

## Choosing the Right Exchange Rate Regime for Pakistan

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### I. INTRODUCTION

Since the collapse of the Bretton Woods system, a vast literature has developed on the virtues and pitfalls of fixed versus flexible arrangements.<sup>2</sup> While a variety of theoretical criteria for choosing the right regime have been proposed, there is still no consensus on how precisely these should be quantified and, to the extent they bear conflicting implications, how they should be prioritized. Following the disorderly exits from pegged regimes by a number of emerging market economies over the past decade, regime choice has drawn increased attention and a more systematic approach to assess the implications of the various criteria appears warranted.

This paper seeks to apply to the case of Pakistan a broad set of analytical considerations that have been identified in the literature as important factors affecting the

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<sup>2</sup> A series of IMF Occasional Papers has focused on exchange rate regimes, including Aghevli, Khan, and Montiel (1991), Eichengreen, Masson, and others (1998), Mussa, Masson, Swoboda, Jadresic, Mauro, and Berg (2000), and Rogoff, Husain, Mody, Brooks, and Oomes (2004).

performance—and hence the choice—of exchange rate regimes.<sup>3</sup> The selection of the key factors—trade orientation; financial integration; economic diversification; monetary independence; credibility; and “fear of floating” type effects<sup>4</sup>—have been guided by quantifiability and cross country comparability, and techniques to empirically assess each factor have been specified in the form of a template developed in Husain (2004).

Comparisons with other countries are used to assess whether a particular country is a “natural” candidate for a fixed regime on the basis of a particular criterion. For example, countries that have a high degree of trade orientation will benefit from a regime that pegs the currency to that of its major trading partner. Since it is unclear a priori what constitutes “high” trade orientation, the analysis takes trade orientation to be high (relatively high) if a country ranks among the top 10 percentile (next 20 percentile) of the distribution generated by all the countries in the sample. The sample comprises 52 economies and includes a wide range of countries of various sizes and levels of development, spanning all major regions. These comparators are used to assess the implications of each factor on whether or not a fixed exchange rate regime is appropriate in Pakistan.

The application of the template to Pakistan indicates a fairly strong case against a pegged regime for Pakistan. Cross-country comparisons of quantitative indicators for most of

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<sup>3</sup> See Edwards and Savastano (1999) for a discussion of issues in assessing the relationship between regime choice and performance. Husain, Mody, and Rogoff (2005) present recent evidence regarding the durability and performance of alternative regimes.

<sup>4</sup> “Fear of floating” is analyzed in Calvo and Reinhart (2002).

the analytical considerations show Pakistan to be among the least likely to benefit, and most likely to be hurt, by a pegged regime. In particular, Pakistan's relatively low trade orientation, high international financial integration, exposure to volatile commodity prices, and susceptibility to real rather than nominal shocks all point to the value of not pegging its exchange rate. This stands in sharp contrast to the de facto peg that has actually been in place for much of the past 15 years, and suggests that increased exchange rate flexibility would be advantageous.

A few qualifications to the analysis should be noted. First, the literature generally considers the relative advantages of fixed versus flexible regimes without explicitly dealing with "nearly-fixed" regimes. Some of the conclusions about fixed regimes may or may not be valid for nearly-fixed regimes and should therefore be interpreted with caution. Second, the analysis for the most part takes as given that macroeconomic policies needed to support the chosen regime are in place, and methods to assess the sustainability of a particular regime are not covered.<sup>5</sup> Regime choice would clearly be of limited importance in improving economic performance if policies are not sustainable. Third, the assessment of the efficacy of a fixed regime under a particular criterion may well depend on the sample period over which the relevant indicator is measured. To the extent possible, alternative sample periods were used to check the robustness of the results. Fourth, different analytical considerations could well

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<sup>5</sup> In many respects, similar policies are needed to sustain any regime, especially if freely falling currencies are regarded as a non-regime.

point in different directions in terms of whether or not a given country should peg.<sup>6</sup> Weighing the importance of each consideration will depend on country-specific circumstances, which invariably introduces some subjectivity to the analysis.

