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Published in:
European Journal of Political Economy

DOI:
[10.1016/j.ejpoleco.2011.10.003](https://doi.org/10.1016/j.ejpoleco.2011.10.003)

[Link to publication](#)

Citation for published version (APA):

Burgoon, B., Demetriades, P., & Underhill, G. R. D. (2012). Sources and legitimacy of financial liberalization. *European Journal of Political Economy*, 28(2), 147-161. DOI: 10.1016/j.ejpoleco.2011.10.003

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Sources and legitimacy of financial liberalization

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ARTICLE INFO

Article history:

Received 12 August 2010

Received in revised form 5 October 2011

Accepted 29 October 2011

Available online 7 November 2011

JEL classification:

G18

F3

F5

Keywords:

Financial openness
 Liberalization dynamics
 Financial regulation
 Political legitimacy
 Political variables
 Financial reform

ABSTRACT

This article seeks to clarify how we understand domestic and international sources of globalization and specifically how we explain financial liberalization across countries. The article also develops our understanding of the underlying legitimacy of financial liberalization. We debate e.g. Abiad and Mody (2005) and others who have found political factors to have little impact on financial openness. Using the same data undergirding such conclusions we argue, in contrast, that even a slight broadening of the political variables employed in the model and much closer attention to “input” and “output” aspects of the political legitimacy of financial liberalization over time reveal a more central role for politics in shaping liberalization. Input legitimacy involves the representation of stakeholders in initial and ongoing decisions to liberalize, while “output” legitimacy concerns liberalization’s distributional consequences and management thereof over time. Several empirical measures of domestic-national and international political factors plausibly influence such aspects of legitimacy and are found to play a significant role in shaping liberalization, suggesting legitimization politics to be more important to financial openness than existing studies have typically acknowledged.

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1. Introduction

Recent public intervention to stabilize the financial system in the wake of the crisis of 2007–9 and the emerging sovereign debt turmoil in Europe have led to concerns about the equity and efficiency of the international financial system and even to challenges to financial openness itself. These all remind us that although the benefits of financial openness may be considerable, global financial openness remains politically fragile and contested. Understanding the causes and dynamics of financial openness has increased in importance as reforms concerning the nature and regulation of the financial system are debated both nationally and internationally. Political economists therefore have strong reasons to conduct ongoing research into the origins and political underpinnings of financial openness as a key face of economic globalization. An important contribution to the literature is Abiad and Mody's (2005) study of the sinews of financial liberalization. The study¹ is based on a rich dataset of policy measures of financial openness, its possible causes and ongoing dynamics – capturing regulatory barriers underlying more downstream financial flows and going beyond existing measures of current and capital account openness.

Their explanation of the timing, pace, and extent of financial reforms and consequent origins of financial openness also stands out as remarkably apolitical. Their core argument and empirical findings highlight how increasing-returns become locked-in

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¹ Along with its subsequent database update (Abiad et al., 2008).

through learning effects. The initial step to liberalization is difficult and is typically sparked by economic shocks, but this policy breakthrough yields information and footholds for deepening liberalization over time which are related to the spatial dynamics of “catching-up” with the most liberalized countries in their region. Many plausible political factors which some previous studies found to have played an important role in shaping financial globalization – such as left-right partisanship or democratic institutions – play little role in their account and are found to have little influence on the particular measures of financial liberalization in the wide range of countries and time-periods covered by the study.

In this article we seek to consider more deeply the role that politics might play in shaping financial liberalization. We do so by slightly broadening the range of political variables considered, focusing on how national policy choices on financial liberalization might be significantly shaped by domestic-national and international factors that underlie the “input” and “output” aspects of the political legitimacy of financial openness. Input legitimacy concerns the involvement of and acceptance by stakeholders of a policy area in the decision to liberalise. Output legitimacy concerns the substantive effects of such policy change on the perceived interests of stakeholders, whatever their involvement and acceptance of the policy change. These factors turn out to influence significantly and directly the chances that governments may liberalize their financial markets, and also may do so indirectly by influencing the domestic learning and catch-up dynamics emphasized by Abiad and Mody and others.

With respect to input legitimacy, we find both domestic and international sources of legitimacy relevant to liberalization. These domestic political factors are two-fold. First, shifts to (as opposed to levels of) Left governments significantly decrease chances of liberalization. And second, both changes and incidence of Left government affect liberalization in ways strongly mediated by democratic representation: different levels of democracy affect the policy options and credibility concerns of parties, such that at low levels of democracy, moves to and incidence of Left governments tend to significantly decrease chances of liberalization, while in more democratic settings this negative effect of Left representation disappears. The international political factors relevant to input legitimacy and which affect financial openness involve the overall international level of voter support for free-market enterprise, international openness, and internationalism generally, and voter support for (post-) Communist parties, Marxist ideology, and international closure. Liberalization is significantly more likely when the international, extra-national *zeitgeist* supports free-market openness and less likely to the extent that it supports anti-market closure. Finally, both the domestic and international input-legitimacy factors may also mediate the learning-based lock-in and catch-up dynamics—as changes to left government have less negative effects as *ex ante* financial openness increases, and as international voter-support for free markets significantly increase the spurring effects of catch-up.

With respect to output-related legitimacy, we find that financial liberalization is more likely in combination with domestic and international spending programs that help address the internal distributional costs and risks of financial markets. Building on the “Polanyian” idea that systems of compensation might increase political support for international openness, we find that some aspects of the public economy and not others increase financial liberalization: various measures of total spending have modest influence. But some features of social spending, particularly health spending, which provides in a developing-country context more generalized indemnification of risk than social security expenditures, spur liberalization. We also find that international sources of compensation – measured as bilateral developmental assistance, multilateral development assistance, and technical assistance – may not only involve conditionality that demands liberalization but also tend to help address social policy risks beyond domestic assistance. In any event, such “social insurance from without” tends to significantly increase the chances of financial liberalization. There is some modest evidence that domestic, though not international, sources of compensation may decrease catch-up behavior.

We develop these points in five sections, building on the empirics of Abiad and Mody’s study. The first lays out the basic findings of that study with respect to the “non-role” of politics. The second section introduces a simple framework focused on input and output legitimacy of liberalization, and introduces the empirical specification to illustrate that framework. A third section then considers discusses how domestic left partisanship and democracy and international embrace of free markets are possible sources of input legitimacy. A fourth section then considers specifications focused on domestic spending and international aid as sources of output legitimacy. A fifth section, then, discusses robustness of the results to alternative measures of liberalization, alternative estimators, and different datasets. The findings, in any event, suggest the value of a research agenda to open up the range of political variables considered in relation to financial openness and to its longer-run political underpinnings.

2. Non-political empirics about external shocks, learning and catch-up

Abiad and Mody’s study of their financial openness data² has few theoretical commitments to a view that politics don’t much matter, but their own argument and discussion of possible political conditions, and certainly their empirical analysis, all yield such a conclusion. Their main theoretical and empirical commitment is to the view that financial liberalization is difficult and a rare event, tending to be possible only with the impulse of exogenous economic shocks such as hyperinflation, recessions, or IMF-conditionality. Once begun, however, the expectation and empirical findings are that the early stages of liberalization are marked by increasing-returns that can get locked-in through a kind of learning effect, while at later stages liberalization reaches a kind of saturation point and yields diminishing marginal returns. Such a pattern they expect to follow an inverse-U pattern. They also expect and find that this lock-in learning dynamic is conditioned by a range of other conditions, not just the starting point of liberalization but also by existing levels of economic development and a range of external conditions such as currency crises. Finally, they follow the lead of other scholars who have given attention to spatial dependence (Simmons and Elkins, 2004; Franzese and Hays, 2006), and

² The dataset that is the basis for their published analysis is an 18-point composite measure of six areas of financial openness for 35 countries between 1973 and 1997, each capturing liberalization of the following aspects of finance (0–3, with 3 being most open): (1) capital controls/reserve requirements; (2) interest rate controls; (3) entry barriers, pro-competition measures; (4) regulations of securities markets; (5) privatization in the financial sector; and (6) international transactions.

expect that polities will tend to try to catch up with the financial openness of their region's most open polity. Abiad and Mody make sense of these developments in apolitical terms, as national reform embedded in the regional liberalization sensitize policymakers to the economic benefits of financial integration by yielding information and material benefits for deepening liberalization over time.

