CAPITAL ACCOUNT LIBERALIZATION AND FINANCIAL GLOBALIZATION, 1890–1999: A SYNOPTIC VIEW

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ABSTRACT

An indicator of financial openness spanning the period 1890–1999 is used to evaluate policies towards the capital account of the balance of payments. Findings include that: financial globalization was deeper in 1890–1913 than subsequently; countries with liberal capital account policies recovered more quickly from the Great Depression than countries that restricted capital account transactions; the correlation between democracy and capital account openness was negative or zero during the gold standard era, in contrast to subsequent periods, when it has tended to be positive; and countries in geographic proximity to one another have tended to behave similarly in their policies towards the capital account. Copyright © 2003 John Wiley & Sons, Ltd.

This paper presents an overview and analysis of 20th century experiences with government policies towards the capital account of the balance of payments. Its main findings are as follows:

1. Financial openness, measured as the absence of official restrictions on international financial transactions, was more extensive between 1890 and 1913 than at any time subsequently. The recent wave of capital account liberalization, by comparison, is less complete and less globally inclusive.
2. There is little association between the openness of the capital account in the 1920s and the severity of the Great Depression of the 1930s, other things equal. Indeed, non-autarkic nations with liberal policies towards the capital account recovered more quickly from the Great Depression than other non-autarkic countries (although, as we will see, other things were not necessarily equal).
3. The positive association of democracy with capital account openness is distinctly modern. Prior to World War I, that correlation was actually negative.
4. The pattern of capital account openness for emerging markets after WWII, when portrayed graphically with time on the X axis and openness on the Y axis, resembles a pair of mountains separated by a deep valley. For example, in the early Bretton Woods period, most Latin American countries had very open capital accounts. There then followed a period of relative closure from roughly 1970 to approximately 1990, after which emerging markets again moved to liberalize their capital accounts.
5. In the post-WWII period, countries in close geographic proximity to one another have often adopted broadly similar policies towards the capital account. In effect, policies appear to have converged within regions while diverging across them. An interpretation is that this geographic influence arises from the

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close trade relations that neighbouring countries have with one other, as well as from competitive policy emulation.

These findings are based on an analysis of historical time series on countries' policies towards the capital account by Quinn and Toyoda (2003). The data measure the degree to which nations restricted inward and outward international current and capital account flows at different points in time.[1] They are derived from a coding of text in a volume published annually by the International Monetary Fund, its *Annual Report on Exchange Restrictions*, which provides a discussion of legal provisions affecting transactions on capital account in individual countries.

The resulting indicator of capital account openness for the post-1950 period is described and analysed in Quinn (1997) and Quinn and Inclán (1997).[2] This paper extends the measure backwards in time to cover the period from 1890 to 1938 for a subset of the same countries.

1. OVERVIEW

Many of the central findings of this paper can be gleaned from Figure 1, which shows medians, means and standard deviations, by year, of the Quinn–Toyoda index, denoted *CAPITAL*.

Three capital account regimes are evident in Figure 1.[3] In the pre-WWI period, most countries maintained open capital accounts; note the very small differences among countries. During the interwar period, in contrast, capital account regimes varied both across countries and over time. Perhaps the single most notable development during the interwar period was the emergence of two authoritarian, state socialist models of development: the Soviet Union and Nazi Germany. Both elaborated central plans predicated upon the complete closure of the capital account. The post-WWII period was and continues to be one of considerable diversity, with some countries maintaining very open capital accounts but others keeping theirs closed. Note, however, the tendency for different countries in the same regions to pursue relatively similar policies, a point highlighted above and developed further below.

In light of these differences over time, I organize the remainder of the discussion by period. And given evidence of pronounced regional regularities after 1950, I further divide my discussion of the last time period by region.
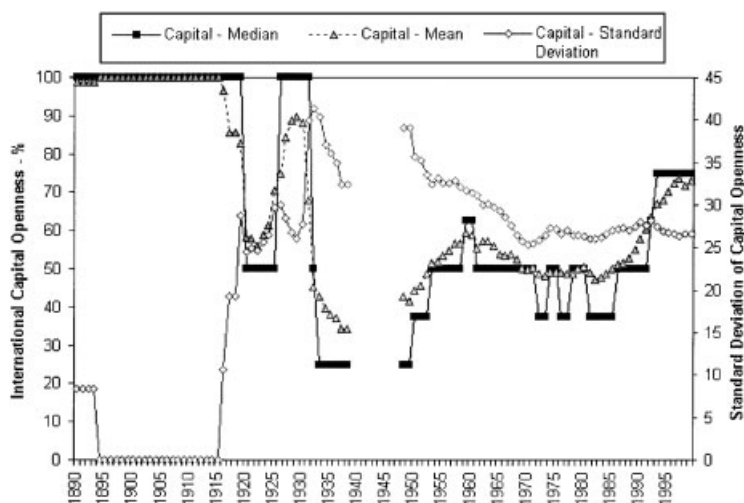

Figure 1. Capital account openness: median, mean and standard deviation, 1890–1999.

2. 1890–1913

The global capital regime, as noted by Hawtrey (1947), Palyi (1972) and Eichengreen (1996), among others, was very open prior to 1913. According to the measure in Figure 1, median levels of capital account openness were higher before World War I than at any time subsequently. Note that the means and medians are close in value, and the standard deviation of the year-to-year series is zero or at least very close to zero.[4] This indicates a relatively high level of uniformity across regions.

Of course, only independent nation states are included in the data set during this period, leaving unaccounted for much of the world, and particularly the newly independent nations of the post-1945 period. Extending the coverage would not change the picture, however, for the colonies of the United States and the European powers, which are the principal omitted jurisdictions, also had open capital accounts. Capital account openness was a by-product of most of the world's nations using the gold standard as the basis for their currency policies. The operation of the gold standard has been well described in the literature (Hawtrey, 1947; Eichengreen, 1996; Cohen, 1998). Capital account openness was integral to the operation of the gold standard, which relied on international flows of capital and monetary gold as well as manufactures and primary commodities (Whittlesey, 1932; Bloomfield, 1963).

