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CAPITAL FLOWS AND THE BEHAVIOR OF EMERGING MARKET EQUITY RETURNS

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ABSTRACT

Foreign portfolio flows may reflect deep changes in the functioning of an emerging market economy and its capital markets. Using a database of monthly net U.S. equity flows, we investigate the relation of these flows to the behavior of equity returns, the structural characteristics of the capital markets, exchange rates, and the strength of the economy. We find that increases in equity flows are associated with a lower cost of capital, higher correlation with world market returns, lower asset concentration, lower inflation, larger market size relative to GDP, more trade, and slightly higher per capita economic growth.

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1. Introduction

During the last decade, we have witnessed momentous changes in how capital flows across borders with most of the dramatic changes taking place in emerging markets. In the late 1980's and early 1990's, a number of developing economies initiated reforms to liberalize their capital markets. These reforms made it easier for both foreign investors to access the local market and for domestic investors to diversify their portfolios internationally. Increasingly, foreign equity and bond purchases have become an important source of capital for developing countries.

The recent crises in Mexico in 1994 and Thailand and other southeast Asian countries in 1997 emphasize the importance of understanding both the impact of capital market liberalizations and the role of foreign portfolio flows for a country's economic prospects. The views widely differ. On the one hand, there is a new stream of research that examines the role of the financial sector and economic growth prospects. King and Levine (1993a,b), Levine and Zervos (1996), Rajan and Zingales (1997), and Bekaert and Harvey (1996) all find a positive relation between the development of the financial sector and economic growth. Obstfeld (1994) explicitly links financial market integration to economic growth. Moreover, Bartolini and Drazen (1996) describe free capital mobility as a possible signal for the government to use to enhance the credibility of a broader reform program. On the other hand, Krugman (1992) is skeptical about the benefits of capital market liberalizations and Mathieson and Rojaz-Suarez (1992) describe how an open capital account may undermine structural reform programs. Worse, some have argued that "the integration of financial markets is dangerous and destabilizing."[1]

The goal of our paper is to document the relation between U.S. equity flows into emerging markets and the behavior of equity returns, the structural characteristics of the equity market, exchange rates and the strength of the economy. We use data on net U.S. equity capital flows to 17 emerging markets during the 1977–1996 period. Following Bekaert, Harvey and Lumsdaine (1998), we identify the break point in net equity capital flows (either up or down). We view these break-points as indicative of the date when the marginal investor may have changed from local to foreign or vice versa. With these

[1] See *Economist* (1997). Claessens, Dooley and Warner (1995) examine whether one can distinguish "hot", speculative capital flows from long-run, stable flows.

dates, we examine the behavior of a wide variety of economic and financial indicators.

We examine four categories of indicators. The first group includes the cost of capital, correlation with the world market return, and volatility. The second group focuses on the structure of the market. We include indicators such as the asset concentration ratios, the size of the market and liquidity indicators. The third category is the economy: foreign exchange volatility, real exchange rates, real GDP per capita, the size of the trade sector, inflation, interest rates and fiscal deficits are analyzed. The last category is country risk. We are interested in the international perceptions of political, economic and financial (credit) risk before and after changes in capital flows.

It is important to be reminded that capital flows are endogenous. Generally speaking, capital flows should be considered the endogenous outcome of a portfolio choice problem. While we report statistics based on pre and post capital flow break points, at no point do we argue that increases in net capital flows 'cause' changes in any of these indicators. The complex process of liberalization provides the foundation for increases in capital flows. It is likely that the components of this process account for the changes in the variates that we report.[2]

Our exploratory analysis remains useful in the light of the many financial and economic woes ascribed to foreign investors by concerned policy makers. The nature of our exercise prevents us from testing formal hypotheses but our results may guide future empirical and theoretical work. In addition, our results may cast doubt on some popular rhetoric regarding the implications of foreign capital inflows.

The paper is organized as follows. The second section provides the setting for our investigation describing the relation between capital flows and financial market integration. The third section provides a brief description of the capital flow data that we use and some summary statistics. In this section, we describe our calculation of the break points. The fourth section details the behavior of the returns, financial structure, economy, country risk and liquidity around capital flow breaks. Some concluding remarks are offered in the final section.

[2] See Bohn and Tesar (1996), Calvo and Mendoza (1998) and Bacchetta and Van Wincoop (1998) for alternative models of capital flows.

2. Capital Flows and Financial Market Integration

It is useful to distinguish between economic integration and financial integration. Economic integration is associated with the reduction in trade barriers (see Sachs and Warner (1992) for an extensive survey). Financial integration is associated with barriers to portfolio investments. It is often the case that these two concepts are linked. Indeed, Bekaert and Harvey (1995) use the size of the trade sector as an instrument for financial integration. While our focus is on financial integration, we will track the behavior of the trade sector to investigate whether financial integration coincides with economic integration in our sample.

A market is financially integrated if a project with identical risk has identical expected returns across different markets. The opposite of market integration, market segmentation, can cause fundamental distortions in an economy. In the segmented market, local investors are restricted to investing in local securities and foreign investors are not allowed (or the cost is high) to invest in the local market.

Obstfeld (1994) and Stulz (1997) detail some of the distortions that occur in the segmented market. Local investors are unable to diversify their equity portfolios because they can only invest in local securities. Further, the local market is usually very small with only a small number of securities. Since investors will pay a premium for diversification, new local firms will arise that inefficiently operate in industries that provide diversification. Current firms may also diversify away from their core activities by accepting negative net present value projects that make them more attractive to investors. One can see that segmentation directly leads to an inefficient allocation of productive resources.

The process of integration should reverse these inefficiencies. Investors will no longer be interested in investing in inefficient domestic companies when they can purchase a foreign stock that is efficient. If the economic liberalization occurs at the same time, the inefficient companies will likely be driven out of business because of price and quality competition from foreign producers. Similarly, the current producers in the local economy may reallocate capital from the inefficient conglomerate divisions to the divisions that have a comparative advantage. Nevertheless, Bekaert and Harvey (1995, 1997, 1998) argue that it is particularly difficult to pin down the exact date when the local market becomes integrated with world markets. Using the legislative dates of capital market liberalizations is fraught with danger. For example, a country might initiate wide-spread reforms – but foreign investors ignore the country's equities because of market imperfections, because the reforms are incomplete, or because they deem the reform program not credible. Hence, while technically open, the market is effectively segmented.

The patterns in net capital flows should reveal much information about market integration. After legal reforms are initiated and the market structure is satisfactory, that is, if the market becomes truly integrated, we should see an increase in capital flows. It is also possible that the market moves in the other direction, i.e. towards segmentation. If restrictive measures are initiated or the political and economic environment is not conducive to international investors, capital flows should 'dry up'. It is therefore also important to carefully consider the particular economic and political environments within each country. We have formed chronologies of important events that might impact capital flows for 20 countries. The timelines appear in Appendix A.

Our investigation does not address the question: Should a developing country prefer direct investment flows to portfolio flows? We choose to concentrate on the portfolio flows, more particularly on equity flows. However, we can indirectly shed some light on this question. It is popularly believed that since portfolio investment is more mobile than direct investment, increased portfolio investment could destabilize an economy and its financial markets. This leads us directly to our investigation of capital flows and equity returns. Destabilization might manifest itself through increased equity volatility. Early work in Bekaert (1995), Tesar and Werner (1995a) and Bekaert and Harvey (1997a) suggest that this is not the case, but the results in Bekaert and Harvey (1998) are more mixed. We reassess these results and expand the scope of examination to other sensitive measures such as foreign exchange volatility and turnover.

The behavior of equity returns also includes any change in the cost of equity capital. Clark and Berko (1997) find that surprise purchases of Mexican equity lead to a significant and substantial price rise. They conclude that the price rise is permanent, reflecting greater risk sharing and improved liquidity and hence induces a reduction in the cost of equity capital. Similarly, Henry (1997) documents a substantial positive price response to capital market liberalizations. Following Bekaert and Harvey (1998), we argue that the dividend yield is directly related to the cost of capital. We find that the dividend yield is sharply lower after increases in capital flows. Even if the change constitutes an actual change in the cost of capital, it is important to realize that foreign investment may not be the only causal factor. For example, Henry (1997) ascribes 50% of the price response to macroeconomic reforms (which may affect the growth rate of dividends as well) but Bekaert and Harvey (1998) find that an important part of the total drop in the dividend yield is accounted for by capital market liberalizations. We also find that correlations with the world market return are doubled after capital flow breaks. A decrease in expected returns and an increase in correlations suggests that the process of market integration leads to reduced diversification benefits for international investors, confirming the results in Bekaert and Urias (1996).

The rest of our paper details the association of capital flow breaks with financial and economic fundamental variables. We find that there are changes in almost every measure we examine moving from a low capital flows period to a high capital flows period.

Our focus on equity flows is potentially quite restrictive. Equity capital may flow into an emerging market while bond flows are drying up. Of course, after a general market opening, we expect both bond and equity flows to increase more or less simultaneously as foreign investors adjust their portfolios. We therefore obtained data on bond flows and examine how they correlate with equity flows.

3. Capital Flows Data

3.1 World capital flows

The ideal data for the study of capital flows is a monthly world matrix of flows. Each element would detail the net flow from (row) a country to (column) another country. However, the task of constructing such a matrix is extraordinarily difficult. First, the U.S. is one of the few countries which has detailed monthly measurements for 65 countries. Even the U.K, a country with bountiful economic data, does not report flows to individual countries. Second, even if two countries report flows, they are not easily reconciled because of different collection conventions. For example, Tesar and Werner (1994) do some basic cross checking of U.S. Treasury and Canadian data and find that the average quarterly net purchases of U.S. shares reported by Statistics Canada is less than half of those reported by the U.S. Treasury while no similar magnitude of discrepancy is found for the reported U.S. net purchases of Canadian equity. Third, the country of origin is not necessarily the final destination for the capital flows. For example, much of the flow to the U.K. is channeled to other European and world investments because London is the leading world clearing house for non-U.S. transactions.[3]

Some attempts have been made to reconcile and create a flow matrix. Indeed, there is great practitioner interest in this exercise. Empirical evidence from U.S. data on stock inclusions in a major index (Shleifer, 1986 and Harris and Gurel, 1986) or flows to mutual funds, (Warther, 1995) suggests that flows impact prices. Presumably a superior measure of flow could lead to excess profits in the context of a trading strategy. Howell (1993) and Howell and Cozzini (1991, 1992) undertake the construction of a capital flow matrix.

We have obtained the Howell matrices for the years 1986 through 1992.[4] Unfortunately, these matrices are only prepared on an annual basis. Furthermore, emerging markets are coarsely organized into three categories, Latin American, Asia and Other. Finally, many of the liberalizations were taking place in the early 1990s and these data end in 1992.

As a result, we choose not to use the Howell data for our analysis. We focus on the capital flows data from the U.S. Department of Treasury. The Howell data, however, can give some insight on what we are missing, in focusing on purely U.S. data. For example, in 1992 the total net equity flows to emerging markets was US$15.95 billion as reported in Howell. Of that amount, $8.97 billion originated from the U.S. The next most important country is the U.K with $2.85 billion in flows (some of which is probably U.S. originated). The Department of Treasury data suggests that the U.S. equity flows to emerging markets in 1992 was $5.54 billion. This comparison suggests that the Treasury data captures a sizable portion of the flows to emerging markets.

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[3] Similar problems exist for measuring bond flows. Ito (1998) reports that bank lending both in Asia and Latin America is dominated by European Banks, not U.S. banks.

[4] We grateful to Michael Howell for providing us with this information.

3.2 U.S. capital flows

Tesar and Werner (1994) provide a detailed analysis of the components of the U.S. capital flows data. The U.S. international portfolio investment transactions are reported through the Department of Treasury's (DOT) "International Capital Form S," [see Appendix B]. Operationally, the 12 district Federal Reserve Banks, principally the Federal Reserve Bank of New York, collect these data, maintain contact with the respondents, and ensure the accuracy and integrity of the data (Kester, 1994). Tabulation of the data, however, is done by the Department of the Treasury and is presented in its *Quarterly Bulletin.* The reporting is done on a monthly basis.

By law, banks, brokers, dealers and other financial institutions, and individuals are required to report the value of any long-term security transactions involving a foreign resident. American Depositary Receipts (ADR) transactions are included in the figures. Securities transactions are reported on a transactions basis. Securities transactions are recorded by the nationality of the person you are carrying the transaction with, not by the country that originally issued the security. A foreigner is any individual, branch, partnership, association, corporation or other organization located outside the United States. Additionally, securities are recorded according to the residency of the issuer and not their currency denomination.

Exceptions for reporting are given when the total purchases and the total sales of securities are less than $2 million for the reporting month. There are penalties for failing to report which can result in a civil penalty of up to $10,000 and up to a year in prison for willful failure to report (see DOT International Capital Form S: Instructions in the appendix).

As mentioned earlier, there are several problems with the data. The increasing complexity of financial transactions and the development of new financial instruments makes it harder to record all the appropriate information. Kester (1994) details three potential problems related to the reporting procedures themselves. These problems involve recording of information of U.S. residents living abroad, financial transactions carried out in foreign financial centers, and stocks of securities held by U.S. residents that are classified geographically by the counterparty and not by the issuing country.

Our data comes directly from the *Treasury Bulletin*'s Table CM-V-4-"Foreign Purchases and Sales of Long-Term Securities by Type and Country". This table reports "Gross purchases by foreigners" which we classify as a U.S. sale and "Gross sales by foreigners" which we classify as a U.S. purchase. We focus on foreign equity securities (columns 7 and 14) and bond securities (columns 6 and 13). More details are provided in the appendix.

3.3 Accumulating capital flows and break points

The capital flow data have been extensively studied before in a portfolio allocation context by Bohn and Tesar (1996) and Tesar and Werner (1994, 1995a,b). We begin by accumulating the capital flows to obtain an approximate measure of the ratio of U.S. ownership to market capitalization. This process must include local market equity appreciation realized by the U.S. investor. The dollar position of U.S. investors in emerging equity market i is:

$$\text{Ownership}_{i,t} = \text{Flow}_{i,t} + \text{Ownership}_{i,t-1}(1 + R_{i,t}) \tag{1}$$

where $\text{Flow}_{i,t}$ is the net capital flow in period t and $R_{i,t}$ is the market i return in U.S. dollar terms from the International Finance Corporation (IFC).[5] We also calculate the cumulative net capital bond flows. Since we do not have information on bond returns in each market, we present a simple accumulation of the net bond flows. While our statistical analysis concentrates on equity ownership using (1), Figure 1 presents the simple accumulation of equity and bond flows. The correlations that are reported in the figures are also based on the simple accumulations.

One problem that we face is the starting point. The capital flow data from the Department of the Treasury begins reporting in January 1977. However, for many countries there are zero entries for a number of years. In addition, we rely on the IFC data to calculate the increase in equity ownership resulting from a rise in the local market index. Hence, the starting point for (1) differs across many countries. Further, we do not know the initial stock of U.S. capital in the emerging stock market. Hence, it is possible

[5] Tesar and Werner (1995a) do not take into account the capital gains on the equity investments for emerging markets. They report a simple accumulation of the net capital flows. However, Tesar and Werner (1994) do adjust for capital gains.

that we calculate some of the early ownerships as small negative numbers. The negative ownerships do not concern us too much given the nature of our examination. Our focus is on the more recent flow data. In addition, we are concerned with the patterns in the flows - not the levels. Finally, it also may be the case that foreigners hold portfolios different than the IFC index. Kang and Stulz (1997) show that foreign investors are more likely to invest in securities that are large and well known. The IFC indices have some advantage here over more comprehensive local indices because of the IFC's focus on large, relatively liquid securities.

Our first task is to assess the break points in the equity flows. We use the break points that are reported in Bekaert and Harvey (1998). We examine 17 emerging markets that are tracked by the IFC. The IFC also tracks Jordan, Nigeria and Zimbabwe. However, the Treasury Bulletin does not include data on these countries.[6]

We use the endogenous break point tests detailed in Bai, Lumsdaine and Stock (1997). We report the 90% confidence interval for the break as well as the median point. In some countries, there is a wide confidence interval, e.g. Taiwan. In other countries, the interval is extremely tight, e.g. Philippines. The technique tells us whether there is a break in the time-series - but it does not tell us if the break is up or down. A visual inspection of the data suggests that the 16 of the 17 are associated with increases in capital flows and only one, the Philippines, is associated with a decrease in capital flows.

Table 1 also reports the mean levels of ownership five years before and five years after (and including the break month). For some of the countries, we do not have data for five years after. We then report the average to the end of the sample. Table 1 confirms that foreign ownership is greater in the post period for every country except the Philippines. It may be the case that foreign equity ownership is increased at the expense of foreign bond ownership. However, this does not necessarily appear to be the case. Table 1 reports the mean levels of cumulative bond flows before and after the equity break. In 11 of the 16 countries, the bond flows increase (often sharply) after the equity break.

[6] The IFC currently follows more than 20 markets. We use the full sample of countries that are available in 1992. Our statistical tests require a minimum number of observations. As a result, we do not include Eastern European countries and others that were added after 1992.

We report four types of test statistics over two different samples. In the first sample, the Philippines (the only country where the capital flows break in a downward direction) is excluded. In the second sample, all countries with insignificant breaks, from the first column of Table 1, are excluded. The first statistic is a simple difference in means across the 17 countries. This test allows for different variances in the pre and post data but imposes independence across countries and across time.

The second set of tests are country specific. We conduct heteroskedasticity-consistent tests of the hypothesis of no change in each time series for each country. These tests also correct for a first-order moving average process in the residuals for all series that are available on a monthly basis. For those series which have components that are observed at an annual frequency, we correct for a 12th-order moving average process. The test statistics' p-values are denoted with asterisks.

The third set of tests involves a multivariate estimation with a single indicator variable that is activated after the break dates. The coefficient on this variable represents the average difference in the post-break period. We test whether this single coefficient is different from zero. This estimation is group-wise heteroskedasticity consistent (allows for different variances across the countries). We also allow the errors to follow panel-specific moving average processes. Finally, we allow for fixed effects in the estimation.

The final test is another version of the multivariate test. In this test, we add country-specific indicator variables which pick up the country-specific difference between the pre and post break mean. We conduct a group-wise heteroskedasticity and moving average-consistent Wald test that these coefficients equal zero.

Not surprisingly, equity flows increase significantly in all countries but the Philippines and U.S. ownership on average increases from less than 0.5% to 4 to 5% of local market capitalization. The changes are significant in every country. Except for Brazil, the change in cumulative bond flows is statistically significant. The χ^2 tests reveal a significant increase in cumulative bond flows which appears to be economically substantial.

Figure 1 allows a comparison of the patterns in equity and bond capital flows. In many countries, for example Argentina, there is a striking correlation between the equity and bond capital flows. In some countries (Brazil, Colombia, India, Indonesia, Malaysia, Thailand and Turkey), the equity capital flows 'lead' changes in the bond capital flows.

In some other countries (Korea, Mexico, Pakistan and Venezuela), the bond market distinctively changes before the equity market.

The final columns of Table 1 report the correlations between the equity and bond flows. For the purpose of this table, we calculate the cumulative net equity flows, unadjusted for local market returns. This puts the equity flows on the same footing as the bond flows (which also do not include local market returns). The correlation is very high. There are six countries (Argentina, Brazil, Indonesia, Korea, Mexico and Pakistan) with correlations above 90%. The correlations are even higher if we focus on the post-1990 period. In this sample, the average correlation between the equity and bond flows is 51%. In general, the evidence points to the bond and equity markets being complementary sources of foreign funding rather than substitutes.[7]

4. Finance, economics and changes in capital flows

There are significant challenges in measuring equity volatility, correlation and the cost of capital for emerging markets. We choose to follow the path of Bekaert and Harvey (1997a) for volatility and correlation and Bekaert and Harvey (1998) for the cost of capital.

4.1 The cost of capital

Bekaert and Harvey (1998) argue that a change in the marginal investor and the different equity valuation it entails should have discrete effects on the price level of stocks [see also Korajczyk (1996)]. They argue that a technique exploiting information in price levels, as reflected in dividend yields, may be more powerful than trying to directly model expected returns. Indeed, the dividend yield has the advantage of being directly measurable – that is, it need not be pre-estimated – and being a stationary random variable. Moreover, shocks to prices should dominate its variation over time. Finally, the dividend yield is intricately linked to the cost of capital.

[7] Negative correlations are found for Chile, Portugal and Taiwan which would suggest that the equity and bond markets might be substitutes in these countries.

Consider a simple example from Bekaert and Harvey (1998). Assume rational expectations and a discounted dividend model for the stock price, P_t:

$$P_t = E_t \left[\sum_{i=1}^{\infty} \delta_{t+i}^{i} D_{t+i} \right], \tag{2}$$

where D_t are the dividends and δ_t is the discount factor. Let:

$$L_t = \begin{cases} 0, & \text{before liberalization;} \\ 1, & \text{after liberalization.} \end{cases}$$

Further assume that the liberalization is a one-time, unexpected event. When the market is segmented, the required rate of return is constant and equal to r. When the market opens up, the required rate of return drops to $\overline{r}$. We can represent this simple model for expected returns as:

$$\delta_t = \frac{1}{1 + r - \eta L_t} \tag{3}$$

where $\eta = r - \overline{r}$, the drop in the cost of capital. Under this set of assumptions, the relation between the change in the dividend yield, $\overline{D}_t/\overline{P}_t - D_t/P_t$ and the change in the cost of capital η, depends on the dividend process.

In the standard Gordon model, which assumes that $E_t D_{t+i} = (1+g) E_t D_{t-1+i}$, this relation is virtually one to one.[8] It is straightforward to show:

$$\begin{aligned} \eta &= r - \overline{r} \\ &= (1+g)\frac{D_t}{P_t} - (1+\overline{g})\frac{\overline{D}_t}{\overline{P}_t} + g - \overline{g} \end{aligned} \tag{4}$$

If the growth rate of dividends is not affected by the capital market liberalization, a regression of D_t/P_t onto the liberalization indicator variable, L_t, yields $-\eta/(1+g)$. Hence, the slope coefficient provides a slight underestimate of the true response of the cost of capital.

Bekaert and Harvey (1998) detail the potential problems in using this measure in cost of capital estimation. Nevertheless, it is a reasonable starting point. Table 2 shows that the dividend yield decreases in 10 of 16 countries after the capital flow break point (with capital flow increases). On average, the dividend yield decreases from 3.86% to

[8] The Gordon model is not a realistic model for stock price determination but Bekaert and Harvey (1998) show that its main intuition remains valid with more general models.

2.65% implying a statistically significant (at the 10% level) reduction in the cost of capital. This analysis includes all countries except the Philippines where a significant down break in capital flows occurred. If we specialize the analysis to the set of countries that experienced an significant increase in equity capital flows, the dividend yield moves from 4.27% to 2.47%. This decrease is also statistically significant across all of our tests.

Although much noisier, it is also possible to gain some insights from the log ex post returns. We find that the average U.S. dollar returns in the five year period before the capital equity flow break is 20.00% and 13.36% following the break. While this is a large absolute difference in average returns, the multivariate test is only significant at the 10% level. This is consistent with the simulations in Bekaert and Harvey (1998) which show that it is much more difficult to observe a shift in the cost of capital by examining the behavior of equity returns.

4.2 Volatility and correlation

We follow the work of Bekaert and Harvey (1997a) and estimate a sophisticated time-series model for volatility for each country that allows both the conditional mean and the conditional variance to vary through time.[9] We condition on both world and local information to capture the changes in the degree of market integration. This model delivers a time-series of conditional volatilities for each country as well as conditional correlations of each country's return with the world market return.

The following section follows the steps detailed in Bekaert and Harvey (1997a). Define the arithmetic excess return on the national equity index of country i in U.S. dollars as $r_{i,t}$. Our model has three components. First, the conditional mean, $\mu_{i,t-1}$, is assumed to be time-varying:

$$r_{i,t} = \mu_{i,t-1} + \epsilon_{i,t}. \tag{5}$$

Second, the unexpected return, $\epsilon_{i,t}$, is determined by both a common world shock, $\epsilon_{w,t}$ and a purely idiosyncratic (country-specific) shock, $e_{i,t}$,

$$\epsilon_{i,t} = v_{i,t-1}\epsilon_{w,t} + e_{i,t}, \tag{6}$$

[9] Other related work on volatility is De Santis and İmrohoroğlu (1996), Aggarwal, In clan and Leal (1996), Kim and Singal (1997) and Richards (1996).

where $v_{i,t-1}$ is a time-varying weight that reveals the relative importance of world versus local information. Finally, the local idiosyncratic conditional variance, $(\sigma^{\ell}_{i,t})^2$, follows an asymmetric GARCH (1,1) which follows from the work of Glosten, Jagannathan and Runkle (1993):

$$(\sigma^{\ell}_{i,t})^2 = E[e^2_{i,t}|\boldsymbol{I}_{t-1}] = c_i + \alpha_i(\sigma^{\ell}_{i,t-1})^2 + \beta_i e^2_{i,t-1} + \gamma_i S_{i,t} e^2_{i,t-1}, \tag{7}$$

where $\boldsymbol{I}_{t-1}$ is the information available at time $t-1$ and $S_{i,t}$ is an indicator variable which takes on the value of one when the idiosyncratic shock is negative and zero otherwise. We also assume that

$$e_{i,t} = \sigma^{\ell}_{i,t} z_{i,t}, \tag{8}$$

where $z_{i,t}$ is a standardized residual with zero mean and unit variance. We investigate two distributional assumptions for the standardized residual, $z_{i,t}$: the normal distribution and a mixture of normal distributions. The latter distribution allows for both skewness and kurtosis.