Mainly as a backdrop to these arguments, Abiad and Mody largely dismiss the role of many plausible political factors that previous studies have found to play an important role in shaping financial globalization. They consider particularly the role of left, right or center governments. Abiad and Mody anticipate that Left governments and executives might be more opposed to liberalization than right ones, on grounds that the former disproportionately represent losers from globalization. But they also anticipate that left governments might also have more political credibility to pursue such reforms than their right-party counterparts, on grounds that such reform can be more credibly sold as in a nation's rather than a party's interest. Their empirical investigation, however, shows consistently the result that presence of left or right (as opposed to center) governments tend not to matter in shaping changes in financial openness – neither directly influencing change nor interacting with various crisis conditions or *ex ante* financial openness. Such is the empirical fate of a range of other political conditions, especially institutional characteristics like quality of democracy and legislative fragmentation; these factors get discussed at the margins of the theoretical treatment and are in any event found to be empirically insignificant in shaping liberalization.

These findings go very much against the gist of a number of other studies into financial liberalization, including quantitative studies of capital account liberalization and openness. They go against, for instance, the findings of [Quinn and Inclan \(1997\)](#) that left partisanship – a la Stolper and Samuelson – interacts with levels of economic development, such that left partisanship spurs liberalization in developing countries but thwarts it in richer countries. It also goes against the many other studies of financial globalization that focus on a range of more or less elite struggles among economic sectors of finance, bureaucratic struggles, historical accidents, and spill-overs from other areas of economic and political globalization (e.g. [Sobel, 1994](#); [Laurence, 2001](#); [Garrett, 2001](#); [Helleiner, 1994](#)).

Consistent with Abiad and Mody's account, pursuing various specifications closer to these previous studies tend also to suggest partisanship matters less in the short-term changes on this particular measure of financial openness on this particular set of countries and years. For instance, left partisanship does not interact with various measures of economic development or factor endowments – and we considered a range of measures of capital-labor ratios, labor productivity, capital productivity, and GDP per capita, all as proxies for factor profile that might mediate the influence of partisanship. None of these measures yields consistently significant results. And in fact the consistent pattern is, though usually statistically insignificant, in the direction opposite Stolper-Samuelson expectations: higher levels of development tend to make left government more rather than less likely to liberalize finance. In any event, Abiad and Mody's findings on the non-importance of partisanship have a reasonable basis, even beyond their estimation approach.

Such findings raise important questions about the role of politics in financial liberalization, with important implications for our understanding of the longer-run policy dynamics of liberalisation. And such dynamics are, of course, in greater need than ever of study in light of the recent global financial crisis. If Abiad and Mody are correct, then liberalisation is a path which is difficult and often painful to stumble upon, but its positive nature becomes clear once the process has begun as the benefits of openness are increasingly manifest. Stimulated by shocks, policy-makers taking the correct initial technical decision to reform through liberalisation link up with the locomotive of learning, and policy is on track. If liberalisation has its origins in specific political conditions, however, then not only the explanation of its origins must be altered, but also our understanding of the longer-run dynamics of openness. We know that markets are dynamic and that they imply a range of adjustment costs and benefits for constituencies over time. The conditions which yielded decisions to begin an initial policy of liberalisation may not be the same as the long-run conditions taking policy further or rendering it sustainable in the long term. So this apparently obvious issue – does financial openness have political origins? – is nontrivial to understanding the relationship between the openness of financial systems and their governance.

From a perspective sensitive to the role of politics in financial liberalization – informed by but beyond the existing political conditions looming large in other studies of financial openness – there are a great many blind spots in the Abiad and Mody study. There is little discussion of the political or economic costs and benefits of liberalization, or of its distributional consequences, something many other studies have highlighted ([Bergh and Nilsson, 2010](#)). And it is certainly unclear from their analysis that all paths leading to liberalisation are the same, or that liberalization's end results are the same, particularly in distributional terms; after all, case and econometric research reveals that each move along the continuum between financial repression and openness seldom takes place in the same way, even in the wake of the same crisis ([Underhill and Zhang, 2003](#)). Even though similar forces may be at work, there is considerable cross-national variation in the experience of crisis and liberalisation, especially in terms of the political compromises produced, and national experiences admit of variation over time ([Moran, 1990](#); [Coleman, 1996](#)). Furthermore, little is said of the longer-run political costs of financial instability plausibly linked to openness itself, despite a considerable literature linking market liberalisation to increased market volatility ([Prasad et al., 2007](#); [Bhagwati, 1998](#); [Arestis and Demetriades, 1999](#)). For the present purposes, however, perhaps the most obvious blind spot is the rather thin treatment of what “politics” may actually mean, as the political variables they address are simple notions of overt left-right orientation of government and parliamentary vs. presidential regime type (c.f. [Lai, 2010](#)). There is little attention to the deeper phenomena of constituency rivalry and interest politics, and how these might play out in relation to initial liberalisation and over time.

3. Input and output legitimacy in the politics of financial liberalization

Our focus here is on articulating empirically a simple framework for understanding such more complicated notions of politics, concentrating on what can be termed the “input” and “output” legitimacy of financial liberalization, and on national-domestic and international factors that help constitute such legitimacy. Such a legitimacy framework has roots in political-economic study of European and global economic governance ([Scharpf, 1999](#); [Held, 1997](#); [Porter, 2001](#)). And the sinews of legitimacy are clearly

	Input Legitimacy	Output Legitimacy
International Level	International Voter support for <i>Net free-market internationalism</i>	Foreign Aid (multilateral, bilateral)
Domestic Level	Δ Left Government Left Government \times Democracy	Social Policy Compensation (e.g. health spending)

Fig. 1. Sources of legitimacy of financial openness at different levels of governance.

applicable to (proximately) national political decisions to liberalize finance, beyond the kinds of political factors articulated in the Abiad and Mody study and elsewhere.

Input legitimacy concerns the involvement of and acceptance by stakeholders in policy-making. In the case of financial opening, this means the involvement of and acceptance by stakeholders in policy “decisions” to liberalize financial regulations. Such input legitimacy encompasses a great many features of policy choice, most obviously the active or passive involvement or formal representation of various stakeholders to liberalization, whether they be workers, firm owners, citizens and any other national individuals or socio-economic groups. This representation can be captured by broad levels of democracy in a nation-state, implying at least passive involvement of stakeholders. But it might also involve more direct involvement in a policy decision – as opposed to de facto decision-making by bureaucrats unfettered by democratic accountability. Input legitimacy might involve, particularly in democratic settings, less direct and formally protected representation through partisan orientation of governments. And finally, input legitimacy involves a general embrace or popularity of a particular policy change, both domestically within a given polity or internationally in the broad world opinion surrounding such change.

Output legitimacy concerns the substantive effects of such policy change for the perceived interests of stakeholders, whatever their involvement and acceptance of the policy change. Such legitimacy is often more relevant than input-legitimacy to the longer run sustainability of the outcomes produced by liberalisation. But it is also relevant to the shorter-term actual introduction of financial liberalization (or reversals). Relevant to such output legitimacy are all downstream effects, real and perceived, of financial openness actually implemented as policy – hence, the relevance of growth, unemployment, inequality, poverty, and actual or perceived degree to which these are affected by financial openness. In our reckoning, however, many *ex ante* policy conditions can clearly be expected to foster output legitimacy – most obviously government and social policies that address the equity concerns of stakeholders potentially affected by financial liberalization.

These kinds of political factors relevant to such input and output legitimacy are, we believe, worth exploring in any empirical or theoretical account of financial liberalization. We provide that exploration by discussing and empirically illustrating such factors, where we can see both national-domestic and international sinews of input and output legitimacy underlying financial liberalization. Fig. 1 maps our investigation and results across the two kinds of legitimacy and levels of governance.

We develop all of these political sinews of input and output legitimacy through further empirical study of Abiad and Mody's measures of financial governance. We do so by building on a benchmark specification from Abiad and Mody's (2005) analysis (their Table Eight, column four, p.80) that takes account of country-specific effects and disturbances, and of how existing levels of financial regulation (interacted with policy measures) may influence the lock-in effects of learning. That baseline specification takes the following form:

$$\Delta FL_{it} = \theta_1 FL_{it-1} + \theta_2 FL_{it-1}^2 + \theta_3 FL_{it-1} * Y_{it-1} + \theta_4 (Reg.lead_{FL_{it-1}} - FL_{it-1}) + \theta_5 Shocks_{it} + \theta_6 Ideology_{it} + \theta_7 Structure_{it} + \varepsilon_{it} \quad (1)$$

where financial liberalization (ΔFL_{it}) is the first-difference of the composite of financial openness³; FL_{it-1} measures *ex ante* levels of financial openness (and its square); $FL_{it-1} * Y_{it-1}$ captures possible interaction with development level; $(Reg.lead_{FL_{it-1}} - FL_{it-1})$ gauges catch-up pressure of trailing the region's most liberalized polity; $Shocks_{it}$ captures various external shocks (recession, high inflation, IMF participation, and banking and BOP crises); $Ideology_{it}$ captures particularly influence of Left, Center or Right ruling governments or executives, and their first year of office; and $Structure_{it}$ captures influence of existing trade openness and interest rates.⁴ This specification addresses possible panel-wise correlation of errors and heteroskedasticity by including country dummies and country-wise clustering of robust standard errors⁵; and the inclusion of lagged levels of financial openness not only gauge learning and lock-in dynamics but also help address possible temporal correlation and heteroskedasticity. With respect to estimator, our benchmark follows Abiad and Mody's consideration of the capped interval of possible liberalization and of discrete shifts in levels of liberalization. Such specification choices, of course, are all open to criticism, and indeed Huang

³ Abiad and Mody's focus on first-difference changes in financial openness is appropriate as a statistical matter, because the measures (individually and in composite) show strong signs of non-stationarity in the dataset.

