# 5

# Financial Reforms for Financial Development

#### 5.1 Introduction

Financial liberalization has been one of the key trends characterizing the post-Bretton Woods era, with decreasing capital controls and an increasing participation of developing countries in international financial markets in recent decades. More broadly, domestic financial development, measured in terms of liquid liabilities or stock market capitalization, has risen dramatically over the same period. By using Bayesian Model Averaging (BMA) and General-to-specific (Gets) approaches, Chapter 2 examines the long-run determinants of financial development. However, what are the factors directly stimulating governments to liberalize the financial sector, aimed at enhancing financial development? Building on the framework of Abiad and Mody (2005) (AM hereafter), this chapter attempts to answer this question and to provide a more comprehensive view of the political economy of financial reform.

Although financial liberalization has been criticized as increasing the likelihood of financial crises and financial fragility, it is widely regarded as promoting the flow of financial resources, thereby reducing capital costs, stimulating investment and fostering financial development and economic growth (McKinnon, 1973; Shaw, 1973; Demirgüç-Kunt and Detragiache, 1998; Summers, 2000). In practice, governments in recent decades have been committed to reducing direct intervention in the financial system by easing or removing controls over interest rates, credit allocation and financial transactions domestically and internationally, opening up the banking system for foreign entry, and privatizing commercial banks or non-bank financial intermediaries. What are the main factors inducing governments to take these steps?

AM introduce an analytical framework to examine the factors that induce governments to undertake financial reforms. Using an ordered logit technique to estimate their specifications, AM argue that policy change in a country is positively related to its level of liberalization and any liberalization gap from the regional leader. The pace of reform is found to be affected by shocks or discrete changes such as a balance-of-payments crisis, a banking crisis, a new government's first year in office, participation in an IMF programme and a decline in US interest rates. However, they find that ideology and political and economic structures have "limited influence" on the likelihood of reform.

The AM analytical framework is attractive in many respects, but some aspects of their empirical analysis merit further attention. First, the ordered logit technique they apply may not be appropriate for this context, although the discrete and ordinal nature of the financial liberalization level,  $FL_{i,t}$ , and policy change,  $\Delta FL_{i,t}$ , may render the ordered logit method a natural choice at first glance. In the AM analysis, the dependent variable is not the level of financial liberalization, but the change in the level of liberalization. AM treat a movement from a score of 1 to 3 of the underlying index the same as they do a movement from 16 to 18, among many other possibilities for a specific change (say +2). However, the lack of cardinality in the scale of their original measure implies that movements along the scale for a specific change are not equivalent. Given this particular nature of the dependent variable, resorting to the ordered logit technique may not lead to the expected gains.<sup>84</sup> Second, as in most cross-country research, AM do not take into account the effects of common trends and the possibility of error dependence across countries and over time. The importance of error dependence seems especially relevant when the effects of domestic learning and regional diffusion are investigated, and is confirmed by the results of this analysis, including a formal test of dependence following Pesaran (2004).

In this analysis, four innovations are introduced. The first is that, rather than their ordered logit technique, this analysis centres on the Pesaran (2006) common correlated effect pooled (CCEP) approach that allows for the possibility of error dependence across countries. Second, to adjust for serial correlation in individual errors, the panel-robust standard errors after Arellano (1987) are computed for the CCEP estimates. Third, it adds the extent of democracy into the AM framework, by introducing the Polity indicator, "polity2", in the PolityIV Database (Marshall and Jaggers, 2008), seeking to measure institutional quality. The level of

democracy is a potentially important variable which reflects the political environment in which new policies are approved or rejected, and policy changes take place. Fourth, in addition to focusing on the original dataset used by AM, it takes up a further investigation based on a larger set of countries, in which the Abiad and Mody financial liberalization index is replaced by the Chinn-Ito index of capital account openness (2006).

This chapter produces the following findings. In general it confirms the negative effects of banking crises and high inflation on policy change, as observed by AM. It is also consistent with AM in suggesting that the effects of new governments in their first year and IMF programmes are strong when financial sectors are highly repressed, and become weaker as the level of financial liberalization goes up. However, this chapter points to the following three distinct conclusions. First, it shows that some of their findings on the effects of crises and shocks are fragile. Second, it is at odds with AM on the effects of domestic learning and regional diffusion. It suggests that policy change in a country is negatively rather than positively related to its liberalization level, and the liberalization gap from the regional leader appears less relevant than in AM. Third, this analysis observes a significant effect of the extent of democracy, the new variable added to the Abiad and Mody framework, on policy change. The findings on the negative effects of domestic learning and irrelevance of regional diffusion are supported by a larger sample of countries drawing on the Chinn-Ito index of capital account openness.

Section 5.2 provides a brief discussion of the model specifications and econometric methods. Section 5.3 presents the empirical results, based on the original dataset with the AM measure, and a larger set of countries with the Chinn-Ito measure, separately. Section 5.4 discusses the implications of the findings. Section 5.5 concludes.

#### 5.2 Methodology

This section starts by briefly describing the models used in AM to study how financial reform is shaped, followed by a discussion of the econometric methods that will be applied in this chapter.

### 5.2.1 Model specifications

Below is the general model structure that captures the effects of domestic learning, regional diffusion, discrete changes and ideology and structure on policy changes.

$$\begin{split} \Delta F L_{it} &= \alpha (F L_{it}^* - F L_{i,t-1}) \\ &+ \beta_1 (R E G_- F L_{i,t-1} - F L_{i,t-1}) \\ &+ \beta_2' S HOCK S_{it} \\ &+ \beta_3' ID EOLOG Y_{it} \\ &+ \beta_4' S TRUCT UR E_{it} \\ &+ \varepsilon_{it} \end{split} \tag{5.1}$$

The dependent variable,  $\Delta FL_{it}$ , is used to measure policy change, the difference between the level of financial liberalization in the current period,  $FL_{it}$ , and the past level of financial liberalization,  $FL_{i,t-1}$ .  $FL_{it}^{86}$ ranges between 0 and 1, with 0 and 1 corresponding to complete financial repression and complete financial liberalization, respectively.  $FL_{it}^*$ is the desired level of financial liberalization. The adjustment factor,  $\alpha$ , measures the degree of status quo bias. A lower value of  $\alpha$  is associated with more resistance to reform and a greater bias towards the status quo. The first term on the RHS is therefore used to examine domestic adjustment. The second term captures regional diffusion in which  $REG_FL_{i,t-1}$  is the maximum level of financial liberalization achieved in the region. SHOCKSit denotes discrete changes including four types of crises – balance-of-payments crises (BOP<sub>it</sub>), banking crises (BANK<sub>it</sub>), recessions (RECESSION<sub>it</sub>) and high inflation periods (HINFL<sub>it</sub>) – and three types of internal or external influences like the incumbent's first year in office (FIRSTYEARit), the influence of international financial institutions reflected by a dummy for an IMF programme of lending (IMFit) and the influence of global factors proxied by the US Treasury Bill rate (USINT<sub>it</sub>). IDEOLOGY<sub>it</sub> reflects political orientation including a dummy for left-wing government (LEFT<sub>it</sub>) and a dummy for right-wing government (RIGHT<sub>it</sub>). STRUCTURE<sub>it</sub> represents structural variables (either economic or political), for example the trade openness measure (OPEN<sub>it</sub>) used in AM.

Overall, the Abiad and Mody framework is appealing, covering almost all possible aspects. However, a political structural variable, the extent of democracy ( $POLITY2_{it}$ ), may be relevant to the analysis and is added to their framework. This is the Polity indicator "polity2" in the PolityIV Database (Marshall and Jaggers 2008) and seeks to measure institutional quality based on the freedom of suffrage, operational constraints on executives and respect for other basic political rights and civil liberties. It

is called the "combined polity score", defined as the democracy score minus the autocracy score.87

#### 5.2.1.1 Benchmark specification

The benchmark specification assumes that the desired level of financial liberalization,  $FL_{it}^*$ , is the perfect level of financial liberalization and the adjustment factor,  $\alpha$ , is positively related to the level of financial liberalization to allow for the likelihood of domestic learning. Putting  $FL^* = 1$  and  $\alpha = \theta_1 FL_{i,t-1}(\theta_1 > 0)$  into Equation (5.1) above and reparameterizing, we have

$$\Delta FL_{it} = \theta_1 FL_{i,t-1} (1 - FL_{i,t-1})$$

$$+ \theta_2 (REG_{-}FL_{i,t-1} - FL_{i,t-1})$$

$$+ \theta'_3 SHOCKS_{it}$$

$$+ \theta'_4 IDEOLOGY_{it}$$

$$+ \theta'_5 STRUCTURE_{it}$$

$$+ \varepsilon_{it}$$
(5.2)

This equation is Equation (4) in AM.