The conditional mean of country i's return is assumed to be linear in a set of global and local information variables. The global information variables include: a constant, the world market dividend yield in excess of the 30-day Eurodollar rate, the default spread (Moody's Baa minus Aaa bond yields), the change in the term structure spread (U.S. 10-year bond yield minus 3-month U.S. bill), and the change in the 30-day Eurodollar rate. These variables are designed to capture fluctuations in expectations of the world business cycle [see Harvey (1991)]. The local information variables include: a constant, the equity return, the exchange rate change, the dividend yield, equity market capitalization to GDP and trade to GDP. All of the information variables are known at time $t-1$. The financial variables are lagged by one month and the macroeconomic variables are lagged by one year to allow for reporting delays.

The world market expected returns and variances are a special case of (1)–(5), with $i = w$, $\sigma^{\ell}_{i,t} = \sigma_{w,t}$, $v_{w,t-1} = 0$. The conditional mean of the world market return, $\mu_{w,t-1}$, is assumed to be a linear function of global information variables. Finally, the relative importance of world versus local information in the variance equation is defined as:

$$v_{i,t-1} = \boldsymbol{q}_{i,0} + \boldsymbol{q}'_{i,1}\mathbf{X}^{*\prime}_{i,t-1} \tag{9}$$

where, following Bekaert and Harvey (1997a), $\mathbf{X}^{*}_{i,t-1}$ includes the subset of the local information variables which might proxy for the degree of market integration: market capitalization to GDP and the size of the trade sector (exports plus imports divided by GDP). The data for this exercise are U.S. dollar total return indices for 20 countries provided by the IFC and the sample covers the 1976-1995 period. These data are described in more detail in Bekaert and Harvey (1995).

The results are contained in Table 2. In 11 of 17 countries, the fitted correlation with the world increases. On average the correlation increases from 0.09 to 0.18 which is significant in the multivariate tests that allow for country-specific coefficients. We also calculated ex post betas with the MSCI world market portfolio. The betas increase from an average of 0.33 to 0.48 which is significant at the 11% level. When we examine only the countries with significant increases in equity flows, the betas increase from an average of 0.11 to 0.48. This change is significant at the 5% level and suggestive of higher correlations with world aggregates.[10]

The results for volatility are more ambiguous. The fitted volatility declines in 9 of 17 countries. On average, volatility falls from 49% (on an annual basis) to 43% after the break in net capital flows but the difference is not significant. On the other hand, when we look at the ex post volatility of the returns, there is more of a change. In the early period, the volatility is 44% which falls to 37% in the later period. This decrease in volatility is not significant. These results suggest that volatility neither systematically increases or decreases after capital flow breaks.

4.3 Financial market indicators

Table 3 details the behavior of a number of financial market indicators. We find that on average the number of stocks included in the IFC index significantly increases from 35 to 57 after the break in capital flows. The IFC index attempts to cover 70% of market capitalization (see Bekaert and Harvey, 1995). It seems like more stocks are being included in the country indices to attain the 70% minimum.

This suggests a pattern in stock market growth in the emerging markets. It is not as simple as the largest firms getting larger. Additional firms are entering the equity

[10] The pooled regression tests are not available for the betas or the ex post volatility because only two observations are available for each country, pre-break beta (volatility) and post-break beta (volatility).

market and smaller current firms are becoming larger. This is consistent with the data on concentration ratios. The concentration ratio (modified Herfindahl ratio) declines, albeit insignificantly, after the break in capital flows. This is consistent with some smaller firms increasing in size at a rate faster than the larger firms. The cross-sectional average may also be influenced by a number of countries (e.g. Mexico) where privatizations introduced a number of large firms to the market.

Market capitalization to GDP increases after the flows break point. Market capitalization to GDP increases in 14 of 16 countries. On average the equity market accounts for 15% of GDP before the break and 29% of GDP after the break. The multivariate tests suggest that this increase is significant leaving little doubt that the size of the equity market relative to GDP increases.

We also examine the cross-sectional volatility of the individual security returns. This is a monthly measure of dispersion. If all of the securities were in one particular industry, the returns would be highly correlated and the cross-sectional volatility would be low. With industrial diversification, the cross-sectional volatility would be high. The results in Table 3 show no particular pattern.

We examine two liquidity indicators: average value traded divided by GDP and turnover. Average value traded is the average monthly value of the shares traded in millions of U.S. dollars. We divide this by the previous year's GDP. This ratio sharply increases in a number of countries. The overall ratio's change is significant at the 10% level for those countries that had a significant break in capital flows. The turnover ratio is the total value of shares traded during the month divided by the average market capitalization. Some countries show significant increases in turnover and some show significant decreases. Overall, there are no particular patterns when examining the turnover ratio. Of course, some caution needs to be exercised in comparing the ratios across countries. Taiwan, for example, is an extremely influential observation. For interpretation, the emphasis should be placed on our multivariate tests which tend to down weight these influential observations in a generalized least squares framework.

Finally, we look at the foreign exchange market. We calculate a trailing annualized three-year standard deviation of exchange rate changes. The multivariate test that allows for country-specific coefficients suggest significant changes in FX volatility. The volatility of the FX rate is almost cut in half after the break in capital flows. The most dramatic decreases in FX volatility are found in Argentina and Mexico. Of course, dramatic changes in FX volatility could be induced by moving from a float to a pegged regime or by stabilization plans in countries with rampant inflation. Appendix A provides a chronology of the currency regimes in the emerging markets.

4.4 The economy

Table 4 details the association of capital flow breaks and fundamental economic variables. There are a number of interesting features. First, in the analysis that excludes only the Philippines, real per capita GDP growth increases from 2.73% to 2.93% after flow break points. Examining the countries with significant breaks, GDP per capita does not significantly change. On a country-by-country basis, Chile, Colombia, Mexico and Thailand have significant increases in real GDP per capita. There are increases in Argentina, Greece, India, Malaysia, Portugal and Taiwan but they are not significant.

There is a sharp reduction in inflation in many countries. The overall average is skewed by Argentina and Brazil. Excluding these two countries, inflation drops from 21.61% to 18.78% after the flow break point. Similar results are found for local interest rates.

Capital flow breaks are also associated with changes in trading patterns. Table 4 indicates that the size of the trade sector is larger after portfolio flows break. On average the trade sector accounts for 61.4% of GDP after a flow break point compared to 50.4% before. These results are consistent with a joint process of financial market and economic integration. Indeed, as Feldstein and Horioka (1980) point out, in a world with free capital flows, savings and investment should be de-linked and large current account imbalances can be run since they can be feasibly financed. However, the data do not seem to support the notion that larger capital mobility has led to emerging markets running large current account deficits. On average, there is a trade surplus as a percentage of GDP of about 1.4% before the capital flows break point which increases to 2.8% on average after the break.

External debt to GDP also significantly decreases on average. While the long-term external debt decreases, the change is not significantly different from zero. With government deficits going down on average as well, it is tempting to conclude that the developing countries have reduced their external debt burden by improving their trade balances and freeing up resources from lower government deficits. In addition, despite the inflowing equity capital, they are actually exporting rather than importing capital, on average. This may suggest that developing countries are not relying on more foreign capital at all but have simply replaced debt with equity. Consider the case of Chile in Figure 1. There is a clear negative correlation between equities and bonds and the largest decrease in external debt of all the countries in our sample. This is consistent with a substitution effect.[11][12] Nevertheless, given the large cross-country differences, we should caution against such generalized inference. For example, more than half of the average increase in trade surplus to GDP in the post break period can be attributed to two European countries: Portugal and Greece.

We also compiled real exchange rate indices for the various countries by dividing the exchange rate in local currency to the dollar by the ratio of the local consumer price index to the U.S. consumer price index. These data are from the International Financial Statistics of the International Monetary Fund. Hence, an increase in the index suggest a real exchange rate depreciation. We find a significant real appreciation of the local currencies in nine of the 16 countries after equity flow breaks, and a significant drop in only four countries. Overall, foreign capital flows seem to lead to real exchange rate appreciations, as is often claimed. The change is highly statistically significant when we allow for country specific coefficients in the multivariate regressions.

4.5 Country Risk

We examine five different measures of country risk: Institutional Investor's Country Credit Rating (IICCR), International Country Risk Guide (ICRG) Economic risk, Political risk, Financial risk and Composite risk. The ICRG Composite risk is a weighted

[11] It is well known that many emerging markets have reduced their reliance on commercial bank debt and some, like Chile, have also reduced their reliance on foreign fixed income.

[12] There is some interesting theoretical and empirical work on the various sources of financing. For example, Boyd and Smith's (1996) model suggests that as an economy develops, the aggregate ratio of debt to equity will generally fall, yet, debt and equity remain complementary sources for the financing of capital investments. See the empirical work in Demurgüç-Kunt and Maksimovic (1996)

average to the first three components (see Erb, Harvey and Viskanta, 1996a,b). A higher country rating means lower risk. These measures are all ex ante. That is, in the case of the IICCR, participants are asked to make an assessment of the future riskiness of a country.

The results in Table 5 suggest an unambiguous increase in rating across the different measures. For example, the ICRG Composite rating increases in every country except Venezuela. The average rating increases from 61.1 to 69.7 which is a statistically significant change. Erb, Harvey and Viskanta (1996a) link expected returns and country ratings. A 8.6 point increase in rating would translate into a 2.4% decrease in the expected returns. Overall, the message is that capital flow inflows are associated with investor perceptions of lower country risk.

4.6 Portfolio Results

We undertake one final experiment. We create two equally weighted portfolios. At each month, the first portfolio, which we call the "segmented portfolio" includes the returns of the countries that have not experienced a significant break in the equity capital flows. At each month, the second portfolio, which we call the "integrated portfolio" includes the returns of the country that have already experienced a significant break in the equity capital flows. The number of countries in each portfolio shifts through time as a number of countries move from the segmented portfolio to the integrated portfolio. As such, it is possible that the results could be heavily influenced by one or two countries when there are a small number of countries in the portfolio. To address this problem, we restrict the sample period to be January 1987 to September 1994.

The portfolio results are contained in Table 6. Consistent with our analysis of the cost of capital and our tests on the ex post returns, there is little difference in the ex post observed returns (25.9% compared to 24.1% on an annual basis for the significant countries). We also find evidence of higher volatility. In the segmented portfolio, the average annualized volatility is 20.7% whereas in the integrated portfolio, the volatility is 35.2%. The volatility analysis contrasts with the inconclusive results in the ex post volatility analyzed in Table 2.

We also calculated the correlations and betas of the two portfolios with world returns. The correlation with the world portfolio increases from 0.13 to 0.36 moving from the segmented to integrated portfolio. We also find that the beta increases from 0.17 to 0.77. The increase in correlation is consistent with integrated markets being relatively more impacted by world information than segmented markets.

5. Conclusions

Our paper examines the behavior of both the financial system and the economy during different capital flow regimes. We identify the point where equity capital flows 'break'. In 16 of the 17 countries we examine, the break is associated with an increase in net capital flows.

We are the first paper to compare and contrast the behavior of both equity and bond capital flows. For many countries, the patterns of the equity and bond flows are very similar. In a few countries, it seems like the bond flows precede equity flows.

We find that expected returns decrease after significant breaks in capital flows. In addition, risk, at least as measured by country rating, decreases and the correlation of equity returns with the world market is higher. This seems consistent with a "one-time" portfolio adjustment associated with the movement from segmented to integrated markets. It does not seem to be consistent with the "return chasing" hypothesis postulated by Bohn and Tesar (1996).

In addition, we find that the increase in capital flows is associated with marginally higher per capita GDP, a larger trade sector, less long-term country debt, lower inflation, and lower FX volatility.

Although not all of these changes are statistically significant, the general picture is one that contradicts the view that foreign portfolio investors are detrimental to a developing country's economy. Of course, our methods do not allow us to distinguish between the scenario where foreign equity investment is responsible for the improved macroeconomic and financial outlook and the scenario where it is simply attracted by the prospect of these improvements. Nevertheless, our suggestive findings of lower expected returns and risk and higher loadings on world factors are consistent with international investors re-balancing their portfolios in response to a wider opportunity set (see also

Bohn and Tesar, 1996). If this is the case, policy makers across the world would be well advised to create an environment that attracts, rather than repels, foreign portfolio investors.

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Appendix A: A Chronology of Important Political and Economic Events

The goal of this appendix is to provide a detailed chronology of important political and economic events in 20 emerging markets that can be used to: (1) interpret the liberalization dates which are statistically derived and (2) provide economic justification for the dating of official liberalizations. We have tried to be as comprehensive as possible and the version published here is very much work in progress. We encourage comments on this appendix and an up to date version is available at www.duke.edu/~charvey/Country_Risk/chronology.htm.

We have tried to rely as much as possible on original sources. The most important sources are the various issues of the International Finance Corporation's annual *Factbooks* as well as the quarterly and monthly IFC reviews. We have also relied heavily on the Cowitt *World Currency Yearbooks.*

We also provide a list of various authors' liberalization dates for these economies. These include the dates in Bekaert and Harvey (1997b, 1998), Kim and Singal (1997), Buckberg (1995), as well as the International Finance Corporation's official liberalization dates.

We also include the dates for the first Country Fund listing as well as the first ADR announcement. These dates are from Bekaert and Harvey (1998) and Miller (1996). Some of the above papers use these launchings as indicators of liberalization.

Finally, the superscripts denote lettered endnotes which detail the source of each piece of information. The dating format is YYMMDD. Most of the data, however, only identify the month. YY00 represents information relevant for that particular year but without a particular month associated with it.

Appendix A

Argentina

Major Political and Economic Events

Date	
7501	Value-added tax introduced at 16%.[p]
760405	Two tier exchange rate structure reintroduced.[a]
761122	The exchange rate structure was merged and unified into the Official Fluctuating Free Market Rate, applicable to virtually all transactions except currency-swap operations with the Central Bank, to which the Official rate still applied.[a]
770701	Swap transactions suspended; Official rate inoperative.[a]
780512	System of minidevaluations (crawling peg) was theoretically abandoned, and the Peso was placed on a controlled, floating basis. However, the minidevaluation system subsequently remained in effect.[a]
781221	The central bank introduced Advance schedule of daily exchange rates (tablita).[a]
8000	Banking crisis.[y]
810622	A two-tier exchange rate structure was reintroduced.[a]
811224	The two-tier system was abandoned, creating a controlled Effective Rate.[a]
820402	Argentine soldiers enter the British-occupied Falkland Islands (Islas Malvinas). Beginning of Falkland Island War.[a,z]
820505	Per dollar tax introduced on all exports proceeds.[a]
820614	Falkland Island War ends.[z]
820705	Two-tier system reinstated.[a]
8208	Beginning of Mexican debt crisis - impacts most of Latin America
820913	Mixed rate was devised for import and export operations.[a]
821102	Two-tier system abandoned.[a]
830601	Old Peso replaced at an exchange of 10,000 old Pesos for 1 new Peso (Peso Argentino.)[a]
8310	Emergency controls on all foreign exchange dealings after provincial judge blocks foreign debt negotiations and president of Central Bank is arrested.[a]
8311	Raul Alfonsin, first democratically elected President in a decade, assumes power.[a]
8400	Decree 4070 enacted requiring all imports to have a permit.[p,a]
8402	Rescue package put together by 4 Latin American Countries and U.S. for the payment of interest arrears on Argentina's foreign debt
8412	Tentative agreement with creditors on rescheduling, financed by IMF, banks and bilateral lenders.[a]
8500	Tariff surcharges 10% for imports and 9% for exports.
8500	Banking crisis.[y]
850519	Central Bank freezes U.S. Dollar bank accounts for 120 days and finally reaches a settlement with the IMF on austerity measures.[a]
8506	Austral plan begins (price and wage controls, devaluation).[p]
850614	Peso Argentino replaced at an exchange of 1,000 old Pesos for 1.00 Austral. A fixed exchange rate vis-à-vis the dollar was introduced.[a]
8508	Bank debt restructuring agreement.[i]
860206	Phase II of the Austral plan announced.[a]
8604	Main parts of Austral plan abandoned.[p]
860407	Austral devalued and system of minidevaluations implemented.[a]
8612	End of Austral Plan.
8700	Argentina offers amnesty to flight capital in conjunction with debt restructuring agreement reached in same year. The program fails to bring back money because it required one for one matching of converted debt with new money.[i]
8708	Bank debt restructuring agreement.[i]
8710	Alfonsin government implements steps to deregulate the financial sector.[p]
871014	Two-tier system reinstated.[a]
8804	Argentina begins accumulating interest arrears.[i]
880903	Plan Primavera announced. Exchange rate system revised.[a]
8903	Brady plan (adjustment packages that combined debt relief and market-oriented reforms)
890417	The official exchange rate was abolished and all dealing takes place at Free Market Rate.
8905	Free market rate abandoned and fixed Official Rate was set. All other currency trading was illegal.[a]
8911	New Foreign Investment Regime put into place. All legal limits on foreign investment abolished. Capital gains and dividends can now be repatriated freely.[e] No need for previous approval of transactions. No legal limits regarding type or nature of foreign investment. Introduction of a free exchange regime (free repatriation of capital, remittance of dividends and capital gains.)
8911	*Bekaert/Harvey Official Liberalization date [final version].*
8911	*Kim and Singal Liberalization date.*
8912	*Bekaert/Harvey Official Liberalization date [NBER version].*
9003	Currency made fully convertible making foreign portfolio investment by residents possible.[a]
9004	Aerolineas Argentinas (Airline) privatized, $260 million.[p]
9010	Joins Multilateral Investment Guarantee Agency, sponsored by the World Bank.[p]
9011	Menem extends value added tax to services, implements tax on fixed assets.[p]
9011	ENTEL (Telecommunications) privatized, $1244 million.[p]
9012	Molinos Rio de la Plata places 5 year $21 million Eurobond.[i]

Appendix A

Argentina

Major Political and Economic Events

Date	
9103	Convertibility Law (fixed exchange rate to dollar and abolished all exchange and capital controls).[p]
9106	Molinos Rio de la Plata returns with an 18-month $15 million Eurobond issue.[i]
9107	Petroleo Brazileiro issues $250 million two year note.[i]
9108	First ADR announced. Telefonica De Agentina SA - B.[aa]
9108	Law protecting dollar denominated deposits was enacted.[p]
9109	Argentina raises $300 million in Eurobond two year issue with put option after first year.[i]
9110	*IFC Liberalization date.* [i]
9110	*Buckberg Liberalization date.* [d]
9110	Menem signs omnibus decree ordering reform of the state, including deregulation of financial market.[p]
9110	Argentine Fund begins.[i] This fund marks the first time US investors can invest in a mutual fund that that represents a broad part of the market. Deregulation decree reformed domestic industry, external trade, and capital markets. The deregulation decree eliminates capital gains taxes for foreigners.[e] Net asset value $62.4 million in December 1991.[aa]
9111	Argentina sells share in Entail worth $356 million as part of privatization program.[i] President Menem signs unprecedented and comprehensive decree giving Argentina one of the most liberalized economies of Latin America.[e]
9200	Argentina's Comision de Valores (Securities Commission) issues regulations requiring debt instruments to carry at least 2 risk ratings by credit rating agencies.[i]
9201	Austral replaced by peso.
9202	Argentina sells shares in Telecom Argentina worth $266 million as part of privatization program.[i]
9204	Preliminary agreement reached on bank refinancing package to be finalized in December. All new bonds issued in new agreement will be eligible for debt-equity conversion with new privatizations. Three series of call warrants on Argentine commercial bank debt are issued by J.P. Morgan and Merrill Lynch.[i]
9206	Lehman Brothers launches first public call warrants on a basket of Argentina's shares.[i]
9207	Moody's upgrades Argentina's sovereign debt rating from B3 to B1.[i]
9211	Agreement on structure of new national pensions system (to be financed with the privatization proceeds of Yacimientos Petroliferos Fiscales, YPF (petroleum company).
9212	Bank debt restructuring agreement.[i]
9303	Social security reform (announcement of creation of private pension fund system to begin operation in future). Argentina's Comision de Valores stipulates that only financial intermediary firms belonging to self-regulating organizations can participate in public offering of securities.[i] This move attempts to cut down on insider trading on the Buenos Aires exchange.
9304	Brady Plan agreement.
9305	Import tariffs on capital goods abolished and a 15% tax reimbursement to capital goods producers established. Global debt offering by Transportadora de Gas de Sur.
9307	Yacimientos Petroliferos Fiscales (YPF) partly privatized by selling $2.1 billion in an equity offering in the U.S. and domestic markets (45% sold on NYSE and Buenos Aires Stock Exchange). The issue was the second largest equity offering by a developing country and was one of the largest offerings in the world.[i]
9308	S&P assigns first time rating of BB- to sovereign debt.[i]
9311	Integration into Mercosur delayed.
9312	Constitutional reforms related to presidential election process.
8000	Banking crisis.[y]
9403	Mexican presidential candidate assassinated.
9407	Merval Index Futures Market created and Mercosur common market agreement was signed. New pension system began operating.
9408	First T-bill auction in 20 years held.
9501	Announcement that companies listed on the exchange will be allowed to repurchase their shares. Announcement of trust fund (2.5 billion dollars) to be established to help privatize provincial banks.
9504	Provincial sales tax considered in exchange for lower social security contributions. Escelsa (Espirito Santo) privatized.
9505	New rules for bank reserve requirements implemented. Announcement of plan to accelerate the privatization of hydraulic energy generator Yacireta and the Corpus Christi hydroelectric projects as well as 25% of Transportadora del Gas del Norte.
9508	Bank reserve requirement for checking and savings accounts lowered from 33% to 30% and the 2% reserve requirement for time deposits is eliminated.
9600	The central bank announced the creation of a $6 billion emergency fund to strengthen the banking sector. Labor reform allows companies to reduce payroll expenses by firing workers without severance pay.[t]
960726	Economy Minister Domingo Cavallo ousted.[t]
9608	Tax increases on fuel and public transportation. Government announces plans to increase personal asset tax on holdings over $100,000 to 1%.
9609	Income tax increase proposed.
9610	Congress approves tax and fiscal agreement.
9612	Labor laws weakened making it easier to hire/layoff individuals.
9703	Standard and Poor's announces that it might increase sovereign debt rating.
9704	Standard and Poor's raises sovereign debt rating to BB and upgrades 13 private companies to investment grade.
9705	YPF permits employees to sell their 10% stake in the company.

Appendix A

Brazil

Major Political and Economic Events

Date	
800418	
	Import tax created, imposes a tax on purchases of foreign exchange for imports of goods and services.[a]
8209	Resident Travel Rate was created. Tax placed on purchases of U.S. dollars by Brazilian residents going abroad.[a]
8210	Personal Remittance Rate established. Tax placed on purchases of foreign exchange for personal remittances abroad.[a]
8303	Resident Travel Rate and Personal Remittance Rate abolished. One Official Rate (peg) in place.[a]
8401	Bank debt restructuring agreement.[i]
8403	Banks and businesses allowed to make remittances abroad without Central Bank approval.[a]
840519	System of comprehensive foreign exchange controls abolished.[a]
850115	First civilian government in 21 years. President-elect dies before assuming power, and Vice-President Jose Sarney is sworn in as Head of State.[a]
8602	Cruzado plan (price and wage controls).[p]
8607	Bank debt restructuring agreement.[i]
8609	Fixed nominal exchange rate abandoned.[p]
8701	Major provisions of Cruzado plan abandoned.[p]
8703	CVM Resolution 1289 Annex II limits foreign direct investment through special conditions.
8709	*Buckberg's First Liberalization date*.[d]
871010	Equity Fund of Brazil. Net asset value was $105.3 million in December 1991.[aa]
8711	Country funds allowed.[d]
8800	Late in 1988, debt conversions to equity are stopped because of fear that they result in inflation.[i]
8805	Aracruz (Pulp and Paper) privatized, $130 million.[p]
8811	Bank debt restructuring agreement.[i]
8903	Brady plan (adjustment packages that combined debt relief and market-oriented reforms).
9003	Collor Plan introduced: introduced a new currency and taxed stock market transactions heavily.[u]
9100	Brazil eliminates exclusive broker system and moves to system like the NYSE.[i]
9101	Devalued cruzeiro by 16%.
9105	*IFC Liberalization date*.[i]
9105	*Bekaert/Harvey Official Liberalization date [Final and NBER].*
9105	*Kim and Singal Liberalization date.*
9105	*Buckberg's Second Liberalization date.*[d]
9105	Foreign investment law changed. Resolution 1832 Annex IV stipulates that foreign institutions can now own up to 49% of voting stock and 100% of non-voting stock. Economy Ministers approved rules allowing direct foreign investments; 15% tax on distributed earnings and dividends but no tax on capital gains. Foreign investment capital must remain in country for 6 years as opposed to 12 years under previous law. Bank debt restructuring agreement.[i]
9107	Until July of 1991, foreign portfolio investors could invest in Brazil only through Brazil funds. Now foreign investors are allowed to set up omnibus accounts which are essentially portfolios of one or more shares held in local custody.[e] There are no minimum holding period restrictions.[e]
9111	Privatization plan successfully started. Usiminas (Steel), Celma (Aircraft turbine repair), Mafersa (railway equipment) and Cosinor (steel) privatized.
9112	Usiminas (Steel) privatized, $1,430 million.[p]
9112	Congressional approval of fiscal reform package. Reactivation of privatization program.
9200	Privatization plan continued of Usiminas (steel), Celma (airplane engines), Mafersa (railroad transport), Cosinor (steel), Indag (fertilizer), Pirantini (steel). Restrictions placed on shares sold include no remittance of dividends for 12 years and ownership requirement of two years. Only small participation of foreigners recorded.[i]
9201	Aracruz announces intention of listing an ADR on NYSE.[aa]
9205	Brazilian authorities ban issuance of international bonds with maturities less than three years. The authorities discourage maturities of 3-5 years.[i] Aracruz (pulp manufacturer) launches first international primary equity offering by Brazilian firm.[i] Paribus launches first ever warrants on Brazilian bank debt.[i]
9207	Brazil reaches agreement on the term sheet in restructuring interest payments for debt. Deal will not be signed until November 1993.[i]
9209	President Collor's departure from office.
9212	New tax regulation.
9303	Poliolefinas (petrochemical) privatized.
9304	Compania Siderurgica Nacional (CSN) Acominas (steel mill) privatized.
9309	Temporary financial transactions tax (of .25%) declared unconstitutional. President Franco ordered a new Financial Operations Tax of .75% to 3.2% with exemption after investment of 15 days.
9311	Bank debt restructuring agreement.[i]
9403	Introduced Unidade Real de Valor, an index for controlling price increases.
9407	New currency introduced as part of anti-inflation program.
9410	New 15% tax on all consumer loans and installment payments by banks and businesses. Tax on foreign investment introduced (1% on trading value).
9411	Two new options products introduced. Constitutional amendment passed allowing private investment in the oil industry. Cancellation of plans to tax gains on foreign investment.
9412	Constitutional amendment allowing private investment in the oil industry. Cancelled plans to tax gains of foreign investment capital.
9501	Announcement that Electrobas (hydroelectric plant) will be included in privatization program.