⁴ Definitions and sources for these and all baseline variables are in Appendix Table A.1. Summary statistics are in Appendix Table A.2.

⁵ In all the baseline estimates where fixed country effects are included, the individual country effects are not reported but are in all models highly jointly significant. For the baseline results in Table One, for instance, Chi-square values range from 1.2e+5 to 8.9e+7.

(2009) has recently criticized Abiad and Mody's ordered logit specification for, among other things, treating liberalization as involving substantively equal, discrete steps at both early and late stages of possible liberalization, and found Abiad and Mody's results fragile in the face of combining OLS estimation with (other) corrections for panel-wise and temporal correlation and heteroskedasticity.

Because we are concerned to show the broader role of politics even where Abiad and Mody's empirics and data suggest a modest role, we begin with their original data and specification. But we consider and discuss alternative specifications that broadly replicate our baseline results. We present these results by adding to the benchmark model summarized in Eq. (1), first the factors that influence 'input' legitimacy, and secondly adding those factors relevant to 'output' legitimacy. We then turn (in Section 5) to whether the results are robust to other specifications.

4. Input legitimacy

domestic partisanship and democracy and global embrace of free markets.

Our discussion of political sinews of input legitimacy is summarized in Table 1 below. To clarify the role of factors relevant to input legitimacy, Column (1), based on Eq. (1), summarizes the estimation we take as the benchmark and point of departure. The most important results, well discussed in the Abiad and Mody piece, are that there does seem to be a lock-in learning effect, captured in this specification by the significant positive effect of lagged levels of financial openness for further changes in openness, and where the square of that lagged level is significantly negative – suggesting the inverse-U relationship of early increasing returns at lower levels of liberalization and saturation at higher levels of liberalization. Also noteworthy is the significantly positive interaction between GDP per capita (on PPP basis) and lagged liberalization, suggesting that desired liberalization is higher among richer countries. Furthermore, the “catch-up” parameter – measured as the difference between the level of financial openness of the region's most liberalized financial system and the country's own level of openness – is modestly significantly positive, suggesting that the chance of liberalization increases to the extent that a country lags behind regional liberalizers. Finally, balance-of-payments currency crises positively affect chances of liberalizing, while banking crises and levels of US interest rates tend to reduce such chances. Key for us, however, is that left or right governments (with center governments as the excluded category) have no significant influence on chances of liberalization.

4.1. Shifts in government

Our first example of how conditions relevant to input legitimacy might matter more than this benchmark suggests involves how left, right and center governments on issues of economic intervention generally influence chances of liberalization. Significantly, however, their empirical study only specifies government form as the incidence of left, right or centrist government. Yet, partisanship of governments might also matter to policy changes by virtue of the actual *change in power* from one to another government form. The idea, here, is that a shift in government can extra political stimulus and power for the new government taking over, yielding short-term changes in financial regulation. Indeed, Abiad and Mody anticipate this possibility when they discuss the “new government” or ‘honeymoon’ hypothesis,” such as Krueger's finding based on case research that one of the most important conditions for liberalization is that a new government comes to power (Krueger, 1993). Although Abiad and Mody also cite reasons to think that shifts in power might not spark reform, as new governments delay painful policies until they have consolidated power (c.f. Haggard and Webb, 1993), the theoretical plausibility and case histories supporting the “new government” suggest that shifts in government may matter as much as, or in any event distinct from, incidence of government. These possibilities lead Abiad and Mody to consider a dummy for first-year-of office of a government, in addition to partisanship of government. But this specification doesn't address the possibility that different governments might differ in their first year of office.

Taking account of such developments in the empirical investigation involve, most simply and minimally, considering how first-differences of partisanship affect first-difference changes in financial regulation.⁶ Table 1's column (2) summarizes the results of testing this possibility, by substituting $\Delta Left$ and $\Delta Right$ for *Left* and *Right*, respectively. Our general expectation is that – possible Stolper–Samuelson effects notwithstanding – a shift to left governments (captured by a positive one in first differences) should decrease the chance liberalization while a shift away from left governments to either centrist or right governments (captured by a negative one in first-differences) should increase the chance of liberalization. One might also hypothesize that the opposite pattern ought to emerge with changes in right government control.

The results summarized in column (2) capture how this is broadly what one finds for changes in left partisanship, though not significantly for changes in right partisanship – both, as in the incidence models, having effects that can be discerned relative to shifts towards centrist governments. The shift to left governments, in particular, significantly decreases the chances that a polity will liberalize. Substantively, this effect can be captured by counterfactual estimates of how moving from no left government to a shift to left government affects predicted changes in openness, holding other parameters at their means. Such a shift increases the likelihood of a reduction of openness by 5.6 percentage points (from a probability of .024 to a probability of .08), and of there being no change by 6.7 percentage points (from probability .795 to .862), and decreases the chance of liberalization (a little or a lot) by 11 percentage points (from a probability of .177 to .067).

⁶ 13 percent of the in-sample observations involve shifts towards or away from left rule. We remove from the RHS dummy for first-year-of-rule, though leaving this in yields virtually the same results.

Table 1

Input legitimacy and financial liberalization.

(DV=Change in Financial openness (ΔFL_{it})).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Benchmark	Δ Government	Δ Government* finance.open.	Government* Democracy.	Government* Democ.dummy	Voter Net free- market Int'lism	Voter Free- market Int'lism	Catchup* Net free-mrkt.
Leftist Government _{it}	-0.092 (0.354)			-1.561** (0.790)	-2.467*** (0.788)	0.051 (0.378)	-0.100 (0.354)	-0.112 (0.414)
Rightist Government _{it}	-0.091 (0.349)			0.122 (0.395)	-0.090 (0.581)	-0.035 (0.322)	-0.118 (0.345)	-0.002 (0.318)
Δ Left government _{it}		-1.261*** (0.411)	-2.266*** (0.495)					
Δ Right government _{it}		-0.569 (0.425)	-0.778 (0.606)					
Δ Left * FL _{it-1}			3.498*** (1.181)					
Δ Right *Financ.openness _{t-1}			1.638 (1.217)					
Democracy (PolityIVscore) _{it}				-0.022 (0.028)				
Left * Democracy (Polity) _{it}				0.183* (0.095)				
Right * Democracy (Polity) _{it}				-0.011 (0.043)				
Democracy dummy (1=Polity>0) _{it}					-0.896** (0.369)			
Left * Democracy dummy _{it}					2.681*** (0.842)			
Right * Democracy dummy _{it}					0.241 (0.655)			
Net free-market internationalism _t						3.745*** (0.706)		0.869 (1.524)
Free-market internationalism _t							0.015** (0.007)	
Net free-market intlsm. * Catchup _{it}								6.092** (2.549)
Financial openness (FL _{it-1})	6.662*** (1.583)	6.485*** (1.612)	6.373*** (1.704)	6.876*** (1.625)	7.371*** (1.699)	3.245** (1.628)	6.129*** (1.678)	3.844** (1.583)
Financial openness sq. ((FL _{it-1}) ²)	-9.763*** (2.641)	-9.974*** (2.583)	-9.850*** (2.573)	-9.745*** (2.605)	-10.100*** (2.571)	-9.082*** (2.630)	-9.555*** (2.634)	-8.405*** (2.464)
FL _{it-1} * Y _{it-1}	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000 (0.000)	0.000** (0.000)	0.000 (0.000)
Catch-up (Reg.lead_FL _{it-1} - FL _{it-1})	2.070* (1.242)	1.871 (1.269)	1.899 (1.266)	2.416** (1.192)	2.698** (1.194)	-1.144 (1.388)	1.599 (1.334)	-0.496 (1.425)
Currency Crisis _{it}	0.454* (0.233)	0.442* (0.243)	0.434* (0.245)	0.425* (0.232)	0.432* (0.237)	0.462* (0.248)	0.442* (0.236)	0.454* (0.246)
Banking Crisis _{it}	-1.014*** (0.344)	-1.054*** (0.361)	-1.057*** (0.361)	-1.076*** (0.359)	-1.096*** (0.363)	-0.946*** (0.344)	-0.973*** (0.342)	-0.988*** (0.354)
Recession _{it}	-0.035 (0.373)	0.051 (0.373)	0.004 (0.382)	-0.056 (0.383)	-0.077 (0.391)	0.101 (0.385)	-0.029 (0.372)	0.111 (0.381)
High Inflation _{it}	-0.429 (0.634)	-0.432 (0.648)	-0.457 (0.637)	-0.274 (0.643)	-0.239 (0.637)	-0.503 (0.673)	-0.455 (0.646)	-0.658 (0.685)
First Year in Office _{it}	0.250 (0.271)			0.260 (0.279)	0.263 (0.282)	0.307 (0.275)	0.279 (0.277)	0.334 (0.269)
IMF program _{it}	0.370 (0.266)	0.379 (0.261)	0.390 (0.257)	0.372 (0.262)	0.369 (0.255)	0.271 (0.288)	0.356 (0.270)	0.277 (0.297)
US Interest Rate _t	-0.089** (0.044)	-0.098** (0.042)	-0.092** (0.043)	-0.104** (0.049)	-0.106** (0.047)	-0.119*** (0.042)	-0.096** (0.043)	-0.117*** (0.042)
Openness _{it}	0.010 (0.010)	0.011 (0.010)	0.011 (0.011)	0.010 (0.011)	0.009 (0.010)	0.013 (0.010)	0.010 (0.010)	0.014 (0.010)
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	No	No	No	No	No	No	No	No
Observations	805	805	805	794	794	805	805	805
Wald χ^2	1.24e+07	8.8e+05	1.13e+07	1.26e+07	5.76e+07	4.13e+07	7.09e+08	2.07e+07
Log likelihood	-730.1	-725.9	-722.7	-723.1	-721.7	-718.4	-728.5	-714.4

