capitalisation are preserved. Again the positive effect of democracy is most pronounced in the late 1990s. Regime stability promotes banking sector growth until the regime and banking sector mature at around 25 years.

In summary, the development of the market for private sector credit appears to be furthered in democratic systems and the positive effect of democracy appears to have been particularly strong in the 1980s and late 1990s. Banking sector development also needs regime stability as it needs time to build reputations and gain the trust of depositors. Countries experiencing faster economic growth also have faster banking sector development - demand for finance appears to boost the banking sector. Banking crises have negative effects on credit growth.

Growth in stock market capitalisation appears to rely less on political stability.<sup>49</sup> The degree of democracy mainly appears to have mattered in the late 1990s. However growth in stock market capitalisation has been fastest in fully democratic regimes. Banking crises and a geographical predisposition to trade openness affect growth in stock market capitalisation negatively. There is no statistically significant positive effect of lagged GDP growth on stock market capitalisation. Trade in stock markets appears less sensitive to political regime characteristics, except in the period 1996-2000. From the OLS results there is evidence for a positive response to regime stability, but this is not preserved in the outlier-robust regressions.

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<sup>47</sup> This result is robust to excluding the countries in Post-socialist countries from the regression, so the results are not purely driven by the experience of newly emerging democracies in central Europe versus new autocracies in central Asia.

<sup>48</sup> Results reported in tables 4 and 5.

The main explanatory factor of the change in the stock market turnover variable is its past level, which picks up unobserved country effects. Finally, there is some evidence that stock markets are driven by exogenous factors at the systemic level (such as capital mobility), which are picked up by the year dummies.

### **Missing Observations**

Given that narrow elites would be more likely to develop (potentially relationship-based) banking than arms' length financial markets, it is surprising that the effects of the political variables in the stock market regressions are less robust than for the banking sector. We note, however, that the stock market regression results are based on a sample that is about half the sample size of the banking sector variable, raising the issue of sample selection bias. When looking at the sub-sample of countries which report stock market capitalisation (using cross-sectional time-series logit analysis) it emerges that the probability of observing stock market data rises significantly in durable and / or democratic regimes, even when controlling for initial per capita GDP (see table 6). The regression results on the stock market variables reported above therefore systematically underestimate the importance of the political regime characteristics. Similarly the effect the unexpected positive effect of Soviet legal origin disappears once it ceases to be effectively a dummy for China and the civil law legal origins have the expected negative effects compared to the common law baseline.

When we include the missing observations of stock market capitalisation and trade ratios in the regressions and assume that the same process governs whether or not there is a stock market and how fast it grows if it does exist, we can use Panel Tobit analysis. Table 7 shows that when making this assumption, the effects of both polity variables on stock market capitalisation and stock market trade are now highly statistically significant. Moreover French civil law legal origin and particularly Socialist legal origin now have the expected negative coefficients, reflecting the fact that many of these countries did not have stock markets at all. On the other hand the German and Scandinavian legal origins have positive coefficients. German and Scandinavian legal origins are mainly observed in highly developed or newly emerging economies (Taiwan, and Republic of Korea)<sup>50</sup>, and if stock market data are reported the stock markets have grown fast.

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<sup>49</sup> For example the transition economies of Central and Eastern Europe have moved quickly to establish stock markets and have often seen booms in stock market capitalisation at least in the initial euphoria of marketisation.

<sup>50</sup> Exceptions are Rwanda and Burundi with German legal origin.

## 6: Conclusions

From our panel data analysis political regime characteristics have emerged as significant factors influencing the speed of financial development, alongside the conventional determinants of financial development stemming from arguments of demand for finance and controls for discontinuities created by financial crises. Regime durability is a statistically significant variable in determining the speed of financial development, especially once biases arising from relatively unstable regimes not reporting stock market data (or not having stock markets) are addressed. Similarly a more representative political system has positive effects on all aspects of financial development, with the greatest and most robust influence in the late 1990s. For stock market capitalisation there are additional benefits arising from a fully representative political system.

We therefore provide empirical evidence for the arguments made in the political economy literature on financial development. More autocratic regimes representing the interests of narrow but powerful elites appear to delay and obstruct financial development. This evidence is in line with the settler mortality hypothesis of financial development to the extent that political systems privileging narrow elites are perpetuated after colonisation.

The legal origin of a country mainly appears to influence whether there is a stock market (or one that functions sufficiently well for market capitalisation and trade volumes to be reported). Common law countries are the most likely to report stock market data. If there are stock market data, then countries with French and German legal origins do not perform significantly worse than common law countries, once the effects of the political regime characteristics are controlled for. This suggests that the legal system impacts on financial development indirectly – civil law systems may be more easily subverted to concentrate power in the hands of a narrow elite. If however there is a political will to widen access to economic resources through financial development, then a country is not necessarily held back by its legal heritage.

Our results also suggest an explanation for the Rajan and Zingales (2003) observation that before 1913 civil law does not appear to have been an impediment to financial development. The relative decline in financial development in civil law countries after 1913 coincides with regime changes, occupations and autocratic governments in continental Europe and Latin America, while the US, Canada, the UK, New Zealand, Australia and South Africa escaped such political turmoil. Financial development is thus likely to have been more affected by regime characteristics than by the legal system, though regime characteristics may in turn partially depend on how conducive the legal system is to setting up an autocratic government.