Appendix A

Brazil

Major Political and Economic Events

Date	
9502	Announcement that Telebras may be privatized.
9503	Financial Operations tax cut from 15% to 9%.
9504	The 5% financial operations tax on foreign investment in fixed income instruments is annulled. Privatization timeline of Rio de Janeiro Servicios de Electricidad expected to shorten.
9505	Real is devalued. Trade policy turns inward as import quotas are introduced and tariffs are increased.
9507	51% stake in Espirito Santo electricity company (Escelsa) sold marking the first privatization of a public utility company.
9510	Capital gains tax discussed. Foreign investors banned from futures market. Pension funds limited to 2% of capital in futures or options investments. Announcement of government's plan to sell its 47.5% stake in Eletropaulo.
9601	5% market entrance tax introduced.
9603	$8.2 billion bailout of Banco do Brasil.[T]
9608	Government plans privatization of Cia. Vale do Rio Doce CVRD (mining).
9610	Financial transactions tax approved by Senate. A 0.2% charge on all stock market and financial transactions. Foreign investors invited back into market under Annex IV after two year ban.
9611	Launch of electronic exchange. Announcement of plans to privatize mobile phone industry. Compania Electrica do Estado do Rio de Janeiro sold.
9612	Cia. Riogradense de Telecomunicacoes privatized. Telecommunications bill outlines privatization plans for industry and confirms plans to split Telebras into 4 entities.
9701	Sao Paulo and BOVESPA agree to allow securitized debt of state-owned companies which can be used to buy shares when the companies are privatized.

Appendix A

Chile

Major Political and Economic Events

Date	
7405	Finance houses were allowed to operate.[p]
7503	Value-added tax introduced, rates 8 and 20%.[p]
7510	Freeing of interest rates broadened.[p]
7900	Very limited degree of capital mobility allowed in mid-1979.[p]
7906	Currency fixed to the dollar, called the Effective Chilean Peso Rate. [p,a]
790703	Effective Rate was abolished, along with daily minidevaluations. Peso fixed. [A]
8000	Restrictions on all capital inflows, except short-term, removed.[a]
8191	Government liquidates 8 financial institutions.[p]
8105	Social security system reformed.[p]
8200	Import surcharges from 4 to 28% imposed on more than 30 items; two tier exchange rate.[p]
820615	The fixed Official Rate abandoned. Currency placed on a controlled, floating basis and linked to a basket of currencies, establishing an Effective Rate.[a]
820805	Effective Rate was allowed to float freely, with the unit depreciating sharply.[a]
8208	Beginning of Mexican debt crisis - impacts most of Latin America.
820903	Preferential Foreign Debt Repayment Rate, applicable for the repayment of foreign credits, was introduced.[a]
820926	The Peso was again pegged to the U.S. dollar with daily devalutions.[a]
8300	Import tariffs raised from 10% to uniform 20%.[p]
8301	Government liquidates two banks and nationalizes others.[p]
8304	Import Exchange Rate introduced. Tax placed on purchase of foreign exchange for imports.[a]
8400	Import tariffs temporarily hiked to 35%.[p]
8401	Bank debt restructuring agreement.[i]
8406	Bank debt restructuring agreement.[i]
8411	Bank debt restructuring agreement.[i]
8500	Import tariffs stabilized to 20%.[p]
8511	Bank debt restructuring agreement.[i]
8700	LAN18657 requires foreign portfolio investments to be held a minimum of 5 years before they can be repatriated. The law governs the organization of a Foreign Capital Investment Fund (FCIF). FCIF should be a fund or trust set up outside of Chile. FCIF may neither invest more than 10% of its assets in a single issuer nor own more than 5% of the voting shares of any issuers. Must have a local administrator.[e]
8705	Toronto Trust Mutual Fund trades as unlisted mutual fund. Net asset value $37.7 in December 1991.[aa]
8706	Bank debt restructuring agreement.[i]
8801	Compania de Telefonos (Telecommunications) privatized, $170 million.[p]
8806	Chile Investment Company, SA privately placed. Net asset value $110.4.[aa]
8807	Bank debt restructuring agreement[i] (Amendment to June 1987 agreement).
8812	*IFC liberalization date.* [i]
8900	Value-added tax reduced to 16% from 20%.[p]
8900	Widespread country funds are introduced into Chile.[i]
8903	Brady plan (adjustment packages that combined debt relief and market-oriented reforms).
8909	Chile Fund launched on NYSE. Initial net asset value $160.4 million.[aa]
8910	*Buckberg Liberalization date* .[d]
8910	*Kim and Singal Liberalization date.*
8912	Independent Central Bank established.[p]
9000	Chile receives first new loan since debt crisis from NMB Bank (Netherlands). This marks the first voluntary general purpose bank loan into the Latin American sovereign market since 1982.[i]
9000	Labor laws reformed.[p]
9003	Compania de Telefonos de Chile, SA announces ADR.[aa]
9004	Foreign direct investment allowed by residents.[h]
9004	President Aylwin submits extensive tax reforms to congress (corporate taxes changed).[p]
9004	*Bekaert/Harvey Official Liberalization date. [NBER version].*
9007	Compania de Telefonos de Chile raises $98 million by issuing ADRs on NYSE. This marks the first international equity borrower in Latin America in over 25 years.[i]
9011	Andean pact renewed (Bolivia, Colombia, Ecuador, Peru and Venezuela) (Chile refused).[p]
9012	Bank debt restructuring agreement[i] (Amendments to previous agreements).
9103	Chile issues $200 million in bonds at 1.5% over LIBOR and schedules to issue another $120 in March of 1992.[i]
9106	Tariffs reduced to 11% across the board.[p]
9201	DL600 eased restrictions on foreign investment and repatriation of capital to one year holding minimum. Central Bank revalued peso by 5%. DL600 also offers guaranteed access to the foreign exchange market.[e]
9201	*Bekaert/Harvey Official Liberalization date.*
9207	Reference rate for peso changed (pegged to 3 currencies).
9208	Reserve requirements on foreign liabilities increased from 20 to 30%. Standard and Poors assigns first time rating of BBB to sovereign debt.[i]
9211	Creation of central securities depository.

Appendix A

Chile

Major Political and Economic Events

Date	
9212	Bill approved allowing for investment repatriation after 1 year and lower taxes on capital gains. Empresa Nacional de Electricidad becomes the first Latin American private sector company to receive an investment grade rating from one of the main rating companies.[i]
9301	Capital markets reform bill presented to Congress. The National Ratings Commission no longer provides its own ratings but approves those issued by private rating companies.[i] Capital Markets legislation passed reclassifying the ratings system to bring it more in line with international standards.[i]
9304	Moody's assigns rating of Baa3 to Compania de Telefonos de Chile.[i]
9306	Capital markets reform bill passed by the Chamber of Deputies. Bill expands investment alternatives for Chile's pension funds and insurance companies.
9312	Eduardo Frei elected president. He favors pro-business policies.
9401	Capital markets reform bill enacted into law. Law eased restrictions on pension fund investments, improved financial market regulation, and developed new financial instruments through securitization.
9404	Central Bank eased regulations on share and bond sales by reducing minimum amount required from 50 to 25 million. Eased restriction for companies to be rated 'A' by local rating agencies.
9408	Agreement with MERCOSUR signed.
9410	New accounting regulations: allowed companies to amortize over 10 years instead of 5 years.
9411	Revalued peso. Foreign exchange liberalization package adopted allowing 25% of export earnings to be kept overseas instead of 14%.
9501	Proposal made that would allow pension funds to invest 40% (up from current 30%) of total assets in equities.
9504	Relaxing of exchange controls on exporters. Exporters now allowed to hold larger amount of revenues abroad.
9505	Central Bank raised overall limit on pension fund investment in equity from 30% to 37%. Superintendencia cleared way for certain mutual funds to invest 30% of assets in foreign markets. New tax of 3% on foreign investment in locally traded shares imposed.
9506	Moody's and Standard and Poor's upgrade Chilean credit ratings.
9507	New restrictions on ADR trading imposing 3% fee and requiring investors to place 30% of investment in non-interest bearing accounts for one year. Trading restrictions are implemented to discourage short term capital inflows.
9512	IFC announced new policy determining foreign legal limits of ownership in IFCI Chile Index.
9610	Regulations governing speculative trading firms changed. Fixed income investment are now required to enter under Chapter XIV as opposed to DL600. Chapter XIV imposed reserve requirement of 30% on investments. Privatization of Colbun (electric utility) cancelled.
9701	Chilean electric utility issues first 100 year bond sale. Bill proposed allowing foreign countries to list shares on domestic stock exchanges.

Appendix A

Colombia

Major Political and Economic Events

Date	
8208	Beginning of Mexican debt crisis - impacts most of Latin America.
840430	Drug traffickers assassinate the Minister of Justice. Government declares "war" on the drug families. Extradition of drug traffickers to U.S. authorized.[a]
8408	Government signs truce with all but one of major guerilla groups.[a]
8500	At midyear, Colombia enters into an informal agreement with IMF and World Bank to monitor economy.[a]
8501	Colombia extradites four drug traffickers to the United States.[a]
8511	Rebels attack the Palace of Justice, killing 100, including 9 judges and the President of the Supreme Court. At mid-month, volcanic eruptions, 20000 feared dead.[a]
8512	Bank debt restructuring agreement.[i]
870710	Foreign ownership can be 100% in some companies. Nationals can sell equity to foreigners. If applications for foreign investment are not answered in 45 days they are approved.[a]
8800	Year of the Massacres (18,000 killings). Forward market for foreign exchange was made available for up to one year at Central Bank for hedging operations by firms operating abroad.[a]
8903	Brady plan (adjustment packages that combined debt relief and market-oriented reforms)
9008	Papelcol (Pulp and Paper) privatized, $100 million.
9011	Andean pact renewed (Bolivia, Colombia, Ecuador, Peru and Venezuela) (Chile refused).[p]
9012	Congress passes law allowing the executive to implement sweeping changes.[p] Colombian government approved a wide ranging reform package that included: Elimination of the requirements that all foreign exchange be sold to the Central Bank, introduction of flexible tariff rates.[u]
9101	New foreign investment code, Resolution 49; foreigners same rights as domestic investors; remittances of up to 100% of most capital registered in the past year; equal access to local credit sources as well as to export incentives; 100% foreign ownership of financial institutions.
9102	*IFC Liberalization date*.[i]
9102	*Bekaert/Harvey Official Liberalization date. [Final and NBER version].*
9102	*Kim and Singal Liberalization date.*
9104	Gaviria administration presented its reform package.[p]
9104	Bank debt restructuring agreement.[i]
9106	Exchange rate system restructured.[a]
9110	*Buckberg Liberalization date*.[d]
9110	Peso deregulated. Floating rate is now used. Resolution 51 passed. Foreign country fund limited to 10% of ownership and foreign firms now permitted to remit 100% of profits.
9112	Resolution 52 passed. Foreign country funds and investors are now allowed to purchase 100% of locally listed companies.
9205	First country fund, Colombian Investment Company SICAV launched in Luxemborg.[aa]
9212	Corporacion Financiera del Valle ADR announced.[aa]
9302	Corporacion Financiera del Valle ADR IPO date.[aa]
9304	Government placed $125 million five year Eurobond marking the government's first re-entry into private bond market since debt crisis.[i] The Superintendencia de Valores introduced plans to integrate the three existing exchanges in the country.[i]
9307	Standard and Poor's assigns rating of BBB- to sovereign debt.[i]
9308	Moody's assigns first time rating of Ba1 to sovereign debt.[i]
9310	New foreign exchange guidelines established. Domestic investors allowed to convert pesos without first converting to US$ to obtain short term loans abroad and to make hard currency loans to foreigners. Entities, currency futures/options permitted. The US dollars can be used internally.
9312	Pablo Escobar killed.
9403	Tighter restrictions on domestic credit and foreign loans imposed.
9404	Restrictions on foreign borrowing imposed.
9408	Inauguration of president coincides with the announcement of a four year social spending effort. Reinforced restrictions on foreign borrowing. ADR backed by property prohibited. Foreign funds required to be registered with central bank.
9501	Eleven new investment funds registered to invest in Colombia.
9502	Parameters established regulating domestic companies that wish to issue stock on foreign exchanges.
9512	Congress exonerated President of illegal actions.[t]
9603	US announced negative assessment of Columbia's cooperation with anti-drug campaign.
9609	New electronic trading system implemented.
9701	New tax on fixed-income instruments established. The 7% tax provides increased incentives to hold equities. New tax regime also includes 1%-8% tax on funds borrowed abroad and restrictions on total amount that the government can borrow abroad are put into effect.
9702	Government decided against implementing a capital gains tax on stocks.
9703	Congress approved tax increase to cover federal budget deficit.

Appendix A

Greece

Major Political and Economic Events

Date	
750308	The Drachma's link to the U.S. dollar severed. Controlled floating exchange rate to be determined vis-à-vis a "basket of currencies."[a]
8005	Banks allowed to freely set interest rates and other terms for deposits in U.S. dollars, Canadian Dollars, and Pounds Sterling.[a]
8011	Interbank foreign exchange market began full operations.[a]
801211	Quotation for the Drachma was introduced on the Paris Bourse.[a]
810101	Greece joins the EEC. Greece was allotted five years to eliminate all currency, tariff and other restrictions on trade with EEC members and to lower tariffs on non-EEC imports to community levels.[a]
840101	All advance import deposit requirements were abolished, as were restrictions on import financing.[a]
8409	Non-residents permitted to open time deposits with local banks, and banks were authorized to lend abroad Drachma derived from the conversion of foreign currencies.[a]
8606	Non-resident investments restricted through block accounts.[a]
8608	Block account restrictions removed for European investors. European Community nationals permitted to invest freely in Greek securities.
8608	*Kim and Singal Liberalization date.*
8700	*IFC Liberalization date for European investors.*[g]
8700	Liberalization of currency controls in 1987 allowed foreigners to participate in the equity market and to repatriate their capital gains.[q]
8700	Greece liberates 190 of the biggest State-controlled enterprises and announces further privatization.[a]
870101	VAT system was begun.[a]
8712	*Bekaert/Harvey Official Liberalization date. [Final and NBER version].*
880101	VAT system modified.[a]
8808	First ADR announced.[aa]
8809	Greece Fund Limited launched on the London Stock Exchange with net asset value of $46.3 million as of December 1991.[aa]
8812	*IFC Liberalization date.*[i]
9100	Foreign exchange restrictions removed for investments (domestic investors investing abroad) into EC countries.[h]
9207	Parliament votes to support the Maastricht Treaty.
9209	Electronic trading on Athens Stock Exchange is introduced.
9211	Greek SEC allows repurchase agreements, but postponed the liberalization of commissions on stock transactions.
9303	EU pushed Greek privatization.
9305	Bank of Greece issued a directive permitting intra-EU capital movements with maturities longer than three months.
9307	EU approved an aid package that will provide $17B for infrastructure and public works projects.
9309	Greek conservative party lost its majority in Parliament; Prime Minister dissolved Parliament.
9310	Socialist electoral victory.
9312	Finance Minister announced that no disclosure of origin will be required for funds entering the stock market and that no additional dividend taxes will be imposed on companies listed on the ASE.
9403	Announcement that OTE company will be privatized.
9404	Parliament passed a new tax bill that increased the corporate tax rate for companies not listed on the ASE from 35% to 40%. Restrictions removed on all capital movements governing both foreign investments and resident investments.
9405	Restrictions on short-term capital movements are lifted. Rumors that the drachma will be devaluated circulate.
9406	Central Bank aggressively intervened to halt the devaluation of the drachma. Government introduced new plan.
9407	Athens Stock Exchange announced new rules that require all companies applying for a listing to submit a plan outlining how IPO funds will be used.
9409	Athens Stock Exchange introduces a new General Index.
9503	Constantinos Stephanopoulos elected President.
9505	Central Bank cut interest rates.
9510	Assassination attempt on President. Political instability in the ruling PASOK ruling party.
9511	Prime Minister is sent to intensive care unit of hospital.
960115	Prime Minister Andreas Papandreou resigned. Constantinos Simitis elected new PM and will continue economic reform program.
9603	OTE privatized this month.
9608	Investors speculate that Prime Minister Simitis may call an early general election.
9611	1997 budget announced - will abolish several tax breaks. Capital Markets Commission institutes reforms aimed at stopping improper trading practices.

Appendix A

India

Major Political and Economic Events

Date	
750924	The Rupee's ties to the Pound Sterling were broken and the Effective Rate was placed on a controlled, floating basis linked to a "basket of currencies."[a]
7800	Stricter enforcement of the foreign investment code resulted in IBM and Coca Cola being asked to leave the country in 1978.[a]
800416	Six largest remaining private banks nationalized.[a]
841030	Indira Gandhi assassinated. Rajiv Gandhi sworn in as Prime Minister.[a]
8606	India Fund launched on London Stock Exchange with net asset value of $440.5 million as of December 1991.[aa]
8911	Congress party defeated.[a]
9000	Late in 1990 the OTC exchange was launched and the Bombay Stock exchange was linked to the Frankfurt Stock Exchange to attract non-resident Indians and foreign investors.[i]
9007	Credit rating on Indian debt downgraded from Baa3 to Ba2.[i]
9012	Government increased direct taxes, imposed import restrictions and attempted to reduce government expenditures to combat deficit.[u]
9101	The IMF sanctioned two loans amounting to $1.8 billion.[a]
9107	The IMF and the World Bank approved emergency loans to repay international debts and to partially offset the foreign exchange shortage suffered in 1990-1991. The government announced an industrial policy aimed at liberalizing the Indian economy and enhancing its attractiveness to domestic and foreign investors. The rupee is devalued 20%, taxes on dividends and capital gains for off-shore mutual funds are reduced, all subsidies on exports are removed, and the limits on foreign holdings are raised.
9201	Minister of Finance established regulations permitting the Securities Exchange Board of India to register foreign investment institutions. A limit of 24% of ownership of company established with a 5% per foreign investment institution.
9202	First ADR announced.[aa]
920301	Dual rate system was created.[a]
9205	First international equity offering by Indian company launched by Reliance Industries (petrochemicals).[i]
9206	Stock market scandal.[i] The Indian income tax authorities froze shares of several large companies that belonged to proxy holders of those involved in the scandal.
9209	Government announces that foreign portfolio investors will be able to invest directly in listed Indian securities. Simultaneously, the tax environment is made more conducive to foreign holdings of domestic securities.
9210	Brokers go on strike to protest action taken by the income tax authorities.
9211	*IFC Liberalization date*.[i]
9211	*Bekaert/Harvey Official Liberalization date. [Final and NBER version].*
9211	*Kim and Singal Liberalization date.*
9212	Parliament's panel report on the stock market scandal released. Finance Minister Manmohan Singh is blamed for not being able to prevent the scandal.
9302	Annual budget announced.
9303	Series of bombings in Bombay.
930301	The rate system was unified at the Interbank Free Rate and the Rupee was made fully convertible.[a]
9307	Essar Gujart launched India's first Euro-convertible bond.[i]
9403	Trading thinned due to a trading boycott by brokers in response to the demands of the Securities and Exchange Board of India (SEBI) that forward (badla) trading practices be made more transparent or be discontinued.
9504	Reserve Bank of India says it will maintain a tight monetary policy during first half of FY 1995.
9505	Government announced it would lift its ban preventing companies from bringing into India funds raised through international equity offerings.
9507	$350 million GDR offering by Steel Authority of India LTD (SAIL) is now scheduled for early 1996.
9608	Government announced plans to sell part of its stakes in 5 public sector companies, telecom (VSNL & MTNL), oil refineries BPCL and Indian Oil, and crude oil and liquefied natural gas company ONGC.
9510	The BSE decided to reintroduce badla trading. The new rules for forward trading called for the completion of a transaction, either by paying full price or taking delivery, in 90 days.
9609	Government exempted capital gains tax for investments in mutual funds made for 3 years or more. The State Bank of India launched the largest GDR issue ever by an Indian company. Telecommunications company VSNL is also slated to launch its GDR issue as the Government disposed 7% of its total stake in the company. Government also made plans to sell 5% of its total stake in Indian Oil Corporation.
9610	Reserve Bank announced it will lower the cash reserve ratio from 12% to 10% over the next three months.
9611	Finance Minister announced that the Government will remove capital gains taxes on investments in new issues.
9701	A new SEBI rule allowed foreign investors to purchase government debt and permits foreign proprietary funds registered in their own countries to invest in Indian stocks.
9702	1997/98 budget spurred confidence in the market. Budget contained provisions to abolish the tax on dividend income; remove the 7.5% corporate surcharge on profits; and reduce the corporate income tax on domestic firms to 35% from 40% and on foreign firms to 48% from 55%. Also proposed were statues to raise investment limits in firms from 24% to 30% for foreign institutional investors.
9703	Sudden withdrawal of support for Prime Minister's government by the Congress Party sent stocks tumbling 8%. Reserve Bank of India announced that foreign institutional investors can invest in all dated Government securities except Treasury bills.

Appendix A

India

Major Political and Economic Events

Date	
9705	Equity markets still feeling the after effects of the political crisis created after the Congress Party withdrew its support of the coalition government.
9707	Reserve Bank lowered lending rate by 1% to 10%. Political concerns causes low trading volume with noticeable lack of foreign interest.
970722	Release of the new budget. [1]
9708	Proposal to implement a market-friendly carry-forward trading system.