#### 5.2.1.2 Alternative specifications

Relaxing two assumptions used in the benchmark specification, three alternative specifications are considered:

First, rather than assuming the desired level of financial liberalization,  $FL_{it}^*$ , to be full liberalization, it is natural to adopt country-specific measures of the desired extent of liberalization. When plugging  $FL^* = c$ (0 < c < 1) and  $\alpha = \theta_1 F L_{i,t-1}$  into Equation (5.1) above, redefining the coefficients yields the following equation as in Equation (5) of AM<sup>88</sup>:

$$\Delta FL_{it} = \theta_1 FL_{i,t-1} + \theta_2 FL_{i,t-1}^2$$

$$+ \theta_3 (REG\_FL_{i,t-1} - FL_{i,t-1})$$

$$+ \theta_4' SHOCKS_{it}$$

$$+ \theta_5' IDEOLOGY_{it}$$

$$+ \theta_6' STRUCTURE_{it}$$

$$+ \varepsilon_{it}$$
(5.3)

Second, the desired level of financial liberalization,  $FL_{it}^*$ , might be reasonably regarded to be increasing with the level of income. When  $FL^* = a + bY_{it}$  and  $\alpha = \theta_1 FL_{i,t-1}$  are considered, Equation (5.1) above can be rearranged and reparameterized as Equation (6) in AM:<sup>89</sup>

$$\Delta FL_{it} = \theta_1 FL_{i,t-1} + \theta_2 FL_{i,t-1}^2$$

$$+ \theta_3 (FL_{i,t-1}.Y_{it})$$

$$+ \theta_4 (REG_{-}FL_{i,t-1} - FL_{i,t-1})$$

$$+ \theta_5' SHOCKS_{it}$$

$$+ \theta_6' IDEOLOGY_{it}$$

$$+ \theta_7' STRUCTURE_{it}$$

$$+ \varepsilon_{it}$$
(5.4)

Finally, when the possibility that shocks, ideology and structure variables may exert effects on the status quo bias is taken into account, the previous assumption  $\alpha = \theta_1 F L_{i,t-1}$  is replaced by the following equation:

$$\alpha = \gamma_1 F L_{i,t-1}$$

$$+ \gamma_2 (REG\_F L_{i,t-1} - F L_{i,t-1})$$

$$+ \gamma_3' SHOCK S_{it}$$

$$+ \gamma_4' IDEOLOG Y_{it}$$

$$+ \gamma_5' STRUCTUR E_{it}$$

Putting this expression as well as  $FL^* = c$  into Equation (5.1) and redefining the coefficients yields the third specification, Equation (8) in AM, below:

$$\Delta FL_{it} = \theta_{1}FL_{i,t-1} + \theta_{2}FL_{i,t-1}^{2}$$

$$+ \theta_{3}(REG\_FL_{i,t-1} - FL_{i,t-1})$$

$$+ \theta_{4}(REG\_FL_{i,t-1} - FL_{i,t-1}).FL_{i,t-1}$$

$$+ \theta'_{5}SHOCKS_{it} + \theta'_{6}SHOCKS_{it}.FL_{i,t-1}$$

$$+ \theta'_{7}IDEOLOGY_{it} + \theta'_{8}IDEOLOGY_{it}.FL_{i,t-1}$$

$$+ \theta'_{9}STRUCTURE_{it} + \theta'_{10}STRUCTURE_{it}.FL_{i,t-1}$$

$$+ \varepsilon_{it}$$

$$(5.5)$$

#### 5.2.2 Econometric methods

AM use an ordered logit technique to estimate the benchmark specification and three alternative specifications with the results presented in Tables 7, 8 and 9 of their paper. A minor problem has been detected in their empirical results in which Singapore is misclassified as an African country while South Africa is misclassified as an East Asian country. The corrected results are presented in Appendix Table A5.4. In general, the pattern of Appendix Table A5.4 (part A) is similar to that of their Table 7. Appendix Table A5.4 (part B) presents stronger evidence for IMFit and  $REG\_FL_{i,t-1}-FL_{i,t-1}$ . 90 It is worth noting that Appendix Table A5.4 (part C) shows that  $FL_{i,t-1}$ ,  $OPEN_{it}$  and  $OPEN_{it} \times FL_{i,t-1}$  appear to be insignificant when country fixed effects are included, different from Table 9 of AM, which shows these variables to be significant when country fixed effects are included.

More importantly, the analyses conducted by AM may be questioned in the following two aspects.

The first is that the ordered logit technique they apply may not be natural for this context, although the discrete and ordinal nature of the financial liberalization level,  $FL_{i,t}$ , and policy change,  $\Delta FL_{i,t}$ , may render the ordered logit method an appropriate choice at first glance. Since the dependent variable is not the level of financial liberalization, but policy change, financial liberalization moving from a score of 1 to 3 in terms of their original measure  $^{91}$  is treated the same as moving from 16 to 18, for example. However, given the ordinal feature of their original measure, in reality policy change reflected by moving from a score of 1 to 3, which could be at rather low levels, doesn't necessarily lead to the same extent of financial liberalization as moving from 16 to 18, which could be at much higher levels of financial liberalization. Given this particular nature of the dependent variable, resorting to the ordered logit technique may not lead to the expected gains.

Second, like in most cross-country research, AM do not take into account the effects of common trends and the possibility of error dependence across countries and over time. This seems especially relevant when the effects of domestic learning and regional diffusion are investigated. The assumption on the error term they use implies that the disturbances are uncorrelated between groups and over time. However, if the error term contains one or more unobserved factors which have different effects on every unit, as noted by Phillips and Sul (2003) among others, "the consequences of ignoring cross section dependence can be serious". On the other hand, the consequences of ignoring serial correlation and heteroscedasticity can also be serious, since this may lead to

a downwards bias in standard errors, and therefore higher significance levels attached to the coefficients. In examining the origins of financial openness, Quinn and Inclán (1997) argue that it is critical to consider a common trend, such as changes in consumer tastes and technology, that may exert substantial effects on government liberalization policies as "fundamental but unobservable forces".

The particular nature of the dependent variable and the possibility of error dependence suggest that another estimation approach would be worthwhile. The wide range of scores on the original financial liberalization index from 1 to 18 and the policy change,  $\Delta FL_{i,t}$ , from -1 to 1 (after transformation) makes a simpler linear regression method a possible choice for this context. This chapter's approach centres on the Pesaran (2006) common correlated effect pooled (CCEP) estimator, a generalization of the fixed effects estimator which allows for the possibility of cross-section correlation. <sup>92</sup> To adjust for serial correlation in individual errors, <sup>93</sup> the panel-robust standard errors from Arellano (1987) are computed for the CCEP estimates, allowing the errors not only to be serially correlated for a given country, but also to have variances and covariances that vary across countries.

Pesaran (2006) proposes two common correlated effect (CCE) approaches for large heterogeneous panels whose error contains unobserved common factors. More specifically, this approach augments the one-way fixed effects model with the (weighted) cross-sectional means of the dependent variable and the individual specific regressors, analogous to a two-way fixed effects model. Including the (weighted) cross-sectional averages of the dependent variable and individual specific regressors is suggested by Pesaran (2006, 2007) as an effective way to filter out the impacts of common factors, which could be common technological or macroeconomic shocks, causing between group error dependence.

The Pesaran (2006, 2007) approach exhibits considerable advantages. It allows unobserved common factors to be possibly correlated with exogenous regressors and exert differential impacts on individual units. It permits unit root processes amongst the observed and unobserved common effects. The proposed estimator is still consistent, although it is no longer efficient, when the idiosyncratic components are not serially uncorrelated.

In this context, the cross sectional means of  $\Delta FL_{it}$ ,  $FL_{i,t-1}$ ,  $GDP_{i,t-1}$  and  $OPEN_{it}$  are considered since these variables may be especially likely to reflect common effects. To allow the effects to be heterogeneous across regions, the models are augmented with the interactions between regional dummies and cross sectional means of the above variables, and

time dummies. The CCEP estimator has been shown to be asymptotically unbiased and consistent as  $N->\infty$  for both T fixed or  $T->\infty$ , and to have generally satisfactory finite sample properties.

Appendix Table A5.3 presents the time series properties for three continuous variables, the financial liberalization index (FLit), GDP per capita in PPP terms (GDP<sub>i,t</sub>) and trade openness (OPEN<sub>i,t</sub>). It contrasts a panel unit root test proposed by Pesaran (2007) in the presence of cross section dependence with the Maddala and Wu (1999) Fisher test, which is associated with the assumption of cross section independence of the error term and does not require a balanced panel. The Pesaran (2007) approach augments the standard ADF regression with cross section averages of lagged levels and first differences of individual series, to control for cross section dependence. The Maddala and Wu (1999) Fisher test is then applied to this more general setting. With cross sectionally independent errors, the Maddala and Wu (1999) Fisher test cannot reject the null of non-stationarity for  $FL_{i,t}$ ,  $GDP_{i,t}$  and  $OPEN_{i,t}$  when we do not allow for a trend. With a trend, the series of  $GDP_{i,t}$  and  $OPEN_{i,t}$  are close to being found as stationary. When we allow for a trend, Pesaran's test shows that we can almost reject the null of non-stationarity for  $FL_{i,t}$ ,  $GDP_{i,t}$  and  $OPEN_{i,t}$  at the 10% significance level<sup>94</sup>, suggesting that  $FL_{i,t}$ ,  $GDP_{i,t}$  and  $OPEN_{i,t}$  may not be I(1) variables. However, this result should be interpreted with caution since there are reservations as to the power and reliability of these tests.

This analysis also employs a normal within groups (WG) approach to estimating the one-way fixed effects models (country fixed effects included), as estimated by AM, with non-robust standard errors. How important controlling for error dependence across countries and over time is for this context can be examined by comparing the WG estimates and CCEP estimates. The consistency of the one-way WG estimator for the dynamic homogeneous model is justified by the length of the time series, 95 but this estimator is biased in small samples because of the lagged dependent variable bias. The country fixed effects can be eliminated by an idempotent (covariance) transformation matrix as in within groups estimation.

# **Empirical evidence**

By applying a within groups approach to the AM framework with the addition of the extent of democracy, this section presents empirical evidence in two steps on what shapes financial reform, an analysis on the original dataset with the AM measure in Section 5.3.1 and an analysis

on a larger dataset with the Chinn-Ito (2006) measure in Section 5.3.2. In each step, the normal one-way fixed effects WG estimates with non-robust standard errors are contrasted with Pesaran (2006) CCEP estimates with panel-robust standard errors, with the former assuming that the errors are serially uncorrelated and independent across countries, while the latter approach allows for error dependence both across countries and over time.

#### 5.3.1 Analysis on the original dataset

This section concerns the analyses on the benchmark specification (Equation 5.2) and three alternative specifications (Equations 5.3, 5.4 and 5.5) using AM's original dataset. The results are presented in Tables 5.1A/B, 5.2 and 5.3 corresponding to Tables 7, 8 and 9 in AM, respectively. Table 5.1 (part A) and 5.1 (part B) reports the WG estimates and CCEP estimates of the benchmark specification (Equation 5.2). Table 5.1A strictly follows the model structure of AM<sup>96</sup> while Table 5.1 (part B) reports  $FL_{i,t-1}$  and  $FL_{i,t-1}^2$  separately, presenting a direct link between policy change,  $\Delta FL_{it}$ , and the level of liberalization,  $FL_{i,t-1}$ . In comparison to the ordered logit estimates in columns 4–6 (with country fixed effects) of Appendix Table A5.4A, the WG estimates in Table 5.1A (country effects are included by definition) not only confirm their findings, but also show that  $FIRSTYEAR_{it}$  and  $OPEN_{it}$  have positive effects on policy change.