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# Diagrams 1-3

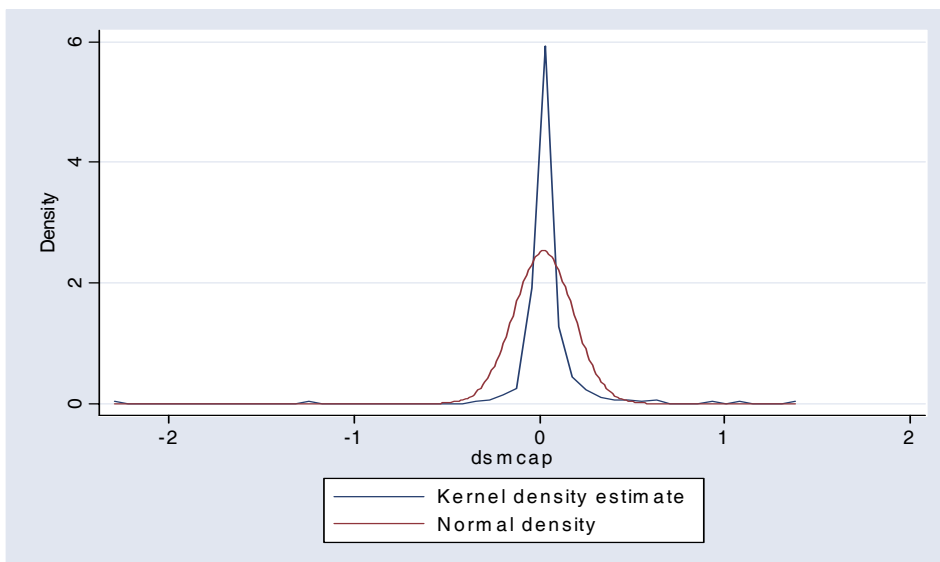
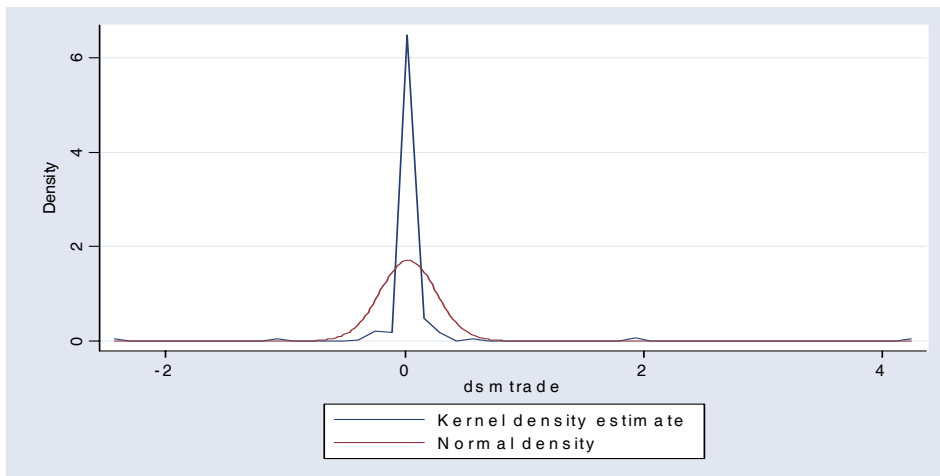
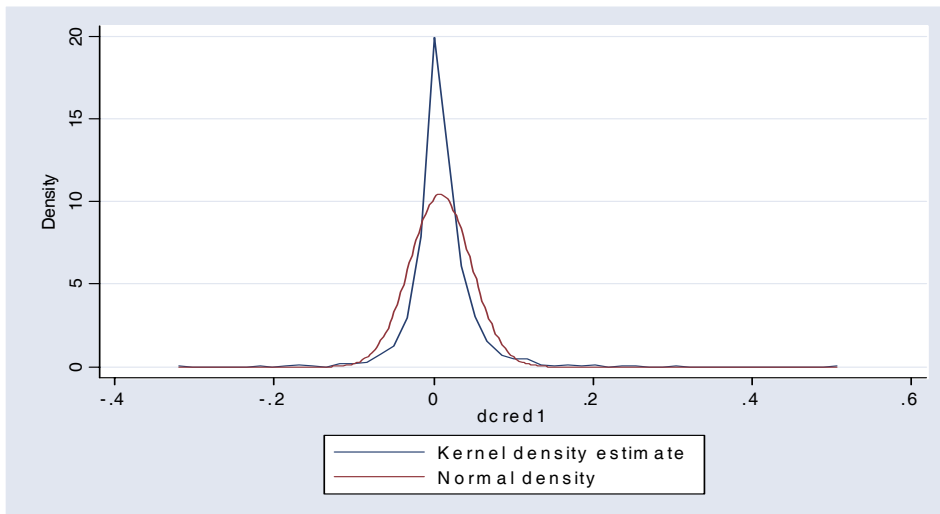


Table 1a  
Financial growth and politics:  
Summary statistics

	<i>Deposits</i>	<i>Credit</i>	<i>Stock</i>	<i>Polity2</i>	<i>Durability</i>
Mean	0.009	0.010	0.023	0.439	22.198
Standard deviation	0.038	0.046	0.158	7.612	24.029
Lower quartile	-0.007	-0.006	-0.009	-7	4
Median	0.006	0.006	0.008	-1	14
Upper quartile	0.022	0.021	0.045	9	31

Table 1b  
Pair-wise correlations on speed of financial development

	d.credit	d.deposits	d.smcap	polity2	herfind.	durabil.	lgrowth	lbank.	trade
d.credit	1.0000								
d.deposits	0.4211	1.0000							
d. sm cap	-0.0123	0.0665	1.0000						
Polity2	0.0556	0.0676	0.0650	1.0000					
Herfindahl	-0.0584	-0.0733	-0.0516	-0.6322	1.0000				
Durability	0.0868	0.1056	0.0831	0.2293	-0.1363	1.0000			
l.growth	0.1147	0.0840	-0.0155	-0.0487	0.0104	0.0506	1.0000		
l.bank crisis	-0.0791	-0.0401	-0.0577	0.0997	-0.0969	-0.0781	-0.0656	1.0000	
trade	0.0495	0.1655	0.0203	0.0372	-0.0855	0.1433	0.0401	-0.1104	1.0000