Notes: The dependent variable is the change in the Financial Liberalization Index. Robust standard errors are in parentheses, adjusted for clustering by country. Fixed effects for 35 countries not shown but highly jointly significant.

*** denotes significance at the 1-percent level; ** denotes significance at the 5-percent level; * denotes significance at the 10-percent level.

Column (3) suggests, further, that shifts to left governments might have effects mediated by *ex ante* financial openness. In particular, the individual coefficient for first-difference in left government suggests that at levels of full closure of financial markets (a score of 0 on the Abiad and Mody scale), a shift to left government predicts a significant reduction of chances of liberalization, on a scale roughly double for that just reported for column (2). But as financial openness becomes greater, this negative effect significantly declines – becoming insignificant once a country reaches a level of financial openness equivalent to .52 liberalization on the rescaled 0 to 1 measure of openness (0 being full closure and 1 being full openness).

4.2. Left government and democracy

Columns (4) and (5) consider a second aspect of input legitimacy, where the incidence of left government appears to significantly interact with levels of democracy in shaping chances of liberalization. As Abiad and Mody report, levels of democracy as well as partisanship generally appear to be insignificant predictors of liberalization. But levels of democracy might well alter the calculations of political parties in the kinds of policies they pursue, and this alteration might play out differently for left than for right or center parties – all net of economic development and other conditions.⁷ And it's also possible that democratization might play out differently in different partisan settings – though government color tends to vary more than levels of democracy as an institution.

Although intuition and previous theory suggests offsetting possibilities, we anticipate a broadly positive interaction – with democracy making effects of left partisanship less negative or more positive. On the one hand, to the extent that left governments are more likely to oppose liberalization to help constituents (a pattern that holds for the shifts to left governments), then one might expect democratization to create stronger electoral incentives to act in such ways, as governments are more likely under democratic institutions to be held accountable for their actions. On the other hand, left governments might tend to oppose financial liberalization because of state control over finance and financial institutions, in which case democratization ought to be more neutral. And, perhaps most importantly, there is also the possibility that democratization will diminish the incentives left parties have to protect financial markets. Democratization brings with it voice for constituents that might unleash other ways of serving constituents (e.g. providing compensation provisions), might also make it more likely that left governments take action in a national interest connected to non-working-class constituents. Finally, the contracting and transaction-costs literature suggests that left parties will in more democratized setting be less likely to oppose liberalization and might be more successful in supporting liberalization than their right counterparts, because they are likely more credible in supporting the spread of markets in light of their ideological bent (Cukierman and Tommasi, 1998).

Both columns (4) and (5) consider the various possibilities focusing on levels of democracy interacted with simple levels, or incidence, of left and right governments (center governments as the excluded category). Column (4) specifies democracy by taking the Polity IV measure of 10-point autocracy and 10-point democracy, with levels of democracy ranging from complete autarchy (–10) to complete democracy (10). Column (5) specifies democracy more roughly, taking a value of 1 for all country-years where the above Polity score is above 0. As both specifications make clear, democratization significantly mutes the tendency of left governments to oppose financial liberalization. Net of economic development as well as all other controls, lack of democracy creates conditions under which left governments tend to significantly oppose liberalization, and as levels of democracy rise this negative effect becomes weaker, such that at medium to high levels of democracy left parties are no longer associated with less financial liberalization or more closure.

Focusing on the substantive effects suggested by the estimation in column (5), in non-democratic settings (with a polity score of 0 or negative) moving from a year without left government to a year with left government leads to an increased chance of some financial closing (negative change in financial openness index) by 4.6 percentage points (from .0138 to .0313 probability), and of zero change in financial openness by 12.8 percentage points (from a predicted probability of .697 to .825), and lowers the chance of financial liberalization by 14.6 percentage points (from a probability of .29 to a probability of .143). However, under more democratic settings (where polity scores are higher than zero), moving from no left to left government predicts in the net a decrease in the chance of reversal by 11.2 percentage points (from a predicted probability of .123 to .026) and of no change by 2.5 percentage points (predicted chance of .824 to .804), and an increase in the chance of liberalization by 13.7 percentage points (from a probability of .034 to .171). Such conditionally positive effects of left government, however, are only significant for the middle third of the full distribution of country-year variation in incidence of left government.

In any event, these patterns suggest that democratization – perhaps the most obvious and general measure of input legitimacy – tends to diminish how much left governments oppose liberalization. Even if partisanship and democracy appear to have few direct effects, thus, their interaction suggests that democracy is conditional good news for the chances of liberalization.

4.3. International support for free-market internationalism versus protectionist closure

The final set of estimations in Table 1 concern the broad subjective embrace versus rejection of free market openness or internationalism, versus support for anti-capitalist regulation or closure. Both the domestic and *international* level of such embrace and

⁷ Stolper-Samuelson considerations might predict that left governments decrease liberalization in non-democracies but be less so inclined in more democratic settings, since the sample is skewed to non-OECD developing countries, where democratization might make left parties more inclined to act for their (presumably) working-class constituencies. We might thus expect left government to become less negative and more positive with democratization. But there is no evidence of general Stolper-Samuelson effects, as discussed above.

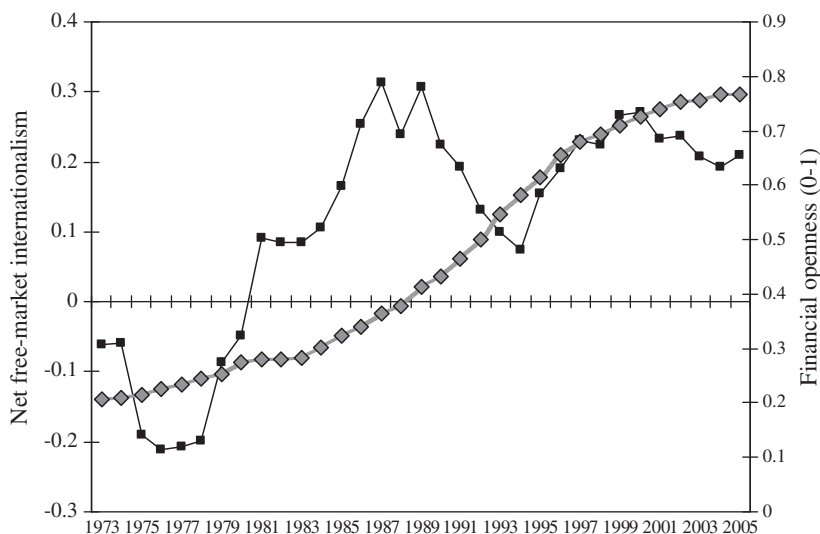


Fig. 2. Net free-market internationalism of voters, and Financial openness.

