November 2005
IMF Country Report No. 05/408

Pakistan: Selected Issues and Statistical Appendix

This Selected Issues paper and Statistical Appendix for Pakistan was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on October 11, 2005. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Pakistan or the Executive Board of the IMF.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

To assist the IMF in evaluating the publication policy, reader comments are invited and may be sent by e-mail to publicationpolicy@imf.org.

Copies of this report are available to the public from

International Monetary Fund ● Publication Services
700 19th Street, N.W. ● Washington, D.C. 20431
Telephone: (202) 623 7430 ● Telefax: (202) 623 7201
E-mail: publications@imf.org ● Internet: http://www.imf.org

Price: $15.00 a copy

International Monetary Fund
Washington, D.C.

INTERNATIONAL MONETARY FUND

PAKISTAN

Selected Issues and Statistical Appendix

Prepared by Milan Zavadjil, Henri Lorie, Ron van Rooden, Axel Schimmelpfennig, Zafar Iqbal and Abhisek Banerjee (all MCD), Taimur Baig (FAD), Ashok Bhatia (MFD), and Carlos Leite (PDR)

Approved by the Middle East and Central Asia Department

October 11, 2005

Contents Page

Tables

I. OVERVIEW

1. **Pakistan's economic performance continues to be strong.** Economic growth exceeded 8 percent in 2004/05—the third year of high growth. Fiscal adjustment, supported by official and private inflows and debt relief, has led to a substantial improvement in public and external debt indicators. International reserves have recovered to close to $10 billion. Financial sector reforms have resulted in a healthy banking system. With these achievements, vulnerabilities have been greatly reduced and Pakistan's prospects look favorable. But will it be just smooth sailing ahead, or are there still challenges to be tackled? This Selected Issues volume tries to shed some light on this.

2. **Raising investment will be key to maintaining high rates of growth in years ahead.** Chapter II compares the current growth acceleration in Pakistan with two earlier periods of strong growth. Each of these were preceded by—or coincided with—a substantial increase in the investment ratio and occurred during periods of relatively low inflation. The current growth acceleration has not seen much of an increase in the investment ratio, at least not according to national accounts data. The increase in total factor productivity witnessed in the last few years may have reflected in part a reduction in existing excess capacity, following the slump of the late 1990s, as well as favorable weather conditions that boosted agricultural production. With many sectors of the economy approaching full capacity, it is now necessary to move the production frontier outward through a rise in investment.

3. **Pakistan's debt burden has declined sharply in the last four years, but remains moderately high.** Chapter III finds that Pakistan's debt situation today stands in sharp contrast to the late 1990s, when Pakistan faced difficulties in meeting some of its debt service obligations. Pakistan's public debt declined by almost 30 percent of GDP since its peak in 2000/01. But with debt still at 60 percent of GDP, risks remain, particularly as the debt-to-revenue and debt-to-exports ratios are still high. A continuation of prudent fiscal policies, as anchored by the recently adopted financial responsibility law, is needed to ensure that debt ratios continue on their downward trajectory.

4. **The banking sector has continued to strengthen.** The 2004 Financial System Stability Assessment (FSSA; IMF Country Report No. 04/215) found that banks' financial health had greatly improved following several years of restructuring and privatization. Chapter IV provides an update on financial sector developments since the FSSA. It finds that most financial soundness indicators continue to show an improving trend. However, lending activity appears to have approached "boom" thresholds, underscoring the need for continued supervisory vigilance. The stock market, after showing stellar gains in the last few years, underwent a major correction in early 2005. This fortunately did not have a significant impact on banks' health or on the economy in general, but it does point to the need for further strengthening of securities markets regulation and oversight.