**Table 2**

Model 1						
	OLS with robust standard errors			Outlier robust regression		
	$\Delta$ credit	$\Delta$ smtrade	$\Delta$ smcap	$\Delta$ credit	$\Delta$ dsmttrade	$\Delta$ smcap
polity2	0.0004	0.0004	0.0005	0.0002	0.0001	-0.0002
	(0.0002)*	(0.0005)	(0.0004)	(0.0001)**	(0.0001)	(0.0002)
highdemoc	0.0017	0.0073	0.0194	0.0023	0.0021	0.0141
	(0.0036)	(0.0137)	(0.0114)*	(0.0019)	(0.0018)	(0.0039)***
durability	0.0005	0.0022	0.0005	0.0002	0.0001	0.0003
	(0.0002)**	(0.0009)**	(0.0011)	(0.0001)**	(0.0001)	(0.0002)
dur25	-0.0003	-0.0017	-0.0003	-0.0002	0.0000	-0.0002
	(0.0002)*	(0.0008)**	(0.0010)	(0.0001)*	(0.0001)	(0.0002)
trade	0.3306	-1.3216	-0.2015	0.3216	-0.2548	-1.9076
	(0.2347)	(0.7182)*	(0.4322)	(0.1900)*	(0.1560)	(0.3425)***
Lbankcris	-0.0072	-0.0108	-0.0182	-0.0073	-0.0001	-0.0093
	(0.0033)**	(0.0076)	(0.0095)*	(0.0015)***	(0.0014)	(0.0031)***
Lgdpgrowth	0.0010	-0.0019	-0.0005	0.0009	-0.0002	0.0004
	(0.0003)***	(0.0011)*	(0.0017)	(0.0001)***	(0.0001)	(0.0003)
French CL	0.0008	-0.0004	0.0000	-0.0002	-0.0005	0.0033
	(0.0022)	(0.0069)	(0.0073)	(0.0012)	(0.0013)	(0.0028)
German CL	0.0046	0.0413	0.0054	0.0046	0.0038	-0.0020
	(0.0031)	(0.0308)	(0.0176)	(0.0022)**	(0.0022)*	(0.0046)
Scandin. CL	-0.0043	0.0113	0.0165	-0.0049	-0.0038	0.0103
	(0.0048)	(0.0172)	(0.0208)	(0.0026)*	(0.0022)*	(0.0050)**
Socialist L	0.0315	0.0518	0.0307	0.0164	0.0641	0.0145
	(0.0082)***	(0.0141)***	(0.0130)**	(0.0058)***	(0.0065)***	(0.0148)
Post-Social.	-0.0101	-0.0212	-0.0232	-0.0093	-0.0013	-0.0082
	(0.0059)*	(0.0123)*	(0.0121)*	(0.0038)**	(0.0032)	(0.0072)
1976	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
1977	0.0033	0.0131	-0.0027	0.0055	-0.0013	-0.0030
	(0.0028)	(0.0062)**	(0.0093)	(0.0039)	(0.0052)	(0.0123)
1978	0.0133	0.0122	0.0000	0.0098	0.0053	0.0000
	(0.0037)***	(0.0110)	(0.0000)	(0.0039)**	(0.0051)	(0.0000)
1979	0.0094	0.0055	0.0178	0.0031	0.0017	0.0065
	(0.0051)*	(0.0059)	(0.0077)**	(0.0039)	(0.0051)	(0.0111)
1980	0.0018	0.0203	0.0214	0.0029	0.0045	0.0058
	(0.0035)	(0.0083)**	(0.0088)**	(0.0039)	(0.0051)	(0.0110)
1981	0.0116	0.0131	0.0143	0.0093	0.0019	0.0057
	(0.0035)***	(0.0073)*	(0.0067)**	(0.0039)**	(0.0050)	(0.0109)
1982	0.0155	-0.0030	0.0153	0.0083	-0.0008	0.0014
	(0.0039)***	(0.0100)	(0.0097)	(0.0038)**	(0.0050)	(0.0104)
1983	0.0063	0.0195	0.0007	0.0061	0.0063	0.0124
	(0.0034)*	(0.0076)**	(0.0199)	(0.0038)	(0.0050)	(0.0104)
1984	-0.0071	-0.0045	0.0061	-0.0002	0.0009	0.0124
	(0.0051)	(0.0098)	(0.0151)	(0.0038)	(0.0049)	(0.0103)
1985	-0.0027	0.0323	0.0443	0.0011	0.0092	0.0186
	(0.0040)	(0.0163)*	(0.0199)**	(0.0038)	(0.0049)*	(0.0103)*
1986	0.0071	0.0326	0.0613	0.0048	0.0141	0.0270
	(0.0053)	(0.0101)***	(0.0205)***	(0.0038)	(0.0049)***	(0.0102)***
1987	0.0017	0.0459	0.0533	0.0035	0.0077	0.0173
	(0.0052)	(0.0127)***	(0.0244)**	(0.0038)	(0.0048)	(0.0102)*
1988	0.0015	-0.0030	0.0342	0.0031	-0.0036	0.0160
	(0.0049)	(0.0130)	(0.0153)**	(0.0038)	(0.0048)	(0.0101)
1989	0.0072	0.0347	0.0148	0.0070	0.0083	0.0293
	(0.0053)	(0.0115)***	(0.0382)	(0.0038)*	(0.0048)*	(0.0101)***
1990	0.0038	-0.0153	-0.0491	0.0042	-0.0032	-0.0013
	(0.0041)	(0.0112)	(0.0449)	(0.0038)	(0.0048)	(0.0101)

1991	0.0025	0.0062	0.0127	0.0026	0.0052	0.0131
	(0.0037)	(0.0090)	(0.0124)	(0.0038)	(0.0048)	(0.0101)
1992	0.0041	0.0208	0.0292	0.0054	0.0034	0.0127
	(0.0041)	(0.0111)*	(0.0148)*	(0.0037)	(0.0047)	(0.0101)
1993	0.0033	0.0982	0.1005	0.0043	0.0153	0.0378
	(0.0042)	(0.0363)***	(0.0219)***	(0.0037)	(0.0047)***	(0.0099)***
1994	-0.0039	0.0225	0.0696	-0.0004	0.0132	0.0408
	(0.0038)	(0.0161)	(0.0143)***	(0.0037)	(0.0047)***	(0.0098)***
1995	0.0050	-0.0010	0.0128	0.0058	-0.0011	0.0167
	(0.0041)	(0.0169)	(0.0132)	(0.0037)	(0.0046)	(0.0098)*
1996	0.0107	0.0414	0.0458	0.0071	0.0056	0.0251
	(0.0043)**	(0.0173)**	(0.0226)**	(0.0037)*	(0.0046)	(0.0097)***
1997	0.0149	0.0685	0.0114	0.0105	0.0099	0.0315
	(0.0040)***	(0.0138)***	(0.0268)	(0.0037)***	(0.0046)**	(0.0096)***
1998	0.0258	0.0328	0.0405	0.0188	0.0020	0.0175
	(0.0044)***	(0.0246)	(0.0259)	(0.0038)***	(0.0046)	(0.0096)*
1999	0.0082	0.1051	0.0751	0.0092	0.0045	0.0174
	(0.0047)*	(0.0341)***	(0.0238)***	(0.0038)**	(0.0046)	(0.0096)*
2000	0.0072	0.0777	0.0258	0.0048	0.0037	0.0168
	(0.0086)	(0.0442)*	(0.0224)	(0.0038)	(0.0046)	(0.0097)*
Constant	-0.0082	-0.0296	-0.0204	-0.0055	-0.0027	-0.0111
	(0.0030)***	(0.0102)***	(0.0138)	(0.0030)*	(0.0042)	(0.0089)
Observations	2257	1338	1252	2257	1338	1252
R-squared	0.09	0.07	0.05	0.10	0.16	0.13