To present a direct link between policy change,  $\Delta FL_{it}$ , and the level of liberalization,  $FL_{i,t-1}$ , Table 5.1 (part B) reports  $FL_{i,t-1}$  and  $FL_{i,t-1}^2$  separately. The within  $R^2$  associated with the CCEP estimates is much larger then those for the WG estimates, hinting at the importance of error dependence. With satisfactory finite sample properties, the CCEP estimates in Table 5.1 show that policy change is negatively rather than positively associated with the lagged level of financial liberalization,  $FL_{i,t-1}$ , and the regional liberalization gap,  $REG\_FL_{i,t-1} - FL_{i,t-1}$ . The CCEP estimates confirm the AM finding on a negative effect of  $BANK_{it}$ , and positive effects of  $BOP_{it}$  and  $FIRSTYEAR_{it}$  on policy change. It also provides strong evidence for a negative effect of  $POLITY2_{it}$ , indicating that the extent of democracy tends to hinder the pace of reform.

Table 5.2 presents the within groups estimates, WG and CCEP, for the alternative specifications (Equations 5 and 6 in AM). The CCEP estimates confirm the previous observations of Table 5.1 in terms of the negative effects of the level of liberalization, regional liberalization gap, banking crises and the extent of democracy, and the positive effects of a balance-of-payments crisis and a new government's first year in office. A positive effect of  $USINT_{it}$  is also observed.

Next we proceed to Table 5.3, which presents the within groups estimates of the most general specification (Equation 8 in AM). Note that the corrected Table 9 in AM shows that  $FL_{i,t-1}$ ,  $OPEN_{it}$  and  $OPEN_{it} \times FL_{i,t-1}$ are insignificant in the presence of country fixed effects. Similarly, the

*Table 5.1* Within estimates: Benchmark specification (Equation 4) A.  $FL_{i,t-1} \times (1 - FL_{i,t-1})$  reported

Estimators	WG	WG	WG	CCEP	CCEP	CCEP
$\overline{FL_{i,t-1}}$	0.083	0.098	0.083	0.046	0.070	0.075
$\times (1 - FL_{i,t-1})$	[0.038]**	[0.038]***	[0.039]**	[0.060]	[0.054]	[0.056]
$REG\_FL_{i,t-1}$	0.076	0.070	0.083	0.109	0.111	0.121
$-FL_{i,t-1}$	[0.016]***	[0.016]***	[0.017]***	[0.025]***	[0.025]***	[0.027]***
$BOP_{it}$		0.017	0.013		0.019	0.019
		[0.006]***	[0.006]**		[0.006]***	[0.006]***
$BANK_{it}$		-0.024	-0.022		-0.021	-0.020
		[0.007]***	[0.007]***		[0.010]**	[0.009]**
RECESSION <sub>it</sub>		-0.010	-0.009		-0.006	-0.007
		[0.008]	[0.008]		[0.008]	[0.008]
$HINFL_{it}$		-0.003	-0.002		-0.009	-0.012
		[0.011]	[0.011]		[0.019]	[0.021]
FIRSTYEAR <sub>it</sub>			0.011			0.011
			[0.006]*			[0.006]*
$IMF_{it}$			0.011			0.008
			[0.007]*			[0.008]
$USINT_{it}$			-0.003			[0.001]***
			0.001			[0.003]
$LEFT_{it}$			-0.001			0.006
			[0.010]			[0.009]
$RIGHT_{it}$			0.000			0.005
			[0.009]			[0.009]
$OPEN_{it}$			0.000			0.000
			[0.000]*			[0.000]
$POLITY2_{it}$			-0.013			-0.034
			[0.014]			[0.020]*
Observations	805	805	805	805	805	805
Number of	35	35	35	35	35	35
countries	33	33	33	33	33	33
R-squared	0.03	0.05	0.07	0.13	0.15	0.17
CSD test	0.00	0.03	0.00	0.13	0.13	0.17
(p-value)	0.00	0.00	0.00	0.03	0.01	0.01

*Table 5.1* Continued B.  $FL_{i,t-1}$  and  $(FL_{i,t-1})^2$  reported separately

Estimators	WG	WG	WG	CCEP	CCEP	ССЕР
$FL_{i,t-1}$	0.081	0.096	0.074	-0.208	-0.178	-0.202
2	[0.038]**	[0.038]**	[0.040]*	[0.058]***		[0.071]***
$(FL_{i,t-1})^2$	-0.104	-0.113	-0.113	-0.154	-0.175	-0.174
	[0.043]**	[0.043]***		[0.066]**	[0.065]**	[0.064]***
$REG\_FL_{i,t-1}$	0.059	0.058	0.058	-0.144	-0.133	-0.148
$-FL_{i,t-1}$	[0.022]***	[0.022]***	[0.023]**	[0.042]***		[0.053]***
$BOP_{it}$		0.016	0.011		0.014	0.014
		[0.006]***	[0.006]*		[0.006]**	[0.005]**
$BANK_{it}$		-0.024	-0.020		-0.019	-0.018
		[0.007]***	[0.007]***		[0.010]*	[0.009]*
RECESSION <sub>it</sub>		-0.010	-0.009		-0.002	-0.004
		[0.008]	[0.008]		[0.007]	[0.008]
HINFL <sub>it</sub>		-0.003	-0.002		-0.014	-0.012
		[0.011]	[0.011]		[0.017]	[0.018]
FIRSTYEAR <sub>it</sub>			0.011			0.011
			[0.006]*			[0.006]*
$IMF_{it}$			0.012			0.008
			[0.007]*			[0.008]
$USINT_{it}$			-0.003			0.003
			[0.001]***			[0.004]
LEFTit			0.002			0.010
			[0.010]			[0.009]
$RIGHT_{it}$			0.003			0.008
n.			[0.009]			[0.008]
$OPEN_{it}$			0.000			0.000
			[0.000]*			[0.000]
POLITY2 <sub>it</sub>			-0.011			-0.038
и			[0.014]			[0.022]*
Observations	805	805	805	805	805	805
Number of	35	35	35	35	35	35
countries						
R-squared	0.03	0.05	0.08	0.20	0.22	0.24
CSD test	0.00	0.00	0.00	0.03	0.02	0.01
(p-value)						

Notes: 35 countries (original dataset), 1973–96. Dependent variable is  $\Delta FL_{it}$ . Using normal one-way within it groups estimator (WG) and Pesaran (2006)'s CCEP estimator, Table 5.1 A/B presents new results corresponding to models in Table 7 in Abiad and Mody (2005) with the addition of  $POLITY2_{it}$ . Table 5.1A reports results for  $FL_{i,t-1} \times (1-FL_{i,t-1})$ , while Table 5.1B reports results for  $FL_{i,t-1}$  and  $FL_{i,t-1}^2$  separately. The within R-squared is reported. Nonrobust standard errors are reported for WG estimates, while panelrobust standard errors are reported for CCEP estimates. CSD tests the null hypothesis of cross section independence in the panel data models using the test following Pesaran (2004).

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Estimators	WG	WG	CCEP	CCEP
$\overline{FL_{i,t-1}}$	0.074	0.092	-0.202	-0.175
	[0.040]*	[0.040]**	[0.071]***	[0.078]**
$(FL_{i,t-1})^2$	-0.113	-0.201	-0.174	-0.105
	[0.043]***	[0.053]***	[0.064]***	[0.066]
$FL_{i,t-1} \times Y_{i,t-1}$		0.007		-0.009
-,		[0.002]***		[0.004]**
$REG\_FL_{i,t-1} - FL_{i,t-1}$	0.058	0.063	-0.148	-0.094
.,,	[0.023]**	[0.023]***	[0.053]***	[0.079]
$BOP_{it}$	0.011	0.011	0.014	0.016
	[0.006]*	[0.006]*	[0.005]**	[0.005]***
BANK <sub>it</sub>	-0.020	-0.023	-0.018	-0.016
	[0.007]***	[0.007]***	[0.009]*	[0.009]*
RECESSION <sub>it</sub>	-0.009	-0.010	-0.004	-0.004
,,	[0.008]	[0.008]	[0.008]	[0.008]
HINFL <sub>it</sub>	-0.002	-0.004	-0.012	-0.015
	[0.011]	[0.011]	[0.018]	[0.018]
FIRSTYEAR <sub>it</sub>	0.011	0.011	0.011	0.011
-	[0.006]*	[0.006]*	[0.006]*	[0.006]*
$IMF_{it}$	0.012	0.012	0.008	0.009
,,,	[0.007]*	[0.007]*	[0.008]	[0.008]
USINT <sub>it</sub>	-0.003	-0.003	0.003	0.006
	[0.001]***	[0.001]***	[0.004]	[0.003]**
LEFT <sub>it</sub>	0.002	0.001	0.010	0.011
	[0.010]	[0.010]	[0.009]	[0.010]
RIGHT <sub>it</sub>	0.003	0.003	0.008	0.006
	[0.009]	[0.009]	[0.008]	[0.009]
$OPEN_{it}$	0.000	0.000	0.000	0.000
	[0.000]*	[0.000]**	[0.000]	[0.000]
POLITY2 <sub>it</sub>	-0.011	-0.010	-0.038	-0.039
	[0.014]	[0.014]	[0.022]*	[0.018]**
Observations	805	805	805	805
Number of countries	35	35	35	35
R-squared	0.08	0.09	0.24	0.25

Table 5.2 Within estimates: Alternative specification (Equations 5 and 6)

Notes: This table, based on the original dataset, presents new results corresponding to models in Table 8 in AM except for the addition of *POLITY2*<sub>it</sub>. See Table 5.1 for further notes.