5. **The corporate sector has also witnessed a sharp recovery in recent years.** Chapter V examines the vulnerability of Pakistan's corporate sector, looking at the sector's governance structure and a score of balance sheet indicators. It finds that, as with the banks, the sector's financial health has improved considerably over the past few years. The corporate governance structure has improved as well, although strong family ownership and control could become a constraint to faster expansion. Pakistan's corporate sector relies mostly on internal and bank financing, and much less on shares or bonds, and its external exposure is very limited. Bank financing has been growing rapidly and warrants careful monitoring. Valuation indicators, meanwhile, have remained relatively low, suggesting that there is still a perception of high risks attached to doing business in Pakistan. These would not only include political and security risk, but also remaining governance problems. While progress has been made in this area, reforms to improve the business environment in Pakistan will therefore need to continue.

II. Is Pakistan's Growth Acceleration Sustainable?[1]

A. Introduction

6. **In the past few years, Pakistan's economy has made a sharp recovery, moving from economic crisis to strong growth.** In the second half of the 1990s, growth rates had fallen to an average of 3 percent per year, barely exceeding population growth. The government that came to power in 1999 put macroeconomic stabilization and key structural reforms at the top of its agenda. With sound fiscal and monetary policies, and aided by strong international support, the economy has witnessed a dramatic turnaround, with growth accelerating to over 8 percent in 2004/05. The question that arises is whether these high growth rates can be sustained in the coming years, as the government aims to achieve.

7. **Raising the rate of growth in a sustained manner has been much discussed in economic theory and policy.** There is a vast body of literature that attempts to answer the question of how to promote growth (see, for example, Barro (1991), Barro and Sala-i-Martin (1994), Bosworth and Collins (2003), and Easterly (2001)). But despite the voluminous literature, empirical analyses of country experiences do not offer reliable and unambiguous results to answer this question.

8. **The good news, according to recent literature, is that growth accelerations are a fairly frequent phenomenon.** Hausmann, Pritchett, and Rodrik (2004) find that a country has a one-in-four chance to experience a growth acceleration sometime during a decade, with an acceleration defined as real per capita growth of 2 percent or more lasting for at least eight years. They also find that growth accelerations tend to be correlated with increases in investment and trade, with real exchange rate depreciations, and with political regime changes. The bad news is that not all accelerations are sustained. External shocks, for example, tend to produce growth accelerations that fizzle out, but economic reform is a significant predictor of accelerations that are sustained.

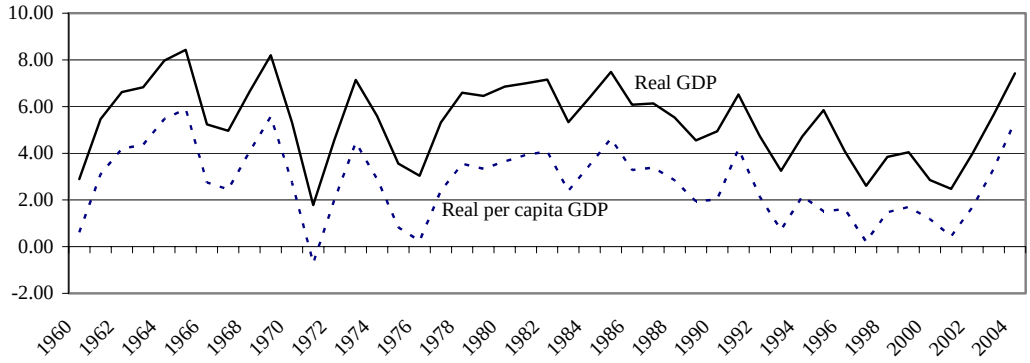
9. **Growth accelerations tend to be highly unpredictable.** The vast majority of growth takeoffs are unrelated to the standard determinants found by Hausmann et al. (2004), such as increases in investment and trade, and growth takeoffs typically fail to materialize when these conditions are indeed favorable. Similarly, Rodrik (2003) argues that igniting economic growth and sustaining it are somewhat different enterprises. Again some good news, as he finds that it often takes only small reform steps to stimulate growth. But it requires continued institutional reforms to sustain growth, by improving resilience to shocks and maintaining productive dynamism. Rodrik emphasizes that there are a few first order economic principles that need to be adhered to—protection of property rights, market-based competition, appropriate incentives, and sound money—to maintain strong growth. These principles can translate into very different policy packages, however, for individual countries. Reformers

[1] Prepared by Ron van Rooden.

have substantial room for creatively packaging these principles into institutional designs that are sensitive to local opportunities and constraints.