Robust standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 3**

Model 2						
	OLS with robust standard errors			Outlier robust regression		
	$\Delta$ credit	$\Delta$ smtrade	$\Delta$ smcap	$\Delta$ credit	$\Delta$ dsmttrade	$\Delta$ smcap
polity2	-0.0001 (0.0003)	-0.0018 (0.0008)**	-0.0014 (0.0007)**	-0.0002 (0.0002)	-0.0002 (0.0002)	-0.0008 (0.0006)
1981-85*polity2	0.0001 (0.0003)	0.0015 (0.0008)*	0.0026 (0.0013)**	0.0004 (0.0002)**	0.0003 (0.0003)	0.0009 (0.0007)
1986-90*polity2	0.0009 (0.0005)*	0.0006 (0.0005)	0.0001 (0.0008)	0.0006 (0.0002)***	0.0001 (0.0003)	0.0004 (0.0007)
1991-95*polity2	0.0005 (0.0004)	0.0017 (0.0009)*	0.0008 (0.0010)	0.0000 (0.0002)	0.0004 (0.0003)	-0.0001 (0.0007)
1996-2000*polity2	0.0011 (0.0005)**	0.0058 (0.0014)***	0.0047 (0.0012)***	0.0011 (0.0002)***	0.0003 (0.0003)	0.0017 (0.0007)**
highdemoc	0.0017 (0.0036)	0.0086 (0.0138)	0.0199 (0.0115)*	0.0025 (0.0019)	0.0021 (0.0018)	0.0145 (0.0039)***
durability	0.0004 (0.0002)**	0.0019 (0.0009)**	0.0003 (0.0011)	0.0002 (0.0001)**	0.0000 (0.0001)	0.0002 (0.0002)
dur25	-0.0002 (0.0002)	-0.0014 (0.0008)*	-0.0001 (0.0010)	-0.0001 (0.0001)	0.0000 (0.0001)	-0.0001 (0.0002)
trade	0.0417 (0.0025)*	-0.0122 (0.0069)*	-0.0015 (0.0043)	0.0035 (0.0018)*	-0.0024 (0.0015)	-0.0192 (0.0034)***
Lbankcris	-0.0070 (0.0033)**	-0.0101 (0.0076)	-0.0172 (0.0092)*	-0.0072 (0.0015)***	0.0000 (0.0014)	-0.0088 (0.0031)***
Lgdpgrowth	0.0009 (0.0003)***	-0.0022 (0.0011)*	-0.0007 (0.0017)	0.0008 (0.0001)***	-0.0002 (0.0001)	0.0003 (0.0003)
French CL	0.0001 (0.0022)	-0.0026 (0.0066)	-0.0005 (0.0073)	-0.0004 (0.0012)	-0.0006 (0.0013)	0.0029 (0.0029)
German CL	0.0042 (0.0030)	0.0389 (0.0300)	0.0047 (0.0176)	0.0047 (0.0022)**	0.0036 (0.0021)*	-0.0026 (0.0046)
Scandin. CL	-0.0047 (0.0048)	0.0093 (0.0175)	0.0153 (0.0206)	-0.0046 (0.0025)*	-0.0038 (0.0022)*	0.0095 (0.0051)*
Socialist L	0.0334 (0.0072)***	0.0754 (0.0119)***	0.0485 (0.0119)***	0.0127 (0.0057)**	0.0653 (0.0066)***	0.0189 (0.0151)
Post-Social.	-0.0129 (0.0064)**	-0.0336 (0.0142)**	-0.0318 (0.0139)**	-0.0109 (0.0038)***	-0.0017 (0.0032)	-0.0114 (0.0073)
1976	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)
1977	0.0033 (0.0028)	0.0080 (0.0065)	-0.0023 (0.0095)	0.0055 (0.0039)	-0.0015 (0.0052)	-0.0027 (0.0124)
1978	0.0136 (0.0037)***	0.0077 (0.0115)	0.0000 (0.0000)	0.0097 (0.0039)**	0.0047 (0.0051)	0.0000 (0.0000)
1979	0.0099 (0.0050)**	0.0013 (0.0063)	0.0157 (0.0075)**	0.0034 (0.0039)	0.0014 (0.0051)	0.0058 (0.0112)
1980	0.0024 (0.0035)	0.0167 (0.0086)*	0.0172 (0.0086)**	0.0035 (0.0039)	0.0041 (0.0051)	0.0044 (0.0111)
1981	0.0119 (0.0036)***	0.0023 (0.0098)	-0.0008 (0.0086)	0.0089 (0.0038)**	0.0000 (0.0052)	0.0006 (0.0117)
1982	0.0157 (0.0040)***	-0.0146 (0.0124)	0.0001 (0.0103)	0.0078 (0.0038)**	-0.0026 (0.0053)	-0.0037 (0.0113)
1983	0.0066 (0.0034)*	0.0077 (0.0091)	-0.0153 (0.0239)	0.0056 (0.0038)	0.0044 (0.0052)	0.0069 (0.0113)
1984	-0.0069 (0.0051)	-0.0162 (0.0118)	-0.0095 (0.0179)	-0.0006 (0.0038)	-0.0010 (0.0052)	0.0072 (0.0112)
1985	-0.0026 (0.0039)	0.0211 (0.0138)	0.0286 (0.0168)*	0.0008 (0.0038)	0.0073 (0.0052)	0.0135 (0.0112)
1986	0.0062 (0.0051)	0.0253 (0.0102)**	0.0576 (0.0228)**	0.0044 (0.0038)	0.0131 (0.0051)**	0.0237 (0.0112)**
1987	0.0008	0.0390	0.0501	0.0031	0.0065	0.0141