Appendix A

Indonesia

Major Political and Economic Events

Date	
7400	Foreign Investment Law ensures eventual majority ownership for Indonesian national in joint ventures. Wholly foreign-owned enterprises are permitted only in very special cases. Permits for investment projects are valid for 30 years.
8400	Central Bank certificates issued through auctions to stimulate money markets.[s]
840101	Incentives granted to Foreign Investment under the Income Tax Law.[a]
8500	Security houses established to serve as market makers in money market instruments. Bankers' acceptances introduced.[s]
8712	Government introduces measures to allow foreigners to purchase shares in eight non-joint venture companies.
8800	Full Financial sector liberalization. Established over-the-counter market to encourage firms to go public.[s]
8901	Malacca Fund (Cayman) Ltd launched as the first Country Fund.[aa]
8903	Some minor foreign exchange restriction still in place.[d]
8903	*Buckberg Liberalization date* .[d]
8905	Accepted IMF's obligations for convertibility.[a]
8909	*IFC Liberalization date* .
8909	Minister of Finance allows foreigners to purchase up to 49% of all companies listing shares on the domestic exchange excluding financial firms.
8909	*Bekaert/Harvey Official Liberalization date. [Final version].*
8909	*Kim and Singal Liberalization date.*
9000	Drastically reduced central bank, refinancing facilities and revised interest rates under the program to approach market rates.[s]
9009	*Bekaert/Harvey Official Liberalization date. [NBER version].*
9105	First privatization took place with issue of 40 million shares of the cement company PT Semen Gresik.
9201	Government announces it will allow foreign shareholders to invest up to 49% of bank stocks.
9202	First ADR launched.[aa]
9207	Capital market supervisory board creates a foreign board for trading stocks by foreign investors. Standard and Poor's assigned a first time rating of BBB- to sovereign debt.[i]
9210	Implementation of Bank Act of 1992 allowed foreign investors to own 49% of private national banks.
9310	Liberalization package was unveiled by the government which included a reduction in import tariffs.
9406	State owned electricity company Perusahaan Umum Listrik Negara is converted into corporate entity and is regarded as a leading candidate for a privatization program.
9409	Indosat, Asia's largest IPO ($1 billion) offered 25% in overseas markets in the form of ADRs.
9410	Indosat begins trading on NYSE.
9411	APEC agreed to open the region's markets to trade and investment by 2020.
9412	Announcement that Jakarta Stock Exchange will split its listings into 2 boards in 4/95. One for blue chips and the other for smaller companies.
9503	Standard and Poor's boosted Indonesia's country rating to investment grade making fixed-income investments more attractive. Concern over the devaluation of the rupiah, but low-interest loans from governments and institutions from World Bank will "unlikely" force a devaluation. International consortium agreed on a $2.5 billion financing deal for Indonesia's first large-scale private power project.
9507	Foreign investment approvals surged to $27.7 billion. Approval for investments in textiles and chemicals. IPO of PT Bimantara Citra. Shares available to foreigners were oversubscribed 45 times.
9510	Central bank intends to increase bank capital adequacy ratios from 8% to 10% in the next 2 years, hurting bank stocks. A new capital markets reform bill was approved which features firm penalties for offenses such as insider trading, share manipulation, and failure by individuals and group to declare significant stakes in publicly-listed companies.
9512	Government announced in its budget that it will increase its spending on roads and other infrastructure. Foreign investors bought Indonesia's largest and most liquid stocks. A deregulation package by the government included cuts in import tariffs on capital goods, but did not give any mention to an expected liberalization in the plywood and textile industries. Anticipation of a government announcement liberalizing regulations in the plywood industry.
9707	Devaluation of the Thai Baht. Rupiah plunged nearly 7%, a record low against the dollar.
9708	Rupiah posted a 39.8% loss in dollar terms.

Appendix A

Jordan

Major Political and Economic Events

Date	
750222	The Effective exchange rate was linked to the SDR.[a]
7611	Removal of all restrictions on the export of national banknotes.[a]
7702	Residents allowed to open accounts in foreign currency, with a cap on amount.[a]
7800	Amman Financial Market opens for business.[e] Non-Jordanian Arabs permitted to buy shares in Jordanian firms without limit.[a]
7801	*Kim and Singal Liberalization date.*
790520	Some restrictions on foreign exchange controls eased. Increased ceiling on residents' foreign currency accounts. Overseas remittances can be made up to a limit.[a]
790829	Central bank announced that commercial banks would be allowed to deal in forward foreign exchange contracts.[a]
800407	Ceiling on residents foreign accounts raised.[a]
8100	Central bank ordered all commercial banks and investment companies to invest at least 3% of total assets in government treasury bills and another 3.5% in government or corporate bonds. New investment incentives also proposed.[a]
8401	Decree limiting foreign participation in banking to 49% was rescinded.[a]
8600	Widened margin of Jordanian Dinar fluctuation against the Special Drawing Rights as a first step towards a complete flotation of the Jordanian Dinar.[j]
8600	Contained speculation on the Jordanian Dinar by restricting transfer of foreign exchange to a limited number of activities.[j]
8600	Encouragement of Investment Law of 1986 raises limit on foreign ownership from 49% to 99% for tourism, agricultural, or related services industries.[e]
8712	*Bekaert/Harvey Official Liberalization date. [NBER version].*
8800	50% Devaluation of the Jordanian Dinar.[j]
8812	*IFC Liberalization date*.[i]
8900	Central bank injects $500 million (10% of GDP) into banking system to meet the run on insolvent banks and to settle foreign deposits.[m]
9101	Onset of Gulf War.
9200	85% of market participants are Jordanian.[m]
9300	Lifted controls on outbound and inbound direct investments, allowed private holding of foreign exchange and other financial assets, provided market access to foreign financial institutions on a non-discriminatory basis.[j] Amman Financial Market turnover rose to $1,400 from $400 million in 1991. Boom fueled by expatriate money and expectations of a peace era expansion.[n] Thirteen new public shareholding companies with combined capital of $128 million sprung up while 26 existing companies boosted capital to $199 million.[k]
9308	King dissolves National assembly in anticipation of elections for Parliament.
9309	Political parties are legalized. The law allows for elections in 1993.
9311	Parliament elections took place for the first time in 40 years.
9312	Bank debt restructuring agreement.[i]
9400	Government allows issuance of non-Dinar denominated shares.[k] New law imposes tough penalties on insider trading.[k] Free access to international financial markets remains restricted by administrative and foreign exchange regulations of the Central Bank.[j]
9400	Government considering law to eliminate written approval necessary for foreigners to invest in equities.
9401	Jordan and PLO signed an economic agreement. Agreement stressed economic cooperation in infrastructure, promotion of investments, and private sector cooperation.
9410	Peace treaty signed with Israel.
9512	Foreign investment bylaws passed allowing foreign investors to purchase shares without government approval.[t]
9512	*Bekaert/Harvey Official Liberalization date. [Final version].*
9612	Parliament separates the Amman Financial Market's operational and supervisory standards.[l]
9500	Foreign ownership represents between 15 to 20% of the total equities of quoted companies.[j]
9600	80% of investors are Jordanian, Foreign capital inflows of $25 million.[j]
9607	Israel elects Prime Minister Netanyahu.
9611	Iraq agrees to all UN conditions.

Appendix A

Korea

Major Political and Economic Events

Date	
750821	Controlled Effective Rate was linked to a "basket" of unspecified currencies.[a]
800925	Liberalization of foreign-investment rules.[a]
8200	Abolished credit ceilings and reduced scope of direct-credit activities. Most preferential interest rates abolished as well.[s]
8302	Computerized exchange trading system put in place.[e]
8400	Minimum and maximum bank interest rate ranges introduced. Interest rate restrictions on interbank lending abolished. Banks allowed to issue CDs at rate higher than for time deposits.[s]
840701	Amendment to the Foreign Capital Inducement Act, a negative list system was introduced which permitted foreign investment in all areas not on the list. Foreign equity participation of up to 100% is allowed in a limited number of industries.[a]
8408	Korea Fund launched on NYSE with a net asset value of $235.9 million as of December 1991.[aa]
8608	Foreign banks granted access to Central Bank's discount rate. [a]
8700	Set up an OTC market for equities.[s]
8704	Trade liberalization measures announced.[a]
8800	Korean government outlines plan for liberalization. However, after the announcement the liberalization plan was put on hold due to an increase in money supply.[e] The liberalization plan defined two categories of industry, Limited and Non-Limited. Non-Limited industries will have foreign investment limits of up to 10% of market capitalization. Limited industries will have foreign investment limits of up to 8% of market capitalization. Furthermore, a limit of 3% is imposed for any single investor for any industry.[e] Most bank and non-bank financial institution lending rates and long-term deposit rates liberalized. Bank of Korea still controls short-term deposit rates, total volume of credit, and minimum credit guidelines to small and medium firms and conglomerates.[s]
8809	*Bekaert/Harvey Official Liberalization date. [NBER version].*
881101	Korea accepted the IMF's obligations of convertibility.[a]
8900	Unified the call money market, previously divided between the banking and non-bank sector.[s] Foreign exchange controls phased out.[a]
9000	Passed legislation to convert investment finance companies to security houses.[s]
900302	Effective exchange rate replaced by a Market Average Rate determined in the interbank market based on a weighted average of rates for WON/U.S. spot transactions and allowed to vary within a narrow band.[a]
9011	First ADR is announced.[aa]
9011	Ministry of Finance announced guidelines governing the opening of the securities industry to foreign institutions. The regulations call for a high entry fee and a required commitment of at least 10 years. No more than ten licenses are expected initially.
910103	Market opening to foreign investors.[v] Notification System makes authorization of foreign investment subject to approval or notification. Foreign participation will be easier under new law. Repatriation of capital freely permitted[a]
9104	Government orders the thirty largest industrial conglomerates, whose sales account for 90% of Korean GDP, to focus on three core businesses. (Tight industrial policy).
9109	Announcement that stock market will open to investors in January of 1992. The announced regulations are that a foreign investor cannot own more than 3% of a company's shares and foreigners cannot own collectively more than 10% of a company. The government later raised the limit to 25% for 45 companies that already had more than 10% ownership by foreigners. The announcement is not well received by foreign investors. Korea admitted into the United Nations.
9111	Samsung, largest conglomerate, announced 2 subsidiaries would be separated from the group.
9112	Republic of Korea and Democratic People's Republic of Korea concluded an agreement covering political reconciliation, military nonagression and economic aggression.
9201	*IFC Liberalization date*.[i]
9201	*Bekaert/Harvey Official Liberalization date. [Final version].*
9201	*Kim and Singal Liberalization date.*
9201	Partial opening of the stock market to foreigners. Foreigners can now own up to 10% of domestically listed firms. 565 foreign investors registered with the Securities Supervisory Board.
9205	Government approves lifting of foreign ownership restrictions on Korea Electric Power and Pohang Iron and Steel.
9211	Korea Electric Power lifts foreign ownership restriction from 8% total and 1% per individual to 10% total and 3% per individual.
9212	Pohang Iron and Steel lifts foreign ownership restriction from 8% total and 1% per individual to 10% total and 3% per individual. Kim Young Sam from the Democratic Ruling Party is elected as President.
9303	Implementation of a growth oriented 100-day economic stimulus package.
9308	President Kim implements the Real Name Financial System to help cut down on corruption by government officials and private recipients of government favors. Implementation led to panic by small investors. False name accounts were given 60 days to transfer funds to real name accounts to avoid maximum penalty of up to 60% of total account value.
9310	Sixty day amnesty period concluded in implementation of the Real Name Financial System. Panic quells as uncertainty over the business climate abates. By the end of 1993 foreigners own up to 9.8% of market capitalization and close to 9% of shares outstanding. Most companies have reached their 10% limit of foreign ownership restrictions.

Appendix A

Korea

Major Political and Economic Events

Date	
9400	Cash deposits for buy orders put into effect. The limit was quickly increased to 40% of purchase value for institutional investors and 80% of purchase value for individual investors. Later the deposit amounts were reduced by half to 20% for institutional and 40% for individual investors. The stock transactions tax was decreased from 0.35% of sales value to 0.2%. Finally, several IPOs hit the market including Samsung Heavy Industry, Goldstar Industrial System, Citizens National Bank, and Industrial Bank of Korea.
9410	Government approved ADR listing of POSCO on NYSE. (First ADR on NYSE, previous were 144As).
9411	IPO of Industrial Bank of Korea ($2.7 billion) and the last round of auction for Korea Telecom ($1.7 billion).
9412	Government announced that institutional investors would be exempt from the cash deposits of 20% for buy orders as of January 1995. Limit of foreign ownership of domestically listed firms raised from 10% to 12%. KEPCO and POSCO retain their limits of 8%. Government announces its intention to raise the overall limit from 12% to 15% sometime in 1995.
9503	Of the Korean Stock Exchange had 702 listed firms, 98 have reached their 12% foreign ownership limit. Overall, 8.6% of the total market capitalization was owned by foreigners.
9504	Ministry of Finance lowered the margin requirements for stock purchases from 40% to 20%. Individuals will be able to borrow up to 100 million won from brokers for purchases. Brokerage firms can lend individuals up to 25% of their capital compared to the current 18%.
9505	KSE trading in KOSPI 200 Index futures began. Announcement that stock options index will be launched in 1997. Announcement that foreign ownership limits will be raised from 12% to 15% in July.
9507	Government raised foreign stock ownership limit from 12% to 15% and raised the limit for single investors from 3% to 5%. KEPCO and POSCO limits' raised to 10%. $1.3 billion of fresh foreign investment entered the market. Ministry of Finance plans to deregulate the securities business by lifting interest rate controls on margin accounts, easing government control on the international activities of securities firms, and permitting local securities firms to borrow from the cheap foreign-currency funds in order to underwrite overseas securities. Most importantly, the registration period for foreign investment will decrease from 14 to 5 days.
9509	Government announced plans to tax fixed income instruments beginning in 1996. Investor confidence responded positively to the news. Government announced that foreign firms will be able to list on the Korean Stock Exchange as of 1996.
9510	Rumors fly that former President Roe Tae Woo amassed an illegal political fund worth $650 million. Investor confidence wanes. Most of the money is thought to be held under false names in various financial institutions.
9512	Former President Chun Doo-hwan is taken into custody for his role in a 1979 coup. This arrest followed the arrest of former President Roe Tae Woo for his accepting bribes from most of the CEOs of Korea's leading companies. The stock markets plunge.
9605	Limit of foreign ownership of domestically listed firms raised from 15% to 18%. Futures begin trading on the Korean Stock Exchange on the KOSPI 200 Index.
9607	Short term abolition of the capital gains tax.
9609	Government relaxes foreign ownership restrictions from 18% to 20% and from 12% to 15% for state owned enterprises.
9610	South Korea opens its first won-yen exchange market, which aims to reduce transactions cost for market traders.
9611	Government announced that in two years it will relax foreign ownership restrictions of telecommunications industry to 33%.
9612	Government IPO of Korea Telecom.
9703	Government announced plans to lift foreign ownership restrictions from 20% to 23% in May 1997.
9705	Government raised foreign ownership restriction from 20% to 23%.

Malaysia

Major Political and Economic Events

Date	
7100	Government began a discrimination program in an attempt to reduce foreign held shares of the Malaysian economy. In 1970 foreigners held as much as 55%. The government plans to reduce this share to 30% by 1990. The target is overshot dramatically by the end of 1990 when foreign ownership is estimated at 25%.[e]
790423	Amount of Malaysian banknotes travelers were allowed to bring into or take out of the country was raised. Restrictions on the export of foreign currencies was lifted.[a]
8001	Paddy farmers riot for a higher rice support price.[a]
800227	Fixed exchange rate abandoned and a controlled, Effective Exchange Rate was established, linked to the SDR in combination with a "basket of currencies".[a]
8010	More exchange controls eased. Traders in commodities futures were allowed to maintain foreign currency accounts in Malaysia.[a]
8108	Commercial banks ordered to stop lending to Malaysian companies for investment abroad, especially in property and equity shares.[a]
8200	Foreign exchange controls loosened. Banks allowed to lend foreign currency to residents and borrow funds from abroad.[a]
8300	Introduction of base lending rate.[s]
8603	Corporatization Policy whereby approved financial institutions, including foreign brokers, were permitted to acquire up to 30% of local brokerage houses.[r]
8700	Malaysian government securities with market-based coupon rates introduced.[s]
8707	Foreign institutions limit on brokers raised to 49%.[r]
8712	Malaysia Fund, Inc launched on the NYSE with a net asset value of $98.3 million as of December 1991.[aa]
8810	Budget calls for liberalization of foreign ownership policies to attract more foreign investors.[r]
8812	*IFC Liberalization date*.[i]
8812	*Bekaert/Harvey Official Liberalization date. [Final and NBER version].*
9100	Removal of base lending rate.[s]
9102	Privatization Master Plan was released. Large automotive company, Proton, and the national electricity company, Tenaga National, are to be privatized in 1992.
9103	Malaysia issued 190 million in bonds that are convertible into shares of state owned communications firm. This marked the first placement of a convertible sovereign bond in the international market.[i]
9106	New economic plan termed the Outline Perspective Plan is passed. The plan emphasized economic growth and encouraged private, including foreign, investment. This plan served as a successor to New Economic Policy of 1971. Government stated that future regulatory process governing foreign investment would be decided on a case by case basis. However, a 30% foreign ownership restriction was still in affect so that the policy might not have been fully commensurate with a liberalization of the capital account.[e]
9108	Government imposed restrictions on automobile loans and consumer credits.
9205	Central bank raised the statutory requirement reserve for financial institutions from 7.5% to 8.5%.
9208	First ADR announced.[aa]
9209	Ministry of Finance approved creation of Kuala Lumpur Options and Financial Futures Exchange to be opened in near future. Also, Malaysian cabinet approved the formation of a SEC to be designed along the lines of the Australian SEC.
9300	In early 1993 Malaysia lifts its foreign ownership limit of 30% on manufacturing firms. Malaysian central depository begins operating a scriptless trading system through computerized clearing and settlement process.[i]
9303	Moody's upgraded Malaysia's rating from A3 to A2.[i]
9310	Resignation of deputy Prime Minister Ghafar Babar is well received by the market.
9401	Adopt capital control measures to curb short-term capital inflows.[x]
9402	Ban implemented preventing British firms from participating in public sector contract bidding.
9409	Malaysian cabinet lifted its 7 month old ban preventing British firms from participating in public sector contract bidding. Prime minister Mahathier Mohammad dissolved the current government and called for a general election. Perception was that several companies would benefit from government contracts in an effort by politicians to raise funds.
9410	Kuala Lumpur Stock Exchange limits the suspension period for listed companies to no more than 10 business days. Improves the image of the exchange and curbs speculation. Government would amend legislation related to corporate disclosure to ensure that company information is more reliable and timely.
9501	Tax cut implemented: maximum personal income tax lowered from 34% to 32% and corporate rate is lowered from 32% to 30%. Tax cut abolished import duties on more than 2600 items, including 600 food and 1400 raw material. Warrants on stocks are allowed by the securities commission.
9506	Kuala Lumpur Stock Exchange regulations revised the commission structure. Foreign brokers cannot be exchange members. Foreign brokers complained that even the new schedule would slash profits on large transactions.
9510	Local brokers noted that foreign investors were moving money into Hong Kong equities and ignoring the Malaysian market. The 1996 Budget proposal: slow the pace of spending on large government construction projects and new restrictions on foreigners' purchases.
9511	Central bank raised the requirement on statutory reserves--funds that banks keep interest free with the central bank--from 11.5% to 12% of liabilities.
9512	Kuala Lumpur Options and Financial Futures Exchanged opened on 12/15/95.
9609	Short sales regulations put into place. Announced plans to establish an Islamic Index for stocks that comply with Islamic business practices. Public Bank cut its base lending rate. Central Bank wanted major banks to acquire smaller banks.

Appendix A

Malaysia

Major Political and Economic Events

Date	
9611	Banks gained more ground on expectations of more mergers and acquisitions in the industry. Foreign and domestic investors poured funds into banks after Rashid Hussain announced that it will acquire Malaysian Banking's 75% share of Kwong Yik Bank.
9701	Government approved higher electricity rates. Bank loans grew at 28% in 1996. Government licensed another company to distribute power in an industrial area.
9702	Government announcements that it will accelerate its deregulation of the banking industry and encourage mergers gave an added boost to the sector. Government also revealed plans to establish an over the counter market, modeled after the NASDAQ. Government introduced its plan at the World Trade Organization to open Malaysia's telecommunications industry to international competition.
9703	Central bank regulations limit to 20% the proportion of all bank loans to the property industry, effective April 1. Regulations limit the lending of stock purchases to 15% of total loans by commercial banks and finance companies.
9704	Central bank has exemptions to the new lending curbs. Loans made for the purchase of owner-occupied houses will be exempted from the lending curbs. Kuala Lumpur Stock Exchange chairman said the exchange will add 200-300 listed firms by year 2000.
9707	Devaluation of the Thai Baht. Ringgit drops to 38 month lows against the dollar. A sign that Bank Negara has given up its strategy of vigorously defending its currency..
9708	Prime minister Mahathir Mohamad's announcement that the government would not take steps to defend the currency weakened the ringgit. Finance Ministry plans to bolster the ringgit indirectly by cutting imports and scaling back on public projects. Standard and Poor's downgraded the country's credit rating. Kuala Lumpur Stock Exchange imposed trading controls on benchmark stocks. To curb speculation, investors required to pay full price for a stock and sellers to deliver all shares before signing the contract. Elimination of short selling which causes panic among investors wanting to hedge positions.

Appendix A

Mexico

Major Political and Economic Events

Date	
6400	Tasma has ADR issue in US market.
8001	Value-added tax introduced at 10%.[p,a]
8106	Mexico Fund launched on NYSE with net asset value of $499.3 million as of December 1991.[aa]
820218	Mini-devaluations of the Peso were suspended, currency left to float freely in exchange markets.[a]
8205	Alfa Group's announcement that it could not pay its foreign debt.
8206	Managed float reintroduced.[a]
820805	A two-tier exchange market for the Peso was established.[a]
820813	All Foreign Currency Accounts in Mexican Banks were frozen and their conversion limited to the "MexDollar" rate, which was also made applicable to liquidation of maturing "Petrobonds".[a]
820817	Beginning of Mexican debt crisis - impacts most of Latin America (August 17).
8209	Lopez Portillo's nationalization of banks, suspension of principal payments on foreign debt[p,a]
820901	Foreign exchange controls were decreed and two basic exchange rates were to operate. The MexDollar was abolished.[a]
8210	IMF rescue package of $5 billion.[p]
821103	Peso devalued via the creation of a floating Official Market Rate applicable within a special free zone along the U.S. border.[a]
8211	Signing of agreement with IMF for a three-year, US$3.96 billion credit.[a]
8212	Miguel de la Madrid sworn in. Strict austerity measures. IMF $5 billion loan.[p] Partial denationalization of the banks was approved.[a]
821220	New exchange rate structure put into effect. Multiple tiered structure.[a]
8305	IMF gives favorable report on Mexico[p]
8307	New agreement with IMF, disbursement of $5.4 billion standby loan continued.[p]
8308	Agreement to reschedule debt signed.[p]
8404	Bank debt restructuring agreement.[i] Private sector debts restructured.[a]
8408	New debt rescheduling pact signed with the banking community.[a]
8501	Tancredo Neves was elected without major incident.[p]
8501	Important progress reported on rescheduling of $50 billion of debt[p]
8503	Bank debt restructuring agreement.[i]
8503	Agreement opened door for innovative debt-conversion schemes.[p]
8507	Official Free Market Rate abolished. Exchange houses allowed to deal in the street or black market rate.[a]
8508	Bank debt restructuring agreement.[i]
8511	Earthquake hits Mexico city.[a]
8600	Beginning of reducing the coverage on import licenses.[p]
8703	Bank debt restructuring agreement.[i] (Public sector debt).
8708	Bank debt restructuring agreement.[i] (Private sector debt).
8712	Pacto de Solidaridad Social (price stabilization plan) initiated.[p]
8712	Announce willing to exchange $10 billion of debt for 20-year collateralized bonds.[p]
8801	Invited creditor banks to present bids and bid ratios for how much debt they would tender.[p]
8810	Mexicana de Cobre (Mining) privatized, $1,380 million.[p]
8811	Tereftalos Mexicanos (Chemical) privatized, $106 million.[p]
8811	Aerovias de Mexico (Airline) privatized, $339 million.[p]
8900	A 1973 law promoting Mexican investment and foreign investment is relaxed. Amnesty in effect for repatriation of flight capital with a one time 2% tax only.[i]
8901	First modern day ADR announced.[aa]
8903	Brady plan (adjustment packages that combined debt relief and market-oriented reforms).
8905	*IFC Liberalization date.* [f]
8905	*Buckberg Liberalization date.* [d]
8905	*Bekaert/Harvey Official Liberalization date. [Final and NBER version].*
8905	*Kim and Singal Liberalization date.*
8906	Mexicana de Aviacion (Airline) privatized, $140 million.[p]
8906	Mexican established companies able to place bond issues in US markets through Section 144a.[i] Bancomex places unsecured bond offer.[i] This marks the first public placement since 1982.
8911	Nafinsa Trust established, allowing foreign investors to purchase voting shares (A shares) which were formerly off limits.
9002	Bank debt restructuring agreement.[i]
9007	Mexico approves debt/nature conversion program aimed at increasing expenditures to education, environment, and social programs.[i]
9009	Cananeas (Mining) privatized, $475 million.[p]
9012	TELMEX (Telecommunications) privatized, $1,760 million.[p]

Appendix A

Mexico

Major Political and Economic Events

Date

9012 Moody announced first time rating of Ba2 on sovereign debt and Pemex gets rating of Ba2 as well.[i] Telmex privatized as government sells 20% of company to consortium headed by Grupo Carso, France's Telecom and Southwestern Bell of the US.[i]

9100 Taxes on dividends eliminated. Maximum individual income tax reduced from 55 to 35%.[p]

9102 Mexico, Canada and U.S. began NAFTA negotiations.[p]

9102 Mexican government placed DM300 million bond offer in Europe.[i]

9104 Hylsa (private steel manufacturer) issues Euro-commercial paper at 12%.[i] Cemex raises 190 million through domestic class B and non-voting (foreign ownership accepted) shares in two tranches.[i] A large portion of the issue is reportedly bought by foreign investors.[i] Government sells 15% share of TELMEX in an international ADR offering.[i] Half of the shares are sold on the NYSE.[i]

9106 Banca Cremi (Banking) privatized, $248 million.[p]

9106 Banpais (Banking) privatized, $182 million.[p]

9106 Bankers Trust issued covered warrants on TELMEX stock.[i]

9107 Mexican government placed peseta denominated bonds in Spanish market.[i] Grupo Gigante becomes first Mexican company to carry out an initial public offering with an international tranche.[i] One third of the offering was sold in the US and Mexican markets.[i] Covered warrants are issued on the Mexico Fund.[i]

9108 Mexican government required reserves to be held against funds raised through Euro-CD offerings.[i] Chicago Board of Options Exchange begins trading TELMEX ADR options. This is the first exchange trade option on a Latin American equity instrument.[i]

9109 Banamex (Banking) privatized, $2,300 million.[p]

9110 Bancomer (Banking) privatized, $2,550 million.[p]

9203 Vanesa places 837 million dollar bond note to fund its acquisition of Bancomer.[i]

9205 Peso devalued. Government sells 40M "L" shares of TELMEX.

9206 Banco Serfin placed 12 year bond in international offering.[i] This placement is important because it demonstrated that investors are willing to accept longer maturities in this emerging market. First call warrants issued on Mexican debt instruments launched by Citibank.[i] Comision Nacional de Valores (Securities Commission) reduces minimum value of commercial paper requiring risk evaluation in the Mexican securities markets.[i]

9207 Mexico announced that $7.2 billion of external debt had been repurchased in the secondary markets over the past two years.[i] The bulk of this debt resulted from the par-bonds program of 1989.[i] Standard and Poor's assigned first time rating of BB+ to sovereign debt.[i]

9208 Mexico, Canada and U.S. announce consensus on NAFTA.[p]

9208 Mexican "Yankee" market issues become the first issue in the US market with a sub-investment grade credit rating.[i] "Yankee" market issues are required to follow SEC reporting rules.