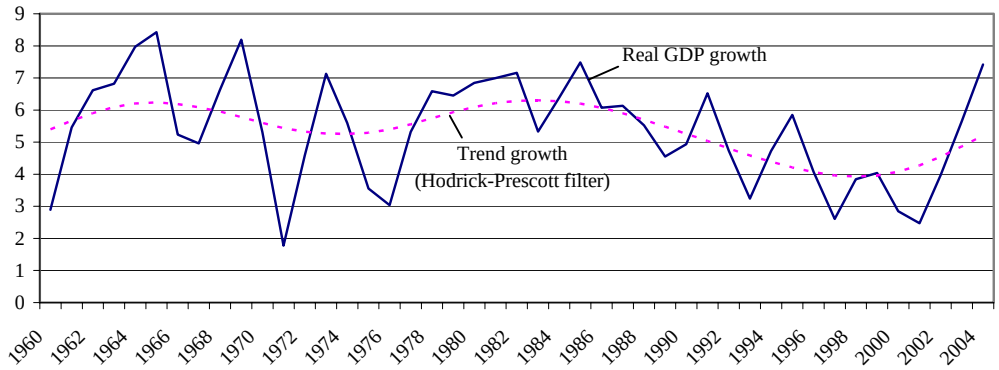
10. **Economic growth in Pakistan has averaged a very respectable 5½ percent per year since 1960.** Real per capita GDP has been growing at an average of about 2¾ percent per year, meaning that real incomes have more than tripled during this period. Since 1960, Pakistan has experienced two earlier sustained growth accelerations, with per capita real growth rates consistently exceeding 2 percent per year, one that started in 1961 and one in 1977, and lasting 10 and 12 years, respectively (Figure II-1).

Figure II.1. Pakistan: Economic Growth, 1960–2004



11. **Estimating trend growth using a Hodrick-Prescott filter suggests that the Pakistani economy has entered another period of strong growth** (Figure II-2). It also suggests that growth is currently above trend level. But this does not tell us, of course, how long this upswing will last, or, in other words, when the next turning point might be (although econometric techniques exist to help forecast turning points). This chapter tries to discern some of the factors underlying the earlier growth spurts and ascertain if they can provide some insights as to whether the current growth acceleration might prove sustainable.

Figure II.2. Pakistan: Actual and Trend Economic Growth, 1960–2004



B. Growth Accounting

12. **To analyze Pakistan's past growth experience, as a first step a standard growth accounting approach is used.** Using a simple two-factor production function that relates output (Y) to the quantities of capital (K) and labor (L):

(1) $$Y_t = AK_t^{\alpha}L_t^{(1-\alpha)}$$

A is total factor productivity (TFP) and α is the elasticity of output to changes in capital. This can be re-written in terms of changes to decompose the rate of output growth (y) into the contribution of growth in the inputs, k and l, plus the change in TFP, a (which is essentially a residual capturing a multitude of factors, as noted also below in Section C):

(2) $$y = a + \alpha k + (1-\alpha)l$$

In the absence of reliable time series for the capital stock, the gross investment rate can be used as a proxy for the change in the capital stock. The change in the capital stock is equal to:

(3) $$K_t - K_{t-1} = I_t - \delta K_{t-1}$$

where δ is a measure of the rate of depreciation. Dividing through K_{t-1} and assuming a steady-state constant value γ for the inverse of the capital-output ratio allows the rate of change of capital (k) to be measured by the investment rate ($i = I_t/Y_t$):

(4) $$k = i\,\gamma - \delta$$

Replacement of k with its steady state approximation yields the formulation used in many growth studies:

(5) $$y = a + \alpha(i\,\gamma - \delta) + (1-\alpha)l$$

In line with many other studies on growth, the output elasticity of capital is assumed to be 0.35 and the rate of depreciation 5 percent (see, for example, Senhadji (2000)). The steady-state capital ratio is calculated using estimates for Pakistan's 1990 capital stock from Crego (1998) and that year's GDP, resulting in a value for γ of 0.7. It should be emphasized that because of these assumptions, and data limitations in general, the results presented here are more indicative than exact measures.