	(0.0050)	(0.0132)***	(0.0266)*	(0.0038)	(0.0051)	(0.0111)
1988	0.0005	-0.0092	0.0305	0.0027	-0.0045	0.0128
	(0.0046)	(0.0145)	(0.0173)*	(0.0037)	(0.0051)	(0.0111)
1989	0.0060	0.0292	0.0120	0.0064	0.0074	0.0260
	(0.0049)	(0.0137)**	(0.0366)	(0.0037)*	(0.0051)	(0.0111)**
1990	0.0024	-0.0210	-0.0520	0.0035	-0.0040	-0.0047
	(0.0040)	(0.0124)*	(0.0433)	(0.0037)	(0.0051)	(0.0111)
1991	0.0021	-0.0051	0.0060	0.0031	0.0029	0.0120
	(0.0038)	(0.0107)	(0.0124)	(0.0038)	(0.0051)	(0.0110)
1992	0.0038	0.0089	0.0223	0.0061	0.0011	0.0113
	(0.0042)	(0.0132)	(0.0167)	(0.0037)	(0.0050)	(0.0110)
1993	0.0030	0.0867	0.0936	0.0053	0.0132	0.0369
	(0.0042)	(0.0369)**	(0.0230)***	(0.0037)	(0.0050)***	(0.0109)***
1994	-0.0042	0.0108	0.0624	0.0005	0.0112	0.0409
	(0.0039)	(0.0162)	(0.0163)***	(0.0037)	(0.0050)**	(0.0108)***
1995	0.0048	-0.0118	0.0059	0.0071	-0.0034	0.0167
	(0.0043)	(0.0169)	(0.0132)	(0.0037)*	(0.0049)	(0.0108)
1996	0.0077	0.0080	0.0190	0.0036	0.0038	0.0160
	(0.0043)*	(0.0183)	(0.0215)	(0.0038)	(0.0049)	(0.0107)
1997	0.0118	0.0347	-0.0158	0.0076	0.0080	0.0214
	(0.0043)***	(0.0128)***	(0.0256)	(0.0037)**	(0.0049)	(0.0106)**
1998	0.0228	-0.0017	0.0126	0.0155	0.0004	0.0075
	(0.0047)***	(0.0233)	(0.0237)	(0.0038)***	(0.0049)	(0.0106)
1999	0.0051	0.0700	0.0468	0.0060	0.0027	0.0086
	(0.0045)	(0.0346)**	(0.0194)**	(0.0038)	(0.0049)	(0.0107)
2000	0.0039	0.0424	-0.0027	0.0022	0.0019	0.0071
	(0.0077)	(0.0406)	(0.0208)	(0.0039)	(0.0049)	(0.0107)
Constant	-0.0070	-0.0109	-0.0057	-0.0048	-0.0010	-0.0064
	(0.0029)**	(0.0084)	(0.0134)	(0.0030)	(0.0045)	(0.0098)
Observations	2257	1338	1252	2257	1338	1252
R-squared	0.10	0.08	0.06	0.11	0.17	0.14

Robust standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 4**

Model 3						
	OLS with robust standard errors			Outlier robust regression		
	$\Delta$ credit	$\Delta$ smtrade	$\Delta$ smcap	$\Delta$ credit	$\Delta$ dsmtree	$\Delta$ smcap
L cred	0.0089 (0.0036)**			0.0201 (0.0024)***		
L smtrade		-0.0141 (0.0847)			0.0475 (0.0022)***	
L smcap			-0.0590 (0.0394)			0.0469 (0.0032)***
polity2	0.0003 (0.0002)*	0.0004 (0.0006)	0.0008 (0.0006)	0.0001 (0.0001)	0.0001 (0.0001)	-0.0002 (0.0002)
highdemoc	0.0002 (0.0035)	0.0072 (0.0142)	0.0122 (0.0144)	-0.0012 (0.0019)	0.0013 (0.0017)	0.0133 (0.0038)***
durability	0.0004 (0.0002)**	0.0023 (0.0010)**	0.0009 (0.0012)	0.0002 (0.0001)*	-0.0000 (0.0001)	0.0000 (0.0002)
dur25	-0.0003 (0.0002)*	-0.0017 (0.0009)**	-0.0005 (0.0011)	-0.0001 (0.0001)*	0.0000 (0.0001)	-0.0001 (0.0002)
trade	0.1569 (0.2324)	-1.1384 (0.6808)**	3.0546 (2.4723)	0.0235 (0.1922)	-0.1117 (0.1475)	-2.8292 (0.3769)***
Lbankcris	-0.0072 (0.0033)**	-0.0112 (0.0087)	-0.0211 (0.0098)**	-0.0074 (0.0015)***	0.0001 (0.0013)	-0.0090 (0.0030)***
Lgdpgrowth	0.0010 (0.0003)***	-0.0018 (0.0011)	0.0002 (0.0015)	0.0009 (0.0001)***	-0.0002 (0.0001)	0.0003 (0.0003)
French CL	0.0006 (0.0020)	-0.0007 (0.0082)	-0.0075 (0.0116)	-0.0008 (0.0012)	-0.0009 (0.0012)	0.0053 (0.0028)*
German CL	0.0020 (0.0030)	0.0444 (0.0357)	0.0074 (0.0221)	-0.0010 (0.0023)	0.0011 (0.0021)	0.0005 (0.0044)
Scandin. CL	-0.0035 (0.0049)	0.0106 (0.0176)	0.0055 (0.0260)	-0.0028 (0.0025)	-0.0027 (0.0021)	0.0163 (0.0049)***
Socialist L	0.0275 (0.0101)***	0.0510 (0.0134)***	0.0096 (0.0139)	0.0113 (0.0058)*	0.0597 (0.0062)***	0.0219 (0.0144)
Post-Social.	-0.0093 (0.0059)	-0.0213 (0.0125)*	-0.0334 (0.0140)**	-0.0073 (0.0037)**	0.0001 (0.0030)	-0.0036 (0.0070)
1976	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)
1977	0.0032 (0.0028)	0.0132 (0.0065)**	-0.0034 (0.0088)	0.0054 (0.0039)	-0.0012 (0.0049)	-0.0025 (0.0120)
1978	0.0132 (0.0037)***	0.0124 (0.0114)	0.0000 (0.0000)	0.0103 (0.0038)***	0.0048 (0.0049)	0.0000 (0.0000)
1979	0.0092 (0.0051)*	0.0057 (0.0062)	0.0180 (0.0076)**	0.0032 (0.0038)	0.0010 (0.0048)	0.0066 (0.0109)
1980	0.0015 (0.0035)	0.0203 (0.0082)**	0.0223 (0.0088)**	0.0029 (0.0038)	0.0034 (0.0048)	0.0053 (0.0107)
1981	0.0112 (0.0035)***	0.0133 (0.0078)*	0.0160 (0.0067)**	0.0088 (0.0038)**	0.0007 (0.0047)	0.0049 (0.0106)
1982	0.0150 (0.0039)***	-0.0026 (0.0100)	0.0189 (0.0107)*	0.0074 (0.0038)*	-0.0010 (0.0047)	-0.0003 (0.0102)
1983	0.0057 (0.0034)*	0.0198 (0.0082)**	0.0054 (0.0178)	0.0054 (0.0038)	0.0057 (0.0047)	0.0132 (0.0101)
1984	-0.0076 (0.0051)	-0.0037 (0.0108)	0.0094 (0.0147)	-0.0011 (0.0037)	0.0013 (0.0046)	0.0125 (0.0100)
1985	-0.0032 (0.0040)	0.0326 (0.0164)**	0.0456 (0.0203)**	0.0009 (0.0037)	0.0083 (0.0046)*	0.0200 (0.0100)**
1986	0.0067 (0.0053)	0.0328 (0.0102)***	0.0647 (0.0229)***	0.0044 (0.0037)	0.0132 (0.0046)***	0.0268 (0.0100)***
1987	0.0012 (0.0053)	0.0463 (0.0134)***	0.0589 (0.0291)**	0.0039 (0.0037)	0.0062 (0.0046)	0.0175 (0.0099)*
1988	0.0009	-0.0020	0.0424	0.0031	-0.0041	0.0138