Sources: Comparative Manifestos Project dataset (own calculations); Abiad and Mody (2005); Abiad et al. (2008) (own calculations).

rejection gauge the domestic thinking of a polity relevant to its subjective acceptance or rejection of financial liberalization in particular. These all capture the possible input legitimacy of financial reforms being explained – net of the kinds of institutional and partisanship conditions relevant to such legitimacy. While domestic measures are most obviously relevant to such input legitimacy, international voter support or rejection for free market ideas is also relevant by capturing the general ideological climate that likely influences a broad polity's tastes for financial liberalization – the tastes of the broad public as well as elites. Indeed, a recent study by Quinn and Toyoda (2007) finds that international levels of voter support for (post-) Communist parties tends to significantly decrease the chances that a polity introduces capital account liberalization, while international voter support for free-enterprise capitalism tends to increase chances of liberalization.

Unfortunately, we have insufficient information to measure the levels of citizen support for free-market internationalism versus regulatory intervention and protectionism – not least because a number of country-years in the sample are non-democratic where polls or party information are lacking – something further research may partially redress. But building on the technique Quinn and Toyoda (2007) use to gauge the influence of international ideology, we can find measures of international levels of voter support for free-market internationalism versus anti-capitalist closure. Such voter support can be gauged using the Comparative Manifesto Project (CMP) dataset, which provides salience measures of party “support” for a range of substantive policy issues, based on content analysis of the party programs of political parties on a range of substantive policy issues for 25 countries since 1945.⁸ Based on the share of a party's program stating a position supporting or opposing free markets or capitalism, one can then judge what this means for voters by multiplying the platform scores by the percentage of votes the relevant party received in the election. One can then take the yearly averages for the inferred voter positions for all the countries in the sample to gauge the general international climate on issues – position-taking that gauge input legitimacy from without.⁹

Relevant to the input legitimacy of financial liberalization are a number of parameters in the CMP dataset. Providing a more encompassing measure of support for markets than Quinn and Toyoda develop, we focus on a measure of net support for international free markets encompassing the following elements: *Free enterprise* (per401 in the CMP dataset); *Protectionism: Negative* (per407); *Protectionism: Positive* (per406); *Controlled Economy* (per412); *Nationalisation* (per413) (See Appendix A.1, Klingeman et al., 2006). From these elements we construct a composite representing support for free-market internationalism in the net: $net\ free-market\ internationalism = (per401 + per407) - (per406 + per412 + per413)$. We then multiply the party-year scores by the percentage of votes gleaned in the relevant election, to generate each polity's support for net free-market internationalism per country-year. Since elections are not held yearly, we construct a 5-year moving average for each country-year to ensure that every country is in the estimates of yearly-varying voter positions. The final step is to calculate the average for the whole international system by taking the un-weighted average for all 25 countries per year. This gives us the average international support

⁸ The dataset provides salience measures of position-taking on issues, where the level of support or opposition to a policy principle is gauged as the number of sentences or sentence fragments addressing such support or opposition, as a percentage of the total number of sentences or sentence fragments in the party manifesto. Higher values represent higher salience and/or support for a particular policy position.

⁹ One might also consider regionally-specific trends in voter support for free market openness, on the assumption that there are significant regional differences. But the CMP data's coverage doesn't allow this fully. For instance, there are no African countries in the dataset.

for net free-market internationalism. Fig. 2 shows how this measure of voter support is quite volatile across years, but tends in general to rise – broadly in line with rising levels of financial openness in the net.¹⁰

We also considered a range of alternative measures of support or opposition to free markets and/or internationalism using the same technique applied to other elements of the CMP dataset. These include: each of the above components separately; support and opposition to international organizations and internationalism, without making explicit reference to political-economic openness (per108–per109); support for Marxist ideology (per404); and support for post-communist parties. And we also considered alternative measures of international support for or opposition to free-market internationalism, including use of raw scores of party proportions on these issues; or weighting the scores by share of parliamentary seats rather than votes.

Although the results are virtually identical regardless of the particular measure one uses, columns (6) through (8) in Table 1 show the results for *net free-market internationalism*. Columns (6) and (7) show how this measure of international voter support for free-market internationalism – measured first in the net (as specified above) and as absolute support for free enterprise and free trade (per401 + per407) – correlates significantly positively with changes in financial openness. Significantly, we can also see in both specifications that the presence of these external voter sentiments tends to reduce the influence of the catch-up dynamic emphasized in the Abiad and Mody study. But column (8) in any event shows that the international voter support for free-market internationalism also interacts significantly with this catch-up dynamic: at low levels of prevailing support for free-market internationalism, countries that lag far behind the regional leader in financial openness are not likely to be significantly spurred to pursue financial liberalization; but at high levels of such internationalism, the urge to catch up becomes significantly more positive.

Substantively, in any event, the effects of international voter embrace of free-market internationalism are actually quite modest. If we consider the model in column (6), and counterfactually predict the change in chance of liberalization as we move from the 25th to the 90th percentile in the sample-distribution's variation in *net free-market internationalism* (from a score of –2.66 to 33.6), we see a decrease in the chance that a country reverses course on financial openness by 1.4 percentage points (from .033 to .018 probability of reversal), and a decrease by 7.5 percentage points in the chance of no liberalization (from .82 to .745 probability), and an increase of 8.5 percentage points in the chance of liberalization (from a probability of .16 to a probability of .24). All these effects, however, are significant at a .05 level throughout the sample distribution. And they are robust not only to alternative estimators discussed below, but also to the exclusion of the US interest-rate dummy (another yearly-varying variable) and to use of other measures of support or opposition to free market internationalism.

5. Output-legitimacy and financial liberalization: domestic and international compensation

In addition to such a range of domestic and international sinews of input legitimacy, we can also explore domestic and international sinews of output legitimacy. Among the many possibilities are those relevant to providing compensation for or mitigation of distributional costs and risks of economic openness generally and financial liberalization in particular. Such involves extension of the quite-established view that the provision of some kinds of policy compensation can help foster support for international economic openness (Polanyi, 1944; Ruggie, 1983; Rodrik, 1997; Bretschgera and Hettichb, 2002). In studies of international trade openness this has been most fully investigated in the context mainly of public opinion surveys, but also some work on party manifestos (Hays et al., 2005; Burgoon, 2009; Mayda et al., 2007). But there is also some qualitative work to support the claim with respect to financial economic openness (e.g. Bordo et al., 1999). Our final set of thoughts on the politics of financial liberalization considers how and whether both national and international sources of such compensation make a difference to financial openness. Table 2 summarizes the results.

5.1. Domestic social policy compensation

Columns (1) through (4) consider the role of various measures of domestic government spending on financial liberalization. Although some have argued that all faces of the public economy are relevant to addressing the individual-economic social risks of economic openness, others have emphasized how not all faces of government spending are equally relevant to such risks (Rodrik, 1997; Burgoon, 2001). The four estimations consider these possibilities by focusing on four measures of government spending, more or less targeted at particular issues relevant to the risks of openness. All are measured as spending as a share of national GDP, and all are lagged by one year to address the time it takes for polities to respond to the potential insurance-effects of such “compensation” and to address possible endogeneity.

Column (1) focuses on government consumption, a measure that has the best coverage, but excludes the many social transfer programs clearly relevant to the risks of openness (PWT 6.2). Perhaps this is why the effect is insignificant, though positively signed as expected. A somewhat better measure is total government spending or revenue, which includes such transfers, but also includes many other government spending programs many of which are irrelevant to – or perhaps even likely to undermine – support for financial liberalization (Kugler et al., 2002).¹¹ Although the results are not shown, this measure also yields positive but statistically insignificant results.

Columns (2) through (4) consider measures of the spending that come somewhat closer to the social policies often thought relevant to social risks of openness. Unfortunately, measures of social policy with reasonable coverage of the country-years in

¹⁰ Tracking *net free-market internationalism* with changes in financial openness yields clear correlation amidst volatility of the former, and is stronger if one takes lagged values of internationalism (not shown but available upon request).

¹¹ For instance, this measure includes military expenditures. Such may play a social insurance role, but also capture a polity's military priorities, or conflict footing, tending to decrease chances of financial liberalization. Empirically, military expenditures tend to decrease liberalization (results not shown but available upon request).

Table 2
Output legitimacy and financial liberalization.