The remainder of the paper is organized as follows. The next section uses Reinhart and Rogoff's (2004) methodology to assess the degree of "fixity" of the *de facto* (as opposed to the announced or *de jure*) exchange rate regime in Pakistan at present and in the recent past. Section III draws on Husain (2004) to summarize the analytical arguments underpinning selected considerations for regime choice, propose alternative quantitative measures—a "template"—of the various considerations, and assesses the implications of the measures for Pakistan's exchange rate regime choice. Section IV presents a summary scorecard of the template for Pakistan, both today and in the future, and contrasts it with scorecards for selected other developing and emerging market economies. Section V concludes with an assessment of the implications of the scorecard for the "right" regime for Pakistan, and how the right regime may change in the future.

## II. PAKISTAN'S DE FACTO REGIME

The *de facto*—as opposed to the *de jure*—rigidity of exchange rate regimes may be assessed by employing a methodology used by Reinhart and Rogoff (2004). According to

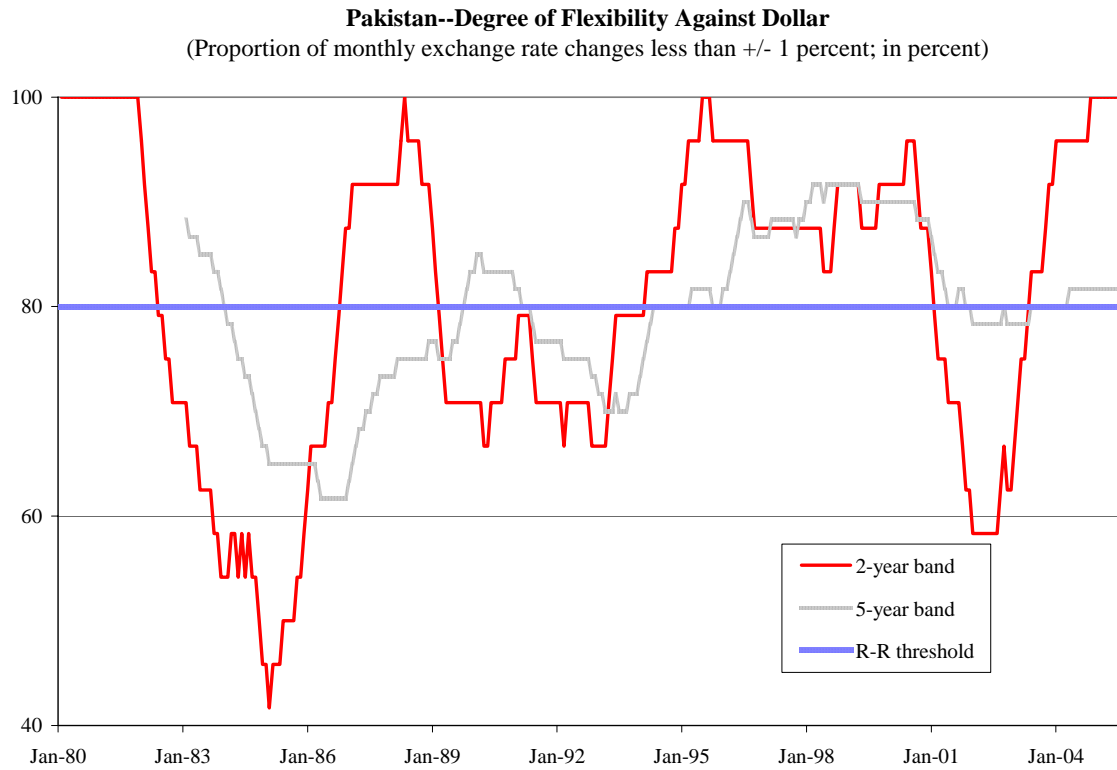
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<sup>6</sup> The fact that some factors may suggest that a fixed exchange rate regime is advantageous in a particular country, while other factors may suggest that a fixed regime is inappropriate, is in line with the empirical finding that no single factor consistently explains actual regime choice across a wide group of countries. See, for example, Juhn and Mauro (2002) and Rogoff, Husain, Mody, Brooks, and Oomes (2004).

this technique, a regime may be considered a de facto peg if its exchange rate (against the main partner currency, measured at a monthly frequency) fluctuates by one percent or less at least 80 percent of the time. Reinhart and Rogoff use both 5-year and 2-year intervals to measure the frequency of “significant” fluctuations.