	(0.0049)	(0.0153)	(0.0220)*	(0.0037)	(0.0046)	(0.0099)
1989	0.0066	0.0354	0.0239	0.0062	0.0072	0.0298
	(0.0053)	(0.0130)***	(0.0312)	(0.0037)*	(0.0046)	(0.0099)***
1990	0.0031	-0.0142	-0.0401	0.0036	-0.0037	0.0001
	(0.0041)	(0.0147)	(0.0395)	(0.0037)	(0.0046)	(0.0099)
1991	0.0018	0.0069	0.0181	0.0011	0.0037	0.0099
	(0.0037)	(0.0103)	(0.0120)	(0.0037)	(0.0046)	(0.0098)
1992	0.0034	0.0215	0.0352	0.0039	0.0023	0.0101
	(0.0042)	(0.0130)	(0.0148)**	(0.0037)	(0.0045)	(0.0098)
1993	0.0026	0.0989	0.1060	0.0038	0.0130	0.0374
	(0.0042)	(0.0388)**	(0.0227)***	(0.0037)	(0.0044)***	(0.0096)***
1994	-0.0048	0.0245	0.0808	-0.0014	0.0118	0.0364
	(0.0038)	(0.0165)	(0.0180)***	(0.0037)	(0.0044)***	(0.0096)***
1995	0.0042	0.0008	0.0259	0.0048	-0.0040	0.0102
	(0.0041)	(0.0179)	(0.0154)*	(0.0037)	(0.0044)	(0.0096)
1996	0.0099	0.0431	0.0576	0.0064	0.0052	0.0241
	(0.0042)**	(0.0214)**	(0.0264)**	(0.0037)*	(0.0044)	(0.0095)**
1997	0.0140	0.0705	0.0243	0.0099	0.0069	0.0301
	(0.0039)***	(0.0154)***	(0.0245)	(0.0037)***	(0.0044)	(0.0094)***
1998	0.0248	0.0356	0.0530	0.0190	0.0013	0.0143
	(0.0043)***	(0.0271)	(0.0290)*	(0.0037)***	(0.0044)	(0.0094)
1999	0.0070	0.1083	0.0894	0.0081	0.0018	0.0148
	(0.0048)	(0.0438)**	(0.0246)***	(0.0037)**	(0.0044)	(0.0094)
2000	0.0059	0.0825	0.0445	0.0042	0.0020	0.0116
	(0.0087)	(0.0327)**	(0.0199)**	(0.0038)	(0.0044)	(0.0095)
Constant	-0.0087	-0.0309	-0.0237	-0.0067	-0.0012	-0.0114
	(0.0029)***	(0.0103)***	(0.0158)	(0.0030)**	(0.0040)	(0.0087)
Observations	2257	1338	1252	2257	1338	1252
R-squared	0.09	0.07	0.07	0.14	0.41	0.27