(DV=Change in Financial openness (ΔFL_{it})).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Government consumption _{it-1}	0.010 (0.043)							
Social security transfers _{it-1}		11.185 (9.203)						
Health expenditures _{it-1}			50.045*** (13.841)					
Total social transfers _{it-1}				26.554** (12.274)				
Bilateral aid received _{it-1}					2.971* (1.588)			
Multilateral aid received _{it-1}						3.140** (1.311)		5.504*** (1.531)
Total aid received _{it-1}							2.612*** (0.844)	
Multil.aid _{it-1} * Catch-up _{it}								-4.150 (3.544)
Multil.aid _{it-1} * FL _{it-1}								-1.635 (3.060)
Leftist Government _{it}	-0.085 (0.368)	-0.146 (0.471)	-0.257 (0.484)	-0.343 (0.520)	-0.298 (0.447)	-0.220 (0.450)	-0.288 (0.448)	-0.229 (0.450)
Rightist Government _{it}	-0.079 (0.360)	0.154 (0.453)	0.172 (0.433)	0.092 (0.477)	-0.098 (0.426)	-0.018 (0.428)	-0.057 (0.428)	-0.015 (0.430)
Financial openness (FL _{it-1})	6.601*** (1.575)	8.094*** (2.336)	8.527*** (2.459)	8.623*** (2.407)	5.598*** (1.973)	5.374*** (1.864)	5.007*** (1.907)	5.245*** (2.019)
Financial openness sq. ((FL _{it-1}) ²)	-9.720*** (2.593)	-9.636*** (2.907)	-9.904*** (3.011)	-9.748*** (2.902)	-7.970*** (2.640)	-7.699*** (2.629)	-7.838*** (2.665)	-7.600*** (2.628)
FL _{it-1} * Y _{it-1}	0.000** (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)	0.000** (0.000)
Catch-up (Reg.lead_FL _{it-1} - FL _{it-1})	2.063* (1.234)	2.853* (1.512)	3.076* (1.583)	2.956** (1.477)	3.426** (1.427)	3.343** (1.388)	3.035** (1.389)	3.424** (1.413)
Currency Crisis _{it}	0.447* (0.231)	0.517 (0.319)	0.406 (0.331)	0.451 (0.326)	0.297 (0.276)	0.364 (0.283)	0.346 (0.276)	0.382 (0.287)
Banking Crisis _{it}	-1.017*** (0.346)	-0.950** (0.389)	-1.051*** (0.371)	-1.096*** (0.360)	-0.991** (0.402)	-0.976** (0.414)	-1.000** (0.411)	-0.979** (0.412)
Recession _{it}	-0.022 (0.362)	0.517 (0.376)	0.499 (0.352)	0.532 (0.360)	0.310 (0.414)	0.300 (0.417)	0.327 (0.417)	0.294 (0.419)
High Inflation _{it}	-0.450 (0.599)	-1.115 (0.727)	-1.234 (0.819)	-1.134 (0.765)	-0.925 (0.904)	-0.940 (0.903)	-0.829 (0.915)	-0.953 (0.906)
First Year in Office _{it}	0.254 (0.269)	0.068 (0.328)	0.066 (0.328)	0.049 (0.324)	0.287 (0.331)	0.302 (0.332)	0.273 (0.331)	0.289 (0.334)
IMF program _{it}	0.362 (0.272)	0.033 (0.302)	0.051 (0.301)	0.011 (0.304)	0.339 (0.311)	0.346 (0.305)	0.296 (0.315)	0.353 (0.306)
US Interest Rate _{it}	-0.089** (0.044)	-0.068 (0.045)	-0.052 (0.049)	-0.059 (0.047)	-0.108** (0.053)	-0.104** (0.052)	-0.107** (0.052)	-0.100* (0.052)
Open _{it-1}	0.010 (0.010)	0.006 (0.013)	0.009 (0.012)	0.004 (0.014)	0.021* (0.011)	0.021* (0.012)	0.021* (0.011)	0.021* (0.012)
Fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year dummies	No	No	No	No	No	No	No	No
Observations	805	575	575	575	626	626	626	626
Wald χ^2	9.3e+06	1.4e+06	9.3e+06	6.5e+05	6.2e+05	2.1e+06	1.5e+06	1.6e+06
Log likelihood	-730.1	-517.0	-511.7	-513.3	-520.1	-520.3	-518.8	-520.1

Notes: The dependent variable is the change in the Financial Liberalization Index. Robust standard errors are in parentheses, adjusted for clustering by country. Fixed effects for 35 countries not shown but highly jointly significant.

*** denotes significance at the 1-percent level; ** denotes significance at the 5-percent level; * denotes significance at the 10-percent level.

the Abiad and Mody dataset are hard to find, and we can only unearth quality measures for social security transfers and for public health expenditures. The former might be expected to have direct relevance for risks of economic openness, but in developing countries such transfers are often heavily skewed to public pension programs and targeted at employees in the formal, public economy. As such, they often do little to indemnify more generally vulnerable workers in more exposed sectors from the risks of financial or other kinds of economic openness. Column (2) shows the effect of such transfers, and following expectation we can see that the effects are positive but statistically insignificant.

Health spending, on the other hand, has often been providing stronger and more evenly dispersed benefits for workers in both developing countries, but also developed countries (as the current debate in the US lays bare). Higher public spending on such health, hence, might have a more meaningful compensatory effect for workers facing the vagaries of open financial markets. Column (3) shows that measures including such health expenditures do, indeed, significantly increase the chances of financial liberalization. And

column (4) shows that the positive effect of combined spending on health and social security transfers tends also to statistically significantly increase financial liberalization. The substantive effects of such spending, based on the model in column (3), appear to be rather substantial. Moving from the 25th to the 75th percentile in the sample distribution of health spending – the equivalent of moving from a setting where a country spends .71 percent of GDP on health benefits to one where it spends 2.54% of GDP on such benefits – decreases the chance that a country will undergo a reversal of financial openness by 3 percentage points (probability of .053 to .024), and also decreases the chance by 8.6 percentage points of there being no change in such openness. And such an increase in health spending predicts an increase of 11.5 percentage points in the chance that a government liberalizes (probability .103 to .218).

5.2. Foreign aid received

Columns (5) through (8), finally, suggest that the role of compensation in increasing the output legitimacy of financial liberalization may extend not only to some domestic social spending, but also to the levels of aid assistance that a country might receive from international sources. Such aid may come with strings attached that might be relevant to financial openness regardless of their substantive, compensatory effects: if aid is made conditional upon economic changes such as financial market opening, then we would expect the effect of aid to be positive. But it is also plausible that international aid of various kinds, whether or not it comes with conditionality, may well play some compensatory role, as it were substituting for the shortcomings of domestic social policy compensation in less developed countries. Both bilateral initiatives of many Northern economies, particularly European countries, and multilateral-aid initiatives channeled through the European Union or World Bank auspices, have explicitly focused on a range of programs that provide direct (health programs) and indirect (infrastructure programs) social insurance role for those facing risks of economic openness. If so, one might hypothesize that, net of conditionality conditions, external compensation might also increase chances of financial liberalization.

Columns (5) through (7) show that due either to the compensatory or other roles such aid might entail, higher levels of bilateral aid (Column 5), multilateral aid (Column 6), and combined-multilateral-bilateral aid (Column 7) tend to significantly increase financial liberalization. All three measures are expressed as shares of GDP, and all are lagged by one year to try to address possible endogeneity and (even harder to address) the possibility of conditionality (OECD-DAC, 2011). As can be seen from the coefficients, all three have a positive, modestly statistically-significant effect on changes in financial openness. And as can be seen by the coefficients, which can be directly compared because they are in the same units, this effect is strongest for multilateral aid. Substantively, however, the effects are quite modest. Moving from the sample's 50th to the 90th percentile in multilateral aid received – equivalent of moving from a level of aid at .07 percent of GDP to a level of 12.6 percent of GDP – decreases the chance of reversal by .8 percentage points (from .025 to .017 probability) and of no change by 4.5 percentage points (from .84 to .796 probability), and increases the chance of liberalization by 5.3 percentage points (.135 probability to .188 probability of liberalization).

Interestingly, such positive effects of foreign aid received for liberalization appear not to be mediated by varying levels of *ante* financial openness or of catch-up dynamics (degree to which a country lags-behind lead-liberalizer of its region). As was also clear from the previous columns in Table 2, foreign aid also does not tend to have effects at the expense of the general catch-up effect, suggesting simply that this aspect of foreign influence might matter more than the spatial effects of lagging-behind regional leaders. But as Column (8) shows, foreign aid received does not significantly interact either the catch-up parameter or with *ex ante* liberalization. Higher aid levels do tend to diminish rather than increase the catch-up dynamic, though not significantly. And the interaction with lagged financial openness is virtually null. What this all suggests is that foreign aid may well be a significant force in spurring liberalization, though not in ways sensitive to either existing openness or other regional influences.