9210 Pace of daily adjustment in the nominal exchange rate was doubled to 40 cents.[p]

9210 Mexican Stock Exchange begins listing warrants.

9212 Standard and Poor's assigned an AA- rating to senior peso denominated debt of the United Mexican States. This is the first credit rating assigned to local currency denominated debt in Latin America.[i]

9301 Currency reform announced. Nuevo Peso introduced.

9305 Duff and Phelps (US credit rating agency) awards United Mexican States its first investment grade rating of BBB for a planned Samurai issue.[i] First listing on the new second tier mid-cap company exchange.[i]

9306 Announced that Central Bank would be granted independence.[p]

9307 Banamex presented Latin America's first peso denominated Euro-medium term note facility. The NP$1 billion program is to have standard Eurobond features with investors paying and receiving dividends in dollars. Standard and Poor's assigned an A rating to the program.[i]

9308 President Clinton signed NAFTA and sent it to Congress.

9311 NAFTA passed in US Government. Peso crisis began and Bank of Mexico steps in to support rate.

9312 Mexican government passed new law that liberalizes foreign investment. The law stipulates that foreign direct investment can be made without prior government approval if the investment is less than $100MM in regions outside of Mexico City, Guadalajara, or Monterrey.

9401 Chiapas uprising

9403 Presidential candidate Luis Donaldo Colosio assassinated.

9406 Market falls 10.2% as investors dump stocks and cetes and plow into tesobonos. Interest on tesobonos now paid in dollars and not pesos.

9408 Ernesto Zedillo wins presidential election.

9412 Peso is devalued. It falls 34% versus dollar and is permitted to float vis-à-vis the dollar.

9502 US bailout loan valued at $13.5 billion is extended to help Mexico with its peso problem.

9503 Mexican officials announce new economic plan.

9504 Chicago Mercantile Exchange reintroduces peso futures. This necessitates the lifting of capital controls in place since the early 1980s. Mexican government authorizes certain Mexican banks to trade futures and options on the peso-dollar exchange rate.

Appendix A

Mexico

Major Political and Economic Events

Date	
9507	President Zedillo says peso has stabilized and that the risk of a financial collapse has disappeared.
9508	Government passes debt-relief program to aid consumers.
9509	President Zedillo announces new economic program.
9608	Guerrilla attack in Oaxaca brings about political uncertainty.
9610	"Pacto" alliance between business, government, and labor renewed, establishing economic, price, and wage targets for 1997.[t]
9612	Interior Ministry says that companies must distribute at least 10% of the net income to employees as of January 1997.
9701	Mexican government pays $3.5 billion to US marking the final repayment of the $13.5 billion emergency loan extended earlier.
9703	The NYSE suspends trading of Sidek's ADR and will ask the US SEC to delist the stock due to its failure to comply with listing criteria.

Appendix A

Nigeria

Major Political and Economic Events

Date	
7908	Nationalization of British Petroleum's oil and oil-marketing interests. Increased share in Shell-BP Petroleum from 60% to 80%.[a] First civilian president elected in 13 years.[a]
831231	Military Coup ended the civilian rule of President Shagari.[a]
840406	Strict foreign exchange controls on Nigerian residents.[a]
8410	Agreement with international creditors to pay for interest accrued since beginning of the year.[a]
850101	Residents permitted to open Foreign Currency Accounts in Nigerian banks for funds not obtained from export proceeds or the payments received by authorized dealers.[a]
8508	Another military coup.[a]
860926	Two tier Official Rate system established.[a]
8711	Bank debt restructuring agreement.[i]
8900	In early 1989 the Nigerian Enterprises Promotion Decree was revised allowing foreigners to acquire a 100% ownership in a Nigerian venture except in banking, insurance, petroleum prospecting and mining, where foreign ownership remains limited to 40% participation.[a]
890109	Dual exchange rate system was abolished and a 'unified' system established.
8904	Bank debt restructuring agreement.[i]
9100	Capital market reform and a privatization program broaden market during 1991. Policy of mass participation results in 620,000 shareholders, an increase of 55% from 400,000 shareholders a year earlier.
9100	Agreement reached on a foreign debt accord with the Paris Club to reschedule debt as well as a new stand-by agreement with the IMF.[i]
9100	Government realized about US$91 million from privatization of public enterprises.
9107	Withholding tax on dividends cut from 15% to 5%.
9112	Total Nigerian debt estimated at $34B. Bank debt restructuring agreement.[i]
9203	Government announces that Naira would be devalued more than 40% to close the gap between official and parallel rates. Effective March naira will be allowed to float.
9204	Government devalues naira by more than 40% to meet IMF conditions. Nigerian central bank no longer sets exchange rate--naira floats freely.
9208	Military government begins federal government overhaul.
9211	Transition from military to civilian rule is postponed. Presidential primaries held in September are voided by President on grounds of fraud and corruption.
9212	Total Nigerian debt is $30B.
9308	Successful democratic transition of power as president Babangida resigns and government headed by Chief Shonekan installed with elections scheduled for 9402.
9401	Balanced budget presented with an inflation target of 15%. The budget is viewed to be unrealistic considering Nigeria's deficit constitutes 17.5% of GDP and the inflation rate in 1993 was 100%. Furthermore the 9401 budget bans the parallel exchange rate and pegs the naira to the dollar.
9404	Presidential elections to be held.
9406	Chief Moshood Abiola, winner of the annulled 1993 presidential elections, declared himself president. Ruling military leaders arrested Abiola and charged him with treason. Arrest of Abiola caused labor strikes. Oil worker strike begins.
9409	Oil worker strike ends.
9410	Finance minister is dismissed.
9500	Government budget released. The budget repeals the Exchange Control Act of 1962 and the Enterprise Promotion Act of 1989. It also legalized the autonomous foreign exchange market that was banned in 9401. Repeal of the Exchange Control and Enterprises Promotion act cleared the way for the stock exchange to be opened to foreign portfolio investment.
9501	*Bekaert/Harvey Official Liberalization date. [NBER version].*
9503	IFC decides to use the autonomous exchange rate instead of the official exchange rate.
9504	SEC helps Nigerian Stock Exchange set new daily price change ceilings.
9508	Government released the Nigerian Investment Promotion Decree and the Foreign Exchange monitoring and Miscellaneous Provisions Decree. These decrees opened the Nigerian market to foreign portfolio investment.
9508	*Bekaert/Harvey Official Liberalization date. [Final version].*
9511	Government opens Nigerian markets to foreign investment (implementation).

Appendix A

Pakistan

Major Political and Economic Events

Date	
7600	Foreign Private Investment Act decrees that foreigners are not allowed to directly invest in Pakistan. However, investment is allowed provided formal permission has been granted by the State Bank of Pakistan and the Ministry of Finance.
8000	IMF granted three-year US$1.73 billion credit, the largest ever to a developing country.[a]
8100	Islamic banking system introduced, with depositors earning a share of banks' profits or losses and borrowers pledging a portion of their return in lieu of interest.[a]
820108	The rupee was devalued when the currency was its peg to the U.S. Dollar ended and the fixed exchange rate abolished. A controlled, floating Effective Rate was established in relation to a "basket" of currencies.[a]
8500	First national elections in almost eight years. Prime minister promises to bring country back to democracy after 8 years of military rule.[a]
8608	Benazir Bhutto, opposition leader, arrested.[a]
880817	President, Chief of Staff and other high ranking officials killed in Airplane explosion.[a]
881201	Benazir Bhutto seated as Prime Minister.[a]
9008	Prime Minister Benazir Bhutto was dismissed.
9011	Several liberalization moves were announced that eased both domestic and foreign investment procedures.
9102	*IFC Liberalization date*.[i]
9102	*Bekaert/Harvey Official Liberalization date. [Final and NBER version].*
9102	*Kim and Singal Liberalization date.*
9102	New foreign investment law passed. Now there is no restriction on foreigners or nonresident Pakistanis purchasing shares of a listed company or subscribing to public offerings of shares. There are, however, some approvals still necessary from the Investment Promotion Bureau, the government's sanctioning and foreign investment regulatory body, and the exchange control restrictions of the State Bank of Pakistan are imposed in certain circumstances.[e]
9103	Foreign investment in listed shares takes place.[e]
9106	*Buckberg Liberalization date*.[d]
9107	Pakistan Fund launched on the Hong Kong Stock Exchange with net asset value of $33.5 million as of December 1991.[aa]
9501	Duty drawbacks on fiber exports removed.
9507	Rupee devalued.
9510	Rupee devalued 0.2% against dollar.
9608	The telecommunication company is privatized. Rupee devalued 0.34% against dollar. Large government borrowing from the banking sector.
9609	Rupee devalued 3.8% against dollar. Government announced it will exempt capital gains on trading of shares of listed companies.
9610	Provincial governments pledged to collect 2 billion rupees through the levy of a farm tax. Rupee devalued by 8.5% against dollar.
9612	The government introduced a package which exempts companies from a 10% withholding tax for bond issues, exempts investors from income taxes for earnings from rights issues as well as income from mutual funds, and exempts insurance companies from capital gains taxes.
9701	Government announced that it will sell a $150 million five-year bond convertible into shares of Pakistan Telecom in order to boost interest in PTC's privatization.
9703	The general sales tax is reduced from 18% to 12.5%. Government announced plans to narrow personal income tax brackets from 10%-35% to 5%-20%. The management of Pakistan International Airlines said it would postpone its privatization for at least 3 years.
9704	Custom duties and import tariffs were cut drastically. Rupee devalued.
9705	The government announced an incentive package, which includes an extension of capital gains exemptions for 3 years, tax waivers on dividends and bonus shares, and tax exemptions on debt securities for foreign investors.
9707	The government made plans to narrow the trade gap. In order to do so they will have to promote high valued-added exports by providing adequate financing terms and lower duties on capital and machinery. The rate on a variety of loans was cut 6%.

Appendix A

Philippines

Major Political and Economic Events

Date	
8000	The Philippines becomes member of the GATT.[a]
8101	10% Capital-gains tax on share transactions to discourage speculation in the Manila Stock market.[a]
811215	Export of foreign currency was forbidden without prior approval.[a]
8302	Residents working abroad have to show proof that proper remittances of earnings were made before their passports could be renewed.[a]
830821	Benigno S. Aquino, political opponent, assassinated at airport after returning from the United States. Beginning of large capital flight.[a]
831005	Commercial banks instructed to surrender 80% of foreign exchange earnings to the Central Bank and a ban was placed on nonresident imports.[a]
8311	Commercial banks must surrender all their foreign exchange receipts to the Central Bank. Foreigners were permitted to own up to 100% of certain Philippine enterprises to attract hard currency.[a]
8400	Letter of intent signed with IMF, including standby credit.[a]
840606	Exchange rate system revised. Multiple rate structure created.[a]
841010	Multiple rate structure abolished. Effective exchange rate determined by market forces with periodic Central Bank intervention. 1% tax on all purchases and sales on foreign exchange.[a]
8505	Bank debt restructuring agreement.[i]
8508	IMF targets missed.
8511	$2.9 billion of public debt rescheduled.
8602	Marcos overthrown.
8603	*Kim and Singal Liberalization date.*
8605	Country Fund liberalization. First Country Fund launch of 1980s is Thorton Philippines Redevelopment Fund Ltd with net asset value of $0.9 million as of December 1991. The first larger scale Country Fund followed in May 1987.[aa]
8605	Import restrictions lifted.
8608	Talks open with IMF. Import controls lifted.
8611	Paris Club debt rescheduling of $870 Million.
8700	Few restrictions left governing repatriation of capital income by foreigners.
8702	$10.5 billion structural adjustment loan. Debt rescheduling.
8705	Philippine Long Term Equity Fund Ltd launched (unlisted) with net asset value of $44.3 million as of December 1991. This is the first Country fund of substantial size.[aa]
8705	Agrarian land reform plan is approved
8708	Coup attempt. Bombings of business in Makati.
8712	Bank debt restructuring agreement.[i]
8811	IMF approves stabilization plan.
8905	Debt rescheduling $2.2 billion.
8908	Brady Deal reached in principle.
8910	*IFC Liberalization date* .[i]
8910	*Buckberg Liberalization date.* [d]
8911	Coup attempt.
9002	Bank debt restructuring agreement.[i]
9102	Reintroduction of official debt/conversion program.[i]
9103	First ADR announced.[aa]
9105	Ayala Land Inc. becomes the first equity transaction in Philippines to have formed an international syndicate.[i]
9106	A Foreign Investment Act is signed into law. The Act removes, over a period of three years, all restrictions on foreign investments. Under the provisions, foreign investors are required only to register with the Securities and Exchange Commission, and most sectors of the economy are opened to 100% foreign ownership.
9106	*Bekaert/Harvey Official Liberalization date. [Final version].*
9111	*Bekaert/Harvey Official Liberalization date. [NBER version].*
9111	Manila Electric (Meralco) is privatized. This is the first privatization to involve an equity issue.[i]
9201	The Central Bank liberalizes rules governing foreign exchange transactions.
9202	The IMF approves an extension of 18-month standby credit.
9205	Mr. Fidel Ramos elected as president. Buy/back option of July 1992 debt restructuring agreement was completed.[i]
9207	Bank debt restructuring agreement.[i]
9208	The government lifted all foreign exchange restrictions allowing foreign investors to freely repatriate their capital.
9300	By end of 1993 residents can freely own foreign securities.[b]
9302	Philippines return to international capital markets for the first time since 1983 with the flotation of a $150 million three year government bond.[i]
9303	Philippine government announced that foreigners can repatriate cash dividends without central bank approval. The move follows the more general relaxation of foreign ownership restrictions in 1992.[i]
9307	Moody's assigns first time rating to sovereign debt of Ba3.[i] Standard and Poor's assigned first time rating to sovereign debt of BB-.[i] A computer link-up is established integrating the exchanges in Manila and Makati.[i]
9501	The Philippine central bank tightens money supply growth.
9504	Local interest rates reduced.
9610	The new Senate leadership pledged its support for a tax reform package.

Appendix A

Philippines

Major Political and Economic Events

Date	
9611	New tax measures designed to reduce the budget deficit and boost the Philippine's credit ratings are applied.
9702	Philippine Stock Exchange proposed scrapping a tax on initial public offerings to encourage firms to go public.
9705	Interest rates raised by 2 %.
9706	Central bank announced that the currency could trade in a wider range.
9707	Devaluation of the Thai Baht.
9708	Peso declines. Central bank decided to raise bank liquidity reserves, indicating a rise in interest rates.

Appendix A

Portugal

Major Political and Economic Events

Date	
7604	Foreign Investment Code bans acquisition of existing domestic enterprises as well as new foreign investment in key public sectors.
7700	Austerity measures in the wake of US$1.5 billion IMF credit.[a] Lisbon Stock exchange was opened for trading of all shares and securities.[a]
770328	Portugal formally applies to join the EEC.[a]
7801	Agreement reached with IMF on a long-delayed standby credit, thus unblocking other foreign loans.[a]
8204	All transactions by foreigners regulated by Instituto do Comercio Externo de Portugal, set up by decree-Law 115/82.[q]
8208	Council of the Revolution dissolved.[a]
8209	New Constitution signed into law that curtailed Presidential powers in favor of Parliament, provided for civilian supreme court and placed the armed forces under a civilian defense minister.[a]
8406	IMF grants Portugal US$55.7 million loan. Exchange rate controls eased slightly.[a]
8600	Portugal enters EC and agrees to eliminate all barriers to trade.[c]
8601	*Buckberg Liberalization date*.[d]
8601-8710	Market performance attributed to "Portuguese entry in the EC and the deregulation and reform of the financial and public sectors."[e]
8607	Al restrictions on foreign investment removed except for arms sector investments.[a]
8607	*Bekaert/Harvey Official Liberalization date. [Final version].*
8607	*Kim and Singal Liberalization date.*
8611	Corporation Law passed. Governs trading, investor protection.[q]
8708	Portugal Fund Ltd launched on the London Stock Exchange with net asset value of $20.4 million as of December 1991.[aa]
8812	*IFC Liberalization date.*[i]
8812	*Bekaert/Harvey Official Liberalization date. [NBER version].*
9003	New privatization laws are adopted that permit 100% privatizations called for limit on foreign ownership on a case by case basis depending on industry, eliminating the earlier limit of 10% on the foreign holding of privatized shares.
9107	New legal framework for the stock exchange becomes law - called Sapateiro Law. It is designed to bring the Portuguese system in line with the European Community rules. It established an independent SEC and rules against insider trading and disclosure.
9109	New system for continuous automatic trading was implemented for some stocks.
9110	Prime Minister Cavaco Silva and the Social Democrat Party were re-elected for four more years with an overall Parliamentary majority.
9209	Bank of Portugal no longer requires 25% of foreign borrowing to be deposited into non-interest bearing accounts if used for non-trade or non-commercial purposes.
9210	Ban on foreign investment in floating-rate treasury notes ends.
9211	Government devalues the escudo by 6% in response to a 6% devaluation of the Spanish peseta.
9212	Bank removed remaining restrictions on capital flows moving into and out of the country. Foreigners can now operate in the short-term money market and domestic banks can lend escudos to non-residents. Maastricht Treaty is ratified by President Soares.
9312	Prime Minister Anibal Cavaco Silva announced a major reshuffling in his cabinet. New convergence program presented to the EU monetary committee.
9406	Oporto Stock Exchange closed as part of a plan to base Portugal's spot trading in Libson and to develop the Oporto Exchange as a national options and futures exchange. Elimination of 20% withholding tax and creation of a screen based trading system.
9606	Oporto Derivative Exchange opens.
9608	Government awards 65% stake in Banco de Fomento & Exterior to Banco Portuguese de Investimento.

Appendix A

Taiwan

Major Political and Economic Events

Date	
7600	Established open money market with market-determined interest rates.[s]
790101	The United States formally recognizes the People's Republic of China and breaks off relations with Taiwan.[a]
790201	Effective Rate was placed on a controlled, floating basis with its exchange determined against a "basket" of currencies.
8000	Liberalized CD rates.[s] In the Spring, Taiwan was expelled from the IMF and the World Bank.[a]
8200	Ministry of Finance began policy of gradual liberalization.[e] The plan has three phases. The first phase will allow indirect investment through trust funds established in the Republic of China. The second phase will allow direct investment by foreign institutions. The third phase will allow free access to foreign capital. [e]
8209	Taipei announced the gradual opening of local stock market to foreign investors via "beneficial certificates" issued by local investment companies. Foreign investors were to be allowed to buy shares in companies in Taiwan.[a]
8308	Implementation date of phase one of the liberalization plan. The International Trust Company Limited is established.
8310	The Taiwan Republic of China fund raises $41 million in Europe and Japan for investment in the Taiwan stock market. This fund is made possible by the International Trust Company Limited. [e]
8400	Flexible maximum and minimum lending rates introduced.[s]
8400	Commercial banks allowed to set prime rate within central-bank administered range. Revoked regulation prohibiting maximum deposit rates from exceeding minimum lending rate.[s] Offshore banking operations begin in Taiwan.[a]
8600	Taiwan continued to dismantle its foreign exchange control system. Allowed foreign-invested firms to remit capital gains as well as all of their investment after one year instead of several; reduced tariffs on 1841 items, freed restrictions on transactions in gold; permitted residents to hold or export up to US$5 million in foreign exchange and allowed residents to buy foreign exchange certificates of deposit at minimums of US$10000.[a]
860401	Value Added Tax of 5% was instituted (15% for entertainment facilities and 1% for small businesses.)[a]
8605	Taipei Fund launched on the London Stock Exchange with net asset value of $88 million as of December 1991.[aa]
8700	Liberalization of foreign capital account. At mid-1987 the 38-year period of martial law was ended, the ban on strikes was lifted and a constitutional democracy was to be instituted.[s]
8707	Practically all foreign exchange controls were lifted. Later in the year, import tariffs on 3500 items were cut. [a]
8801	President Chiang Ching-kuo died, bringing an end to Chiang family rule which lasted four decades. Vice President Lee Tung-hiu was sworn in as his successor, followed by massive public unrest.[a]
8800	At mid-year, the Minister of Economy and eight other officials faced impeachment charges over a scandal involving Taiwan's top automobile manufacturer. Liberalizations continued. Foreign stockbrokers could open branches in Taiwan and import tariffs were being reduced.[a]
8809	It was announced that the income tax on capital gains would be reimposed at the start of 1989.[a]
890403	Foreign Exchange Rate liberalization.[s]
890720	Complete deregulation of interest rates with advend of a new Banking Law. Relaxed the requirenment for entry into the banking system and the establishment of new branches including international offices. Government set to allow foreign investmen in the stock market in local companies.[s]
8911	Central Bank lifted the US$5 million annual limit for financial institutions making remittances and overseas investments with specified trust funds. Taiwan recognizes the Government on the Mainland and sanctioned indirect investment in China through affiliates or subsidiaries.[a]
9005	President Lee Teng-hui reelected by the national assembly.
9101	*IFC Liberalization date*.[i]
9101	Implementation date of phase two of liberalization plan. Eligible foreign institutional investors may now invest directly in Taiwan securities if they have applied for and received SEC approval as a qualified foreign institutional investor (QFII).[e] Outward remittance is not allowed until three months after initial investment. Each foreign institution is limited to holding a maximum of 5% of any listed stock and total foreign holdings in any listed companies may not exceed 10%.[e]
9101	*Bekaert/Harvey Official Liberalization date. [Final and NBER version].*
9101	*Kim and Singal Liberalization date.*
9112	First ADR announced.[aa]
9202	Central bank halts (temporarily) inward remittance of QFII funds.[e]
9205	China Steel Corporation plans to place 18 million shares of GDRs worth $400 million marking the first time foreign investors will be allowed to directly purchase equity of a Taiwanese company. Until this time investors were restricted to Euroconvertible bonds and country funds.[i]
9206	Asia Cement tapped international market with a $60 million issue.[i]
9301	Authorities approve purchase by domestic investors of futures traded on international exchanges as a part of a three stage program to develop domestic futures and options trading facilities.[i]
9305	China Hsin raises $72 million through GDR issue on NYSE.[i]
9507	New Taiwan Dollar fell 3.5% against the dollar. The government lowered the interbank rate to 4.8%.
960104	Parliament reinstates a capital gains tax of 10-14% on stock market profits.[i]
960302	Executive Yuan increased the ceiling on foreign ownership of total market capitalization from 15% to 20%, raised to 25% in December.[i]

Appendix A

Thailand

Major Political and Economic Events

Date	
770429	Foreign Promotion Act, guarantees that no private business will be nationalized. Tax exemptions are granted for three to eight years, as are tariff exemptions and reduction in income taxes. Free repatriation of profits and dividends.[a]
8000	Interest rate ceilings for financial institutions from 15 percent limit imposed by usury law.[s]
8300	Board of Investment criteria are changed to facilitate export-oriented investment. While new criteria require majority local ownership for firms producing in the domestic market, they permit majority foreign ownership of export-oriented firms; plants whose output is wholly exported are permitted to be owned 100 percent by foreigners.[s] Banking crisis.[y]
8400	Thailand abandons fixed exchange rate vis-à-vis the dollar. General credit restrictions abolished but restrictions on bank lending rates reimposed. Ceilings for loans to priority sectors lowered.[s]
8500	IMF standby credit.[a]
8507	Bangkok Fund Ltd launched on the London Stock Exchange with net asset value of $163.5 million (in December 1991).[aa]
8612	Morgan Stanley launches $30 million Thailand Fund.[r]
8701	General Yongchaiyut called for reforms.
8707	ASEAN free trade agreement extended.
8709	Inauguration of the Alien Board on Thailand's Stock Exchange. The Alien Board allows foreigners to trade stocks of those companies which have reached their foreign investment limits. Thais continue to trade stocks on the Main Board.[o,q] [Park and Van Agtmael claim early 1988 but two other sources establish the date as September 1987.][e]
8709	*Bekaert/Harvey Official Liberalization date. [Final version].*
8806	Chartchai Choonhavan takes office.
8808	*Kim and Singal Liberalization date.*
8812	*IFC Liberalization date.*[i]
8812	*Bekaert/Harvey Official Liberalization date. [NBER version].*
8812	Ceiling on foreign borrowing raised.
8900	Abolished deposit rate ceilings on commercial bank time deposits greater than one year.[s]
8903	US imposes restrictions on imports from Thailand.
8906	Accusations of corruption.
8912	Strikes protesting privatization.
9001	Domestic firms no longer need to get approval to pay dividends to foreigners.[o]
9003	Ceiling on loan rates raised.
9005	Thai citizens gain access to foreign bank accounts.[o]
9009	Twenty ministers sacked in corruption scandal.
9101	First ADR announced.[aa]
9101	Coup overthrows government. Investability Index jumps 35 percent.
9102	Prime Minister Chatichai ousted.
9104	Announcement of the loosening of foreign exchange controls and the introduction of the value added tax system in January of 1992. Controls and reporting requirements for the repatriation of dividends, capital gains, foreign currencies, and share certificates are partially removed.
9205	Controls and reporting requirements for the repatriation of dividends, capital gains, foreign currencies, and share certificates continue to be partially removed.[o]
9510	The Thai prime rate stands at 13.75%, the highest in several years.
9608	The Bank of Thailand said it would pump more funds into the market by intervening in the foreign exchange and repurchase markets.
9609	The government unveiled a tax-cut package aimed at stimulating exports and reducing the current account deficit.
9612	The government planned to reduce interest rates.
9702	The overnight rates rose to 25%. The baht fell to its lowest level in 10 years. The central bank boosted short term rates. Thai officials refused to join the World Trade Organization agreement to liberalize the telecom industry.
9705	The Financial Minister pledged to reduce interest rates by 2% by year-end.
9707	Devaluation of the Thai Baht.