Capital account openness and democracy had, if anything, a negative correlation in this period, as shown in Table 1.[5] This is in contrast to the interwar years 1920–38 and the post-1960 period. Why this difference? A central mechanism of currency equilibration under the gold standard was that gold was allowed to move freely in or out of a country, depending on its terms of trade and other factors affecting its balance of payments. The burden of price adjustments under this system fell mainly on those with non-mobile assets, who consequently bore greater risks. These individuals (a) tended to be farmers or labourers and (b) constituted the majority of the population. Because governments engaged in few counter-cyclical policy initiatives, shocks and depressions were relatively common under this gold standard system (see Simmons, 1994 for a discussion). This is evident in the fact that the annual growth rate for all countries in the sample 1880–1913 was low (0.91%) relative to its standard deviation (13.65).[6] These outcomes rendered the population at large critical of the efficiency of the gold standard system.

Political scientists have shown that voters today penalize incumbents for economic volatility (Quinn and Woolley, 2001). Studies of voting patterns in the pre-1913 period show the same effect (Quinn and Woolley, 2000). Hence, when an incumbent government expanded the franchise to include labourers and other unskilled individuals, it increased the pool of voters adversely affected by the shocks endemic to the international financial openness of the gold standard, and likely decreased its re-election prospects. In countries like the United States, where the franchise was broad, populist politicians were able to mobilize popular discontent against the regime. Thus, in the United States the link between the dollar and gold came

Table 1. Summary of data by time period

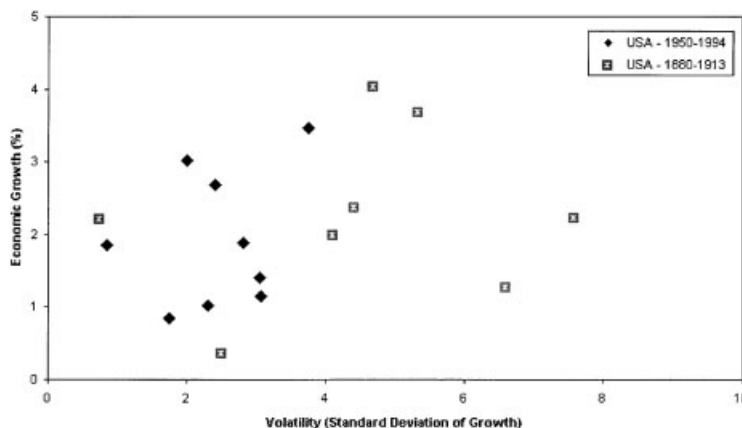| Time period	Mean of capital (0 to 100)	Mean of democracy (−10 to 10 scale; Polity IV)	Correlation of capital and democracy
1890–1913	99.7	−0.2	−0.06
1914–18	93	1.5	−0.07
1919	84	2.3	−0.19
1920–29	70	1.9	0.15
1930–38	47	0.5	0.22
1949	42	1.2	−0.21
1950–59	53	1.2	−0.08
1960–69	55	0.3	0.21
1970–79	47	−0.7	0.23
1980–89	50	0.7	0.38
1990–99	68	4.2	0.56

Figure 2. US growth rate and growth volatility.

under serious threat in the 'Populist Revolt' of the 1890s. The USA is thus a specific example of the general point, that democracy and financial openness did not fit together neatly during this period.

Over time, with the development of a welfare state or some other means of economic compensation, however, these anti-democratic incentives of an open capital account are attenuated or vanish.[7] Counter-cyclical stabilization policy and the diversification of production out of agriculture and primary commodity production may work in the same direction by reducing output volatility. In the post-Bretton Woods period, 1971–94, the annual rate of growth for sample countries was significantly higher (1.59%) than before 1913, while the volatility of that growth was lower (the standard deviation was 3.24). Figure 2 displays the growth rate and the volatility of growth for the United States, 1875–1913 vs. 1950–1994 using data from Maddison (1994).[8] The result is the modern tendency for financial liberalization and political liberalization to go hand in hand.[9]

3. 1914–1938

The efforts of post-WWI governments to re-establish the gold standard and its corollary, capital account openness, are described in Hawtrey (1947) and Palyi (1972). By 1929, the vast majority of the nations considered in this data set had succeeded in achieving this goal.[10]

One country, the Soviet Union, stands out as an exception, as situating itself at the forefront of what would be a new trend in the relationship between capital account openness and democracy. Already by 1919, the new Soviet state had imposed tight controls on capital movements, closing off its economy from international financial flows entirely. This restrictive policy was in keeping with Leninist theory, which held that capital exports were the central mechanism of a new and advanced stage of capitalist imperialism (Hilferding, 1981; Quinn and Toyoda, 2002). In Leninist theory and Soviet practice, blocking international capital movements was key to establishing an independent Soviet state and weakening the influence of the imperialist powers. And, given the nature of the Soviet state, there were no domestic political impediments to this revolution in policy stance. Not surprisingly, this turns out to be the period when the positive correlation between capital account openness and democracy first begins to become apparent.[11]

As the Great Depression spread and world trade slowed, many nations sought to conserve their gold and foreign exchange reserves by imposing tight exchange restrictions. Germany went to the extreme in this regard; by 1931 it had in place comprehensive restrictions on capital account transactions, which became the basis for the country's notorious exchange clearing system. The Centre Party government, under Chancellor Heinrich Brüning, restricted the capital account in July 1931, a policy continued by the

subsequent Von Papen government in 1932. After forming a government in January 1933, the Nazis extended their predecessors' capital account restrictions. But, their national socialist rhetoric notwithstanding, it is not clear if the Nazis would have undertaken such a closure *de novo*.[12] Be that as it may, the Nazis soon came to see capital account restrictions as a key element of their four-year plan, in which rearmament was foremost. By rejecting an open capital account, the Nazi regime was freed from the discipline of exchange rate targets and free to implement its policies of fiscal spending in the pursuit of rearmament. Other authoritarian governments, notably Hungary, Portugal and Romania, similarly closed or restricted their capital accounts. Again, it is hardly surprising in this light that Table 1 shows a positive correlation between capital account openness and democracy in the 1930s.