13. **In both the two earlier periods of sustained strong growth, growth resulted from an increase in capital inputs, as well as an increase in TFP** (Table II.1). Indeed, the two previous sustained growth accelerations were preceded by—or coincided with—a significant increase in the investment ratio. In the early 1960s, the investment ratio[2] rose from just over

[2] Gross fixed capital formation, including both private and government investment.

12 percent of GDP in 1960 to 22½ percent in 1964 (Figure II.3). By 1971, when this ten-year period of strong growth ended, the investment ratio had declined again to about 14 percent of GDP. Similarly, the investment ratio rose sharply to 19 percent of GDP in the two years preceding the 1977 growth acceleration. As periods of sustained growth have been defined here as lasting as long as real per capita growth remains at least 2 percent each year, this second period ended in 1992. However, following a dip in 1993, growth was fairly strong again in 1994–96. Starting in 1993, the investment ratio started to decline, falling back again to 14 percent by 1998.

Figure II.3. Pakistan: Economic Growth and Investment, 1960–2004

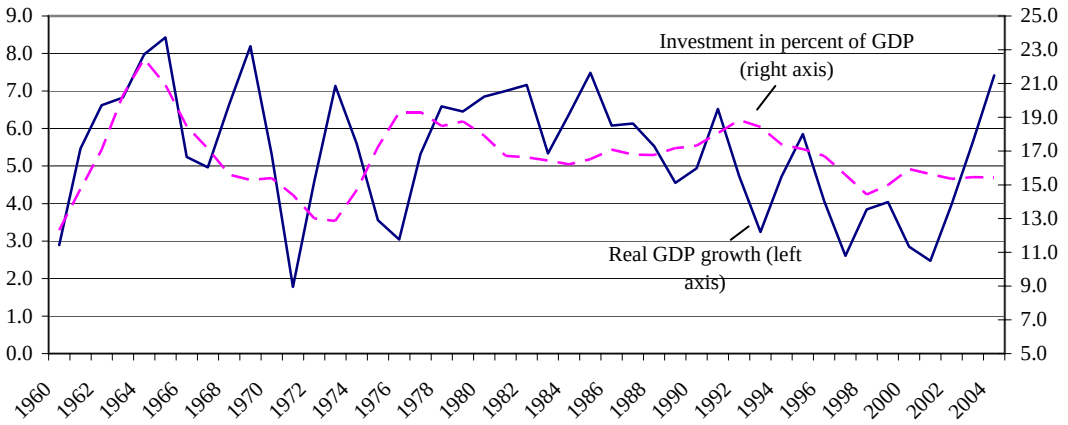


Table II.1. Pakistan: Growth Accounting, 1960–2004

	1960-2004	1960-69	1970-79	1980-89	1990-99	2000-04	1961-70	1977-88	2003-04	1993-2001
Real GDP growth	5.38	6.32	4.94	6.25	4.46	4.48	6.56	6.36	6.53	3.75
Capital	1.90	2.07	1.81	1.92	1.94	1.63	2.14	2.04	1.60	1.79
Labor	1.80	1.60	2.01	1.78	1.71	2.01	1.63	1.84	2.03	1.81
TFP	1.67	2.65	1.11	2.55	0.81	0.83	2.80	2.48	2.90	0.14

14. **The recent growth acceleration was not preceded or accompanied by a similar increase in the investment ratio.** The contribution of capital to growth is actually below the historical average and well below that of the two previous growth spurts. According to the latest available estimates, the investment ratio has remained fairly stable at about 15½ percent of GDP since 1999. There are indications, however, that investment may be underreported in the national accounts—as suggested by the sharp increases in commercial credit and imports of machinery—but it is unclear to what extent and whether this is different from earlier years (Table II.2).