0.00

0.00

0.01

0.01

CSD test (p-value)

CCEP estimates of Table 5.3 find less evidence for FLi,t-1, OPENit and  $OPEN_{it} \times FL_{i,t-1}$ . It confirms the negative effect of  $REG\_FL_{i,t-1} - FL_{i,t-1}$  on policy reform. <sup>97</sup> A positive effect of  $FIRSTYEAR_{it}$  and a negative effect of its interaction term with  $FL_{i,t-1}$  are observed, highlighting that new

*Table 5.3* Within estimates: Alternative specification (Equation 8)

Estimators	WG	CCEP	
$\overline{FL_{i,t-1}}$	-0.009	-0.175	
<i>Y</i>	[0.072]	[0.121]	
$(FL_{i,t-1})^2$	-0.011	-0.143	
7	[0.073]	[0.076]*	
$REG_{FL_{i,t-1}} - FL_{i,t-1}$	0.025	-0.147	
,	[0.023]	[0.055]*	
$(REG - FL_{i,t-1} - FL_{i,t-1}) \times FL_{i,t-1}$	0.330	0.094	
	[0.086]***	[0.098]	
$BOP_{it}$	0.020	0.014	
	[0.010]**	[0.010]	
$BOP_{it} \times FL_{i,t-1}$	-0.029	-0.009	
	[0.019]	[0.022]	
$BANK_{it}$	-0.023	-0.023	
	[0.013]*	[0.016]	
$BANK_{it} \times FL_{i,t-1}$	0.004	0.011	
	[0.027]	[0.026]	
RECESSION <sub>it</sub>	-0.015	-0.006	
	[0.012]	[0.014]	
$RECESSION_{it} \times FL_{i,t-1}$	0.020	0.008	
	[0.023]	[0.024]	
HINFL <sub>it</sub>	0.030	0.014	
	[0.015]*	[0.026]	
$HINFL_{it} \times FL_{i,t-1}$	-0.156	-0.105	
	[0.043]***	[0.073]	
FIRSTYEAR <sub>it</sub>	0.028	0.027	
	[0.010]***	[0.012]*	
$FIRSTYEAR_{it} \times FL_{i,t-1}$	-0.049	-0.046	
D CE	[0.020]**	[0.027]*	
$IMF_{it}$	0.020	0.011	
DATE FI	[0.009]**	[0.008]	
$IMF_{it} \times FL_{i,t-1}$	-0.050	-0.024	
$USINT_{it}$	[0.026]* -0.003	[0.018]	
USIN I it	[0.001]***	-0.001 [0.005]	
$LEFT_{it}$	-0.025	-0.019	
LEF I it	[0.014]*	[0.014]	
$LEFT_{it} \times FL_{i,t-1}$	0.068	0.076	
$LLI_{1t} \wedge IL_{i,t-1}$	[0.034]**	[0.039]*	
$RIGHT_{it}$	0.006	0.008	
Inoill II	[0.012]	[0.012]	
$RIGHT_{it} \times FL_{i,t-1}$	0.020	0.025	
11 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	[0.032]	[0.039]	
OPEN <sub>it</sub>	0.001	0.001	
OI DI'IL	0.001	0.001	

mators	WG	CCEP
$EN_{it} \times FL_{i,t-1}$	-0.001	-0.001
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	[0.000]***	[0.001]
.ITY2 <sub>it</sub>	-0.030	-0.043
	[0.018]*	[0.031]
$LITY2_{it} \times FL_{i,t-1}$	0.002	0.001
. ,,, 1	[0.002]	[0.003]
ervations	805	805
nber of countries	35	35
quared	0.14	0.27
test (p-value)	0.00	0.01
ı.	**	-

Table 5.3 Continued

Notes: This table, based on the original dataset, presents new results corresponding to models in Table 9 in AM except for the addition of POLITY2it. See Table 5.1 for further notes.

governments in their first year are likely to trigger reform, especially when the extent of financial liberalization is still at an early stage. The effect of the interaction between  $LEFT_{it}$  and  $FL_{i,t-1}$  is also shown to be positive.

The discrepancy between the WG estimates and CCEP estimates in the above study has pointed to the fundamental significance of relaxing assumptions on the error term. One may wonder which is more important, controlling for serial correlation in the errors or adjusting for cross section error dependence? To what extent does each relaxation make the results different from those associated with error independence? Answers may be found from Table 5.4, which reports the WG estimates with panel-robust standard errors, controlling for serial correlation of errors only, and the CCEP estimates with non-robust standard errors, controlling for cross section error dependence only. As it stands, both are important. Nevertheless, the quantitatively larger effects (coefficients) and much larger  $R^2$  associated with the CCEP estimates than with the WG estimates may reflect that controlling for cross-country correlation is an especially crucial step for this context. One may notice from Table 5.4 that, suggested by either the WG estimates or CCEP estimates, the ideology and economic and political structure in general appear to have a substantial influence on policy change, especially for  $LEFT_{it}$  and  $OPEN_{it}$ . This has raised a methodological concern that insufficient consideration of error dependence could lead to misleading findings.

 $\it Table~5.4~$  Error dependence across countries and over time considered separately

A. Within estimates corresponding to Table 5.1B

Estimators	WG	WG	WG	CCEP	CCEP	CCEP
$FL_{i,t-1}$	0.081	0.096	0.074	-0.208	-0.178	-0.202
	[0.049]	[0.045]**	[0.053]	[0.056]***	[0.057]***	[0.059]***
$(FL_{i,t-1})$	-0.104	-0.113	-0.113	-0.154	-0.175	-0.174
	[0.046]**	[0.045]**	[0.051]**	[0.049]***	[0.050]***	[0.050]***
$REG\_FL_{i,t-1}$	0.059	0.058	0.058	-0.144	-0.133	-0.148
$-FL_{i,t-1}$	[0.025]**	[0.027]**	[0.027]**	[0.037]***	[0.037]***	[0.040]***
$BOP_{it}$		0.016	0.011		0.014	0.014
		[0.006]**	[0.006]*		[0.006]**	[0.006]**
$BANK_{it}$		-0.024	-0.020		-0.019	-0.018
		[0.009]**	[0.009]**		[0.007]***	[0.007]**
RECESSION <sub>it</sub>		-0.010	-0.009		-0.002	-0.004
		[0.010]	[0.009]		[0.008]	[0.008]
HINFL <sub>it</sub>		-0.003	-0.002		-0.014	-0.012
		[0.019]	[0.020]		[0.010]	[0.011]
FIRSTYEARit			0.011			0.011
			[0.006]*			[0.006]*
$IMF_{it}$			0.012			0.008
			[0.009]			[0.007]
$USINT_{it}$			-0.003			0.003
			[0.001]**			[0.003]
LEFT <sub>it</sub>			0.002			0.010
**			[0.008]			[0.011]
$RIGHT_{it}$			0.003			0.008
			[0.008]			[0.010]
$OPEN_{it}$			0.000			0.000
			[0.000]*			[0.000]
POLITY2 <sub>it</sub>			-0.011			-0.038
102111211			[0.013]			[0.015]***
Observations	805	805	805	805	805	805
Number of countries	35	35	35	35	35	35
R-squared	0.03	0.05	0.08	0.20	0.22	0.24
CSD test (p-value)	0.00	0.00	0.00	0.03	0.02	0.01

*Notes:* Panelrobust standard errors are reported for WG estimates, whilst non-robust standard errors are reported for CCEP estimates. See Table 5.1 for further notes.

Table 5.4 Continued B. Within estimates corresponding to Table 5.2

Estimators	WG	WG	ССЕР	CCEP
$\overline{FL_{i,t-1}}$	0.074	0.092	-0.202	-0.175
,,,, 1	[0.053]	[0.053]*	[0.059]***	[0.062]***
$(FL_{i,t-1})^2$	-0.113	-0.201	-0.174	-0.105
,	[0.051]**	[0.068]***	[0.050]***	[0.055]*
$FL_{i,t-1} \times Y_{i,t-1}$		0.007	. ,	-0.009
1,1 1 1,1 1		[0.003]**		[0.003]***
$REG\_FL_{i,t-1} - FL_{i,t-1}$	0.058	0.063	-0.148	-0.094
- 1,1 1 1,1 1	[0.027]**	[0.025]**	[0.040]***	[0.047]**
$BOP_{it}$	0.011	0.011	0.014	0.016
· n	[0.006]*	[0.006]*	[0.006]**	[0.006]**
$BANK_{it}$	-0.020	-0.023	-0.018	-0.016
п	[0.009]**	[0.009]**	[0.007]**	[0.007]**
RECESSION <sub>it</sub>	-0.009	-0.010	-0.004	-0.004
i.	[0.009]	[0.009]	[0.008]	[0.008]
$HINFL_{it}$	-0.002	-0.004	-0.012	-0.015
ıı	[0.020]	[0.020]	[0.011]	[0.011]
FIRSTYEARit	0.011	0.011	0.011	0.011
n	[0.006]*	[0.006]*	[0.006]*	[0.006]*
$IMF_{it}$	0.012	0.012	0.008	0.009
11	[0.009]	[0.009]	[0.007]	[0.007]
USINT <sub>it</sub>	-0.003	-0.003	0.003	0.006
и	[0.001]**	[0.001]**	[0.003]	[0.003]*
LEFT <sub>it</sub>	0.002	0.001	0.010	0.011
11	[0.008]	[0.007]	[0.011]	[0.011]
RIGHT <sub>it</sub>	0.003	0.003	0.008	0.006
11.	[0.008]	[0.009]	[0.010]	[0.010]
$OPEN_{it}$	0.000	0.000	0.000	0.000
11	[0.000]*	[0.000]**	[0.000]	[0.000]
POLITY2 <sub>it</sub>	-0.011	-0.010	-0.038	-0.039
· IL	[0.013]	[0.013]	[0.015]***	[0.015]***
Observations	805	805	805	805
Number of countries	35	35	35	35
R-squared	0.08	0.09	0.24	0.25
CSD test (p-value)	0.00	0.00	0.01	0.01

 $\it Note:$  Panelrobust standard errors are reported for WG estimates, whilst non-robust standard errors are reported for CCEP estimates. See Table 5.1 for further notes.