In contrast, the French and British governments sought to defend the gold standard while maintaining an open capital account. Arguably, this left them less able to expand militarily and therefore hindered their efforts to meet the rising Nazi threat.

A key question concerning this period is the contribution of capital account openness to both the descent into the Great Depression and the recovery. To shed new light on this question, I extend and match the extended Quinn–Toyoda measures of capital account openness to the Maddison data set.[13] This produces a data set for 29 countries and 14 years (1925–1938).[14] I distinguish two periods: the descent into the Great Depression, 1929–32; and the recovery, 1933–38. The question is whether the levels of capital account openness help to explain the severity of the depression and the course of recovery in different countries.

A simple comparison of means of growth by openness of economy reveals some striking differences. (I code economies as financially open when their *CAPITAL* scores are 75% or higher.) For the 1929–32 period, financially open economies contracted more sharply than financially closed economies, but the difference in the means of the two populations is not statistically significant at conventional levels.[15] During 1932–38, however, financially open economies grew faster than closed economies, and the difference was statistically significant.[16]

Regression analysis can be used to probe further. In this analysis the independent variables are lagged to attenuate endogeneity bias: averages for 1925–28 are used when the dependent variable is for 1929–32, and averages for 1929–32 are used when the dependent variable is for 1933–38.[17] In the regression in the first column of Table 2, growth at time s is regressed against per capita income in the prior period $(s-1)$ and on the average level of capital account openness in the prior cross-section (again, $s-1$). The coefficient on capital account openness is negative but not statistically significant at conventional confidence levels.

The regressions in columns 2 and 3 report results for the 1929–32 and 1933–38 subperiods separately. They suggest parameter instability: while the coefficient measuring the effects of capital account openness on growth in the period 1929–32 is negative and highly significant, that for the effects on growth in the 1933–38 model is in fact positive.

Table 3 takes this analysis one step further, adding measures of a country's dependence on commodity exports, political turmoil, the change in the volume of trade, the change in the economy-wide price level, the

Table 2. Growth during the interwar period

Variable	Model 1	Model 2	Model 3
Income $(t-1)$	−0.00	−0.00	−0.00
	(0.00)	(0.00)	(0.00)
Capital account openness $(t-1)$	−0.02	−0.04[**]	0.02
	(0.02)	(0.01)	(0.03)
Intercept	3.25	1.35	4.12[*]
	(1.52)[**]	(1.12)	(2.12)
Adj. R^2	48%	12%	1%
Number of countries	29	29	29
Number of observations	58	29	29

Note: Model 1: Pooling by OLS. Panel-corrected covariance matrix. Model 2 & 3: Heteroskedasticity-consistent covariance matrix. Standard errors in parentheses: [*], [**], [***] indicate significance at the 10%, 5% and 1% levels, respectively.

Table 3. Growth during the interwar period

Variable	Model 1	Model 2	Model 3	Model 4	Model 5
Income	−0.01[***]	−0.01[***]	−0.01[***]	−0.01[***]	−0.01[***]
(per capita, PPP-adjusted)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Capital	**0.11[***]**	**0.08[***]**	**0.10[***]**		**0.10[***]**
	(0.02)	**(0.03)**	**(0.03)**		**(0.03)**
Capital* (1929–32)	**−0.06[***]**	**−0.07[***]**	**−0.06[**]**		**−0.07[**]**
	(0.02)	**(0.02)**	**(0.02)**		**(0.02)**
(1929–32) (dummy variable for time)	4.95	5.20	4.24	−5.22	4.3
	(3.14)	(3.72)	(3.39)	(3.09)	(2.96)
Dummy variable for anti-capitalist regimes	11.49[***]	10.36[***]	11.18[***]	6.86[***]	11.28[***]
	(1.54)	(1.62)	(1.56)	(0.91)	(1.54)
Regime change dummy variable	−0.38	−0.23	−0.42	−1.36	−0.19
	(1.29)	(1.25)	(1.26)	(1.41)	(1.21)
Log of commodity producers (commodity workers as % of population)	14.22[***]	13.99[***]	14.08[***]	14.19[***]	14.33[***]
	(2.40)	(2.62)	(2.48)	(3.22)	(2.63)
Log of commodity* (1929–32)	−1.94[**]	−1.86[*]	−1.81[**]	−0.27	−1.97[**]
	(0.76)	(0.90)	(0.80)	(0.87)	(0.71)
Change in trade volume	−0.06	−0.07	−0.04	−0.02	
	(0.08)	(0.08)	(0.05)	(0.09)	
Years on the gold standard	−0.82[*]		−0.87[**]	−0.41	−0.87[*]
	(0.44)		(0.41)	(0.55)	(0.46)
Inflation	0.05	0.09		−0.12	−0.01
	(0.16)	(0.15)		(0.19)	(0.11)
Adj. R^2	86.38%	85.56%	86.32%	82.12%	86.10%
Number of countries	29	29	29	29	29
Number of observations	58	58	58	58	58

Note: Dependent variable is growth. Pooling by OLS. Panel-corrected covariance matrix using fixed effects models. All independent variables lagged one period.
Standard errors in parentheses: [*], [**], [***] indicate significance at the 10%, 5% and 1% levels, respectively.

number of years the country was on the gold standard in the interwar period, and a dummy variable for time.[18] To test for parameter stability, I include interaction terms of the key variables with a dummy variable for 1929–32. Wherever preliminary analysis indicated that the coefficient on the interaction term differed significantly from zero at standard confidence levels, both the level of the variable and the interaction term were retained in the final specification.[19] Finally, I added a dummy variable to account for Nazi Germany and the Soviet Union, the two regimes that imposed international capital restrictions as a by-product of political ideology and planning logic.[20] The pooled, cross-section time series models are estimated with 29 country observations and two periods. Panel-corrected standard errors are reported.[21]

The model is estimated with fixed effects (not reported here).[22] (All data necessary to replicate the results of the study are available from the author.)