Table II.2. Pakistan: Investment Indicators, 2000/01–2004/05

	2000/01	2001/02	2002/03	2003/04	2004/05
	(In percent of GDP)				
Gross fixed capital formation	15.8	15.5	15.3	15.6	15.3
Government	2.2	2.9	2.7	2.9	3.5
Private	13.7	12.6	12.6	12.7	11.8
Change in inventories	1.4	1.3	1.7	1.7	1.6
Gross capital formation	17.2	16.8	16.9	17.3	16.8
Import of machinery	...	...	3.6	4.4	5.3
Foreign direct investment	0.5	0.5	0.7	0.8	1.1
Commercial credit	14.9	13.9	14.8	17.1	19.0

Source: Pakistani authorities.

15. **The recent growth acceleration has come largely from an increase in TFP.** The contribution of TFP to growth in the last few years is similar, or even somewhat higher, than in the earlier growth periods. To some extent, this may reflect the growing contribution of the services sector to growth, which is likely to require less investment compared to manufacturing. It also may reflect that following the slump of the late 1990s there was considerable excess capacity in the economy and therefore less of a need for new investments to generate growth. The increase in capacity utilization translates into higher productivity per unit of capital and is reflected in the higher-than-average contribution of TFP to growth. But with many sectors approaching full capacity, sustaining growth in the coming years would now appear to require an increase in the investment ratio, as without new investments it might be difficult to continue to improve productivity at the same pace as in these last few years.

16. **With agriculture accounting for about one quarter of GDP, it is worth analyzing the impact of variations in rainfall on growth.** Agricultural production in Pakistan is heavily dependent on rainfall because of the limited infrastructure to smooth the supply of water. Including the change in rainfall, r, in production function (5) gives:

$$y = a + \alpha(i\,\gamma - \delta) + (1-\alpha-\beta)l + \beta r \quad (6)$$

Rainfall data were obtained from the Federal Bureau of Statistics of Pakistan, by taking the average of annual rainfall in Lahore, Peshawar, and Rawalpindi/Islamabad.[3] Assuming, admittedly rather arbitrary, a small weight for rainfall (0.05) does not change the growth accounting picture much for the entire period 1960–2004 (Table II.3), nor for the earlier periods of sustained growth. But it does have a major impact on the picture for the recent

[3] The average of these three cities gives an average annual rainfall for the 1960–2004 period of about 750mm, which is similar to average annual rainfall figures quoted in general descriptions of the country.

growth acceleration. The results suggest that improved rainfall has been a significant contributor to the recent growth acceleration. This is consistent with the increase witnessed over the last four years in the contribution of agricultural production—and particularly of that of major crops such as cotton and wheat—to the overall growth rate, which improved by almost 2½ percentage points, compared to a similar increase in the contribution of the services sector and an increase in the contribution of the industrial sector of 1½ percentage points (Table II.4).

Table II.3. Pakistan: Growth Accounting, 1960–2004

	1960-2004	1960-69	1970-79	1980-89	1990-99	2000-04	1961-70	1977-88	2003-04	1993-2001
Real GDP growth	5.38	6.32	4.94	6.25	4.46	4.48	6.56	6.36	6.53	3.75
Capital	1.90	2.07	1.81	1.92	1.94	1.63	2.14	2.04	1.60	1.79
Labor	1.67	1.48	1.86	1.64	1.58	1.86	1.50	1.70	1.88	1.68
TFP	1.62	2.86	0.89	2.53	0.70	0.62	2.71	2.59	1.84	0.23
Rainfall	0.19	-0.08	0.37	0.15	0.23	0.36	0.21	0.03	1.21	0.05

Table II.4. Pakistan: Contributions to GDP Growth

	2000/01	2004/05	Increase
Agriculture	-0.6	1.7	2.3
Of which: major crops	-1.0	1.4	2.3
Industry	0.8	2.5	1.6
Of which: manufacturing	1.4	2.2	0.8
Services	1.6	4.2	2.6
Of which: commerce	0.8	2.2	1.4
finance	-0.6	0.7	1.3
GDP growth at factor costs	1.8	8.4	6.5

Source: Pakistani authorities.