Table 5.4 ContinuedC. Within estimates corresponding to Table 5.3

Estimators	WG	CCEP
$\overline{FL_{i,t-1}}$	-0.009	-0.175
-,	[0.061]	[0.105]*
$(FL_{i,t-1})^2$	-0.011	-0.143
-,,-	[0.068]	[0.104]
$REG\_FL_{i,t-1} - FL_{i,t-1}$	0.025	-0.147
-,	[0.029]	[0.040]***
$(REG - FL_{i,t-1} - FL_{i,t-1}) \times FL_{i,t-1}$	0.330	0.094
The state of the s	[0.082]***	[0.116]
$BOP_{it}$	0.020	0.014
	[0.010]*	[0.010]
$BOP_{it} \times FL_{i,t-1}$	-0.029	-0.009
	[0.021]	[0.019]
BANK <sub>it</sub>	-0.023	-0.023
	[0.016]	[0.013]*
$BANK_{it} \times FL_{i,t-1}$	0.004	0.011
	[0.025]	[0.026]
RECESSION <sub>it</sub>	-0.015	-0.006
	[0.015]	[0.012]
$RECESSION_{it} \times FL_{i,t-1}$	0.020	0.008
	[0.022]	[0.023]
HINFL <sub>it</sub>	0.030	0.014
	[0.027]	[0.015]
$HINFL_{it} \times FL_{i,t-1}$	-0.156	-0.105
	[0.058]**	[0.043]**
FIRSTYEAR <sub>it</sub>	0.028	0.027
	[0.010]***	[0.009]***
$FIRSTYEAR_{it} \times FL_{i,t-1}$	-0.049	-0.046
	[0.024]**	[0.019]**
IMF <sub>it</sub>	0.020	0.011
n	[0.011]*	[0.009]
$IMF_{it} \times FL_{i,t-1}$	-0.050	-0.024
	[0.022]**	[0.026]
USINT <sub>it</sub>	-0.003	-0.001
I DEC	[0.001]**	[0.004]
LEFT <sub>it</sub>	-0.025	-0.019
	[0.014]*	[0.014]
$LEFT_{it} \times FL_{i,t-1}$	0.068	0.076
DICHT	[0.037]*	[0.034]**
RIGHT <sub>it</sub>	0.006	0.008
DICIT FI	[0.011]	[0.013]
$RIGHT_{it} \times FL_{i,t-1}$	0.020	0.025
	[0.034]	[0.032]

Estimators	WG	CCEP
OPEN <sub>it</sub>	0.001	0.001
	[0.000]**	[0.000]**
$OPEN_{it} \times FL_{i,t-1}$	-0.001	-0.001
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	[0.000]**	[0.000]**
POLITY2 <sub>it</sub>	-0.030	-0.043
	[0.025]	[0.018]**
$POLITY2_{it} \times FL_{i,t-1}$	0.002	0.001
,	[0.002]	[0.002]
Observations	805	805
Number of countries	35	35
R-squared	0.14	0.27
CSD test (p-value)	0.00	0.01

Table 5.4 Continued

Notes: Panelrobust standard errors are reported for WG estimates, whilst non-robust standard errors are reported for CCEP estimates. See Table 5.1 for further notes.

In sum, the above analyses based on the augmented specifications in which POLITY2it is included, allowing for the possibility of error dependence across countries and over time, produce interesting findings. On the one hand, this chapter confirms the significant effects of crises and shocks on policy reform identified by AM. More specifically, it confirms negative effects of banking crises and high inflation, and does agree with AM that a new government in its first year and an IMF programme have a strong effect when financial sectors are highly repressed and a weaker effect thereafter. On the other hand, it differs from AM in the following three aspects. First, it shows that the significant effects of balance-of-payments crises and US interest rates found by AM are fragile. The second aspect is that it yields opposite findings to AM on the effects of domestic learning. It shows that the extent of policy reform is negatively rather than positively affected by the existing liberalization level, while the regional liberalization gap does not appear relevant. Third, it addresses the importance of the extent of democracy for the process of financial reform and identifies a negative effect of the extent of democracy on policy change.

## 5.3.2 Analysis on a larger dataset

This section makes an effort to explore if the findings are robust to a larger set of countries. It makes use of the Chinn-Ito index of financial openness (2006) which is available for 108 countries over 1970–2000. But the Chinn-Ito index measures only a country's degree of capital account openness, one aspect of six policy dimensions on which the creation of the AM is based. Moreover, the country coverage in this analysis is confined to the data availability of crisis variables taken from Bordo *et al.* (2000) which contains only 55 countries. Since most of the added countries are OECD countries (listed in the Appendix Table A5.2), the effects of factors like balance-of-payment crises, banking crises, IMF programmes and the extent of democracy are expected to be weaker. A variable description is presented in Appendix Table A5.1.

Tables 5.5A, 5.5B and 5.5C report the within groups estimates corresponding to Tables 5.1B, 5.2 and 5.3, respectively. As expected, these tables show weaker evidence for the effects of shocks, crises, ideology and economic and political structures on policy reform, except for US interest rates and high inflation. But, since the above analysis in general obtains findings consistent with AM on the effects of crises and shocks, more emphasis is placed on the robustness of the new findings regarding the negative effects of domestic learning and regional diffusion.

With a larger sample size, both the WG and CCEP estimates in these tables clearly indicate that policy reform is negatively linked to the level of liberalization,  $FL_{i,t-1}$ , at the 1% significance level. The tables further confirm that the effect of  $REG\_FL_{i,t-1} - FL_{i,t-1}$  on policy change is ambiguous. Removing the variable  $IMF_{i,t}$  doesn't alter the pattern of the results, as reported in Appendix Table A5.5 (A, B, C).

Hence, the findings summarized earlier on the negative effects of domestic learning and irrelevance of regional diffusion are largely supported by a larger sample of countries based on the Chinn-Ito index of capital account openness.

#### 5.4 Discussions

The above findings have several implications. The negative link between policy change and the liberalization level suggests a convergence in the extent of financial liberalization in the sense that countries with highly repressed financial sectors have more potential to embark on reform, while countries with a highly liberalized financial sector have greater status quo bias – the reform likelihood is "saturated" (AM). Vivid examples can easily be picked up from the financial liberalization process in East Asia in recent decades. Since the 1970s, countries or areas with levels of liberalization much lower than those of the main developed countries (the US or UK for example) like the Republic of Korea, Singapore, Hong

Table 5.5 Augmented dataset with Chinn-Ito measure (2006)

A. Within estimates corresponding to Table 5.1B

Estimators	WG	WG	WG	CCEP	CCEP	CCEP
$FL_{i,t-1}$	-0.168	-0.170	-0.185	-0.204	-0.214	-0.301
	[0.044]**	* [0.044]**	** [0.048]***	[0.069]***	[0.068]***	[0.086]***
$(FL_{i,t-1})^2$	0.052	0.053	0.070	0.087	0.092	0.164
	[0.037]	[0.037]	[0.039]*	[0.049]*	[0.049]*	[0.058]***
$REG\_FL_{i,t-1}$	-0.016	-0.018	0.007	0.048	0.044	0.063
$-FL_{i,t-1}$	[0.027]	[0.027]	[0.030]	[0.036]	[0.037]	[0.046]
$BOP_{it}$		0.002	0.003		-0.005	-0.006
		[0.007]	[0.007]		[0.007]	[0.008]
$BANK_{it}$		-0.010	-0.012		-0.008	-0.010
		[0.009]	[0.009]		[0.010]	[0.011]
RECESSION <sub>it</sub>		-0.001	0.004		0.001	0.002
		[0.007]	[0.007]		[800.0]	[0.009]
HINFL <sub>it</sub>		-0.018	-0.015		-0.009	-0.007
		[0.012]	[0.013]		[0.017]	[0.018]
FIRSTYEARit			0.000			0.001
			[0.007]			[0.005]
$IMF_{it}$			0.000			0.007
			[0.009]			[0.007]
$USINT_{it}$			-0.005			-0.002
			[0.001]***			[0.002]
LEFT <sub>it</sub>			-0.002			-0.010
			[0.010]			[0.010]
RIGHT <sub>it</sub>			0.000			-0.003
			[0.010]			[0.012]
$OPEN_{it}$			0.000			0.000
			[0.000]			[0.000]
POLITY2 <sub>it</sub>			-0.003			0.004
			[0.018]			[0.027]
Observations	1263	1262	1150	1263	1262	1150
Number of	55	55	53	55	55	53
countries						
R-squared	0.04	0.04	0.07	0.22	0.22	0.26
-						

Notes: 55 countries, 1973–97. Dependent variable is  $\Delta FL_{i,t}$ . Using normal one-way within groups estimator (WG) and Pesaran (2006)'s CCEP estimator, this table, based on a larger dataset associated with the Chinn-Ito measure (2006), presents new results corresponding to Table 5.1B. The within groups *R*-squared is reported. Variable descriptions are presented in the Appendix Table A5.1. Countries included are listed in the Appendix Table A5.2. Non-robust standard errors are reported for WG estimates, while panelrobust standard errors are reported for CCEP estimates.