In the regression in column 1, a more open capital account is *positively* associated with growth in 1933–38. The interaction term for the level of capital account openness and the 1929–32 period is negative and statistically significant at the 1% level, consistent with the presumption that the effects of capital account openness differed during the two periods. The net effect of capital account openness on growth in 1929–32 (the sum of the overall effect and the interaction effect for the earlier subperiod) is positive, but the sum of the two effects is not significantly different from zero at standard confidence levels. All this suggests that capital account openness *per se* was not associated with the descent into the Great Depression. And, if anything, countries with more open capital accounts recovered significantly more quickly from the post-1929 slump.

The coefficient for years on the gold standard is negative and significantly different from zero. This is consistent with the argument of Eichengreen and Sachs (1985), who showed that countries remaining on the gold standard struggled economically in this period. Note that the sign of the coefficients for commodity producers differs across the two periods. Commodity producers, logically enough, suffered more in the downturn but bounced back more quickly in the subsequent upswing. The coefficients for changes in the political regime, changes in trade volumes, and changes in price levels do not differ significantly from zero at standard confidence levels. Finally, the dummy variable for the anti-capitalist autarkic regimes, Nazi Germany and Soviet Russia, is positive and significantly greater than zero at standard confidence levels. If the standard GNP data for these countries are taken at face value, then closing the economy and undertaking economic planning for industrialization and rearmament stimulated short-term growth in both authoritarian regimes.

Because of the high degree of co-linearity among capital account openness, gold standard, trade volume and price changes, the possibility exists that the effects of some variables are masked. The regressions in columns 2, 3, 4 and 5 therefore experiment with the omission of the gold standard, trade, capital account openness and deflation/inflation, respectively. Reassuringly, the coefficients for the capital account variables always retain both their signs and statistical significance. Note also that the regression in column 4, which omits the capital account openness measures, has the lowest R^2 of the regressions in Table 3. Similarly, the coefficient for number of years on the gold standard remains consistently negative and statistically significant in most of these specifications, which again reassures us that these results are reasonably robust.

4. BRETTON WOODS, 1950–1970

Instead of a global story about openness or closure, as was the case in 1890–1913 and 1919–1939, the post-WWII story is one of regional patterns. Table 4 reports an analysis of variance of the yearly means of capital by region relative to the contemporaneous global mean.[23] Overall, the hypothesis that the means are drawn from the same population is rejected. (Only in East and South East Asia in 1971–89 and 1990–99 can we accept the hypothesis of equal means.)

Because this suggests that it is important to distinguish regions and subperiods when analysing capital account openness after World War II, I divide the discussion into three time periods—1950–70, 1970–90 and the 1990s—and take a separate region as the main focus in each period.

By 1949, the basic architecture of the Bretton Woods system was in place but capital account liberalization was not yet underway. Indeed, many academics and politicians saw the retention of capital controls as highly desirable (Bloomfield, 1946 provides a discussion of the climate of the times). Consequently, the International Monetary Fund did not place injunctions or restrictions on countries' policies towards the capital account. But while the majority of nations in the sample had low levels of financial openness, a few were already very open financially, and others occupied intermediate positions.

Interestingly, the level of capital account openness in this period does not appear to have been directly linked to a country's level of development. Nor was whether or not a country had a democratic political

Table 4. *F*-tests of the equality of means, by region

Period	Hypothesis tested	*F*	*p*-Value
1950–99	Central America vs. world	55.87	0
	South America vs. world	22.04	0
	East and S.E. Asia vs. world	15.25	0
	Sub-Saharan Africa vs. world	39.73	0
	West Europe vs. world	10.69	0
	South Asia vs. world	302.1	0
	Middle East & N. Africa vs. world	100.2	0
1950–70	Central America vs. world	220.9	0
	South America vs. world	49	0
	East and S.E. Asia vs. world	69.71	0
	Sub-Saharan Africa vs. world	9.84	0
	West Europe vs. world	4.7	0.04
	South Asia vs. world	469.48	0
	Middle East & N. Africa vs. world	149.24	0
1971–89	Central America vs. world	19.89	0
	South America vs. world	3.1	0.09
	East and S.E. Asia vs. world	1.58	0.22
	Sub-Saharan Africa vs. world	223.49	0
	West Europe vs. world	154.21	0
	South Asia vs. world	1545.21	0
	Middle East & N. Africa vs. world	345.6	0
1990–99	Central America vs. world	5.02	0.04
	South America vs. world	8.6	0
	East and S.E. Asia vs. world	0.68	0.42
	Sub-Saharan Africa vs. world	38.54	0
	West Europe vs. world	103.4	0
	South Asia vs. world	148.98	0
	Middle East & N. Africa vs. world	48.64	0

system strongly correlated with capital account openness. Given the historical context, this is not surprising. In 1949, as in 1919, the victors in the war were largely democratic but also largely economically exhausted: they used surrender requirements for 'hard' foreign currency (made possible by the retention of capital and exchange controls) to rebuild their international reserves. Many Western Hemisphere autocracies, in contrast, largely sat the war out, accumulated substantial currency reserves, and consequently were able to maintain relatively open capital accounts following the conclusion of hostilities (see Table 1).

The European economies remained relatively closed in the immediate post-war era, though their economies were more open within imperial trading zones than without (Figure 3). As the European Community (EC) took shape, capital mobility became progressively freer in Europe. The opening of capital accounts in post-WWII Europe was in part a by-product of the politics of European integration, rather than a conscious strategy of economic policy reform. The relatively stable financial environment of the 1950s and early 1960s facilitated this strategy; the Western European nations retreated from capital account openness in the late 1960s, as the Bretton Woods regime came under pressure.