C. Growth Determinants: Some Stylized Facts

17. **This section goes beyond the growth accounting framework and tries to identify broader factors that may determine growth in Pakistan.** Growth accounting is a fairly mechanical approach, subject to various criticisms. A first concern is that the results are sensitive to underlying assumptions about the nature of the production function and to the indicators chosen to measure changes in outputs and inputs. Also, TFP is measured only as a residual. It provides a measure of economic efficiency, that is, the quantity of output that can be produced with a given quantity of inputs or, in other words, an outward shift of the production function (Easterly and Levine, 1997). Such gains in efficiency can reflect a myriad of factors that influence growth, but which the measured increases in factor inputs do not account for. In addition to technical innovation, TFP also reflects, for example, political (in-)stability, economic policies, or institutional changes, which affect the efficiency of an

economy in much of the same way as technology does. But most of all, an accounting decomposition does not determine the fundamental causes of growth (Bosworth and Collins, 2003). It merely provides a framework for identifying the proximate sources of growth. To get a better understanding about the determinants of growth, a simple regression analysis was conducted, with the results presented in Table II.5. The dependent variable is real GDP growth. The explanatory variables include lagged growth, the rate of investment, changes in annual rainfall, the rate of inflation, world growth, and real exchange rate changes. The sample period is 1960–2004.

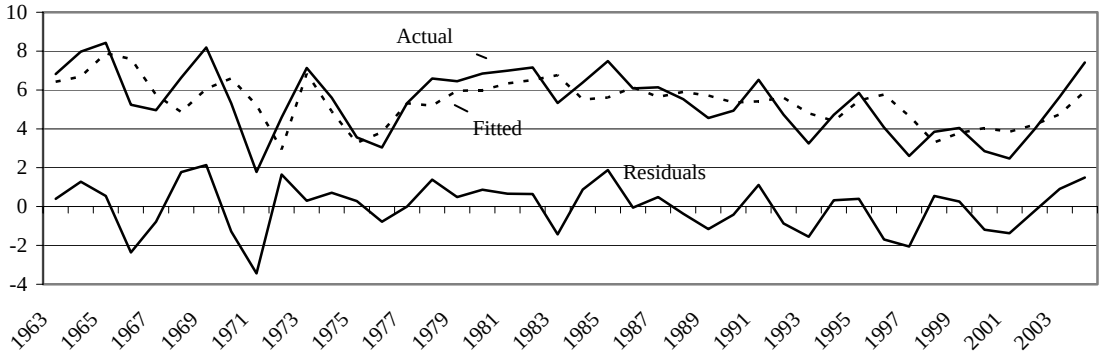
Table II.5. Regression Results

	(1)	(2)
Dependent variable: real GDP growth, 1960-2004		
Real GDP growth, lagged one year (percent)	0.52	0.51
	(4.27)	(4.16)
Investment ratio, lagged one year (percent of GDP)	0.17	0.16
	(4.84)	(4.04)
Average rainfall current and previous year (percent change)	0.018	0.018
	(2.03)	(1.95)
Inflation, lagged one year (percent)	-0.064	-0.069
	(-2.41)	(-3.22)
Real exchange rate change, lagged one year (US$, percent)	-0.028	
	(-3.69)	
Partner country growth, lagged one year (percent)		0.13
		(1.02)
R-squared	0.43	0.39
Adjusted R-squared	0.37	0.33

Notes: Estimation is by OLS. T-statistics in parentheses.