By the Reinhart and Rogoff measure, Pakistan has maintained a de facto peg for much of the time since the early 1990s (see chart). With the exception of the period immediately following the balance of payments crisis and the freeze of foreign currency accounts in mid-1998, the value of the rupee against the dollar has fluctuated very little, whether seen from a 2-year or 5-year window. That said, the parity of the rupee has been adjusted, sometimes in large steps. But these adjustments, especially the larger ones, were sufficiently infrequent that the exchange rate regime of the rupee may be considered a de facto peg to the dollar.

Did the choice of a de facto peg for the rupee reflect economic considerations? The analysis in subsequent sections attempts to address this question.



### III. THE TEMPLATE

This section summarizes the template for assessing the implications of a selected set of analytical considerations on the choice of whether or not a country should peg its exchange rate. An assessment for Pakistan based on each consideration is also presented.

#### A. Economic Integration/Optimal Currency Areas

The higher the degree of integration of an economy's trade with its partners, the greater the benefits of a fixed exchange rate or common currency. An argument that has often been advanced in favor of fixed exchange rates is that exchange rate variability discourages trade and investment. By eliminating this variability and the associated transactions costs via a peg—or in extreme a currency union—a country can in principle promote trade. Although

time series studies have generally found a small or negligible effect of exchange rate variability on trade and investment,<sup>7</sup> gravity models such as those in Rose (2000) and Frankel and Rose (2002) find larger effects and conclude that countries that trade a lot will tend to benefit from entering into a currency union with their principal trading partner(s).

The simplest measure of a country's trade orientation, and hence the magnitude of potential gains from nominal exchange rate stability, is the ratio of its exports plus its imports to GDP. The larger is this ratio, the larger might be the transaction costs saving associated with a stable exchange rate.

However, even if a country's trade ratio is relatively large, its trading patterns may well be spread across different partners that have different currencies. Since a country can eliminate the volatility of its exchange rate against only a single currency via a peg, the potential transaction cost saving is limited to trade with the largest partner (or partners using a common currency). This may be measured by the weight of the top currency in total exports, where the top currency captures the share of exports destined for countries that either use the top currency or peg their exchange rates against the top currency.

Despite the potential trade gains, a peg may lead to difficulties if the country's business cycle is not synchronized with the cycle of the main trading partner (against whose currency the exchange rate has been fixed). Thus, the degree of cyclical synchronicity may

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<sup>7</sup> See Edison and Melvin (1990) for an early survey of this literature.

be important in determining the efficacy of a peg. Given data limitations for the large sample of countries used here, each country's cycle is measured as the annual growth rate of GDP and the correlation of cycles is taken as a rough measure of cyclical synchronicity.

The quantitative measures of trade orientation and optimal currency area effects suggest that Pakistan should not peg its exchange rate. Pakistan's trade orientation is among the lowest in the sample (Chart 1a), and the share of its exports to its main trade partner currency area is relatively low (Chart 1b). Moreover, the synchronicity of its economic cycle with that of its main trading partner is towards the lower end of the sample (Chart 1c).

## **B. Financial Integration**

Other factors equal, the disadvantages of exchange rate inflexibility rise as economies' integration into global markets increases. As noted by Rogoff et al (2004) and Husain, Mody, and Rogoff (2004), in developing countries with limited access to private external capital, pegs and other limited flexibility exchange arrangements have been associated with lower inflation, without an apparent cost in terms of lower growth or higher growth volatility. In emerging market economies, where exposure to international financial flows is greater, less flexible regimes have had a higher propensity of experience banking and/or currency crises. In advanced economies, free floats have on average registered faster growth than other regimes, without incurring higher inflation.