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

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Table 5.5 ContinuedB. Within estimates corresponding to Table 5.2

Estimators	WG	WG	CCEP	CCEP
$\overline{FL_{i,t-1}}$	-0.185	-0.180	-0.301	-0.375
	[0.048]***	[0.048]***	[0.086]***	[0.122]***
$(FL_{i,t-1})^2$	0.070	0.028	0.164	0.138
.,,	[0.039]*	[0.046]	[0.058]***	[0.071]*
$FL_{i,t-1} \times Y_{i,t-1}$		0.003		0.002
1,72 2 1,72 2		[0.002]*		[0.004]
$REG\_FL_{i,t-1} - FL_{i,t-1}$	0.007	0.013	0.063	0.038
- 1,6 1 1,6 1	[0.030]	[0.030]	[0.046]	[0.058]
$BOP_{it}$	0.003	0.002	-0.006	-0.012
**	[0.007]	[0.007]	[0.008]	[0.010]
BANKit	-0.012	-0.011	-0.010	-0.002
	[0.009]	[0.009]	[0.011]	[0.013]
RECESSION <sub>it</sub>	0.004	0.005	0.002	0.002
и	[0.007]	[0.007]	[0.009]	[0.010]
HINFLit	-0.015	-0.018	-0.007	0.006
и	[0.013]	[0.013]	[0.018]	[0.017]
FIRSTYEARit	0.000	0.000	0.001	0.000
	[0.007]	[0.007]	[0.005]	[0.006]
$IMF_{it}$	0.000	0.000	0.007	0.010
11.	[0.009]	[0.009]	[0.007]	[0.007]
USINTit	-0.005	-0.005	-0.002	-0.002
u	[0.001]***	[0.001]***	[0.002]	[0.002]
LEFT <sub>it</sub>	-0.002	-0.004	-0.010	-0.013
и	[0.010]	[0.010]	[0.010]	[0.011]
RIGHT <sub>it</sub>	0.000	-0.002	-0.003	-0.008
ii ii	[0.010]	[0.010]	[0.012]	[0.017]
OPEN <sub>it</sub>	0.000	0.000	0.000	0.000
- 11	[0.000]	[0.000]	[0.000]	[0.001]
POLITY2 <sub>it</sub>	-0.003	-0.003	0.004	0.007
1 02111 <b>-</b> [[	[0.018]	[0.018]	[0.027]	[0.033]
Observations	1150	1150	1150	1150
Number of countries	53	53	53	53
R-squared	0.07	0.07	0.26	0.33

Note: See Table 5.5A for further notes.

Table 5.5 Continued C. Within estimates corresponding to Table 5.3

Estimators	WG	CCEP
$FL_{i,t-1}$	-0.360	-0.681
	[0.096]***	[0.255]**
$(FL_{i,t-1})^2$	0.255	0.448
,	[0.089]***	[0.232]*
$REG\_FL_{i,t-1} - FL_{i,t-1}$	-0.006	-0.009
	[0.031]	[0.057]
$(REG - FL_{i,t-1} - FL_{i,t-1}) \times FL_{i,t-1}$	0.274	0.436
	[0.107]**	[0.263]
$BOP_{it}$	-0.010	-0.013
	[0.012]	[0.017]
$BOP_{it} \times FL_{i,t-1}$	0.030	0.009
	[0.020]	[0.028]
$BANK_{it}$	-0.010	-0.002
	[0.014]	[0.024]
$BANK_{it} \times FL_{i,t-1}$	0.003	-0.002
	[0.025]	[0.036]
RECESSION <sub>it</sub>	0.006	0.003
	[0.011]	[0.012]
$RECESSION_{it} \times FL_{i,t-1}$	-0.008	-0.006
	[0.021]	[0.019]
HINFL <sub>it</sub>	0.041	0.046
	[0.018]**	[0.033]
$HINFL_{it} \times FL_{i,t-1}$	-0.254	-0.171
EID CEIVE A D	[0.054]***	[0.147]
FIRSTYEAR <sub>it</sub>	-0.008	-0.009
EIDCEVE AD EI	[0.011]	[0.009]
$FIRSTYEAR_{it} \times FL_{i,t-1}$	0.019	0.019
D.C.	[0.021]	[0.017]
$IMF_{it}$	-0.002	0.018
DATE FI	[0.011]	[0.012]
$IMF_{it} \times FL_{i,t-1}$	0.032	-0.006
LICINIT	[0.039] -0.005	[0.050] -0.003
USINT <sub>it</sub>	[0.001]***	[0.003]
LEFT <sub>it</sub>	-0.019	-0.045
LEF1 it	[0.016]	[0.028]
$LEFT_{it} \times FL_{i,t-1}$	0.028	0.028
$LLI_{lt} \wedge L_{l,t-1}$	[0.031]	[0.051]
$RIGHT_{it}$	0.004	-0.015
11.011.11	[0.015]	[0.031]
$RIGHT_{it} \times FL_{i,t-1}$	-0.013j	0.022
110111 <sub>11</sub> \ 111 <sub>1</sub> ,t-1	[0.031]	[0.048]
	[0.001]	[0.010]

Table 5.5 Continued

Estimators	WG	CCEP
OPEN <sub>it</sub>	0.001	0.000
	[0.000]*	[0.001]
$OPEN_{it} \times FL_{i,t-1}$	0.000	0.000
1,1 1	[0.000]	[0.000]
POLITY2 <sub>it</sub>	-0.010	0.008
	[0.020]	[0.041]
$POLITY2_{it} \times FL_{i,t-1}$	0.001	0.000
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	[0.002]	[0.007]
Observations	1150	1150
Number of countries	53	53
R-squared	0.10	0.35

Note: See Table 5.5A for further notes.

Kong, Thailand and China have actively and progressively liberalized their financial systems.

This research finds that the significant effect of a regional liberalization gap on policy changes is hard to identify, although two opposite views have been proposed in the literature. AM suggest that countries with a level of liberalization far from that of the regional leader are found to be more likely to undertake reform, perhaps due to competitive pressure. The larger the gap in terms of liberalization levels within a region, the fiercer the competition amongst these countries for international capital and technologies. In contrast, Axelrod (1997) documents that the more similar a country is to its neighbouring nations in terms of economic, social and political developments, the more likely it is that it "adopts one of the neighbour's traits" while Simmons and Elkins (2004) predict that "governments' liberalization policies will be influenced by the policies of their most important foreign economic competitors". This line of research in general predicts that a greater gap from the regional leader tends to be associated with less incentive to compete and less chance to catch up with the regional leader in the short run, therefore a status quo bias is maintained.

In accordance with AM, the pattern suggested by their Table 3 that the coefficient on  $REG\_FL_{i,t-1} - FL_{i,t-1}$  is positive and the coefficient on the interaction term is negative although insignificant, seems to be in line with the convergence story identified earlier in the sense that countries with lower levels of liberalization relative to that of the regional leader

are more inclined to initiate reform, while the reform momentum fades as the liberalization gap from the regional leader shrinks. It implies that a greater gap from the regional leader tends to be associated with more incentives to engage in reform.

The finding concerning the negative effect of the extent of democracy on policy change is consistent with Fernandez and Rodrik (1991), who argue that there is uncertainty with respect to the distribution of benefits and costs from reform. They contrast democratic societies in which the majority would vote against the reform due to the presence of this uncertainty, just for safety, with authoritarian societies like Taiwan and the Republic of Korea (early 1960s), Chile (1970s) and Turkey (1980s), where "reform was imposed by the authoritarian regimes and against the wishes of business." The status quo appears to be more easily dislodged in autocratic societies than in democratic societies.

Chapter 4 shows that democratization is typically followed by financial development at least in the short run, which is in line with the argument of Rodrik and Wacziarg (2005) in terms of a short-run boost in economic growth and a decline in growth volatility after democratization. Together with the findings of Chapter 4, a clear picture seems to appear to us: a short-run increase in financial development emerges after democratization; however, once democracy has been established and enhanced, the extent of democracy may exert negative effects on the extent to which governments undertake financial reform.

This finding tends to suggest that ideology and political structure can have a substantial influence on policy change, contrary to some extent to the findings of AM, who claim that ideology and economic and political structure have a limited influence on policy change.

#### 5.5 Conclusion

This chapter studies the forces that lead governments to undertake reforms to enhance financial development, based on AM. Given the particular nature of the dependent variable, it suggests replacing the ordered logit technique used by AM with a within groups approach, allowing for the possibility of error dependence across countries and over time, which seems of especial importance when the effects of domestic learning and regional diffusion in the process of financial liberalization are studied. Based on these innovations, the analysis shows that some of the AM findings are not robust to error dependence and the estimation method. It has produced the following significant findings, shedding new light on the political economy of financial reform.

This chapter finds that policy change in a country is negatively rather than positively associated with the initial extent of liberalization level, and the distance behind the regional leader. This indicates convergence in the extent of financial liberalization, in the sense that countries with highly repressed financial sectors have more potential to embark on reform, whilst countries with a highly liberalized financial sector have greater status quo bias.

This analysis suggests that some of AM findings on the effects of shocks and crises are robust whilst others are fragile. More specifically, it confirms the negative effects of banking crises and high inflation. It also agrees with AM that new governments in their first year and IMF programmes have a strong effect when financial sectors are highly repressed, and a weaker effect thereafter. But it finds no evidence in support of the effects of balance-of-payments crises and US interest rates on policy change.

Furthermore, it shows that economic and political structure and ideology can have a substantial influence on policy change, and the extent of democracy, the added variable, has a significantly negative effect on policy reform.