In the immediate post-war era, North America, Central America and the Caribbean were among the world's most open regions. The United States emerged from World War II with few capital account restrictions. After 1952, Canada removed capital account restrictions almost completely, in one of the most dramatic (if under-analysed) liberalizations of the post-WWII period.[24] Less well known is the fact that Mexico, along with most of Central America and the Caribbean, was nearly completely open financially
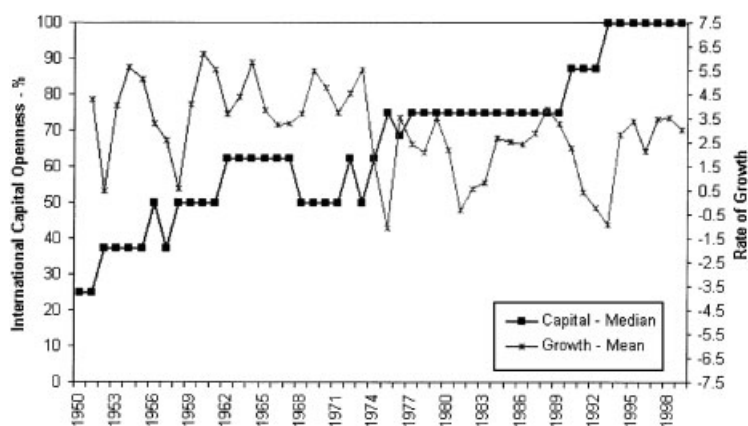
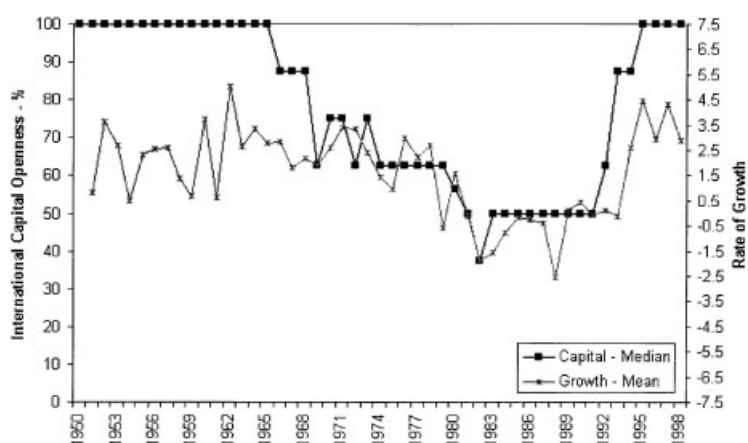Figure 3. Growth and capital account openness—Western Europe.

Figure 4. Growth and capital account openness—Central America and Caribbean.

from the start of the Bretton Woods period (see Figure 4). Capital account openness was associated with relatively fast and stable growth in this period (compared with what was to come).

South America was already moderately open to international capital flows in the decade following World War II. The next 10 years saw most countries of the region remove many of their restrictions on international capital flows. In the early 1960s, nearly all the nations of the Western Hemisphere, North, South and Central, had essentially abolished restrictions on capital account transactions (see Figure 5).

The 1965 military coup in Brazil is the marker distinguishing the prior period of political and economic openness from the subsequent period of political and economic restriction. Brazil's new military regime developed an ambitious authoritarian model of import-substituting industrialization, in some respects reminiscent of the Central Europe of the 1930s; its model was emulated to a greater or lesser extent in a variety of other South American countries. Among other things, this model implied increasingly stringent controls not just on trade in merchandise but also on international capital flows. What emerged in the 1965–74 period, again reminiscent of authoritarian experiences in the 1930s, was a short-term burst in growth, stimulated by aggressive monetary and fiscal policies, and made possible by a move away from international financial liberalization.[25]
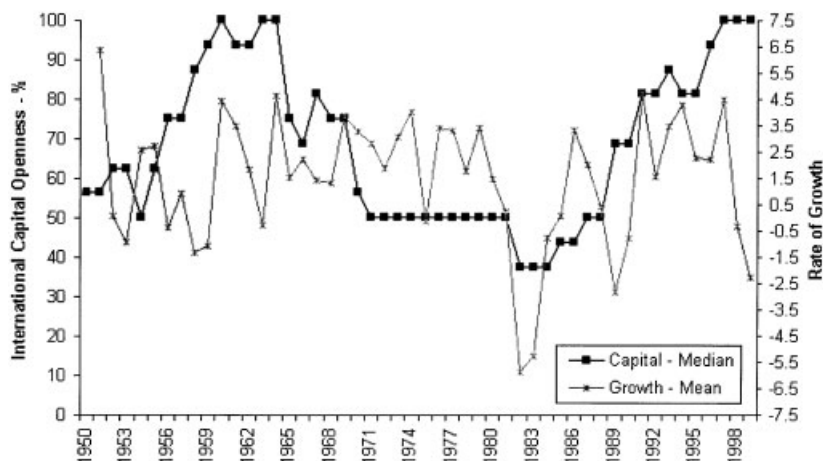
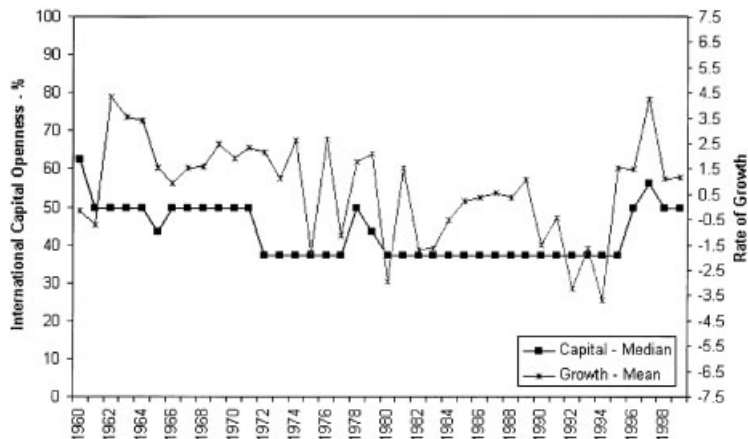Figure 5. Growth and capital account openness—South America.