The method used by Rogoff et al (2004) to assess whether an economy has access to private external capital is whether or not it is included in the Morgan Stanley Capital



International (MSCI) emerging markets index. This index is based on a number of qualitative and quantitative indicators of each economy, including GDP per capita, local government regulations, perceived investment risk, foreign ownership limits, and capital controls. Other (similar) indices include JP Morgan's Emerging Market Bond Index Plus (EMBI+) and the IFC's various emerging market indices (which are now maintained by S&P). Among the IFC's indices, the IFCI Composite covers the emerging market economies whose stock markets are considered the most liquid (based on market capitalization and turnover), the IFCG Composite includes the IFCI Composite group plus a number of other countries where stock markets are somewhat less liquid, and the IFCG Frontier Composite comprises countries that have less information availability and are thus not included in the other indices. Clearly, countries that are not in any of these indices would appear not to be integrated into global financial markets; countries that are only in the IFCG Frontier Composite would also appear to be relatively less integrated.

Some countries may have been excluded from the major emerging market indices because of their small size, even if foreign investor participation in their financial markets was significant relative to the size of their economies. The IFC indices, for example, initially had indicative thresholds of \$2 billion for stock market capitalization and \$1 billion for annual stock market turnover.<sup>8</sup> Hence, a quantitative measure of the ratio of the countries'

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<sup>8</sup> Over time, however, some countries that did not meet the thresholds were added to the indices, if the IFC received queries and expression of interest from international investors in these countries' stock markets and high quality stock market data were available. The thresholds did not apply to the Frontier Composite index.

stock market capitalization and/or annual stock market turnover to GDP may be a useful supplement to the previous measure. In principle, this measure could facilitate identification of small economies that are relatively well integrated into global financial markets but have not been included in the major emerging market indices.

Another proxy for international financial integration may be the level of financial development. If so, countries that are at a relatively early stage of financial development—as indicated by a low money-to-GDP ratio—may also have less access to private global capital and may therefore be less susceptible to financial risks under a pegged regime.

International financial integration considerations, taken by themselves, also suggest a case against a peg in Pakistan. Pakistan is included in most emerging market indices, suggesting that it is relatively well integrated into global markets and, therefore, relatively more exposed to the volatility of private international capital flows. In addition, its stock market turnover ranks Pakistan among the countries in the sample with relatively developed capital markets (Chart 2a), although its broad money to GDP ratio places Pakistan in the middle of the sample (Chart 2b).

### **C. Diversification/Terms of Trade**

A country should avoid a peg if its production and exports are not diversified. Diversified economies are less vulnerable to terms of trade shocks, and therefore less likely

to require exchange rate flexibility to facilitate adjustment to such shocks.<sup>9</sup> Conversely, countries that are heavily reliant on a single commodity (or group of commodities) will likely require exchange rate flexibility to respond to changes in world commodity prices to mitigate spillovers into other sectors.

In a recent set of papers, Frankel has suggested that countries that are heavily reliant on a single commodity (or set of commodities) should peg to the international price of their principal export commodity(ies). Such a regime would, of course, give rise to de facto flexibility against the currency of any single trading partner, and would therefore not be considered a “fixed” regime.<sup>10</sup>

A country’s vulnerability to terms of trade shocks can be measured by simply calculating the historical volatility of its terms of trade (export unit value divided by import unit value).<sup>11</sup> It may be noted, however, that such data are available for a large sample of countries only at an annual frequency, which may understate true volatility. Moreover, the quality of the data may well be uneven across countries, especially as the structure of trade has changed significantly in some countries over the past two decades.

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<sup>9</sup> See, for example, Appendix I in Eichengreen, Masson, et al (1998).

<sup>10</sup> For example, Frankel’s argument would suggest that oil producer consider pegging their currencies to the international price of crude oil.

<sup>11</sup> As the terms of trade reflect both export and import prices, high volatility of the former need not necessarily reflect a lack of export (and production) diversification and may arise on account of sharp movements on the import side (e.g. from heavy reliance on oil imports).

An alternative measure of production and export diversification is the share of primary commodities in a country's exports and GDP. The higher are these ratios, the more reliant is the country on its main commodity(ies), the less diversified its economy, and the weaker the case for a peg.