Appendix A

Turkey

Major Political and Economic Events

Date	
8100	Quotas for imports abolished, and advance deposits reduced. New variety of Turkish Lira introduced, NGTA, that allowed nonresidents to buy into Turkish enterprises and nonresidents to set up companies outside Turkey.[a]
8211	Elections bring end of military rule. Foreign exchange controls were sharply eased.[a]
8400	Exchange rate controls removed in early 1984. Effective Rate for the Lira was set daily by the Central Bank and periodically adjusted.[a]
8800	Article 15 of Decree 32 paves way for foreigners to invest directly in Turkey.[e] No longer are foreigners required to seek preapproval to purchase or sell securities listed on the Istanbul exchange.
8900	Since 1989, foreign investors have been permitted to trade in listed securities with no restrictions at all and pay no withholding or capital gains tax provided they are registered with the Capital Markets Board and the Treasury.[q]
8907	Communiqué passed allowing foreign mutual funds to have access to equities market. Subsequently, a resolution passed in Official Gazette, declared the securities market in Turkey fully open to foreign institutional and individual investors.[q]
8908	*IFC liberalization date*.
8908	*Bekaert/Harvey Official Liberalization date. [Final and NBER version].*
8908	*Kim and Singal Liberalization date.*
8912	Turkish Investment Fund, Inc launched on the NYSE. Net asset value as of December 1991 was $52.7 million.[aa]
8912	*Buckberg liberalization date.* [d]
9007	First ADR announced.[aa]
9100	Banking crisis. [y]
9110	The final outcome of the general elections removed prevailing political uncertainty. The True Path Party emerged from the elections as the biggest party, but was unable to gain an overall majority.
9111	On November 20, a coalition government was formed between the DYP and the Social Democrat Populist Party and the coalition later received Parliament's vote of confidence.
9204	EIS becomes the first Turkish corporation to place equity directly with foreign investors through GDR offerings that raised $34 million.[i] First time rating assigned by Standard and Poor's of BBB to sovereign debt. Moody's assigned first time rating of Baa3.[i]
9212	A tax decree introducing preferential tax rates on investments in mutual funds and investment trusts having a 25% equity content helped produce a 4% gain in the IFC Global Total Return Index.
9304	Death of President Ozal led to the Turkish Parliament approving Prime Minister Suleyman Demirel as the new Turkish President.
9312	On the last day of 1993, government officials announced significant changes to import tariffs for many products, but primarily autos and cigarettes due to new trade relationships with the EU.
9403	Central Bank abandoned its interventionist policy and begins to gradually devalue the lira.
9404	Government announced a three-month economic austerity program on April 15, to lower inflation and reduce the budget deficit.
9406	IMF increased Turkey's credit line to $713 million from $400 million following the adoption of the austerity program.
9409	Privatization program was approved by the Constitutional Court on September 8.
9412	Turkish and EU officials agree to postpone their customs union until March 1995.
9503	A Customs Union with the EU and lower T-bill interest rate more than offset negative factors, including the Turkish army's invasion of Iraq to destroy the bases of the separatist Kurdistand Workers Party.
9504	Relations between Turkey and the EU were strained during the first week of April. Government proposed that 15% of the shares of Turkish Telekom be transferred to current and former employees and another 10% to the postal service general directorate. The government will retain 51% of the shares.
9509	Central bank eased credit conditions. Later news of rising consumer prices prompted the central bank to reverse its monetary easing.
9512	The Refah party, espousing Islamic law, was the nominal election winner.
9603	A new coalition government was successfully formed between the True Path Party and the Motherland Party, causing an upsurge in stock prices.
9606	Collapse of new coalition government, power to Muslim Welfare Party.
9608	The stocks of state-owned petroleum distributor Petrol Ofisi and petrochemicals giant Petkin were propped up by a statement made by Deputy PM that the two companies were next on the list for a full sell-off after completing the first phase of privatizing the state telecom company, Turkish Telekom.
9609	Government aimed to reduce Turkey's large public deficits by generating $10 billion mainly through the sale of state property, the introduction of a new withholding tax on Treasury paper, and the securitization of major state infrastructure projects. The Turkish Capital Board will require that all foreign investors at the Istanbul exchange supply proper identification information from October prior to engaging in any transaction. Turkey has so far raised only $300 million from privatizations, far below the $2 billion target for 1996. More than 130 companies are slated for divestiture, including Turkish Telekom, Eregli (iron and steel) and several banking and industrial companies.
9611	Finance Ministry says that only interest income and not capital gains would be subject to withholding tax.
9612	Standard and Poor's downgrade of Turkey's long-term foreign currency debt from B+ to B sent stock prices tumbling and sparked fear of a financial crisis.
9701	Constitutional court rejected a request by opposition parliamentarians to block the sell-off of Turkish Telekom. The partial privatization of Turkish Telekom is expected to generate $3.5 billion for the government in 1997.

Appendix A

Turkey

Major Political and Economic Events

Date	
9703	The government has targeted $5 billion in privatization revenues in order to balance the budget. Moody's downgrades Turkey's foreign sovereign debt to B1 from Ba3, but many investors had expected it.
9704	The court began debating a request for the annulment of two articles in the privatization law, one concerning the evaluation of state firms slated for divestiture, and the other relating to the sell-off process.
9707	State-controlled iron and steel company Erdemir reached record highs on expectations that it is at the top of the government's privatization list.

Appendix A

Venezuela

Major Political and Economic Events

Date

760701 Multiple exchange rate system abolished. Single rate introduced.[a]

8005 20% reserve requirement was imposed on overseas deposits of Venezuelan banks and on 25% on deposits of multinational firms.[a]

8208 Beginning of Mexican debt crisis - impacts most of Latin America

8300 Foreign exchange controls and a two-tier official exchange rate system imposed; restrictions on imports.

830228 Three-tier exchange rate system was established.[a]

840224 Another tier added to the three-tier exchange rate system.[a]

8500 Public sector debt restructuring agreement.[a]

8602 Bank debt restructuring agreement.[i]

8711 Bank debt restructuring agreement.[i]

8812 *Buckberg Liberalization date*.[d]

8903 Brady plan (adjustment packages that combined debt relief and market-oriented reforms).

900116 Decree 727 opened foreign direct investment for all stocks except bank stocks.

9001 *IFC Liberalization date.*[i]

9001 *Bekaert/Harvey Official Liberalization date. [Final and NBER version].*

9001 *Kim and Singal Liberalization date.*

9003 Agreement with commercial banks to restructure almost two thirds of external bank debt under Brady Plan.

9011 Andean pact renewed (Bolivia, Colombia, Ecuador, Peru and Venezuela) (Chile refused).[p]

9012 Bank debt restructuring agreement.[i]

9107 Standard and Poor's upgraded Venezuelan debt from B+ to Ba1.[i]

9108 Venezuela returned to Euromarkets with $500 million five year bond.[i] Vencemos (private cement) launched a two tranche offering of two year and five year bonds.[i] Venezuela's credit rating upgraded from Ba3 to Ba1.[i]

9108 First ADR announced.[aa]

9109 VIASA (Airline) privatized, $145 million.[p]

9111 CANTV (Telecommunications) privatized, $1,885 million.[p]

9202 The escalation of political unrest for several months culminated in an attempted coup d'etat. Venprecar (steel) was the first Latin American equity offering in which all shares including those trading in Caracas were listed in dollars.[i]

9204 President reshuffled cabinet. Taxes on luxury items, and price controls on energy were implemented. Merrill Lynch issues warrants on Venezuelan debt/equity conversion bonds. This marks the first public offering of warrants on Latin American sovereign debt.[i]

9207 Caracas exchange requires listed companies to provide quarterly reports.[i]

9211 A 2nd coup attempted.

9212 An automated transactions system was implemented at the Bolsa de Valores de Caracas. The municipal and gubernatorial elections saw large turnouts of voters with the ruling party winning only 8 out of 22 states.

9300 Banking crisis.[y]

9303 Venezuela becomes first Latin American nation to launch interregional international bond offering simultaneously in Colombia and internationally.[i]

9304 Standard and Poor's lowered Eurobond outlook to negative from stable.[i]

9310 A 10% value added tax on wholesalers and importers was implemented on Oct. 1.[p]

9311 Legislation was passed in early November which opened the Venezuelan banking sector to foreign investment, effective January 1, 1994.

9312 On Dec. 5, Rafael Caldera, the populist independent candidate, won the presidential elections with 30% of the votes.

9401 A 10% value added tax on retail sales was approved to start on January 1. Bank stocks opened to foreign investors.

9402 President Caldera officially assumed the office of the presidency on Feb. 2.

9404 April 26, resignation of central bank President Ruth de Krivoy.

9406 Exchange and price restrictions imposed. Government fixed exchange rate. This action effectively prohibited repatriation of capital.

9411 Resolution 41 passed attempting to alleviate restraint of the fixed exchange rate on the repatriation of foreign capital. In practice the resolution has little impact.

9412 The central bank moved to suspend sales of zero-coupon bonds during two consecutive weeks. Congress also authorized the government to sell Bs 160 billion (10% of the 1994 budget) in Treasury notes to enable Venezuela to complete the 1994 payments on its non-restructured debt.

9504 The listing of Brady bonds on the Caracas Stock Exchange on April 7 proved to be a significant event for equities. Two days after the Brady listing, the Exchange Control Board ruled that Brady bond trading in Caracas was illegal.

9506 The Venezuelan cabinet allowed Brady bond trading to resume, fueling fresh demand in equities. The approval of Brady bond trading has the de facto effect of allowing foreigners to repatriate capital earnings and implies effective currency convertibility.

9507 Restoration of political and economic rights for Venezuelan citizens encouraged investors to return to the stock market.

9510 President's decision to seek emergency loan from the IMF caused confidence in the market to increase substantially. On Oct. 27, Venezuelan officials passed a new law relaxing exchange controls for tourists, who can now exchange their dollars at the market rate drawn from Brady bond trading.

Appendix A

Venezuela

Major Political and Economic Events

Date	
9511	On Nov. 29, the IFC replaced Venezuela's official exchange rate (fixed at BS70 per dollar) with the implied exchange rate derived from Brady bond trades (then about BS344 per dollar) for dollar calculations of the IFC index.
9512	On December 11, the government announced a long-awaited devaluation of the official bolivar exchange rate, reducing its value by 41% to BS290 per dollar. State oil company, PDVSA, concluded its auction of ten potentially oil-rich tracts.
9604	New foreign exchange regime implemented on April 22, when the government liberalized the exchange rate and substituted the fixed rate BS290 to the dollar with a floating market rate. The rate was BS498.6 on the first day close.
9607	Floating exchange rate ended with creation of foreign exchange band system.
9608	Sale of Banco de Venezuela scheduled for Aug 29.
9609	Inflation rate topped 115% in September. Government delays sale of Banco de Venezuela.
9611	Successful partial privatization of the government's remaining 49% in the national phone company, CANTV, lent credence to the government drive to implement market reforms.
9612	Stocks rose following the successful government sale of Banco de Venezuela, which lent credibility to the government's economic reform plan.
9701	The new exchange rate system that was initiated in early January did not cause a great change in sentiment in the equities market. Foreign interest diminished amid a rise in labor unrest.
9704	Investors looked to the government's planned privatizations, including the sale of state-controlled aluminum companies.
9705	Venezuela due to auction operating contracts for 20 oil fields in June in its 3rd round of oil sector liberalization.

Appendix A

Zimbabwe

Major Political and Economic Events

Date	
7901	White voters approved a new constitution based on black majority rule but retaining white control of the military and security forces as well as the judiciary and the civil service.[a]
7912	UN Security Council lifted the international embargo on trade with the country.[a]
800307	Civilian elections. The Rhodesian Dollar was decoupled from the South African Rand. The unit's exchange value was linked to a "basket of currencies."[a]
800418	Country became legally independent as Zimbabwe. Currency renamed Zimbabwe Dollar.[a]
8009	Zimbabwe joins IMF.[a]
8211	New foreign investment guidelines published which stipulated that foreign companies must provide a minimum 20% local participation in existing enterprises.[a]
840327	All remittances of dividends, branch and partnership profits, rent and other income from nonresident equity holdings were suspended, except for dividend and profit remittances or venture capital entering after September 1,1979. [a]
8408	Prime Minister Mugabe committed one of Africa's few remaining multiparty democracies to one-party rule and entrenched his supremacy as head of a new Politburo at his party's first congress in 20 years. New constitution to be drawn up based on Marxist-Leninist principles.[a]
8600	President Mugabe announced that the Assembly seats reserved for whites would be abolished and the government would increase control of the economy to spur development.[a]
860101	Remittances declared from March 27, 1984 through December 31, 1985 can be released by means of six-year 4% government bonds.[a]
8609	United States suspends aid to Zimbabwe.[a]
8704	As promised, the 20 seats reserved for whites in the National Assembly were abolished.[a]
8705	The percentage of profit and dividend remittances was halved to 25% for new investments which entered the country before September 1979. Regulations involving the investment of surplus funds owned by foreign companies were relaxed.[a]
8700	At the end of 1987, the nation's two rival political parties signed a "unity agreement" and were merged. Mugabe was elevated to executive President, the Premiership being dissolved. Former rival, Joshua Nkoma, became Vice President. One-party Socialist States was achieved committed to Marxist-Leninist principles.[a]
8800	1988-1989 Budget announced that 75% of profits that foreign companies keep in Zimbabwe will be taxed. The Zimbabwe stock exchange was revived after a prolonged period of inactivity.[a]
8900	It was announced that the economy was to be gradually deregulated. A one-stop investment center was to be created to help attract overseas capital and foreign companies were to be able to borrow domestically up to 25% of their shareholder's funds. Restrictions on the payment of dividends to foreign investors were also relaxed. Special tax concessions were to be granted to companies expecting to be major foreign exchange earners. A new opposition party was formed.[a]
8908	Plans formulated to revise the Constitution in order to allow for the confiscation of commercial (white) farmland for redistribution to blacks.[a]
9000	President Mugabe scored a decisive political victory, his party taking 116 of 120 seats in the Parliament.[a]
9007	Signed investment protection agreement with the Untied States, insuring American companies against political risks. Later, a US$16 billion five-year Structural Adjustment Program was announced.[a]
9012	Parliament authorized the government to confiscate factories, farms and private residences when it sees fit, with payment being whatever the regime finds appropriate.[a]
9103	Zimbabwe launched a five year (1991-1995) Structural Adjustment Program. Designed to cut the fiscal deficit substantially by 1994.
9211	The World Bank's International Development Association made a special loan of US$150 million to help fund drought relief.
9212	Approximately 6 million people registered for the government's drought relief program. On Dec. 3, a group of fifteen western nations agreed to provide Zimbabwe with US$1.4 billion in grants, soft loans, and commercial loans for 1993.
9304	Finance Minister Chidzero announced new investment guidelines and export incentives which effectively opened the Zimbabwe Stock Exchange to foreign portfolio investment. Foreign investors may participate on the ZSE provided that: 1) they finance the purchase of shares by inward transfer of foreign currency through normal banking channels; 2) the purchase of shares will be limited to 25% of the total equity of the company (excluding existing foreign shareholdings prior to May 1993) with a single investor acquiring a maximum of 5% of the shares outstanding; 3) investments will qualify for a 100% remitability after taxes; 4) capital and capital gains are freely remittable after capital gains deductions. In addition, foreign investors participating in the stock market, under the new rules, are not required to obtain exchange control approval and can register share purchases either in their own names or names of nominee companies.
9304	*Bekaert/Harvey Official Liberalization date. [NBER version].*
9306	New investment guidelines effective June 23.
9360	Market opened to foreign investors.[w]
9306	*Bekaert/Harvey Official Liberalization date. [Final version].*
9307	*Kim and Singal Liberalization date.*
9401	Reserve Bank removed most remaining restrictions on current account transactions. Reserve Bank introduced a new two-tier foreign exchange system to establish a market-determined exchange rate for the Zimbabwe dollar.
9406	Two-tier system abolished leaving a single exchange rate to be determined by the inter-bank market.
9504	In early April, President Magabe's ruling ZANU-PF party secured an overwhelming victory in the country's general elections.

Appendix A

Zimbabwe

Major Political and Economic Events

Date	
9512	On Dec. 29, the Reserve Bank announced that it was increasing foreign ownership limits for ZSE-listed companies to 35% of the total equity of the company, from 25%.
9601	New ownership rule took effect on Jan. 1. Raised limit to 35% from 25% for foreign ownership. (Announced December 29, 1995).
9603	President Mugabe re-elected to a six-year term.
9605	Appointment of Herbert Murerwa as finance minister helped bolster market sentiment.
9608	Stocks rose following a 2% cut in the Reserve Bank's rediscount rate and lower inflation figures.
9609	Reserve Bank eased the limit on foreign portfolio investment in a listed company from 35% to 40%.
9610	In mid-October, a 0.5% cut in the Reserve Bank's rediscount rate and lower money market rates triggered a three-week equity rally.

Appendix A

Notes: Unless otherwise noted all information is taken from International Finance Corporation (IFC) Factbooks 1991-1996 and IFC Quarterly Reviews 1996-1997. Dates are listed in YYMMDD format. Dates listed as YY00 indicate that the event month is not known.

[a]Cowitt, P. P., ed., *World Currency Yearbook*, Currency Data and Intelligence, Inc., Brooklyn, New York, 1984,1985,1989, and 1991.

[b]Cowitt, P.P. Edwards, C. A. and E. R. Boyce, *World Currency Yearbook 1990-1993*, Currency Data and Intelligence, Inc., Brooklyn, New York, 1996.

[c]Bentley, P., Ed., *World Guide to Exchange Control Regulations*, Euromoney Series, Longwood Publishing Group, Wolfeboro, NH, 1986.

Peso devalued. Unit was replaced on a controlled, floating basis creating an Effective Rate.[a]

[e]Park, K. K. H. and Van Agtamel, A. W., *The World's Emerging Stock Markets: Structure, Developments, Regulations,and Opportunities,* 1993.

[f]Cowitt, P. P., Edwards, C. A. and E. R. Boyce, *World Currency Yearbook 1990-1993*, Currency Data and Intelligence, Inc., Brooklyn, New York, 1996.

[g]No month is provided by IFC. IFC says that by end of 1987 the EC members could freely invest in Greece.

[h]No month is provided by IFC. IFC says that in the summer of 1991 these restrictions were lifted.

[i]*Private Market Financing for Developing Countries,* International Monetary Fund, various issues from 1991-1996.

[j]*Role of Financial Markets in Privatization in the ESCWA Region: Economic and Social Commission for Western Asia*. United Nations. New York, 1997.

[k]*Middle East Economic Digest* 39(16), April 21,1995, page 11, and *Middle East Economic Digest* 39(2), January 13, 1995, page 24.

[m]El-Erian, Mohamed A and Kumar, Manmohan S, 1994, Emerging Equity Markets in the Middle Eastern Countries, International Monetary Fund, Working Paper WP/94/103.

[n]*Middle East Economic Digest*, January 13, 1994.

[o]Bailey, W. and J. Jagtiani, Foreign ownership restrictions and stock prices in the Thai capital market, *Journal of Financial Economics* 36(1), August 1994, pages 57-87.

[p]Edwards, S., *Crisis and Reform in Latin America: From Despair to Hope*, World Bank, 1995.

[q]*The FT Guide to World Equity Markets: 1993*, Euromoney publications, London, 1993.

[r]George, R. L., *A Guide to Asian Stock Markets, Longman, Hong Kong, 1989.*

[s]World Bank *The East Asian Miracle,* Oxford University Press, 1993

[t]International Finance Corporation *Emerging Markets 1997 Factbook*

[u]International Finance Corporation *Emerging Markets 1991 Factbook*

[v]International Finance Corporation *Quarterly Review of Emerging Markets, 1992 1st Quarter*

[w]International Finance Corporation *Quarterly Review of Emerging Markets, 1994 2nd Quarter.*

[x]Montiel, P., and C. M. Reinhart, The Dynamics of Capital Movements to Emerging Economies during the 1990s, working paper, University of Maryland.

[y]Kaminsky, G. L., and C. M. Reinhart, The twin crises: The causes of banking and balance of payments problems, working paper, University of Maryland.

[z] www.malvinas.com

[aa]Bekaert, G. and C. R. Harvey, Foreign speculators and emerging equity markets, Working paper, National Bureau of Economic Research, 1997.

TABLE 1

Analysis of Net U.S. Capital Flows

	Net Equity Holdings Break Point			Level of Equity Holdings			Cumulative Net Bond Flows			Correlation of Equity and Bond Flows	
Country	5th Percentile	Mediana	95th Percentile	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	Full sample	Post-1990
Argentina	Apr-93	May-93 ***	Jun-93	-0.0201	0.1519	***	-285.9	3642.7	***	0.986	0.985
Brazil	Nov-87	Jul-88 ***	Mar-89	0.0013	0.0399	***	-16.6	71.6		0.924	0.914
Chile	Jan-86	Feb-88	Mar-90	0.0003	0.0230	***	-269.7	-906.3	***	-0.789	-0.741
Colombia	Aug-93	Sep-93 ***	Oct-93	-0.0103	0.0206	***	-174.9	187.3	***	0.826	0.939
Greece	May-85	Jan-87 ***	Sep-88	-0.0177	-0.0065	***	-44.3	-84.2	***	0.155	0.645
India	Mar-93	May-93 ***	Jul-93	0.0006	0.0059	***	-251.0	-183.2	***	0.163	0.846
Indonesia	Feb-93	Jul-93	Dec-93	0.0124	0.0603	***	42.6	861.6	***	0.977	0.967
Korea	Sep-91	Apr-93 *	Nov-94	0.0080	0.0321	***	-469.0	3159.5	***	0.921	0.908
Malaysia	Feb-91	May-92	Aug-93	0.0082	0.0162	***	-300.8	284.2	***	0.514	0.581
Mexico	Jul-89	Jun-90 **	May-91	0.0753	0.1526	***	213.7	10765.4	***	0.978	0.962
Pakistan	Apr-93	May-93 ***	Jun-93	0.0001	0.0090	***	1.6	67.8	***	0.950	0.929
Philippines	Feb-90	Feb-90 ***	Feb-90	0.3240	0.1513	***	-195.8	-717.8	***	-0.475	0.226
Portugal	Jun-93	Sep-94	Dec-95	0.0231	0.0497	***	-161.3	-197.8	***	-0.826	-0.468
Taiwan	Sep-88	Sep-92		0.0001	0.0008	***	-1287.4	-7209.2	***	-0.394	-0.432
Thailand	Feb-88	Aug-88 ***	Feb-89	0.0076	0.0322	***	-6.1	-145.5	***	0.080	0.634
Turkey	May-88	Jan-90	Sep-91	-0.0300	0.0067	***	-10.4	125.4	***	0.803	0.616
Venezuela	Dec-93	Mar-94 ***	Jun-94	-0.0072	0.0082	***	1044.1	1668.8	***	0.505	0.230
Mean[a]				0.0032	0.0377		-123.5	756.7		0.423	0.532
P-value					0.01			0.17			0.31
Mean[b]				0.0038	0.0446		1.2	1915.0		0.649	0.799
P-value					0.03			0.06			0.15
P-value[a], FE					0.00			0.56		NA	NA
P-value[b], FE					0.00			0.87		NA	NA
P-value[a], JS					0.00			0.00		NA	NA
P-value[b], JS					0.00			0.00		NA	NA

[a]Excludes Philippines which has a break down in capital flows

[b]Excludes Philippines and countries with breaks that are not significant.