Figure 6. Growth and capital account openness—Sub-Saharan Africa.

At independence, the levels of capital account openness in independent Sub-Saharan African nations more or less matched the levels of openness of their former colonial power. Indeed, in 1960, the median level of capital account openness in the region was higher than in Western Europe (see Figure 6).

As in other regions, the retreat from capital account openness in Sub-Saharan Africa was accelerated by the collapse of Bretton Woods, but the trend in financial openness predates the progressive decline of that international monetary system. Nigeria in 1962 and Ghana in 1961 are examples of countries that closed for developmental or ideological reasons. As in South America, the immediate post-closure regional growth rates were high compared with what was to come. Paired with financial closure was a retreat from democratic institutions.

During the Bretton Woods period, East and South East Asian nations were, on average, characterized by low levels of international financial openness (Figure 7). The averages, however, masked great diversity in experiences. Hong Kong, Singapore and Malaysia were relatively open. Indonesia, Japan, Korea, Thailand and Indonesia were moderately open. Burma and China were closed. Within the region, there is no evident pattern of association between growth and partly open versus fully open economies.

As with Sub-Saharan African nations, the levels of international financial openness of South Asian nations at independence more or less matched that of the dominant colonial power: in this case, Great
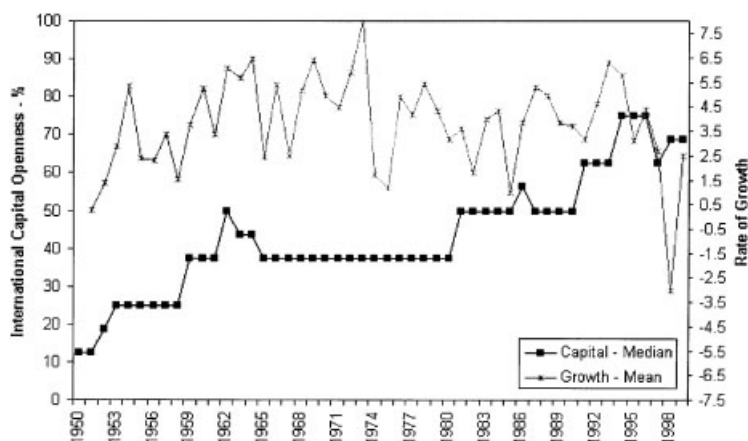
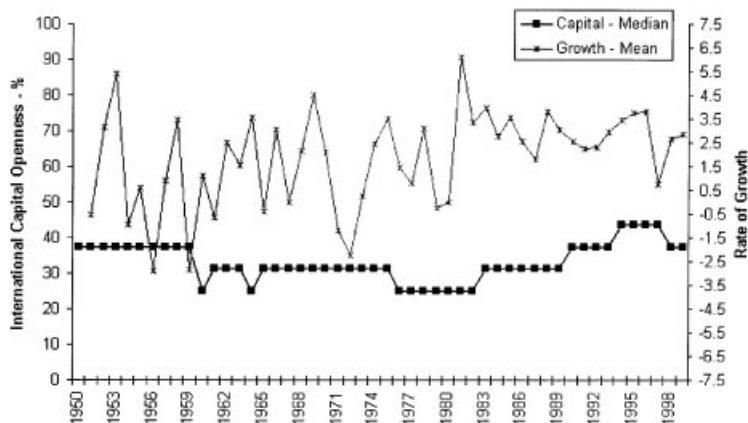Figure 7. Growth and capital account openness—East and South East Asia.

Figure 8. Growth and capital account openness—South Asian.

Britain. Britain in 1947–49, however, maintained relatively tight capital controls (Shannon, 1949). India, Sri Lanka and Pakistan retained them as well. Even so, South Asian nations closed further in the 1960s (Figure 8).

Excepting Saudi Arabia, Kuwait and Bahrain, the nations of the Middle East and North Africa were characterized by low levels of openness from 1950 to 1970. Paired with low levels of capital account openness were extraordinarily high levels of economic volatility. The economies in the region, at least as measured by the latest Penn World Table 6.1 data, had some of the world's highest average growth rates. Their low levels of capital account openness are not surprising, given underlying suspicions of many in the Islamic world of Western financial interests (Figure 9).

To summarize, in the 1950–70 period, the divide *vis-à-vis* capital account openness was not between open advanced industrial and closed emerging market nations. Instead, we observe a three-way divide among the financially open Western Hemisphere nations, the liberalizing Western European nations, and the more restrictive rest of the world. Another observation is that most post-colonial African nations were partly to fully open in the first years after independence, closing thereafter. A third is that the region of most rapid growth, East and South East Asia, was characterized by a great diversity of capital account regimes.
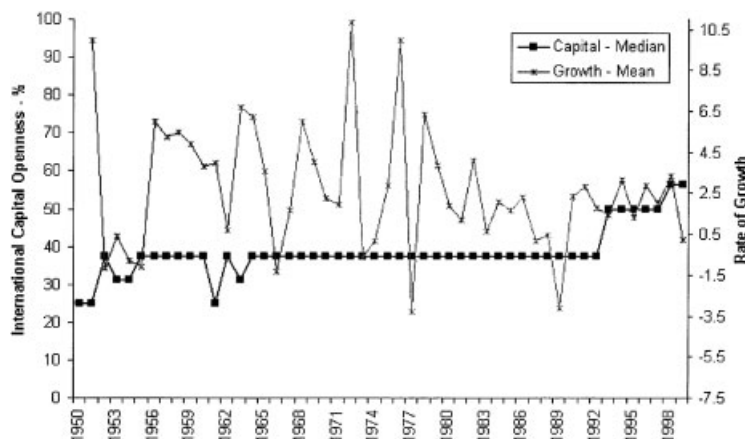
Figure 9. Growth and capital account openness—Middle East and North Africa.