# Appendix tables

*Table A5.1* The variables (mainly used with the larger dataset)

Variable	Description	Source
FL	It is the financial liberalization index, produced by rescaling the Chinn-Ito index to interval [0, 1]. The Chinn-Ito index, the <i>KAOPEN</i> index, measures a country's degree of capital account openness, taking on higher values the more open the country is to cross-border capital transactions.	Chinn and Ito (2006)
Y	GDP per capita in PPP terms.	Penn World Table 6.2
ВОР	As in Abiad and Mody (2005) (originally taken from Bordo <i>et al.</i> (2000)), it is the balance-of-payments crisis variable identified by "a forced change in parity, abandonment of a pegged exchange rate, or an international rescue," or if an index of exchange market pressure (a weighted average of exchange rate, reserve and interest rate changes) exceeds a critical threshold of one and a half standard deviations above its mean. It is set equal to 1 if a balance of payments crisis has occurred within the past two years, and 0 otherwise.	Bordo <i>et al</i> . (2000)
BANK	As in Abiad and Mody (2005) (originally taken from Bordo <i>et al.</i> (2000)), it is the bankig crisis identified by periods of "financial distress resulting in the erosion of most or all of aggregate banking system capital". It is set equal to 1 if a banking crisis has occurred within the past two years, and 0 otherwise.	Bordo <i>et al.</i> (2000)
RECESSION	As in Abiad and Mody (2005), it is the recession dummy variable, set equal to 1 where the annual real GDP growth rate is negative, and 0 otherwise.	Penn World Table 6.2 (PWT62) (Heston <i>et al.</i> , 2006)

Table A5.1 Continued

Variable	Description	Source
HINFL	As in Abiad and Mody (2005), it is the high inflation dummy variable, set equal to 1 where the annual inflation exceeds 50%, and 0 otherwise.	World Bank World Development Indicators (WDI), 2008
FIRSTYEAR	Based on the YRSOFFC variable (how many years the chief executive has been in office), it is the first year in office dummy as in Abiad and Mody (2005).	World Bank's Database of Political Institutions (2005)
IMF	As in Abiad and Mody (2005), it is the IMF programme dummy variable constructed using the programme dates from the IMF "History of Lending Arrangements".	Abiad and Mody (2005), and IMF's "History of Lending".
USINT	As in Abiad and Mody (2005), it is the US Treasury Bill rate used as the world interest rate.	IMF's International Financial Statistics (2005)
LEFT	As in Abiad and Mody (2005), it denotes a left-wing government where its associated party is named or described as "communist", "socialist", "Social Democratic" or "left-wing".	World Bank's Database of Political Institutions (2005)
RIGHT	As in Abiad and Mody (2005), it denotes the right-wing government where its associated party is named or described as "conservative", or "right-wing".	World Bank's Database of Political Institutions (2005)
OPEN	The sum of exports and imports over GDP (at current prices), averaged over 1973–97.	Penn World Table 6.2
DEMO	Index of democracy. It is called combined the polity score, and is the democracy score minus the autocracy score, averaged over 1973–97. It is also used with the original dataset. The index has been converted to range from 0 to 1.	PolityIV Database (Marshall and Jaggers 2008)

East As	ia	South	Asia	OECD	countries
CHN	China	BGD	Bangladesh*	AUS	Australia*
HKG	Hong Kong	IND	India*	AUT	Austria
IDN	Indonesia*	LKA	Sri Lanka*	BEL	Belgium
KOR	Korea, Rep.*	NPL	Nepal*	CAN	Canada*
MYS	Malaysia*	PAK	Pakistan*	CHE	Switzerland
PHL	Philippines*			DEU	Germany*
SGP	Singapore*			DNK	Denmark
THA	Thailand*			ESP	Spain
TWN	Taiwan*			FIN	Finland
				FRA	France*
Latin America		Middle	Middle East		United Kingdom*
& Caril	obean	& Afric	& Africa		Greece
ARG	Argentina*	EGY	Egypt*	IRL	Ireland
BRA	Brazil*	GHA	Ghana*	ISL	Iceland
CHL	Chile*	ISR	Israel*	ITA	Italy*
COL	Colombia*	MAR	Morocco*	JPN	Japan*
CRI	Costa Rica	NGA	Nigeria	NLD	Netherlands
ECU	Ecuador	ZAF	South Africa*	NOR	Norway
JAM	Jamaica	ZWE	Zimbabwe*	NZL	New Zealand*
MEX	Mexico*			PRT	Portugal
PER	Peru*			SWE	Sweden
PRY	Paraguay			TUR	Turkey*
URY	Uruguay			USA	USA*
VEN	Venezuela*				

Table A5.2 The list of countries in the augmented dataset

Note: Countries with \* are in the original dataset of Abiad and Mody (2005).

Table A5.3 Unit root test in heterogeneous panels

Variables	F	FL G		DP	OP	OPEN	
Trend	Yes	No	Yes	No	Yes	No	
Maddala and	43.82	25.39	77.84	52.81	75.23	64.11	
Wu (1999)'s Fisher test	[0.99]	[1.00]	[0.24]	[0.94]	[0.31]	[0.68]	
Pesaran (2007)'s cross sectionally augmented Fisher test	74.85	50.23	67.65	54.98	63.01	62.31	

Notes: Maddala and Wu (1999)'s Fisher test is for the case of cross sectionally independent error. Under the null of a unit root, the test statistic is asymptotically distributed as a standard normal. Pesaran (2007)'s test is the Maddala and Wu (1999)'s Fisher test applied to the cross sectionally augmented Dickey-Fuller regression. The 10% critical values provided by H.M. Pesaran for the pair of N = 30 and T = 30 is 82.89 with a trend and 82.18 without a trend.

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*Table A5.4* Corrected version of Tables 7, 8 and 9 in Abiad and Mody (2005) A. Corrected version of Table 7 in Abiad and Mody (2005)

Country dummy						
included	No	No	No	Yes	Yes	Yes
$\overline{FL_{i,t-1}}$	3.933	4.562	4.106	6.794	7.284	6.574
×(1 –	[4.39]***	[4.94]***	[4.48]***	[4.44]***	[4.83]***	[4.07]***
$FL_{i,t-1}$ )						
$REG\_FL_{i,t-1}$	1.032	1.050	1.195	2.285	2.089	2.529
$-FL_{i,t-1}$	[4.18]***	[3.76]***	[3.93]***	[3.23]***	[2.71]***	[3.21]***
$BOP_{it}$		0.521	0.430		0.550	0.475
		[2.60]***	[2.21]**		[2.19]**	[1.94]*
$BANK_{it}$		-1.020	-0.983		-0.995	
		[2.74]***			[2.68]***	
RECESSION <sub>it</sub>		-0.018	0.002		-0.055	-0.026
		[0.05]	[0.00]		[0.15]	[0.07]
HINFL <sub>it</sub>		-0.136	-0.238		-0.317	
		[0.35]	[0.62]		[0.50]	[0.48]
FIRSTYEAR <sub>it</sub>			0.178			0.234
			[0.78]			[0.87]
<i>IMF</i> <sub>it</sub>			0.327			0.253
			[1.81]*			[0.98]
USINT <sub>it</sub>			-0.071			-0.090
			[1.82]*			[2.13]**
$LEFT_{it}$			0.282			-0.035
			[1.14]			[0.10]
RIGHT <sub>it</sub>			0.153			-0.132
			[0.85]			[0.39]
OPEN <sub>it</sub>			-0.001			0.009
			[1.01]			[1.14]
Observations	805	805	805	805	805	805
Number of countries	35	35	35	35	35	35

*Notes*: This is a corrected version of Table 7 in Abiad and Mody (2005), which treated Singapore as an African country and South Africa as an East Asian country. Except for the difference in magnitude, this table shows a similar pattern to Table 7 in Abiad and Mody (2005). Robust t-statistics in brackets.

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Table A5.4 Continued B. Corrected version of Table 8 in Abiad and Mody (2005)

Country dummy				
included	No	No	Yes	Yes
$FL_{i,t-1}$	4.110	4.307	6.546	7.189
	[4.49]***	[4.69]***	[4.02]***	[4.34]***
$(FL_{i,t-1})^2$	-4.052	-5.720	-6.638	-9.893
	[3.94]***	[4.19]***	[3.35]***	[3.90]***
$FL_{i,t-1} \times Y_{i,t-1}$		0.095		0.247
1,5 2 1,5 2		[2.34]**		[2.55]**
$REG\_FL_{i,t-1} - FL_{i,t-1}$	1.231	0.965	2.465	2.714
1,72 2 1,72 2	[2.72]***	[1.88]*	[2.09]**	[2.45]**
$BOP_{it}$	0.429	0.476	0.473	0.457
	[2.19]**	[2.40]**	[2.02]**	[1.95]*
$BANK_{it}$	-0.985	-0.976	-0.932	-1.007
	[2.70]***	[2.70]***	[2.70]***	[2.92]***
RECESSION <sub>it</sub>	-0.002	-0.005	-0.027	0.001
	[0.00]	[0.01]	[0.07]	[0.00]
HINFL <sub>it</sub>	-0.235	-0.206	-0.303	-0.398
	[0.63]	[0.53]	[0.48]	[0.64]
FIRSTYEAR <sub>it</sub>	0.178	0.141	0.233	0.245
	[0.78]	[0.62]	[0.86]	[0.91]
<i>IMF</i> <sub>it</sub>	0.332	0.414	0.255	0.288
	[1.74]*	[2.12]**	[0.96]	[1.06]
USINT <sub>it</sub>	-0.070	-0.074	-0.090	-0.086
	[1.80]*	[1.87]*	[2.07]**	[1.99]**
LEFT <sub>it</sub>	0.280	0.190	-0.029	-0.098
	[1.15]	[0.82]	[0.08]	[0.28]
RIGHT <sub>it</sub>	0.146	0.153	-0.125	-0.072
	[0.77]	[0.84]	[0.38]	[0.21]
OPEN <sub>it</sub>	-0.001	0.000	0.009	0.013
	[1.00]	[0.04]	[1.14]	[1.40]
Observations	805	805	805	805
Number of countries	35	35	35	35

Notes: This table corresponds to the Table 8 in Abiad and Mody (2005), which treated Singapore as an African country and South Africa as an East Asian country, and consequently indicates that IMF in column 1 and REG\_FL-FL in columns 2 and 3 are insignificant. Robust t-statistics in brackets.