A direct measure of an economy's reliance on a particular commodity is the correlation of the country's economic cycle with the world price cycle of the commodity. This may be assessed by correlating the country's annual GDP growth rate with the corresponding change in the world price of its key commodity(ies). Since commodity price changes may affect activity with a lag, the relevant correlation may well be that of activity with lagged commodity prices.<sup>12</sup> It should be noted, however, that world commodity prices are synchronous with global activity, and a high correlation could be due to strong links with the global economy rather than heavy dependence on the commodity itself.

Diversification considerations also point to a moderate case against a peg in Pakistan, although the implications of the alternative quantitative measures are somewhat mixed. On the one hand, Pakistan's terms of trade volatility and the share of primary commodities in its exports are relatively low (Charts 3a and 3b), suggesting that Pakistan's need to adjust to commodity price shocks is not especially high. However, as the bulk of Pakistan's exports

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<sup>12</sup> The empirical analysis suggests that a one-period lag tends to yield the highest correlations. Hence, the correlations reported below are for activity with one-period lagged commodity prices.

are cotton-related products rather than raw cotton, these measures (especially the latter) probably do not capture Pakistan's true dependence on cotton and, consequently, its need to adjust to cotton-related shocks. Indeed, the more direct measure—the correlation of world cotton prices with Pakistan's economic cycle—indicates a relatively low degree of diversification for Pakistan (Chart 3c), and therefore a moderate case against a peg since it could complicate the necessary adjustment to cotton-related shocks.<sup>13</sup>

#### **D. Stabilization**

Whether or not fixed rates provide better insulation against shocks depends on the degree of capital mobility and on the relative importance of real versus nominal shocks. Although there is a large literature examining various aspects of this broad topic, much of this may be summarized in the following three cases, as outlined in Ghosh et al (2003):

If capital is relatively immobile, a positive aggregate demand shock in a country with a fixed exchange rate leads to higher imports and a loss of reserves. Unless sterilized, this leads to a contraction in the money supply and thereby partly offsets the initial shock. Under a floating regime, the shock results in a depreciation, which exacerbates the effects of the initial shock. Hence, a fixed regime provides better insulation of output against shocks to aggregate demand when capital mobility is low.

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<sup>13</sup> It should be noted that the correlation between activity and commodity prices for Pakistan—in relation to the sample—is significantly higher than the lagged correlation. [Since the economic cycle is calculated on the basis of fiscal year data—which end June 30—which the commodity price cycle is based on calendar years, the contemporaneous correlation is not the relevant measure.]

Under high capital mobility, however, a fixed regime is disadvantageous. In this situation, the same demand shock (incipiently) raises domestic interest rates and induces a capital inflow that more than offsets the loss of reserves. This results in an increase in the money supply, which exacerbates the demand shock. Under a floating regime, by contrast, the shock leads to an appreciation of the exchange rate, partly offsetting the initial shock.

Fixed rates better insulate against monetary shocks, regardless of the degree of capital mobility. A positive money demand shock raises interest rates, thereby curbing aggregate demand and imports. Under a fixed regime, reserves increase, either because of lower imports (under low capital mobility) or larger capital inflows in response to the incipient increase in interest rates (under high capital mobility). Either way, the money supply expands to match the higher money demand, and output is unaffected. Under a floating regime, however, the increase in domestic interest rates causes the exchange rate to appreciate, thereby curbing exports and amplifying the initial shock.

Thus, economies where monetary shocks are relatively more important than real shocks may be candidates for a fixed exchange rate. A fixed regime may also be preferable in economies where real shocks are relatively more important but international capital mobility is low (especially in relation to international trade flows).

A natural quantitative measure relates to capital mobility. As the degree of capital mobility is intended to measure the relative importance of capital versus trade flows, a simple

measure is the ratio of the sum of all (gross) capital flows to the sum of all trade flows. While the degree of “netting out” of inflows and outflows in individual line items in the Fund’s *Balance of Payments Statistics* may differ across countries, the sum of the flows recorded under the principal headings should provide a reasonable approximation of the relative magnitude of gross capital flows in different countries.<sup>14</sup> To minimize the impact of cyclical fluctuations in capital flows, the time period should cover several years, ideally a full cycle. To assess the importance of capital *versus* trade flows, the magnitude of gross capital flows needs to be scaled by trade flows.