Bond flows are reported in millions of U.S. dollars.

Test Statistics are detailed below:

Sig. indicates the Newey-West corrected T-stats on the univariate regression:

Series = B0 + (Indicator for Five Years After Break)*B1

FE indicates the T-stat significance on a panel estimation with fixed effects of the regression:

Series[i,t] = B0[i] + (Indicator for Five Years After Break)[i,t]*B1

JS indicates the Chi-Square joint test that all of the coefficients are zero in the pooled time series regression with fixed effects:

Series[i,t] = B0[i] + (Country Specific Indicator for Five Years After Break)[i,t]*B1[i]

All multivariate regression tests are corrected for group-wise heteroskedasticity and group-wise moving average processes in the residuals

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

TABLE 2

Behavior of Equity Returns

Country	Dividend yield			Fitted Correlation with World			Fitted Volatility (annual)			Ex Post Log Returns (annual)			Ex Post Volatility (annual)		Betas	
	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	5 yrs before	5 yrs after
Argentina	1.99	2.94	***	0.12	0.26	***	119.67	60.34	***	46.74	18.02		99.31	33.67	-0.93	1.31
Brazil	5.00	3.81		0.06	0.06		61.69	79.24	***	23.48	13.35		61.94	79.21	0.26	1.22
Chile	5.22	6.38	**	0.12	0.09	***	33.55	31.86	**	19.00	39.23		34.60	24.72	0.58	-0.09
Colombia	5.04	1.89	***	0.04	-0.02	***	27.37	25.45		35.06	14.77		33.22	27.44	0.16	0.03
Greece	9.91	4.24	***	0.12	0.16	***	26.46	46.86	***	-10.80	30.46		25.36	50.56	-0.11	0.62
India	1.67	1.09	***	-0.02	-0.18	***	33.57	27.77		14.37	5.60		38.22	28.36	-0.47	0.25
Indonesia	0.84	1.40	**	0.06	0.32	***	73.17	56.43		-7.80	19.20		32.07	28.19	0.20	0.78
Korea	1.33	1.33		0.22	0.21		27.78	25.95	**	2.42	5.83		29.74	22.64	0.68	0.51
Malaysia	2.14	1.68	***	0.48	0.49		21.42	22.87		10.74	17.82		28.22	24.87	1.10	0.72
Mexico	3.62	1.82	***	0.15	0.32	***	46.38	35.79	*	43.69	12.17		63.32	40.19	1.15	0.78
Pakistan	5.23	1.80	***	0.02	0.12	***	32.29	30.87		17.70	5.59		26.34	26.34	0.03	-0.11
Philippines	2.75	1.05	***	0.29	0.39	***	35.69	34.90		63.32	11.04	**	35.56	34.64	0.57	0.87
Portugal	3.09	3.20		0.51	0.50		26.67	19.30		3.35	13.23		24.52	14.26	0.90	0.48
Taiwan	0.56	1.08	***	-0.04	0.21	***	73.12	69.68		12.16	11.95		62.32	36.18	0.91	0.94
Thailand	7.52	3.21	***	-0.10	0.38	***	28.07	27.76		27.14	19.16		28.45	28.11	0.71	0.55
Turkey	7.13	4.00	***	-0.39	0.02	***	96.80	68.40	*	59.38	-5.31		74.41	64.37	0.47	0.09
Venezuela	1.41	2.55	***	0.08	0.00	***	52.77	58.07		23.36	-7.30		48.37	61.11	-0.39	-0.35
Mean[a]	3.86	2.65		0.09	0.18		48.80	42.91		20.00	13.36		44.40	36.89	0.33	0.48
P-value		0.07			0.10			0.21			0.13			0.15		0.11
Mean[b]	4.27	2.47		0.07	0.13		44.81	40.00		22.32	11.76		45.43	39.76	0.11	0.48
P-value		0.00			0.25			0.12			0.02			0.24		0.04
P-value[a], FE		0.08			0.19			0.09			0.73			NA		NA
P-value[b], FE		0.11			0.37			0.08			0.61			NA		NA
P-value[a], JS		0.00			0.00			0.27			0.97			NA		NA
P-value[b], JS		0.07			0.00			0.25			0.94			NA		NA

[a]Excludes Philippines which has a break down in capital flows

[b]Excludes Philippines and countries with breaks that are not significant.

Test Statistics are detailed below:

Sig. indicates the Newey-West corrected T-stats on the univariate regression:

Series = B0 + (Indicator for Five Years After Break)*B1

FE indicates the T-stat significance on a panel estimation with fixed effects of the regression:

Series[i,t] = B0[i] + (Indicator for Five Years After Break)[i,t]*B1

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Series[i,t] = B0[i] + (Country Specific Indicator for Five Years After Break)[i,t]*B1[i]

All multivariate regression tests are corrected for group-wise heteroskedasticity and group-wise moving average processes in the residuals.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table3

Financial Indicators

Country	Number of Companies			Concentration Ratio			Market Cap to GDP			Cross-Sectional Standard Deviation			FX Volatility			Value Traded to GDP			Turnover		
	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.
Argentina	25.78	32.10	***	0.28	0.29		0.04	0.08	***	0.25	0.12	***	0.38	0.03	***	2.09	2.55		0.47	0.30	***
Brazil	21.42	56.93	***	0.29	0.18	***	0.04	0.05	***	0.21	0.26	**	0.06	0.14	***	1.47	2.04	**	0.42	0.38	
Chile	23.90	29.62	***	0.22	0.22		0.09	0.46	***	0.14	0.10	***	0.05	0.02	***	0.86	2.67	***	0.08	0.09	
Colombia	20.25	24.42	***	0.19	0.20	**	0.07	0.19	***	0.13	0.12		0.02	0.02	***	0.36	1.40	***	0.06	0.10	***
Greece	10.00	21.57	***	0.57	0.27	***	0.02	0.09	***	0.09	0.13	***	0.04	0.03	*	0.04	1.46	***	0.04	0.14	***
India	58.63	118.78	***	0.18	0.12	***	0.07	0.21	***	0.12	0.10	*	0.02	0.02		3.53	2.91	**	0.75	0.18	***
Indonesia	62.51	45.71	***	0.19	0.20		0.08	0.13	***	0.12	0.11		0.01	0.00	***	1.80	4.11	***	0.44	0.36	
Korea	70.07	152.27	***	0.18	0.21	***	0.27	0.31	**	0.07	0.09	**	0.01	0.01	***	18.80	31.40	***	0.84	1.08	**
Malaysia	55.32	90.17	***	0.19	0.19		0.64	1.70	***	0.09	0.09		0.01	0.01	***	7.77	51.72	***	0.13	0.33	***
Mexico	34.13	66.56	***	0.16	0.26	***	0.07	0.23	***	0.19	0.11	***	0.07	0.02	***	2.41	9.85	***	0.71	0.46	***
Pakistan	52.50	71.00	***	0.16	0.15	*	0.05	0.15	***	0.09	0.11	**	0.01	0.02	***	0.42	3.25	***	0.08	0.36	***
Philippines	18.00	32.82	***	0.31	0.29	*	0.05	0.25	***	0.14	0.13		0.02	0.02		1.56	4.73	***	0.30	0.19	***
Portugal	30.02	31.38	*	0.22	0.20	***	0.11	0.14	***	0.09	0.07	**	0.04	0.04		1.82	3.20	***	0.20	0.31	***
Taiwan	57.58	84.13	***	0.19	0.16	***	0.62	0.50	*	0.11	0.08	***	0.01	0.01	***	172.44	100.03	***	2.84	1.97	***
Thailand	9.72	37.90	***	0.32	0.23	***	0.04	0.21	***	0.08	0.11	***	0.02	0.01	***	2.12	14.23	***	0.49	0.71	**
Turkey	15.14	27.95	***	0.23	0.25		0.03	0.12	***	0.17	0.18		0.02	0.03	**	0.23	3.90	***	0.10	0.55	***
Venezuela	15.25	16.70	***	0.25	0.34	***	0.10	0.07	***	0.16	0.12	**	0.04	0.09	***	3.12	1.09	***	0.33	0.18	***
Mean[a]	35.14	56.70		0.24	0.22		0.15	0.29		0.13	0.12		0.16	0.11		13.70	14.74		0.50	0.47	
P-value		0.03			0.22			0.11			0.24			0.24			0.47			0.44	
Mean[b]	31.78	59.82		0.26	0.23		0.08	0.16		0.14	0.13		0.07	0.04		3.43	7.02		0.42	0.39	
P-value		0.05			0.24			0.02			0.33			0.25			0.16			0.42	
P-value[a], FE		0.02			0.20			0.00			0.20			0.36			0.00			0.01	
P-value[b], FE		0.00			0.06			0.00			0.86			0.64			0.07			0.03	
P-value[a] JS		0.00			0.00			0.00			0.00			0.00			0.00			0.00	
P-value[b], JS		0.00			0.00			0.03			0.00			0.00			0.00			0.00	

[a]Excludes Philippines which has a break down in capital flows

[b]Excludes Philippines and countries with breaks that are not significant.

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JS indicates the Chi-Square joint test that all of the coefficients are zero in the pooled time series regression with fixed effects:

Series[i,t] = B0[i] + (Country Specific Indicator for Five Years After Break)[i,t]*B1[i]

All multivariate regression tests are corrected for group-wise heteroskedasticity and group-wise moving average processes in the residuals.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table 4

Macroeconomic Indicators

Country	Real GDP per Capita Growth			Average (Exp. + Imp.)/GDP (%)			Average Trade Surplus/GDP (%)			Average Inflation (Annual %)			Interest Rate (Lending)[a]		
	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 years before	5 years after	
Argentina	0.757	1.314		19.45	26.56	***	0.63	3.43	***	1410.35	4.87	***	3822.78	10.42	***
Brazil	2.404	-1.741	***	15.57	18.97	***	3.29	-1.31	***	220.88	1475.31	***	304.35	3867.19	***
Chile	2.783	5.779	***	55.94	67.42	***	3.18	-0.54	***	23.50	19.08	***	36.20	31.70	**
Colombia	1.795	3.510	***	34.76	46.82	***	-2.56	4.37	***	27.56	22.05	***	42.26	40.56	
Greece	0.852	1.161		42.91	61.93	***	-6.94	0.29	***	20.51	16.73	***	20.51	24.80	***
India	3.137	3.673		15.18	17.87	***	-0.49	0.59	***	9.87	9.09		17.25	16.30	***
Indonesia	6.103	5.788		42.89	47.27	***	-0.13	-1.10		7.91	9.19	***	21.90	18.34	***
Korea	6.832	6.604		75.44	90.11	***	3.90	4.55		7.32	5.17	***	10.23	8.70	***
Malaysia	5.540	6.046	*	140.16	182.51	***	5.82	6.21		2.71	4.26	***	7.62	8.47	***
Mexico	-1.041	0.281	*	35.61	51.00	***	3.28	9.16	***	81.03	16.14	***	66.39	19.28	***
Pakistan	2.534	0.590	***	31.77	34.08	***	-1.73	1.19	***	9.59	11.45	***	NA	NA	nc
Philippines	0.141	-0.284		52.62	70.43	***	1.15	4.37	***	10.06	11.77		18.92	19.30	
Portugal	0.019	1.594		83.00	94.18	***	10.75	15.41	***	9.76	3.91	***	20.12	14.33	***
Taiwan	4.349	5.281		80.27	75.93	***	8.78	3.47	***	3.28	3.55		NA	NA	nc
Thailand	4.801	8.687	***	53.18	77.91	***	-2.06	2.93	***	2.38	4.90	***	17.22	16.63	
Turkey	2.436	1.726		32.61	40.74	***	-0.95	3.79	***	50.85	72.10	***	45.47	65.55	***
Venezuela	0.319	-2.588	**	47.00	49.56	***	-1.82	-8.32	***	46.33	65.35	***	33.08	39.30	**
Mean[b]	2.73	2.98		50.36	61.43		1.43	2.76		21.61	18.78		28.19	25.33	
P-value		0.40			0.20			0.22			0.37			0.17	
Mean[c]	2.24	2.15		37.09	47.48		-0.45	1.69		25.57	18.86		29.56	23.65	
P-value		0.47			0.15			0.12			0.29			0.03	
P-value[b], FE		0.76			0.00			0.62			0.41			0.37	
P-value[c], FE		0.85			0.00			0.70			0.29			0.24	
P-value[b], JS		0.99			0.00			0.66			0.23			0.00	
P-value[c], JS		0.98			0.00			0.77			0.10			0.00	

Country	Real Exchange Rate			External Debt (%GDP)			Long Term Ext. Debt (%GDP)			Government Surplus (% GDP)		
	5 years before	5 years after	Sig.	5 years before	5 years after	Sig.	5 years before	5 years after	Sig.	5 years before	5 years after	Sig.
Argentina	95.08	50.72	***	47.1	29.0	***	37.4	24.2	***	-0.78	0.00	***
Brazil	187.06	125.11	***	44.1	30.1	***	37.9	24.4	***	-10.01	-7.76	*
Chile	94.66	100.12	*	108.1	61.8	***	92.0	49.1	***	-1.67	1.22	***
Colombia	96.97	72.10	***	39.7	28.7	***	35.1	21.9	***	0.36	-0.55	**
Greece	138.25	109.39	***	NA	NA	nc	NA	NA	nc	-12.65	-20.28	***
India	99.08	97.30		30.5	32.9	*	26.7	30.1	***	-7.09	-6.29	**
Indonesia	109.47	135.56	***	60.8	55.1	***	50.3	44.4	***	-0.59	0.61	***
Korea	100.76	100.84		NA	NA	nc	NA	NA	nc	-0.25	0.31	***
Malaysia	106.47	94.55	***	47.3	39.8	***	42.0	31.0	***	-1.41	1.87	***
Mexico	90.38	95.29	***	61.6	39.3	***	54.5	28.3	***	-10.25	NA	nc
Pakistan	98.63	105.75	***	48.9	50.0		39.0	43.1	***	-7.03	-6.82	
Philippines	98.79	91.42	***	83.0	66.3	***	63.7	54.4	***	-2.89	-2.06	***
Portugal	96.48	92.18	*	NA	NA	nc	NA	NA	nc	-4.21	NA	nc
Taiwan	NA	NA	nc	NA	NA	nc	NA	NA	nc	NA	NA	nc
Thailand	98.57	98.98		39.8	35.2	***	30.2	24.4	***	-3.35	3.24	***
Turkey	131.52	105.68	***	42.4	38.0	***	34.1	30.2	***	-3.63	-4.61	***
Venezuela	93.85	79.31	***	66.1	55.5	***	55.3	46.5	***	-0.33	-4.14	***
Mean[b]	104.24	99.00		53.04	41.28		44.54	33.12		-4.19	-3.32	
P-value		0.16			0.03			0.34			0.00	
Mean[c]	102.06	94.87		47.23	37.59		39.52	30.35		-5.14	-4.70	
P-value		0.02			0.04			0.44			0.00	
P-value[b], FE		0.58			0.00			0.00			0.75	
P-value[c], FE		0.92			0.02			0.00			0.61	
P-value[b], JS		0.00			0.00			0.00			0.00	
P-value[c], JS		0.00			0.01			0.00			0.00	

[a]Deposit rates used for Argentina, Brazil, Mexico, and Turkey

[b]Excludes Philippines which has a break down in capital flows

[c]Excludes Philippines and countries with breaks that are not significant.

[d]Inflation and interest rate calculations exclude Argentina and Brazil.

[nc]Indicates that the regression was not estimated due to data problems.

Taiwan is not included in some of the macroeconomic analysis because it is not a member of the IMF and we lack the relevant data.

Test Statistics are detailed below:

Sig. indicates the Newey-West corrected T-stats on the univariate regression:

Series = B0 + (Indicator for Five Years After Break)*B1

FE indicates the T-stat significance on a panel estimation with fixed effects of the regression:

Series[i,t] = B0[i] + (Indicator for Five Years After Break)[i,t]*B1

JS indicates the Chi-Square joint test that all of the coefficients are zero in the pooled time series regression with fixed effects:

Series[i,t] = B0[i] + (Country Specific Indicator for Five Years After Break)[i,t]*B1[i]

All multivariate regression tests are corrected for group-wise heteroskedasticity and group-wise moving average processes in the residuals.

*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table 5

Country Risk

Country	Institutional Investor's Country Credit Rating			ICRG Economic Index			ICRG Financial Index			ICRG Political Index			ICRG Composite Index		
	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.	5 yrs before	5 yrs after	Sig.
Argentina	21.9	36.3	***	21.2	32.4	***	25.1	36.6	***	62.4	74.0	***	54.5	71.9	***
Brazil	32.7	27.5	***	20.7	22.6	***	23.9	32.2	***	63.4	66.5	***	54.1	60.8	***
Chile	28.1	36.4	***	23.9	31.6	***	25.6	39.1	***	45.9	62.0	***	47.9	66.5	***
Colombia	36.4	44.4	***	33.3	34.9	***	35.3	38.4	**	56.4	58.0		62.6	65.1	*
Greece	53.1	47.5	***	30.0	30.1		25.9	29.9	***	60.7	61.8	*	58.5	61.1	***
India	47.7	51.7	***	35.1	36.7	***	35.0	40.2	***	49.5	63.4	***	49.4	67.0	***
Indonesia	43.7	42.6		28.8	34.9	***	27.7	36.4	***	42.3	63.0	***	60.6	69.8	***
Korea	67.3	70.4	***	37.7	40.6	***	47.2	46.5	***	66.8	77.3	***	76.1	82.0	***
Malaysia	32.3	44.3	***	27.4	31.2	***	31.9	40.4	***	67.9	68.7		69.8	79.8	***
Mexico	58.4	63.7	***	38.7	40.9	***	30.8	44.2	***	62.8	70.8	***	58.2	70.5	***
Pakistan	29.5	29.4		31.7	31.1	**	23.1	32.7	***	34.7	54.2	***	44.9	59.2	***
Philippines	22.2	27.0	***	28.6	31.5	***	21.6	29.1	***	42.4	48.5	***	46.5	54.6	***
Portugal	64.5	67.9	***	39.3	41.5	***	42.8	43.2		71.2	80.6	***	76.8	82.7	***
Taiwan	77.0	78.8	***	43.5	43.5		48.2	47.3		75.2	78.6	***	83.6	85.2	***
Thailand	53.1	60.6	***	35.1	37.0	***	29.6	41.6	***	56.9	59.5	***	61.0	69.1	***
Turkey	38.7	43.3	***	27.8	28.0		24.1	29.6	***	52.5	57.0	**	52.3	57.4	***
Venezuela	36.0	33.6	***	31.6	32.2		35.1	34.6		67.3	64.9	**	67.2	66.3	
Mean[a]	45.02	48.65		31.61	34.33		31.96	38.31		58.48	66.25		61.09	69.65	
P-value		0.26			0.11			0.01			0.02			0.01	
Mean[b]	43.61	46.51		31.50	33.85		31.10	37.69		58.08	65.01		58.64	67.31	
P-value		0.33			0.14			0.00			0.03			0.00	
P-value[a], FE		0.22			0.00			0.00			0.00			0.00	
P-value[b], FE		0.33			0.00			0.00			0.00			0.00	
P-value[a], JS		0.00			0.00			0.00			0.00			0.00	
P-value[b], JS		0.00			0.00			0.00			0.00			0.00	

[a]Excludes Philippines which has a break down in capital flows

[b]Excludes Philippines and countries with breaks that are not significant.

Test Statistics are detailed below:

Sig. indicates the Newey-West corrected T-stats on the univariate regression: Series = B0 + (Indicator for Five Years After Break)*B1

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*Significant at the 10% level.

**Significant at the 5% level.

***Significant at the 1% level.

Table 6

Integration/segmentation portfolio analysis:

January 1987 to September 1994

Moment-Significant Countries	Segmented portfolio	Integrated portfolio
Annunalized Mean %	25.88	24.13
Annualized Volatility %	20.73	35.16
Correlation with World	0.132	0.355
Beta with World	0.174	0.771

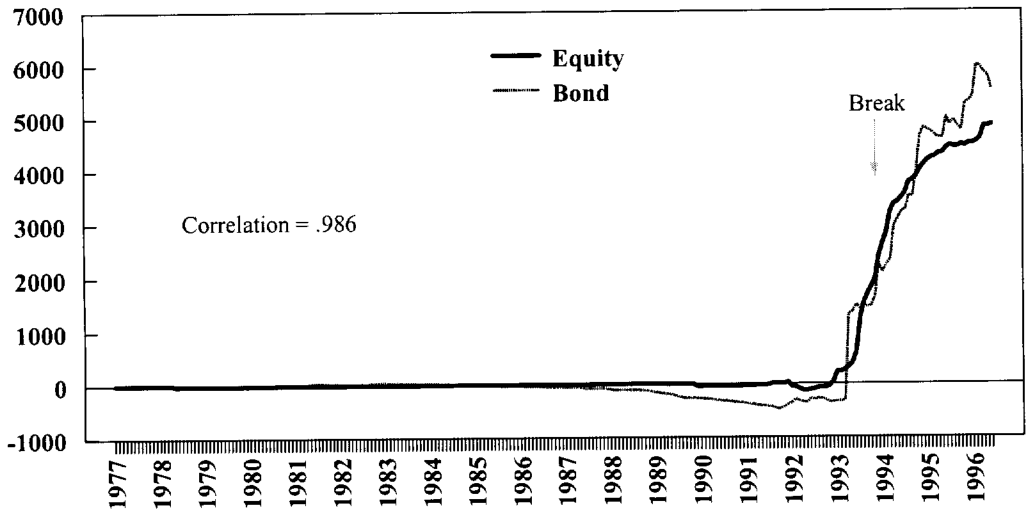
Moment-All Countries	Segmented portfolio	Integrated portfolio
Annunalized Mean %	20.78	25.52
Annualized Volatility %	18.70	33.01
Correlation with World	0.365	0.320
Beta with World	0.423	0.652

Significant countries include all countries in the analysis except for Chile, Turkey,Malaysia,Taiwan,Indonesia,Portugal. Philippines is always excluded.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Argentina



*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Brazil

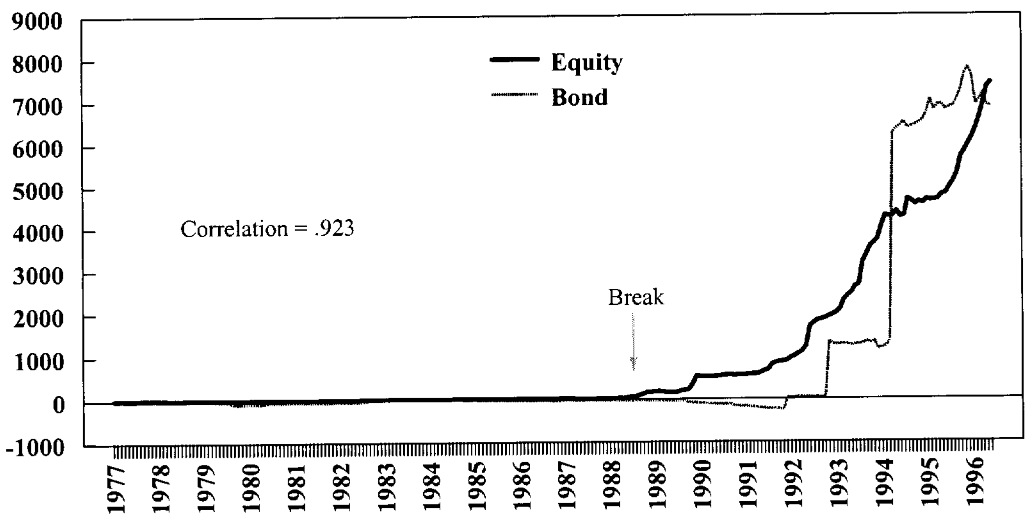


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Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Chile

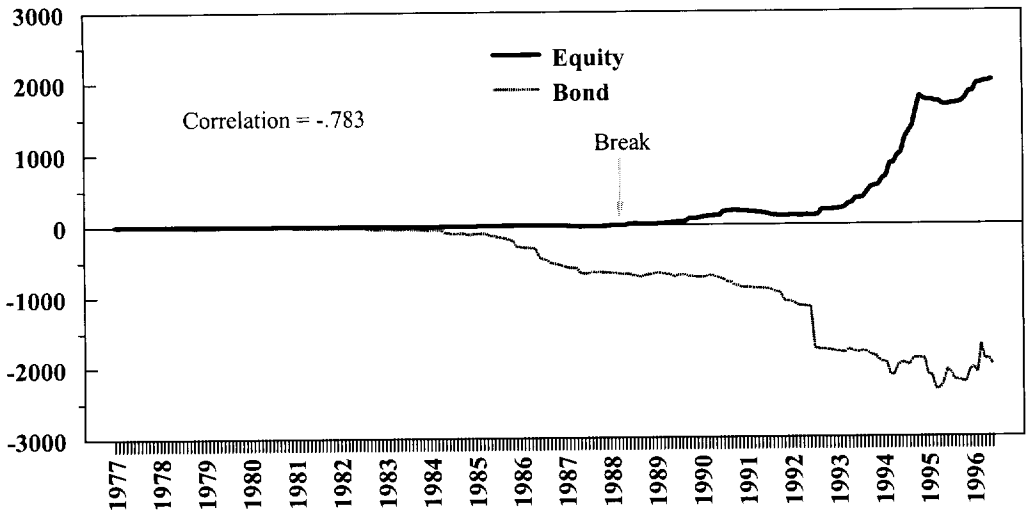

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Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Colombia