Robust standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 5**

Model 3						
	OLS with robust standard errors			Outlier robust regression		
	Δ credit	Δ smtrade	Δ smcap	Δ credit	Δ dsmttrade	Δ smcap
L cred	0.0078 (0.0037)**			0.0194 (0.0024)***		
L smtrade		-0.0187 (0.0833)			0.0477 (0.0022)***	
L smcap			-0.0595 (0.0386)			0.0485 (0.0032)***
polity2	-0.0002 (0.0003)	-0.0018 (0.0008)**	-0.0015 (0.0008)*	-0.0002 (0.0002)	-0.0001 (0.0002)	-0.0006 (0.0006)
1981-85*polity2	0.0001 (0.0003)	0.0015 (0.0008)*	0.0024 (0.0011)**	0.0004 (0.0002)*	0.0003 (0.0003)	0.0009 (0.0007)
1986-90*polity2	0.0008 (0.0005)*	0.0006 (0.0006)	0.0008 (0.0007)	0.0005 (0.0002)**	-0.0000 (0.0003)	0.0002 (0.0007)
1991-95*polity2	0.0004 (0.0004)	0.0017 (0.0009)*	0.0014 (0.0012)	-0.0001 (0.0002)	0.0002 (0.0003)	-0.0004 (0.0007)
1996-2000*polity2	0.0011 (0.0005)**	0.0060 (0.0013)***	0.0053 (0.0014)***	0.0009 (0.0002)***	0.0002 (0.0003)	0.0015 (0.0007)**
highdemoc	0.0004 (0.0035)	0.0085 (0.0144)	0.0126 (0.0144)	-0.0011 (0.0019)	0.0013 (0.0017)	0.0139 (0.0038)***
durability	0.0004 (0.0002)*	0.0020 (0.0010)*	0.0007 (0.0012)	0.0001 (0.0001)	-0.0000 (0.0001)	-0.0000 (0.0002)
Dur25	-0.0002 (0.0002)	-0.0014 (0.0009)*	-0.0003 (0.0011)	-0.0001 (0.0001)	0.0000 (0.0001)	-0.0001 (0.0002)
trade	0.2592 (0.2466)	-1.2986 (0.6738)*	3.1553 (2.3759)	0.0846 (0.1925)	-0.1065 (0.1472)	-2.7922 (0.3806)***
Lbankcris	-0.0070 (0.0033)**	-0.0106 (0.0088)	-0.0204 (0.0095)**	-0.0074 (0.0014)***	0.0003 (0.0013)	-0.0084 (0.0030)***
Lgdpgrowth	0.0009 (0.0003)***	-0.0021 (0.0012)*	-0.0001 (0.0015)	0.0008 (0.0001)***	-0.0002 (0.0001)	0.0002 (0.0003)
French CL	-0.0000 (0.0020)	-0.0031 (0.0081)	-0.0084 (0.0114)	-0.0008 (0.0012)	-0.0010 (0.0012)	0.0050 (0.0028)*
German CL	0.0019 (0.0029)	0.0429 (0.0352)	0.0064 (0.0222)	-0.0006 (0.0022)	0.0011 (0.0021)	-0.0000 (0.0045)
Scandin. CL	-0.0040 (0.0048)	0.0083 (0.0181)	0.0039 (0.0258)	-0.0027 (0.0025)	-0.0027 (0.0021)	0.0154 (0.0050)***
Socialist L	0.0298 (0.0091)***	0.0749 (0.0120)***	0.0299 (0.0144)*	0.0111 (0.0058)*	0.0606 (0.0062)***	0.0254 (0.0147)*
Post-Social.	-0.0119 (0.0065)*	-0.0342 (0.0144)**	-0.0432 (0.0152)***	-0.0086 (0.0037)**	-0.0002 (0.0030)	-0.0066 (0.0071)
1976	-0.0029 (0.0078)	0.0000 (0.0000)	0.0000 (0.0000)	-0.0018 (0.0038)	0.0000 (0.0000)	0.0000 (0.0000)
1977	0.0004 (0.0083)	0.0080 (0.0066)	-0.0029 (0.0089)	0.0035 (0.0038)	-0.0015 (0.0049)	-0.0022 (0.0121)
1978	0.0106 (0.0085)	0.0079 (0.0116)	0.0000 (0.0000)	0.0084 (0.0038)**	0.0044 (0.0049)	0.0000 (0.0000)
1979	0.0068 (0.0085)	0.0015 (0.0065)	0.0155 (0.0072)**	0.0016 (0.0038)	0.0007 (0.0048)	0.0062 (0.0109)
1980	-0.0008 (0.0079)	0.0166 (0.0084)*	0.0172 (0.0084)**	0.0015 (0.0038)	0.0030 (0.0048)	0.0046 (0.0109)
1981	0.0086 (0.0084)	0.0025 (0.0102)	0.0008 (0.0079)	0.0067 (0.0038)*	-0.0010 (0.0049)	0.0004 (0.0114)
1982	0.0123 (0.0089)	-0.0142 (0.0125)	0.0034 (0.0105)	0.0052 (0.0037)	-0.0027 (0.0050)	-0.0047 (0.0110)
1983	0.0031	0.0081	-0.0106	0.0032	0.0040	0.0084

	(0.0082)	(0.0098)	(0.0205)	(0.0037)	(0.0049)	(0.0111)
1984	-0.0104	-0.0152	-0.0063	-0.0033	-0.0004	0.0079
	(0.0083)	(0.0128)	(0.0164)	(0.0037)	(0.0049)	(0.0109)
1985	-0.0059	0.0215	0.0301	-0.0014	0.0065	0.0154
	(0.0082)	(0.0141)	(0.0172)*	(0.0037)	(0.0049)	(0.0109)
1986	0.0029	0.0254	0.0572	0.0021	0.0126	0.0250
	(0.0090)	(0.0104)**	(0.0223)**	(0.0037)	(0.0048)***	(0.0109)**
1987	-0.0025	0.0394	0.0518	0.0016	0.0054	0.0157
	(0.0076)	(0.0137)***	(0.0281)*	(0.0037)	(0.0048)	(0.0109)
1988	-0.0029	-0.0081	0.0350	0.0008	-0.0047	0.0118
	(0.0084)	(0.0163)	(0.0211)	(0.0037)	(0.0048)	(0.0108)
1989	0.0026	0.0299	0.0172	0.0038	0.0068	0.0284
	(0.0081)	(0.0147)**	(0.0326)	(0.0037)	(0.0048)	(0.0108)***
1990	-0.0010	-0.0197	-0.0468	0.0011	-0.0041	-0.0024
	(0.0079)	(0.0151)	(0.0410)	(0.0037)	(0.0048)	(0.0108)
1991	-0.0013	-0.0044	0.0081	-0.0001	0.0022	0.0104
	(0.0083)	(0.0118)	(0.0125)	(0.0037)	(0.0048)	(0.0108)
1992	0.0004	0.0096	0.0251	0.0030	0.0007	0.0107
	(0.0083)	(0.0146)	(0.0174)	(0.0037)	(0.0048)	(0.0108)
1993	-0.0004	0.0874	0.0958	0.0031	0.0115	0.0390
	(0.0081)	(0.0390)**	(0.0244)***	(0.0036)	(0.0047)**	(0.0106)***
1994	-0.0077	0.0132	0.0704	-0.0022	0.0104	0.0390
	(0.0083)	(0.0168)	(0.0194)***	(0.0036)	(0.0047)**	(0.0106)***
1995	0.0014	-0.0095	0.0160	0.0046	-0.0055	0.0124
	(0.0081)	(0.0179)	(0.0144)	(0.0037)	(0.0047)	(0.0105)
1996	0.0042	0.0094	0.0274	0.0017	0.0037	0.0161
	(0.0085)	(0.0215)	(0.0246)	(0.0035)	(0.0047)	(0.0104)
1997	0.0083	0.0365	-0.0065	0.0056	0.0052	0.0209
	(0.0089)	(0.0151)**	(0.0234)	(0.0035)	(0.0046)	(0.0104)**
1998	0.0192	0.0012	0.0214	0.0144	-0.0002	0.0062
	(0.0091)**	(0.0259)	(0.0259)	(0.0035)***	(0.0047)	(0.0104)
1999	0.0013	0.0734	0.0574	0.0035	0.0003	0.0072
	(0.0071)	(0.0430)*	(0.0205)***	(0.0035)	(0.0047)	(0.0104)
2000	0.0000	0.0479	0.0122	0.0000	0.0005	0.0023
	(0.0000)	(0.0308)	(0.0182)	(0.0000)	(0.0047)	(0.0105)
Constant	-0.0046	-0.0121	-0.0060	-0.0044	0.0000	-0.0083
	(0.0073)	(0.0088)	(0.0157)	(0.0030)	(0.0042)	(0.0096)
Observations	2257	1338	1252	2257	1338	1252
R-squared	0.10	0.08	0.07	0.15	0.42	0.28