Finally, the 1960s saw the re-emergence of a positive correlation between democratization and international financial openness. This positive correlation was driven by a move away from both democracy and international financial openness among emerging market nations.

5. SINCE BRETTON WOODS

The end of Bretton Woods saw most governments, notably including that of the United States, increase their restrictions on international capital flows. For the advanced industrial nations, including not just the USA but also most of Western Europe, the increased restrictions of the late 1960s and early 1970s were a brief hiatus in what became a slow but steady march towards full capital account liberalization. By 1977, many European nations were moderately open to financial flows. What followed was a long period of relative policy stability. The only other region that moved in this same direction was East and South East Asia, which maintained low levels of capital account openness up to the second oil shock, but which responded to it with increased financial liberalization (see Figures 3 and 5, respectively).

For other emerging market nations, the end of Bretton Woods inaugurated a long period of retrenchment from international financial openness. In Central America and the Caribbean Basin, most economies underwent a 20-year period of partial closure, starting with the economic crisis following the second oil crisis. Sub-Saharan Africa also suffered as a result of the second oil crisis, and similarly responded by tightening its capital account restrictions. Meanwhile South Asian, Middle Eastern and North African nations all continued to maintain tight restrictions on their capital accounts (see Figures 4, 6, 8 and 9).

South America, whose experience is depicted in Figure 5, merits special comment. The countries of this region, which already had myriad capital account restrictions, responded to the economic upheavals of the 1970s by tightening these further. Their experiment with capital account closure was then punctuated by the deep economic crisis in the early 1980s. The combination of world commodity price shocks in the early 1980s and the exhaustion of the model of debt-financed import-substituting industrialization ultimately produced a region-wide economic collapse. The region's economies contracted at an annual rate of 0.7% in the 1980s, with 1982 and 1983 being years where South American economies contracted at a rate greater than 5%.

These economic crises (abetted by failed military adventurism in Argentina) delegitimated both authoritarian political regimes and their model of trade and financial restrictions. Not long after nations in

the region began again the democratization process, they resumed the liberalization of trade, services and capital. By 1990, as a result of these trends, South America's capital accounts were moderately open.

Since then, every region of the world has seen capital account liberalization advance, in some cases to levels not seen since the 1920s. In some cases progress was impressive: in South America, 1984 saw a regional median openness of 37.5% compared to the 100% of 13 years later, in 1997. Western Europe, in contrast, had taken 36 years (from 1957 to 1993) to cover the same amount of ground. Just as impressively, the nations of Central America and the Caribbean went from a median level of openness of 50% in 1991 to 100% in 1994. Former Soviet bloc countries are not represented in this data set, but they also underwent rapid liberalizations during this period.

In other regions, such as South Asia, East and South East Asia, Sub-Saharan Africa, and the Middle East and North Africa, liberalization proceeded more gradually and stabilized at lower levels. But, there too, the trend towards liberalization was unmistakable.

In the aftermath of the East Asia crisis of 1997–98, some nations (East and South East Asia, Sub-Saharan Africa and South Asia) retreated from capital account liberalization (Wade, 1998). But these retreats from capital account liberalization were modest by historical standards. They were most likely to occur in the same nations that had taken the most modest steps in the direction of financial liberalization in the preceding years.

Some of these liberalizations were the natural outgrowth of the successful economic policies of the 1970s and 1980s. In East and South East Asia, their export-led growth strategy produced, for many governments, very large current account surpluses, which created pressure for them to ease capital outflow restrictions. Capital account liberalization among the European Union nations was also a natural result of prior successful EU integrations of markets for goods, services and people.

Other liberalizations had their roots in policy failures, most famously in the case of the former Soviet bloc nations. In the case of South America, capital account liberalization similarly began after economic and political collapses of the early 1980s. The failures in the Soviet bloc and in South America were not merely economic: entire authoritarian structures shattered. Twinned in the 1990s with the advance in capital account liberalization was political liberalization. The year-to-year correlation of democracy and *CAPITAL* was 0.56 for the 1990s.

The very rapid liberalization in Central America and the Caribbean Basin is clearly associated with a shift in US policy (and, laterally, IMF policy). An open capital account was a policy advocated by the Clinton administration, and was reinforced by trade and international financial agreements, such as the Caribbean Basin Initiative.

6. CONCLUSIONS AND IMPLICATIONS

The core arguments of the paper are as follows. (1) Capital account openness was nearly universal and unconditional until World War I, a situation never realized again subsequently. Even in the second half of the 1920s, when it had been restored in many countries, a non-negligible minority retained significant restrictions on international capital flows. (2) The Great Depression of the 1930s was not significantly more severe in countries that retained open capital accounts. Indeed, there is some evidence that countries with open capital accounts recovered from the Great Depression more quickly than capitalist nations with closed capital accounts, especially if they opted to abandon the gold standard and pursued reflationary monetary policies in lieu of capital account restriction. (3) The correlation of democracy with capital account openness varied by time: it was zero to moderately negative in 1890–1919 and 1949–1959, but moderately to strongly positive in 1920–1938 and 1960–1999. (4) Many emerging market countries, especially in the Western Hemisphere, had long experience with capital account liberalization. (5) From 1950 to 1990, the timing of capital account liberalization varied by region. Even in the 1990s, a period of liberalization, nations adopted policies that generally accorded to those of their geographic neighbours.

Implicit in much of the literature on capital account liberalization and policy sequencing is what seems to be a systematic misunderstanding about the extent to which emerging market countries pursued liberal

policies after World War II. It is not often appreciated that a significant number of emerging markets in fact experimented with international financial openness in the 1950s and early 1960s. They also grew relatively rapidly in this period. Thus, the subsequent closure of capital accounts was associated with import substitution industrialization ('indiginization') strategies rather than with any obvious failure of the previous policies towards international financial flows. While many emerging countries experienced short-term growth booms from the initial capital account closures, the longer-term growth consequences were not beneficial.