The Mundell-Fleming framework also highlights the relative importance of real versus nominal shocks. The latter may be approximated by the mean-adjusted standard deviation (the coefficient of variation) of (the inverse of) money velocity over a given sample period. A relatively high value would suggest that nominal shocks are relatively large and money demand is relatively volatile.

It is possible, however, that a country facing highly volatile money demand is also subject to large and frequent real shocks, suggesting the desirability of scaling this measure of nominal volatility by a measure of real volatility. A simple measure of an economy’s exposure to real shocks is the variability of its terms of trade. However, an economy that is

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<sup>14</sup> The absolute values of the following line items were summed to yield estimated gross capital flows: capital account credits; capital account debits; direct investment abroad; direct investment in reporting economy; portfolio investment assets; portfolio investment liabilities; financial derivatives assets; financial derivatives liabilities; other investment assets; other investment liabilities; and net errors and omissions.

highly trade oriented will be affected more by a given terms of trade shock than an economy that trades relatively little. For this reason, it is useful to consider both the ratio of velocity variability to terms of trade variability as well as the variability of money velocity by itself.

On balance, considerations emanating from the Mundell-Fleming framework point to a case against a peg in Pakistan. The capital mobility measure ranks Pakistan near the middle of the sample and, therefore, does not indicate a strong case either for or against a peg (Chart 4a). However, monetary shocks have been relatively small in Pakistan (Chart 4b), as has been the ratio of monetary to real shocks (Chart 4c), thereby suggesting that a peg would not be advantageous.

### **E. Credibility/Nominal Anchor**

A weak central bank may face difficulties in maintaining low inflation over a sustained period. In such circumstances, a country may be able to “import” monetary policy credibility and lower inflation by pegging the exchange rate (or adopting a foreign currency) and forgoing monetary autonomy. Countries that have a history of high inflation or frequent episodes of high inflation may therefore benefit from a pegged regime.<sup>15</sup>

A country’s inflation history can be summarized by a simple indicator such as the proportion of months over the past decade in which inflation exceeded 10 percent on a year-

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<sup>15</sup> Rogoff et al (2004) find that rigid exchange rate regimes in countries with limited access to external private capital have tended to experience lower inflation than those with more flexible regimes.



on-year basis. To check sensitivity of the results, a different time period, say the past five years, can be assessed. To further check sensitivity, an inflation threshold of 8 percent can be used, over both ten-year and five-year horizons.

By these crude measures alone, the inflation history of Pakistan presents a neutral case in the debate for and against a pegged regime for the rupee. Regardless of whether an inflation threshold of 8 percent or 10 percent is used, Pakistan ranks in the middle of the sample (Charts 5a and 5b). This suggests that while adopting a peg could carry some nominal anchor/credibility gains, such gains would not be large.

#### **F. Fear of Floating/Balance Sheet Effects**

The fear of floating literature (e.g., Calvo and Reinhart, 2002) points to a number of additional factors that may explain why some countries are reluctant to allow much exchange rate flexibility. For example, a high degree of liability dollarization can result in major balance sheet effects of large exchange rate shocks, thereby imparting strong effects (through the banking and/or corporate sectors, or even the public sector finances) which may be partly permanent. Similarly, a high degree of pass through of exchange rate changes to the domestic price level will result in a serious inflationary impact of large exchange rate shocks without capturing significant gains in adjustment or competitiveness.

While a gradual and eventual move to flexibility may help stem dollarization—and hence the prospect of balance sheet effects and high exchange rate pass through—the presence of these types of effects means that exchange rate changes may be highly disruptive

in the near term. To the extent that a lack of exchange rate flexibility over time contributes to a build up of dollarization and fear of floating type effects, countries that do not have such effects at present may be well advised not to maintain a peg and thereby avoid the effects from developing.