Robust standard errors in parentheses  
significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%



**Table 6**

Panel Logit results for whether stock market capitalisation is observed

SMCAP observed=1	
polity2	0.1373
	(0.0214)***
durability2	0.1292
	(0.0101)***
trade	-0.0601
	(0.0055)***
percapgdp70	0.0003
	(0.0000)***
French CL	-3.6725
	(0.3777)***
German CL	-4.5541
	(1.3850)***
Scandinavian CL	-2.4989
	(0.6380)***
Socialist L	-5.7511
	(0.8862)***
Post-Socialist CL	-1.6085
	(1.0310)
1981 /85	3.5353
	(0.3817)***
1986 / 90	5.2051
	(0.4825)***
1991 /95	7.4953
	(0.5574)***
1996 -2000	9.8192
	(0.6767)***
Constant	-3.4520
	(0.3649)***
Observations	2397

Standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

**Table 7****Panel Tobit results for limited dependent variables SMCAP and SMTRADE**

	(1)	(2)
	<b>LD Smcap</b>	<b>LD Smtrade</b>
polity2	0.0325	0.0653
	(0.0065)***	(0.0062)***
highdemoc	0.3564	0.0020
	(0.1110)***	(0.1078)
durability2	0.0129	0.0143
	(0.0016)***	(0.0016)***
trade	-0.0050	-0.0068
	(0.0009)***	(0.0009)***
Lbankcris	0.2151	0.1802
	(0.0810)***	(0.0816)**
Lgdpgrowth	0.0155	0.0086
	(0.0072)**	(0.0064)
French CL	-0.4834	-0.5542
	(0.0884)***	(0.0822)***
German CL	0.5361	0.5500
	(0.1669)***	(0.1287)***
Scandinavian CL	0.7781	0.4920
	(0.1383)***	(0.1306)***
Socialist L	-1.3687	-1.1961
	(0.2628)***	(0.2404)***
Post-Socialist CL	1.0423	1.0669
	(0.2561)***	(0.0000)
Constant	-12.8224	-2.9970
	(0.2000)***	(0.1779)***
Observations	2648	2675

Standard errors in parentheses

Significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

Year dummies included but coefficients not reported

## Appendix

Table A  
Political regimes and financial development:  
GMM estimates

	$\Delta$ credit	$\Delta$ smtrade	$\Delta$ smcap
polity2	0.0005 (0.0001)***	0.0007 (0.0005)	0.0009 (0.0004)**
durability	0.0001 (0.0000)***	-0.0169 (0.0071)**	0.0004 (0.0001)***
trade	0.0036 (0.0023)	0.0006 (0.0002)**	-0.0009 (0.0043)
Lbankcris	-0.0078 (0.0033)**	-0.0146 (0.0073)**	-0.0203 (0.0088)**
Lgdpgrowth	0.0011 (0.0003)***	-0.0016 (0.0009)*	-0.0006 (0.0017)
Civil Law	0.0008 (0.0019)	0.0085 (0.0088)	0.0068 (0.0080)
Socialist Law	0.0305 (0.0077)***	0.0615 (0.1579)	0.0516 (0.1521)
1976	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)
1977	-0.0037 (0.0050)	-0.0811 (0.0349)**	0.0466 (0.0461)
1978	0.0064 (0.0056)	-0.0817 (0.0323)**	0.0481 (0.0435)
1979	0.0029 (0.0070)	-0.0870 (0.0343)**	0.0643 (0.0445)
1980	-0.0048 (0.0057)	-0.0727 (0.0299)**	0.0685 (0.0453)
1981	0.0051 (0.0052)	-0.0787 (0.0314)**	0.0615 (0.0442)
1982	0.0088 (0.0058)	-0.0943 (0.0371)**	0.0638 (0.0463)
1983	0.0003 (0.0053)	-0.0718 (0.0299)**	0.0473 (0.0480)
1984	-0.0127 (0.0059)**	-0.0954 (0.0355)***	0.0533 (0.0490)
1985	-0.0095 (0.0040)**	-0.0623 (0.0377)*	0.0911 (0.0605)
1986	0.0000 (0.0000)	-0.0600 (0.0340)*	0.1077 (0.0615)*
1987	-0.0048 (0.0055)	-0.0482 (0.0322)	0.0998 (0.0662)
1988	-0.0060 (0.0056)	-0.0980 (0.0358)***	0.0808 (0.0561)
1989	0.0001 (0.0065)	-0.0601 (0.0313)*	0.0633 (0.0162)***
1990	-0.0033 (0.0051)	-0.1097 (0.0329)***	0.0000 (0.0000)
1991	-0.0047 (0.0053)	-0.0881 (0.0346)**	0.0594 (0.0434)
1992	-0.0031 (0.0060)	-0.0750 (0.0331)**	0.0756 (0.0422)*
1993	-0.0040	0.0000	0.1428

	(0.0061)	(0.0000)	(0.0490)***
1994	-0.0115	-0.0728	0.1130
	(0.0054)**	(0.0429)*	(0.0492)**
1995	-0.0029	-0.0961	0.0576
	(0.0053)	(0.0445)**	(0.0476)
1996	0.0026	-0.0550	0.0904
	(0.0056)	(0.0269)**	(0.0497)*
1997	0.0066	-0.0285	0.0555
	(0.0053)	(0.0370)	(0.0519)
1998	0.0176	-0.0631	0.0860
	(0.0055)***	(0.0486)	(0.0497)*
1999	0.0008	0.0073	0.1213
	(0.0069)	(0.0432)	(0.0452)***
2000	-0.0004	-0.0184	0.0696
	(0.0098)	(0.0538)	(0.0461)
Constant	0.0005	0.0708	-0.0698
	(0.0051)	(0.0376)*	(0.0378)*
Hansen's J-test (p-value)	0.598	.7727	0.7265
First-stage R-squared value	0.8729	0.8763	0.8649
Hausman test of exogeneity (p-value)	1	1	1
Observations	2179	1316	1252

Notes:

1. The null hypothesis of the Hansen's J-test states that the instruments used in the GMM estimations are valid
2. The tests of exogeneity is a Hausman test which examines the null hypothesis that there is no statistically significant difference between the OLS and GMM estimates. The null hypothesis states that Polity2 is exogenous
3. significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%