6. Robustness and sensitivity checks

To consider whether the results summarized in Tables 1 and 2 are artifacts of method and measurement, we conducted a range of robustness and sensitivity checks. Table 3 summarizes the results of what we consider to be the most important of these checks. Each of the six columns summarizes the results of a particular estimation approach, focusing on how a number of the key measures of input and output legitimacy affect financial liberalization as modeled using that approach. Within any given estimation approach (for each column), we report key results from six different regressions (all based on the benchmark model from Tables 1 or 2 denoted in the first column). The included controls and measures of all key right-hand-side variables are the same as in Tables 1 and 2, though these are not shown to conserve space. The full results (twelve tables, reflecting six alternative specifications of Tables 1 and 2) are available in Supplemental Appendix 1.¹²

Column (1) reproduces the key results just discussed in Tables 1 and 2, as denoted in the first title column of the table. These are, recall, the key results based on ordered logit estimations focused on the 18-point Abiad and Mody composite of financial liberalization for 35 countries between 1973 and 1995. Column (2), then, considers the first robustness test, focusing on whether the results are robust to an alternative measure of financial liberalization, particularly one that excludes from the composite liberalization of state interventions involving supervision of banking and securities standards. Such supervision is deemed by many

¹² These and other supporting results are available at < <http://home.medewerker.uva.nl/b.m.burgoon/>>.

Table 3
Selected robustness checks.

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Based on:</i>						
<i>Table 1: Input legitimacy</i>						
<i>Model (2)</i>						
Δ Left government _{it}	−1.261*** (0.411)	−1.422*** (0.423)	−2.266*** (0.495)	−0.035*** (0.012)	−0.008* (0.004)	−0.010** (0.005)
Δ Right government _{it}	−0.569 (0.425)	−0.768* (0.425)	−0.778 (0.606)	−0.011 (0.012)	0.007* (0.004)	0.006 (0.004)
<i>Model (4)</i>						
Leftist Government _{it}	−1.561** (0.790)	−1.715** (0.804)	−0.037** (0.018)	−0.031 (0.020)	−0.001 (0.003)	−0.002 (0.003)
Rightist Government _{it}	0.122 (0.395)	0.202 (0.407)	0.003 (0.011)	0.008 (0.011)	0.014*** (0.003)	0.014*** (0.003)
Democracy _{it}	−0.022 (0.028)	−0.017 (0.030)	−0.001* (0.001)	−0.002** (0.001)	0.000 (0.000)	0.001* (0.000)
Left * Democracy _{it}	0.183* (0.095)	0.183* (0.094)	0.005** (0.002)	0.005** (0.002)	0.001*** (0.000)	0.002*** (0.000)
Right * Democracy _{it}	−0.011 (0.043)	−0.021 (0.042)	0.001 (0.001)	−0.000 (0.001)	−0.000 (0.000)	0.000 (0.000)
<i>Model (5)</i>						
Net free-market int'lism _t	3.745*** (0.706)	3.390*** (0.718)	0.087*** (0.024)	− (0.010)	0.024** (0.010)	0.034*** (0.011)
<i>Based on:</i>						
<i>Table 2: Output legitimacy</i>						
<i>Model (3)</i>						
Health expenditures _{it-1}	50.045*** (13.841)	48.727*** (13.708)	0.921** (0.401)	0.611 (0.379)	0.642*** (0.224)	0.737*** (0.235)
<i>Model (4)</i>						
Total social transfers _{it-1}	26.554** (12.274)	28.371** (11.669)	0.348 (0.314)	0.462** (0.220)	0.276*** (0.087)	0.286*** (0.085)
<i>Model (7)</i>						
Total aid received _{it-1}	2.612*** (0.844)	2.611*** (0.983)	0.064* (0.033)	0.014 (0.028)	0.016** (0.007)	0.017** (0.007)

Note: Rows (or sets of rows report) results from separate models, reported per model specification. Not shown are all controls and country and year dummies, as in Tables 1 and 2. Full results in Supplemental Appendix Tables 1–12.

Column 1: Ordered logit from Tables 1 and 2 (DV: Change in Financial openness (ΔFL_{it-1}))

Column 2: Ordered logit using alternative measure of financial openness (DV: Change in Non-supervisory Financial openness ($\Delta NSFL_{it-1}$))

Column 3: OLS with panel-corrected standard errors and fixed effects (DV: Change in Financial openness (ΔFL_{it-1}))

Column 4: OLS with panel-corrected standard errors, fixed effects and year dummies (DV: Change in Financial openness (ΔFL_{it-1}))

Column 5: OLS with panel-corrected standard errors and fixed effects using Abiad et al. (2008) expanded and revised data (82 countries, 1973–2001) (DV: Change in Financial openness (ΔFL_{it-1}))

Column 6: OLS with panel-corrected standard errors and fixed effects using Abiad et al. (2008) expanded and revised data (82 countries, 1973–2001), and alternative measure of financial openness, (DV: Change in Non-supervisory Financial openness ($\Delta NSFL_{it-1}$))

Standard errors in parentheses.

*** denotes significance at the 1-percent level; ** denotes significance at the 5-percent level; * denotes significance at the 10-percent level.

(particularly post Great Recession) to be crucial to smooth-functioning global finance, and plausibly should not be considered on a par with more protectionist obstacles to free international flows of financial investment. All the results in the column are based, in other respects, on the same specification as in the benchmark (column (1)). The results, in any event, are not appreciably different from those reported in the benchmark, except that change to Right as well as to Left government significantly lowers chances of non-supervisory financial liberalization – though much less so than do shifts to Left government.

Column (3) summarizes results of an alternative estimator to Abiad and Mody's ordered logits: OLS coefficients with country-clustered standard errors and fixed effects. Although the coefficients cannot be directly compared with the benchmark's ordered logit coefficients, we can see from this alternative that the results are again similar in terms of sign and statistical significance. In substantive terms, most of the results are within five percent of the results reported in Tables 1 and 2 above. But the results for measures of output legitimacy are more modest – though still exhibiting the same pattern where health-focused domestic compensation more meaningfully spurs liberalization than do general transfers or foreign aid.

Column (4) adds year dummies to the estimation, introducing a quite conservative technique to further address possible serial correlation (beyond the lagged levels of liberalization already included in the benchmark).¹³ Again the basic signs of the relationships discussed above remain, but here we do see some softening in substantive effects, particularly those factors related to output legitimacy: where health expenditures and total aid received lose statistical significance. Even in this conservative test, however, it is important to note that the broad patterns of input and output legitimacy reported in Tables 1 and 2 hold tone.

Column (5) and (6), finally, consider the robustness of the results to the expanded Abiad et al. (2008) dataset, including some 90 countries, more dimensions of financial liberalization, and through to 2005. Both Columns (5) and (6) focus on OLS models with panel-corrected standard errors and fixed effects, comparable to Column (3)'s focus on the original dataset. But Column

¹³ Not surprisingly, this leads the primarily temporally-varying measure of *Net free market internationalism* to drop out due to collinearity.

(5) focuses on changes in the full composite of financial liberalization, while Column (6) summarizes results from models based on a non-supervisory financial liberalization (comparable to Column (2) but now on the newer dataset). The results broadly reproduce those reported in Tables 1 and 2 with respect to both input and output legitimacy. The partial exception involves how some of the substantive results are smaller (though not in terms of statistical significance) and that the interaction between partisanship and democracy is a bit different. With respect to the latter, while interaction between Left partisanship and Democracy levels remains strongly positive, Left governments are not less likely to liberalize than Center governments when Democracy is low.

These results only provide a partial overview of robustness tests of these estimators, of course. But they do show that the basic baseline results reported in Tables 1 and 2 hold to quite different estimators and specification. And beyond these particular tests, we have conducted a range of further tests to find that the results are robust to yet other estimators and changes in specification, including: error-correction models; random intercept and coefficient models; alternative specifications of Left partisanship, Democracy, and voter embrace of *net free-market internationalism*; bootstrapping of standard errors, and stepwise deletion of controls. Altogether, we have good reason to conclude that domestic and international politics of input and output legitimacy are very relevant to global financial liberalization and not mere artifacts of a particular method for assessing such liberalization.

7. Conclusion

This article has sought to clarify how domestic and international political factors linked to input and output legitimacy of economic globalization help explain financial liberalization across countries and time. The motivation to do so has been dissatisfaction with findings suggesting that such liberalization has little to do with standard political variables. The main findings of our own investigation of their dataset are that both domestic and international sources of both input and output legitimacy of financial liberalization appear to matter significantly to the short-term decisions of polities to change financial openness. First, we find that shifts to left partisanship, and the interaction of left partisanship and democracy, are important domestic sources of input legitimacy, while international voter support for free-market internationalism, as opposed to anti-capitalist closure, are important international sources of input legitimacy. Second, we find that some targeted social policies – and not spending generally – constitute provisions of compensation that may be important domestic sources of output legitimacy that serve to sustain financial openness. And multilateral and bilateral aid might not only spur liberalization through the conditionality sometimes attached to such aid, but may also serve a compensatory role that constitute important international sources of output legitimacy again supporting financial openness.