As the median and average levels of capital account openness approached a post-war high of 75% in 2000, protesters world-wide raged against economic globalization. However, the conjunction of rising globalization, rising prosperity and rising protest is not anomalous or unprecedented. Polanyi (1957) noted long ago that democratic market societies are governed by a double movement: economic liberalism and self-regulating markets clashing with 'the principle of social protection'. Voters acting to defend this 'second principle', the search for social protection, oppose capital account liberalization for societies without extensive welfare states. That is, they are prepared to sacrifice the growth and efficiency gains of capital account liberalization for the additional stability offered by a more restrictive capital account regime. From this point of view, it is not a coincidence that this rising wave of protest against economic globalization coincides with its triumphs.

NOTES

1. Current account transactions refer to the purchase of goods and services, and the matching financial transactions. Capital account transactions encompass cross-border investments (portfolio flows, government and multinational organization transfers, as well as direct investments).
2. Comparisons with other measures may be found in Eichengreen (2002), Edison *et al*. (2002) and IMF (2001).
3. The image of three distinct regimes seen in Figure 1 resembles Obstfeld and Taylor's (2002) 'conjecture figure'. The data used to generate their Figure 3 ('assets to sample gdp', p. 24) do show nuanced differences with *CAPITAL* (the rule-based indicator of openness). According to this *de jure* measure of capital account openness, freedom of capital movement was vastly greater before WWI than at any time since. Overseas assets as a percentage of 'sample GDP', in contrast, are far higher in the late 20th century than ever before, with a much smaller peak in 1914. Also, the Obstfeld–Taylor measure, unlike *CAPITAL*, shows no recovery during the interwar years. Obstfeld and Taylor (2002) note that 'assets to sample GDP' overestimates financial globalization as the data are only available for some advanced industrial nations with higher than average asset flows.
4. The means, medians and standard deviations are computed using the data on *CAPITAL* for each country during the period in question.
5. The democracy variable is calculated as the sum of the DEMOCRACY and AUTOCRACY(*-1) score for each country at a point in time from Gurr and Jaggers (2002). The negative correlation from this period is largely driven by Spain's limited commitment to capital mobility.
6. All data for economic growth used in the regression analyses here are PPP-adjusted data from Maddison (1994). The growth data, 1950–99, used in the graphs are from the Penn World Tables (PWT 6.1).
7. For further discussions, cf. Eichengreen (1996), Brune *et al*. (2001), Quinn (2000).
8. The introduction of a central bank in the USA in 1913 is one of the possible explanations for this trend. The fall in volatility has continued since WWII (Blanchard and Simon, 2001).
9. There is considerable debate about the extent to which the US business cycle has become more stable (Romer, 1989).
10. Many nations liberalized in 1926 and 1927, in particular. Some nations maintained moderate restrictions in 1928 and 1929: Portugal, Peru, Japan, Turkey and New Zealand. Spain and Italy had stricter controls.
11. Another anti-democratic government, the Italian fascist regime, also maintained numerous capital account restrictions.
12. Wunderlich (1938, pp. 403–404).

13. To create a measure of capital account openness, 1890–1938, I used the coding rules described in Quinn (1997). For data sources, I used Einzig (1934), Ellis (1939, 1940), IMF (1950), League of Nations (1922, 1923) and Palyi (1972). I draw the reader's attention to Paper No. 11, 'Exchange Control', in League of Nations (1922) as an invaluable source of information. Since it is not based upon a single source, the coding should not be considered to be as reliable as the results from 1950 forward.

14. The countries are Argentina, Australia, Brazil, Belgium, Canada, Chile, Colombia, Czechoslovakia, Denmark, Finland, France, Germany, Hungary, Italy, Japan, Mexico, The Netherlands, Norway, New Zealand, Peru, Romania, Spain, Sweden, Switzerland, The Soviet Union, Turkey, The United Kingdom, The United States and Venezuela.

15. The mean growth for closed economies was -1.3%, and for open economies the mean was -3.1%. The ANOVA p-value was 0.13. The Soviet Union is excluded.

16. Closed economies averaged 2.5% growth compared with 5.1% for open economies. The ANOVA p-value was 0.01. The Soviet Union and Nazi Germany are excluded.

17. Using annual observations is not feasible because the results would then be dominated by a handful of outliers. I also do not pool the interwar observations with data from other periods because of regime differences across time.

18. I used the regime change indicator in Polity IV. I define commodity dependence by the proportion of workers in agriculture or extractive industries. These data, as well as the price data and change in trade data, are from Mitchell (1980, 1983, 1995). I follow Palyi (1972, pp. 116–117, regarding the gold standard. Note that some countries with capital controls had currencies that were ostensibly on the gold standard, though free conversion was not possible. Nazi Germany was one such case.

19. I follow Friedrich (1982).

20. Debate continues about the extent to which the Nazi government can be classified as 'anti-capitalist' (Kopper, 1995; James, 2001b). Wolfe (1955) noted that the planning and controls found in the Nazi economy were far beyond what would be found in a 'controlled and managed capitalism'. By 1937 private capital issues required government permission (Balogh, 1938). The establishment of new companies or the expansion of old companies was forbidden, except with special permission. Economic activities were directed by a four-year plan. See also Wunderlich (1938).

21. I used the POOL command with HETCOV in Shazam 9.0.

22. A Hausman test shows that a fixed effects (rather than a random effects) model should be used.

23. I use World Bank regional codes to group the countries with one exception. I divide LAC (Latin America and the Caribbean) into South America and the rest. The differences between the two groups are substantial, as F-tests reveal.

24. The Philippines went from a completely closed capital account in 1961 to a completely open one in 1962.

25. See Diaz-Alejandro (1985) for further discussion of this linkage.

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