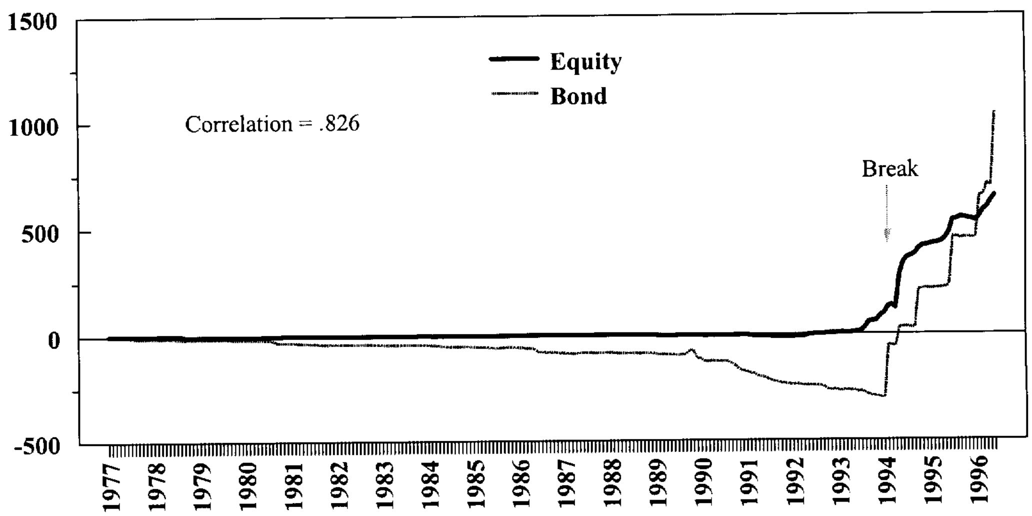

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Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Greece

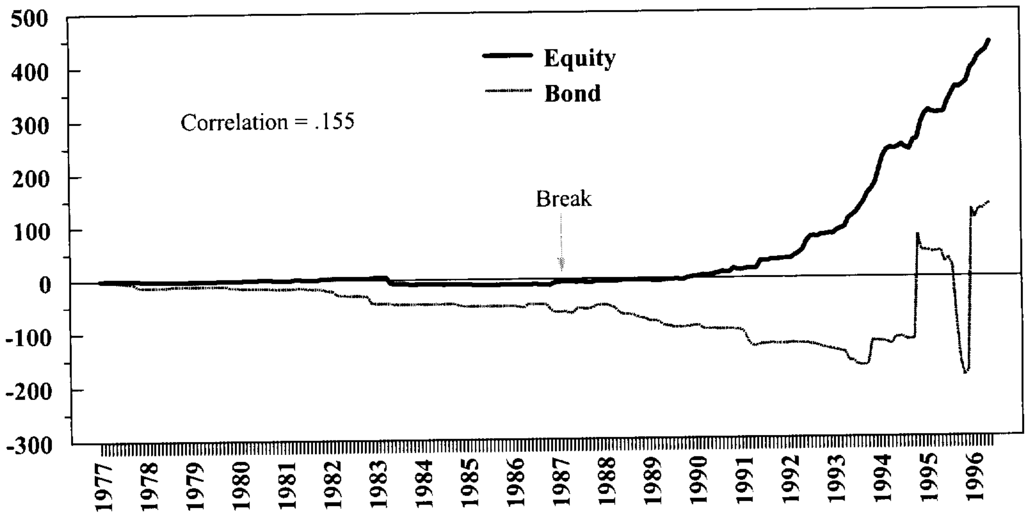

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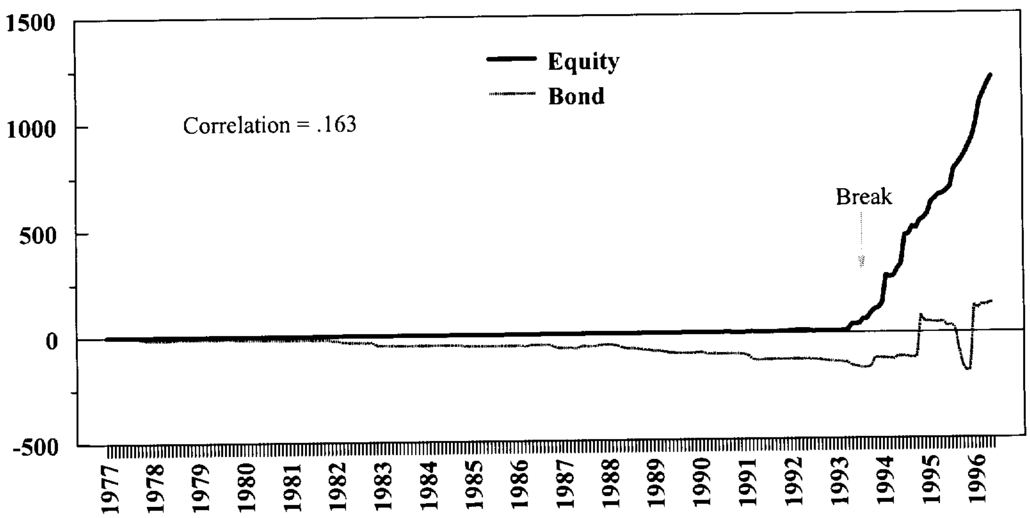
Figure 1

Cumulative U.S. Net Equity and Bond Flows*

India

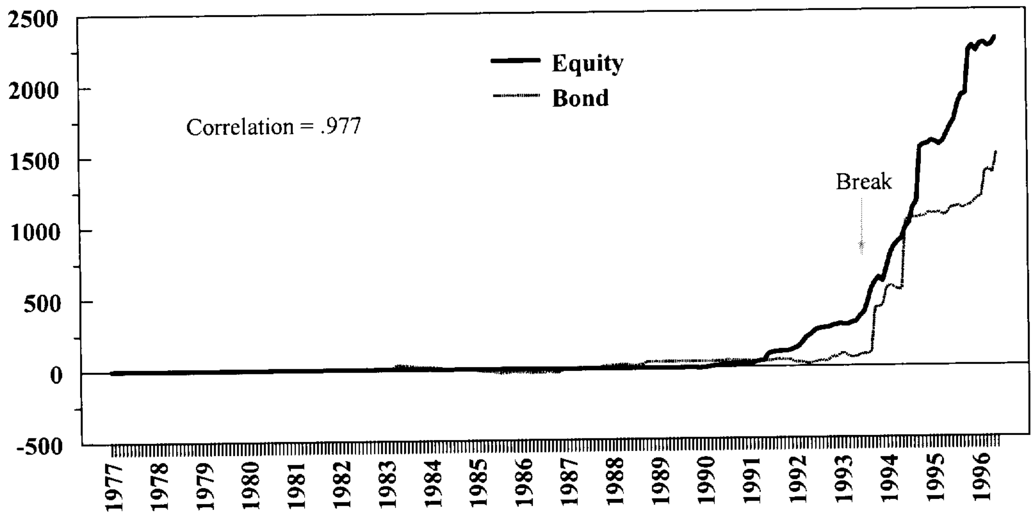


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Indonesia

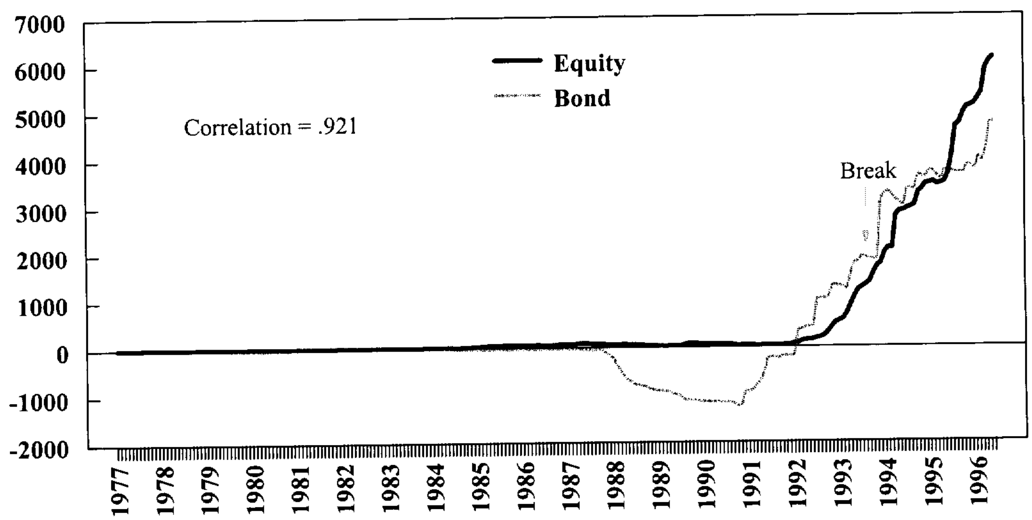


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Korea

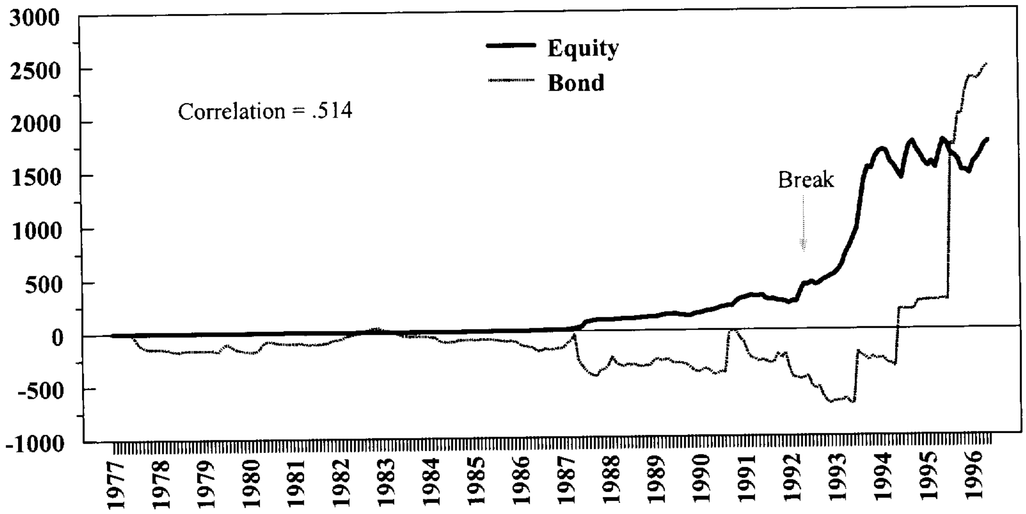


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Malaysia

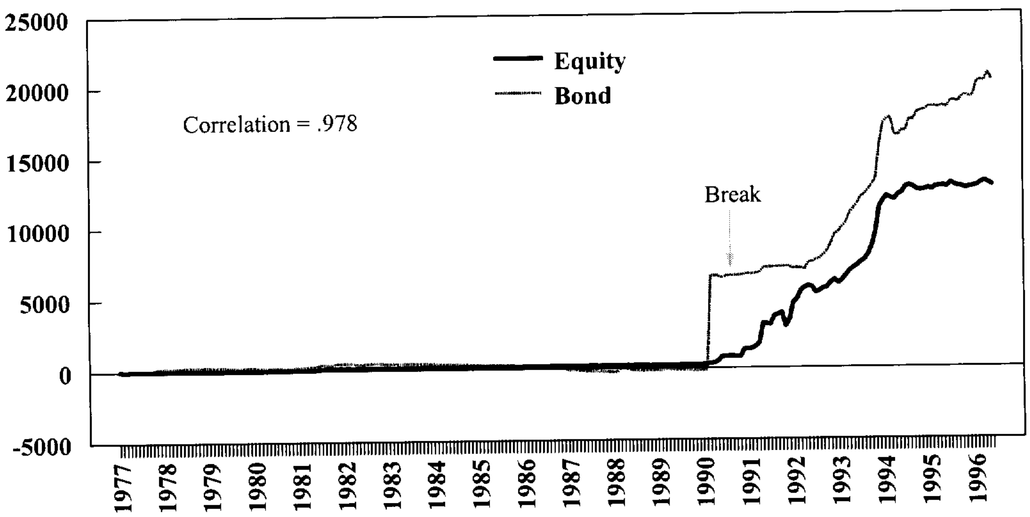


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Mexico

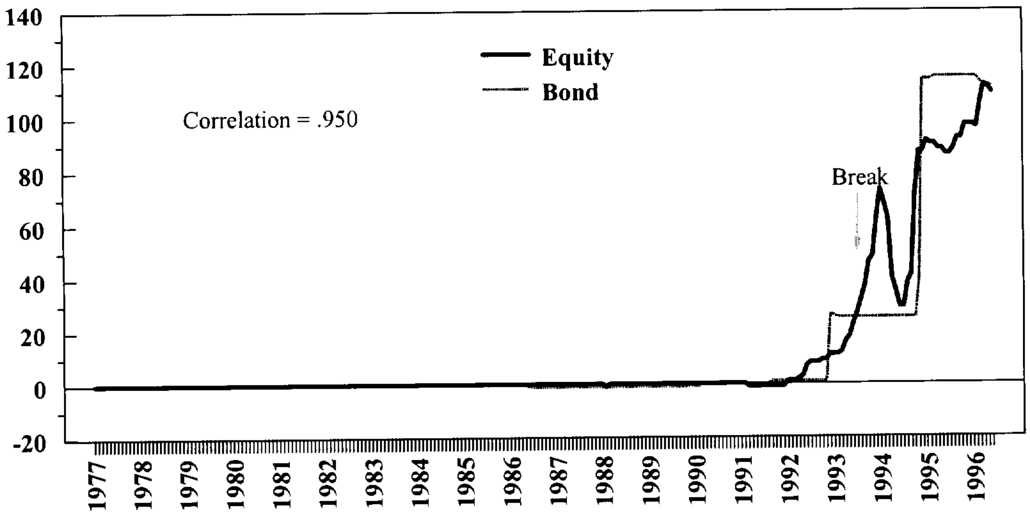


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Pakistan

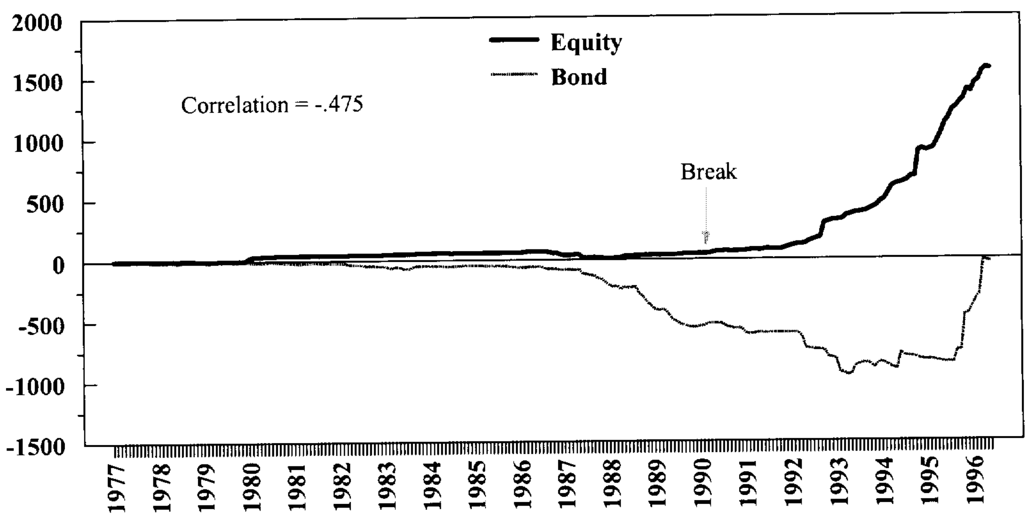


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Philippines

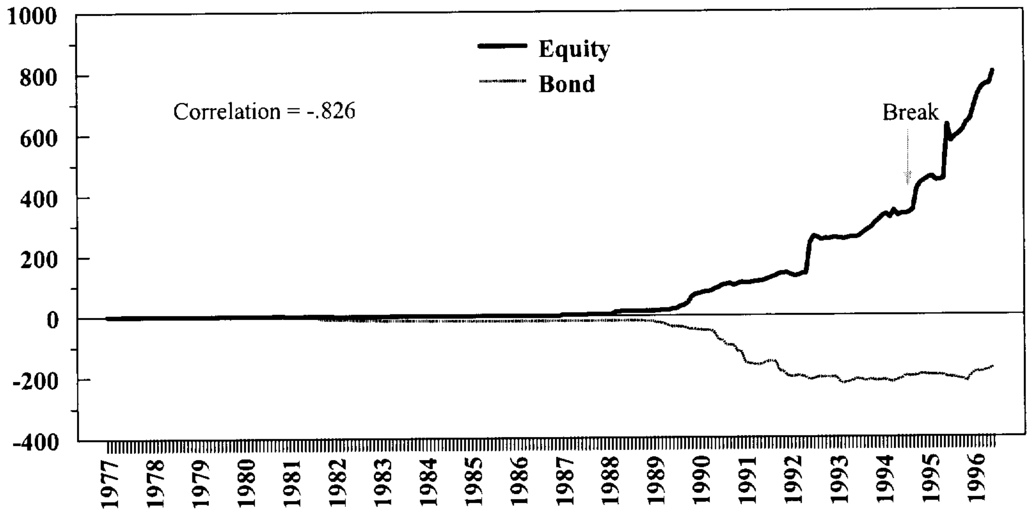


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Portugal

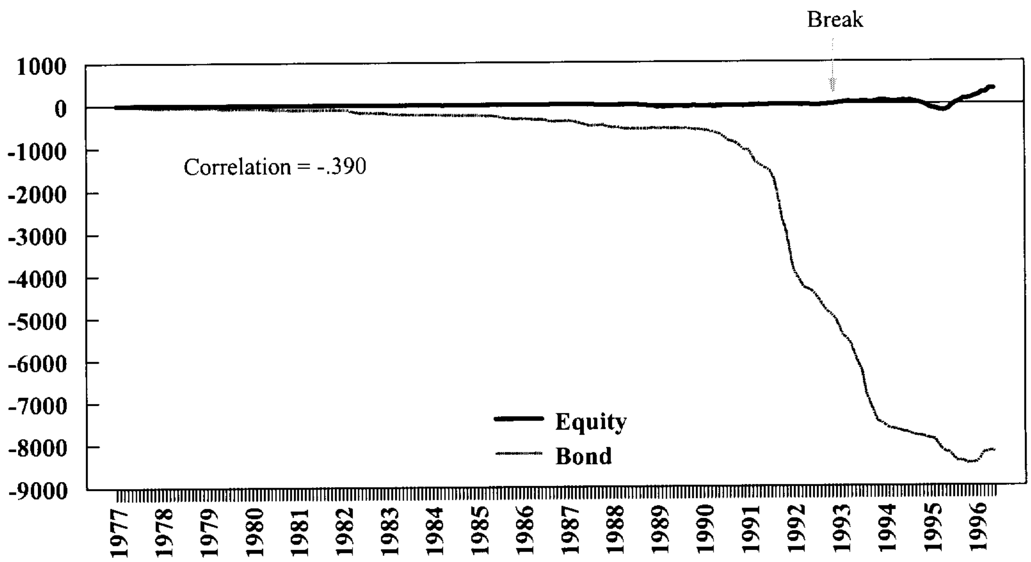


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Taiwan

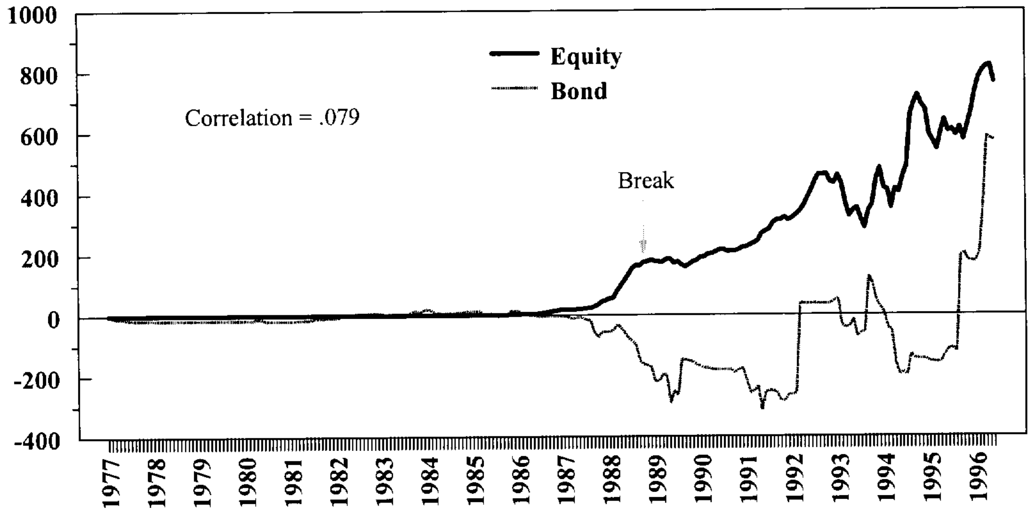


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Thailand

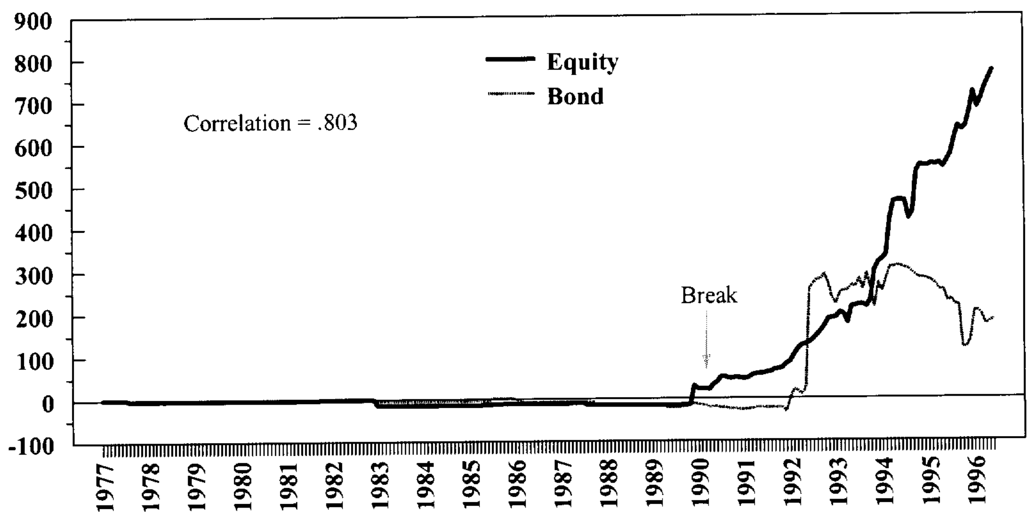


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Turkey

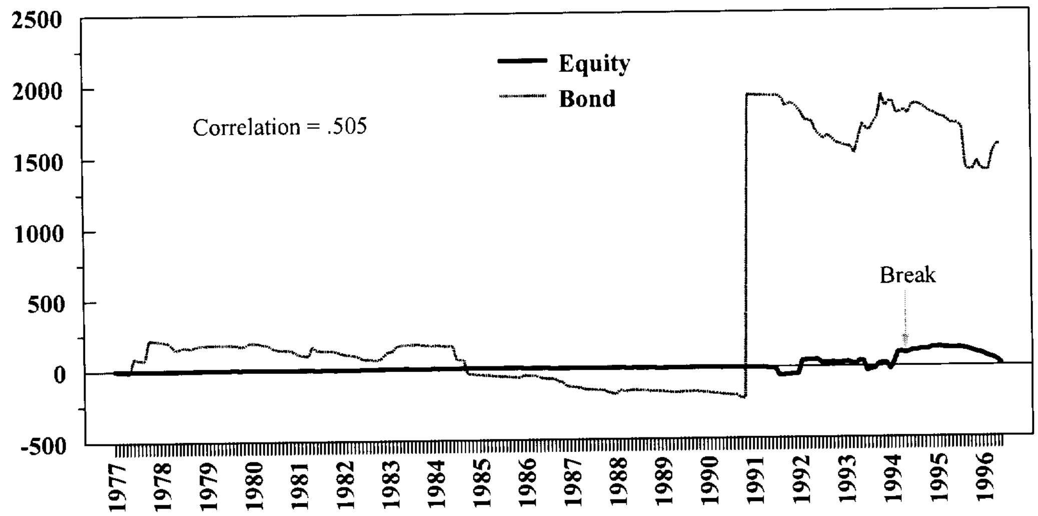


*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.

Figure 1

Cumulative U.S. Net Equity and Bond Flows*

Venezuela



*U.S. $ millions unadjusted for local returns. Equity breaks based on flows adjusted for market returns divided by market capitalization.