These findings provide a partial corrective to apolitical explanations of financial liberalization. Our message, in this sense, is simply that politics matter more and differently than this interpretation would have us believe. However, the ongoing debate on the reform of the financial system reminds us that these findings may also be seen as more significant in terms of our understanding of the underlying political economy of financial liberalization if the benefits of the latter are to be preserved in a politically sustainable fashion. Our study into input and output legitimacy as a framework through which to understand such politics is at the least a reminder of a larger research agenda into the politics of globalization than the present study allows. We believe it important to consider the complex power-political interaction of a wide range of state and market actors in both formal and private fights on issues of economic governance – well beyond the kinds left-right partisan conditions discussed above. We also believe that features of democratic involvement or subjective support for more or less open markets are crucial to input legitimacy and go well beyond measures of broad democracy and international voter attitudes discussed above. More obviously, the sources of output legitimacy are much more complicated than the simple role of compensatory social and aid provisions highlighted above – involving the gamut of policies and non-hard law practices that might diminish the distributional costs and system risks of open markets. These policies and practices are particularly key if, post-crisis, we consider the long-term stability of openness and not just the short-term embrace the present paper has investigated. All such politics, relevant to both the short and long-term, both domestic and international aspects of input and output legitimacy, cannot be lightly dismissed as shaping the global economy. These findings have implications for how financial openness might be dealt with in the aftermath of the 2007–9 financial crisis.

Acknowledgements

The authors gratefully acknowledge the funding support of the World Economy and Finance Research programme of the Economic and Social Research Council of the United Kingdom ('National and International Aspects of Financial Development', grant no. RES-156-25-0009), and also funding support under the European Commission's 7th Framework Research Programme, Theme Socio-economic sciences and humanities ('Politics, Economics and Global Governance: The European Dimensions' (PEGGED), Grant Agreement no. 217559). The authors are also indebted to a number of colleagues who provided support and challenging commentary on earlier versions of the manuscript. The regular seminars organized in the context of the ESRC project named above, especially the Amsterdam seminar in October 2007 and Cyprus in May 2008, were invaluable in this regard and we thank all participants who contributed so constructively to the discussion. In particular we wish to thank Stijn Claessens and Badi Baltagi in this regard. Our thanks are also due for comments from Henry Laurence as discussant on our panel at the September 2009 meetings of the American Political Science Association in Montreal. Of course our colleagues cannot be held responsible for shortcomings and the authors accept full responsibility for any remaining weaknesses.

Appendix A. Data and summary statistics

Table A.1

Variable definitions and sources for baseline estimations (Table 1 and 2).

Variable name	Description	Source
Financial openness (FL_{it-1})	• Composite (0–18, standardized to range from 0–1) of financial openness, based on sum of six aspects of openness (0–3, 3 being most open): (1) capital controls/reserve requirements; (2) interest rate controls; (3) entry barriers, pro-competition measures; (4) regulations of securities markets; (5) privatization in the financial sector; and (6) international transactions.	Abiad and Mody (2005)
Leftist Government _{it}	• Dummy for when largest government-forming party is <i>Left</i>	Database on Political Institutions (World Bank, 2001)
Rightist Government _{it}	• Dummy for when largest government-forming party is <i>Right</i>	
First Year in Office _{it}	• Dummy for year government first takes power	Polity IV (Bennett and Stam, 2008)
Democracy (PolityIVscore) _{it}	• Categorical measure of democracy, as difference between 10-point democracy and 10-point autocracy measure, ranging from complete autarchy (–10) to complete democracy (10)	
Govt. consumption _{it-1}	• Total consumption by government as percent of GDP	PWT 6.2 (Heston et al., 2006)
Recession _{it}	• Dummy for years for which annual real GDP growth (PPP-basis) is negative	Kugler et al., 2002
Open _{it}	• Total imports and exports as percent of real GDP	
Social security transfers _{it-1}	• Total expenditure on social security as a share of GDP	OECD Development Assistance Committee database (2011)
Health expenditures _{it-1}	• Total health expenditures as a share of GDP	
Total social transfers _{it-1}	• Total social security and health spending as share of GDP	OECD Development Assistance Committee database (2011)
Bilateral aid received _{it-1}	• Total bilateral aid flows from 16 OECD countries, in real dollars as share of real GDP	
Multilateral aid received _{it-1}	• Total multilateral aid flows from 16 OECD countries, in real dollars as share of real GDP	Bordo et al., 1999
Total aid received _{it-1}	• Total aid flows from 16 OECD countries, in real dollars as share of real GDP	
Currency Crisis _{it}	• Dummy for a “forced change in parity, abandonment of a pegged exchange rate, or international rescue” within past two years.	IMF International Financial Statistics database History of Lending Agreements www.imf.org.
Banking Crisis _{it}	• Dummy for “financial distress resulting in the erosion of most or all of aggregate banking system capital” within past two years.	
High Inflation _{it}	• Dummy for years in which annual inflation exceeds 50 percent	Comparative Manifesto Project dataset (Klingeman et al., 2006)
US Interest Rate _{it}	• US Treasury Bill rate	
IMF program _{it}	• Dummy for participation in IMF lending agreements	Party-year scores weighted by percent vote in country-year's election. See text for details.
Net free-market internationalism	• Percentage of party-platform support for free-market internationalism, based on 5-year averages of CMP coding of percentages of party platforms for <i>net free-market internationalism</i> = (per401 + per407) - (per406 + per412 + per413). Based on following: <i>per401 (Free enterprise)</i> : Favorable mentions of free enterprise capitalism; superiority of individual enterprise over state and control systems; favorable mentions of private property rights, personal enterprise and initiative; need for unhampered individual enterprises. <i>per407 (Protectionism: Negative)</i> : Support for the concept of free trade; otherwise as 406, but negative. <i>per406 (Protectionism: Positive)</i> : Favorable mentions of extension or maintenance of tariffs to protect internal markets; other domestic economic protectionism such as quota restrictions <i>per412 (Controlled Economy)</i> : General need for direct government control of economy; control over prices, wages, rents, etc.; state intervention into the economic system. <i>per13 (Nationalisation)</i> : Favourable mentions of government ownership, partial or complete, including government ownership of land..	

Table A.2

Summary statistics for baseline estimations (Table 1 and 2).

Variable name	Obs	Mean	Std. Dev.	Min	Max
Change in Financial openness (ΔFL_{it})	805	0.020	0.068	-0.444	0.611
Financial openness (FL_{it-1})	840	0.393	0.318	0	1
Leftist Government _{it}	875	0.216	0.412	0	1
Rightist Government _{it}	875	0.386	0.487	0	1
Δ Left government _{it}	840	0.010	0.272	-1	1
Δ Right government _{it}	840	0.019	0.271	-1	1
Democracy (PolityIVscore) _{it}	828	3.313	6.826	-9	10
Democracy dummy (1=Polity>0) _{it}	828	0.659	0.474	0	1
Net free-market internationalism _t	875	0.075	0.161	-0.212	0.314
Government consumption _{it-1}	840	16.727	7.205	5.203	54.272

Table A.2 (continued)

Variable name	Obs	Mean	Std. Dev.	Min	Max
Social security transfers _{it-1}	575	0.041	0.046	0.001	0.198
Health expenditures _{it-1}	575	0.020	0.019	0.001	0.093
Total social transfers _{it-1}	575	0.061	0.061	0.005	0.268
Bilateral aid received _{it-1}	636	0.106	0.216	-0.0004	1.321
Multilateral aid received _{it-1}	636	0.052	0.147	0	1.323
Total aid received _{it-1}	636	0.158	0.346	-0.0004	2.163
Catch-up (Reg.lead_FL _{it-1} - FL _{it-1})	840	0.350	0.277	0	0.889
Currency Crisis _{it}	875	0.297	0.457	0	1
Banking Crisis _{it}	875	0.137	0.344	0	1
Recession _{it}	840	0.125	0.331	0	1
High Inflation _{it}	840	0.112	0.315	0	1
First Year in Office _{it}	875	0.195	0.397	0	1
IMF program _{it}	875	0.247	0.431	0	1
US Interest Rate _t	875	7.041	2.567	3.019	14.078
Open _{it}	875	55.665	55.566	6.320	422.394

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