In terms of quantitative measures, Reinhart, Rogoff, and Savastano (2003) assess the degree of dollarization in a large sample of countries. In addition to presenting a summary composite measure for most countries (comprising information on the share of bank deposits in foreign currencies, the share of domestic debt denominated in or indexed to a foreign currency, and the share of private external debt in total debt), they group countries into what effectively amounts to high, medium, and low dollarization categories.<sup>16</sup>

The correlation of exchange rate changes with (the cyclical component of) economic activity may provide an alternative, and possibly more direct, measure of the presence of possible balance sheet effects. Although balance sheet mismatches may well be prevalent but not affect activity over a given sample period if the exchange rate remains relatively stable, an observed positive correlation between exchange rate changes (where a increase in the exchange rate is an appreciation) and activity would suggest that depreciation tends to be associated with a slowdown or contraction in economic activity. Such contractionary effects,

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<sup>16</sup> Highly dollarized economies are those where at least 10 percent of broad money or domestic public debt is foreign currency denominated, and where private external debt constitutes at least 10 percent of total debt. Economies with a medium degree of dollarization are those where only one of these conditions is met, while economies with low dollarization meet neither condition.

whether they arise because of balance sheet-type reasons or other factors, would in turn indicate that large exchange rate changes following a misalignment would be especially disruptive. Hence, economies where the evidence suggests depreciation is likely to be contractionary will likely be reluctant to allow exchange rate flexibility. As regards measurement of the relation between changes in the exchange rate and activity, the relevant correlation will be one which allows for a lagged impact of the exchange rate on the subsequent pace of economic activity.

Exchange rate pass through may be measured by the correlation of (year-on-year percent changes) of a country's (quarterly) consumer price index with its nominal effective exchange rate. To allow for a possible lagged effect in the transmission to domestic prices, current period inflation could be correlated with last period's depreciation.

In contrast to the other analytical considerations, fear of floating-type effects suggest that, at least in the relatively recent past, a peg may be advantageous for Pakistan. In relation to the other countries in the sample, Pakistan's degree of dollarization has been quite high (Chart 6a). In addition, nominal exchange rate depreciation has been strongly correlated with slower activity (Chart 6b). Together, these suggest the presence of significant balance sheet-type effects that would argue in favor of a peg as dollarization is reduced and such effects recede. By contrast, and possibly also in contrast to occasional assertions in the Pakistani press, there is little evidence of significantly higher pass-through of exchange rate changes into domestic inflation in Pakistan than in other countries. Indeed, Pakistan ranks in the

middle of the sample in terms of exchange rate pass through, at least as measured by the simple correlation discussed above.

#### **IV. THE SCORECARD**

Taken together, the measures capturing the various regime choice considerations indicate a fairly strong case against pegging the rupee (Table 1). The following features stand out:

- Pakistan's relatively high degree of integration in global financial markets subjects it to the volatility of private capital flows and raises risks associated with operating a peg (such as a disruptive exit, possibly accompanied by a banking/currency crisis).
- Its relatively high dependence on cotton, which implies that Pakistan has a greater need for adjustment to commodity price shocks than more diversified economies.
- Real shocks have been far more important in Pakistan than nominal shocks, implying that a pegged regime would not be advantageous from a macroeconomic stabilization perspective.
- As Pakistan's external trade orientation remains relatively low by international standards, the trade gains that could be achieved via a peg are also low. Hence, economic integration factors also point against a peg.
- By contrast, cross-country comparisons appear to suggest that Pakistan's relatively high degree of dollarization and evidence of contractionary effects of rupee depreciation may be good reasons to "fear floating" and adopt a peg. However, factors specific to Pakistan weaken, if not reverse, this argument. Since dollar

borrowing by the corporate sector in Pakistan remains very limited, balance sheet effects normally associated with “contractionary devaluation” are not likely to be present. Rather, causality more likely was in the reverse direction—the de facto peg of the rupee was likely adjusted *in response* to the emergence of balance of payments pressures (reserves depletion), which often were the result of adverse supply shocks (e.g., weaker exports).