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

Table A5.4 ContinuedC. Corrected version of Table 9 in Abiad and Mody (2005)

Country dummy included	No	Yes
$\overline{FL_{i,t-1}}$	3.719	3.475
	[2.16]**	[1.61]
$(FL_{i,t-1})^2$	-3.827	-1.82
-,-	[2.19]**	[0.70]
$REG_{FL_{i,t-1}} - FL_{i,t-1}$	0.508	1.459
· · · · · · · · · · · · · · · · · · ·	[0.81]	[1.21]
$(REG - FL_{i,t-1} - FL_{i,t-1}) \times FL_{i,t-1}$	2.87	10.256
	[1.51]	[3.95]***
$BOP_{it}$	0.811	0.809
	[2.69]***	[1.89]*
$BOP_{it} \times FL_{i,t-1}$	-0.892	-0.989
·	[1.47]	[1.11]
BANK <sub>it</sub>	-0.883	-1.043
	[1.65]*	[1.85]*
$BANK_{it} \times FL_{i,t-1}$	-0.093	0.016
•	[0.09]	[0.01]
RECESSION <sub>it</sub>	-0.487	-0.503
	[1.12]	[0.91]
$RECESSION_{it} \times FL_{i,t-1}$	1.235	1.164
,	[1.43]	[1.21]
HINFL <sub>it</sub>	0.292	0.37
	[0.64]	[0.50]
$HINFL_{it} \times FL_{i,t-1}$	-2.203	-3.471
•	[1.65]*	[2.35]**
FIRSTYEAR <sub>it</sub>	0.566	0.592
	[1.98]**	[1.86]*
$FIRSTYEAR_{it} \times FL_{i,t-1}$	-1.163	-1.055
·	[1.84]*	[1.45]
$IMF_{it}$	0.775	0.65
	[2.94]***	[1.83]*
$IMF_{it} \times FL_{i,t-1}$	-1.523	-1.741
	[2.26]**	[1.94]*
USINT <sub>it</sub>	-0.078	-0.091
	[1.93]*	[2.10]**
LEFT <sub>it</sub>	-0.116	-0.616
	[0.29]	[1.16]
$LEFT_{it} \times FL_{i,t-1}$	1.049	1.282
	[1.01]	[1.09]
RIGHT <sub>it</sub>	0.257	0.192
	[0.87]	[0.50]
$RIGHT \times FL_{i,t-1}$	0.087	-0.221
	[0.09]	[0.19]

Country dummy included	No	Yes
$ {OPEN_{it}} $ $ OPEN_{it} \times FL_{i \ t-1} $	3.719 [2.16]** -3.827	3.475 [1.61] -1.82
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	[2.19]**	[0.70]
Observations Number of countries	805 35	805 35

Table A5.4 Continued

Notes: This table corresponds to the Table 9 in Abiad and Mody (2005), which treated Singapore as an African country and South Africa as an East Asian country, and consequently indicates that  $(REG\_FL - FL) \times FL$ is significant but *OPEN* and *OPEN*  $\times$  *FL* are insignificant in column 1, and FL, OPEN and OPEN  $\times$  FL are significant in column 2. Robust t-statistics in brackets.

Table A5.5 Augmented dataset with Chinn-Ito measure (2006): IMF dropped A. Within estimates corresponding to Table 5.1B

Estimators	WG	WG	WG	CCEP	CCEP	CCEP
$\overline{FL_{i,t-1}}$	-0.168	-0.170	-0.174	-0.204	-0.214	-0.261
	[0.044]***	[0.044]***	[0.045]***	[0.069]***	[0.068]***	[0.084]***
$(FL_{i,t-1})^2$	0.052	0.053	0.056	0.087	0.092	0.119
	[0.037]	[0.037]	[0.038]	[0.049]*	[0.049]*	[0.059]**
$REG\_FL_{i,t-1}$	-0.016	-0.018	0.002	0.048	0.044	0.044
$-FL_{i,t-1}$	[0.027]	[0.027]	[0.028]	[0.036]	[0.037]	[0.036]
$BOP_{it}$	0.002	0.001	-0.005	-0.006		
	[0.007]	[0.007]	[0.007]	[0.008]		
$BANK_{it}$	-0.010	-0.010	-0.008	-0.009		
	[0.009]	[0.009]	[0.010]	[0.011]		
RECESSION <sub>it</sub>	-0.001	0.000	0.001	0.001		
	[0.007]	[0.007]	[0.008]	[0.009]		
$HINFL_{it}$	-0.018	-0.017	-0.009	-0.009		
	[0.012]	[0.013]	[0.017]	[0.017]		
FIRSTYEARit	0.000	0.001	[0.007]	[0.006]		
$USINT_{it}$	-0.005	-0.002				
	[0.001]***	[0.002]				
LEFT <sub>it</sub>	-0.004	-0.008				
	[0.010]	[0.009]				
$RIGHT_{it}$	0.000	0.000				
	[0.010]	[0.011]				

<sup>\*</sup> significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%.

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Table A5.5 Continued

Estimators	WG	WG	WG	CCEP	CCEP	CCEP
OPEN <sub>it</sub>	0.000 [0.000]*	0.000				
POLITY2 <sub>it</sub>	-0.002 [0.016]	0.012 [0.022]				
Observations	1263	1262	1213	1263	1262	1213
Number of countries	55	55	53	55	55	53
R-squared	0.04	0.04	0.07	0.22	0.22	0.25

Note: See Table 5.5A for notes.

# B. Within estimates corresponding to Table 5.2

Estimators	WG	WG	ССЕР	CCEP
$\overline{FL_{i,t-1}}$	-0.174	-0.169	-0.261	-0.343
-,	[0.045]***	[0.045]***	[0.084]***	[0.118]***
$(FL_{i,t-1})^2$	0.056	0.006	0.119	0.079
-,	[0.038]	[0.044]	[0.059]**	[0.081]
$FL_{i,t-1} \times Y_{i,t-1}$		0.004	0.004	
-,,		[0.002]**	[0.004]	
$REG\_FL_{i,t-1} - FL_{i,t-1}$	0.002	0.007	0.044	0.012
.,,	[0.028]	[0.028]	[0.036]	[0.048]
$BOP_{it}$	0.001	0.001	-0.006	-0.011
	[0.007]	[0.007]	[0.008]	[0.009]
BANK <sub>it</sub>	-0.010	-0.010	-0.009	0.000
	[0.009]	[0.009]	[0.011]	[0.013]
RECESSION <sub>it</sub>	0.000	0.001	0.001	0.002
	[0.007]	[0.007]	[0.009]	[0.009]
HINFL <sub>it</sub>	-0.017	-0.020	-0.009	0.000
	[0.013]	[0.013]	[0.017]	[0.016]
FIRSTYEAR <sub>it</sub>	0.000	0.000	0.001	0.000
	[0.007]	[0.007]	[0.006]	[0.006]
USINT <sub>it</sub>	-0.005	-0.004	-0.002	-0.001
	[0.001]***	[0.001]***	[0.002]	[0.002]
LEFT <sub>it</sub>	-0.004	-0.006	-0.008	-0.012
	[0.010]	[0.010]	[0.009]	[0.010]
RIGHT <sub>it</sub>	0.000	-0.001	0.000	-0.004
	[0.010]	[0.010]	[0.011]	[0.015]
OPEN <sub>it</sub>	0.000	0.000	0.000	0.000
	[0.000]*	[0.000]*	[0.000]	[0.000]

Table	A5.5	Continued
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Estimators	WG	WG	ССЕР	CCEP
POLITY2 <sub>it</sub>	-0.002	-0.002	0.012	0.019
	[0.016]	[0.016]	[0.022]	[0.028]
Observations	1213	1213	1213	1213
Number of countries	53	53	53	53
<i>R</i> -squared	0.07	0.07	0.25	0.31

Note: See Table 5.5A for notes.

Table A5.5 Continued C. Within estimates corresponding to Table 5.3

Estimators	WG	CCEP
$FL_{i,t-1}$	-0.303	-0.599
-,-	[0.089]***	[0.232]**
$(FL_{i,t-1})^2$	0.190	0.355
-,-	[0.081]**	[0.208]*
$REG_{FL_{i,t-1}} - FL_{i,t-1}$	-0.024	-0.040
<i>y</i>	[0.029]	[0.053]
$(REG - FL_{i,t-1} - FL_{i,t-1}) \times FL_{i,t-1}$	0.216	0.360
	[0.096]**	[0.224]
$BOP_{it}$	-0.010	-0.010
	[0.011]	[0.015]
$BOP_{it} \times FL_{i,t-1}$	0.027	0.000
	[0.020]	[0.025]
BANK <sub>it</sub>	-0.008	0.002
	[0.014]	[0.023]
$BANK_{it} \times FL_{i,t-1}$	-0.003	-0.009
	[0.025]	[0.035]
RECESSION <sub>it</sub>	0.006	0.009
	[0.010]	[0.011]
$RECESSION_{it} \times FL_{i,t-1}$	-0.017	-0.023
.,	[0.020]	[0.022]
HINFL <sub>it</sub>	0.027	0.022
	[0.017]	[0.031]
$HINFL_{it} \times FL_{i,t-1}$	-0.201	-0.103
· · ·	[0.049]***	[0.143]
FIRSTYEAR <sub>it</sub>	-0.005	-0.005
**	[0.011]	[0.009]
$FIRSTYEAR_{it} \times FL_{i,t-1}$	0.010	0.010
	[0.020]	[0.018]

Table A5.5 Continued

Estimators	WG	CCEP
USINT <sub>it</sub>	-0.005	-0.002
	[0.001]***	[0.002]
$LEFT_{it} \times FL_{i,t-1}$	-0.017	-0.034
,	[0.015]	[0.025]
$LEFT_{it} \times FL_{i,t-1}$	0.022	0.048
,	[0.030]	[0.049]
RIGHT <sub>it</sub>	0.009	-0.004
	[0.014]	[0.025]
$RIGHT_{it} \times FL_{i,t-1}$	-0.019	0.006
•	[0.030]	[0.043]
OPEN <sub>it</sub>	0.001	0.000
	[0.000]**	[0.000]
$OPEN_{it} \times FL_{i,t-1}$	0.000	0.000
	[0.000]	[0.000]
POLITY2 <sub>it</sub>	-0.002	0.020
	[0.019]	[0.033]
$POLITY2_{it} \times FL_{i,t-1}$	0.002	0.002
,	[0.002]	[0.005]
Observations	1213	1213
Number of countries	53	53
R-squared	0.09	0.33

*Note:* See Table 5.5A for notes.