**Table 1. Scorecard**

|   | Pakistan | China    | Egypt    | India    | Morocco  | Philippines | Russia   | Thailand |
|---|----------|----------|----------|----------|----------|-------------|----------|----------|
| <b>Economic integration</b>               | <b>4</b> | <b>4</b> | <b>3</b> | <b>3</b> | <b>2</b> | <b>3</b>    | <b>3</b> | <b>3</b> |
| Trade orientation                         | 4        | 4        | 5        | 5        | 3        | 2           | 3        | 2        |
| Trade pattern concentration               | 3        | 3        | 2        | 3        | 1        | 4           | 3        | 4        |
| Cyclical synchronicity with trade partner | 3        | 3        | 3        | 2        | 3        | 3           | 3        | 3        |
| <b>Financial integration</b>              | <b>4</b> | <b>4</b> | <b>4</b> | <b>3</b> | <b>4</b> | <b>4</b>    | <b>4</b> | <b>5</b> |
| Inclusion in major indices                | 5        | 5        | 5        | 4        | 5        | 5           | 5        | 5        |
| Stock market capitalization/turnover      | 4        | 3        | 3        | 3        | 3        | 2           | 3        | 4        |
| Financial development                     | 3        | 5        | 4        | 3        | 4        | 3           | 2        | 4        |
| <b>Economic diversification</b>           | <b>4</b> | <b>2</b> | <b>3</b> | <b>2</b> | <b>2</b> | <b>4</b>    | <b>4</b> | <b>4</b> |
| Terms of trade volatility                 | 3        | 2        | 3        | 2        | 2        | 3           | 3        | 3        |
| Commodities dependence--GDP               | 2        | 2        | 3        | 2        | 3        | 3           | 4        | 3        |
| Commodities dependence--activity          | 4        | 3        | 3        | ...      | 1        | 5           | 3        | 5        |
| <b>Monetary independence</b>              | <b>4</b> | <b>2</b> | <b>4</b> | <b>3</b> | <b>2</b> | <b>3</b>    | <b>4</b> | <b>3</b> |
| Trade versus capital flows                | 3        | 3        | 3        | 3        | 1        | 4           | 4        | 3        |
| Monetary volatility                       | 4        | 2        | 5        | 3        | 3        | 3           | 3        | 3        |
| Real versus nominal shocks                | 4        | 1        | 5        | 3        | 3        | 2           | 4        | 3        |
| <b>Credibility</b>                        | <b>3</b> | <b>3</b> | <b>3</b> | <b>3</b> | <b>5</b> | <b>3</b>    | <b>1</b> | <b>3</b> |
| Inflation history--8 percent              | 3        | 3        | 3        | 3        | 5        | 3           | 1        | 3        |
| Inflation history--10 percent             | 3        | 3        | 3        | 3        | 5        | 3           | 1        | 3        |
| <b>Fear of floating type effects</b>      | <b>2</b> | <b>3</b> | <b>3</b> | <b>3</b> | <b>4</b> | <b>2</b>    | <b>2</b> | <b>2</b> |
| Dollarization                             | 2        | 3        | 3        | 3        | 5        | 2           | 2        | 2        |
| Balance sheet effects                     | 1        | 3        | 2        | 3        | 3        | 2           | 3        | 2        |
| Exchange rate pass through                | 3        | 3        | 3        | 3        | 3        | 3           | 2        | 2        |

**Legend:**

- 1=strong case for peg
- 2=case for peg
- 3=neutral
- 4=case against peg
- 5=strong case against peg

Another interesting feature of the scorecard is that the implications from the various considerations for regime choice are much more uniform for Pakistan than for most other countries. For example, in China, Morocco, and Russia, some factors point to a peg, which others suggest flexibility. In these cases, subjective judgment to prioritize the factors is needed to conclude whether or not a peg is useful. In Pakistan's case, however, the case against a peg appears relatively clear cut.

## V. CONCLUSIONS

A “fear of floating” appears to have characterized Pakistan's exchange rate regime over the past 15 years. This fear was reflected in the maintenance of a de facto peg of the rupee against the dollar—albeit with repeated devaluations—without an accompanying declaration of a de jure peg. Economic considerations for regime choice suggest, however, that this fear may have been misplaced, and that a peg is not advantageous for an economy with Pakistan's features. Thus, increased exchange rate flexibility is likely to improve Pakistan's economic performance.

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