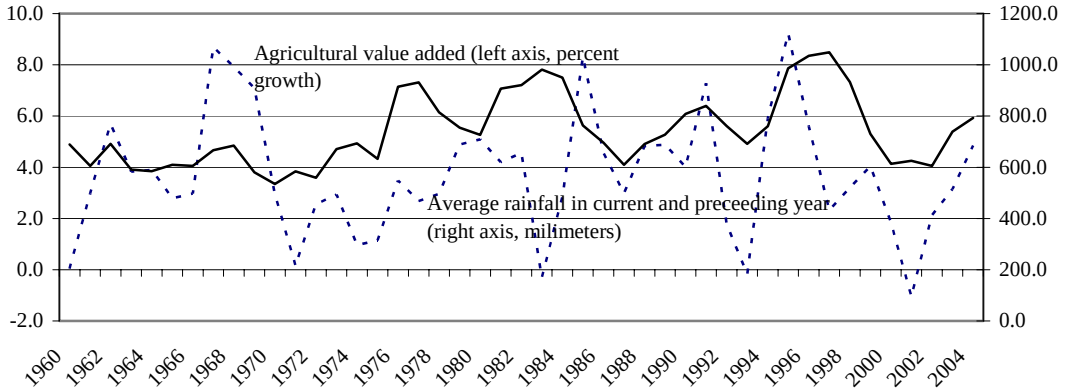
18. **The overall explanatory power of the regression results is limited, highlighting the difficulty of pinpointing specific determinants of growth** (Figure II.4)**.** It also seems to confirm the broad consensus emerging from the literature that little is still known about what determines growth. Only a little over one-third of the variation in growth is explained by the determinants in Table II.5. Of course, this also reflects the very limited availability of consistent time series for the entire sample period, for example indicators describing the quality of institutions.

Figure II.4. Pakistan: Actual and Fitted Growth Rates
(equation 1), 1963–2004



19. **The results do confirm the importance of investment and rainfall as determinants of growth in Pakistan.** The coefficients for both investment and rainfall are statistically highly significant and have the expected sign. It should be noted that growth and investment may depend on the same set of fundamentals. The lagged value of the investment ratio was used in an attempt to overcome this problem, although it is recognized that this does not eliminate this problem altogether. Rainfall is a major determinant of agricultural output, and thus, to a lesser extent, of overall output. Changes in the average rainfall of the current and previous year explain about 70 percent of the variation in agricultural value added (Figure II.5). The agricultural sector in turn accounts for about one quarter of overall GDP and also has significant indirect effects, for example on the textile industry. Rainfall is, of course, a factor the authorities have no control over, but they can work to improve water management. Indeed, the government is now planning major investments in this area in order to reduce the impact of fluctuations in rainfall.

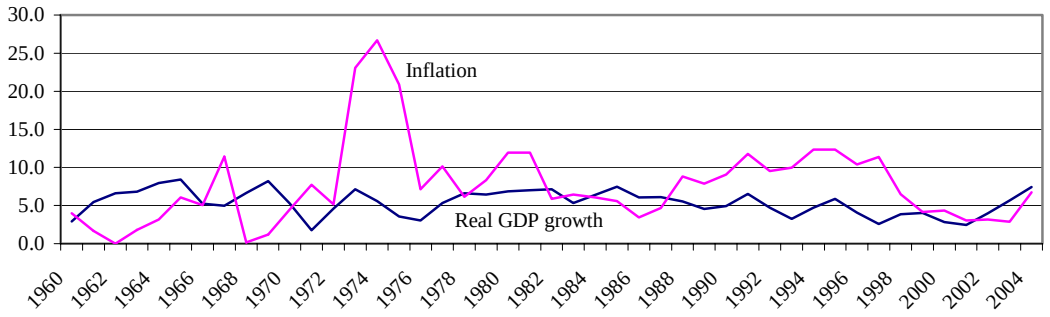
Figure II.5. Pakistan: Agricultural Growth and Rainfall, 1960–2004



20. **Macroeconomic stability also appears to be a (pre-)condition for growth.** The coefficient for inflation is significant and has the expected sign. Periods of sustained growth appear to have been preceded by a reduction in inflation from relatively high levels (Figure II.6). Prior to the 1977 growth spurt, inflation was reduced to 7 percent, down from a

peak of almost 27 percent in 1974. Similarly, albeit less dramatically, inflation was reduced to 4 percent in 1999, following a peak of about 12 percent in 1994–95. Inflation averaged 3½ percent during the growth spurt of the 1960s, 7½ percent during the one starting in 1997, and almost 5 percent during 2003–04. By comparison, inflation averaged 15 percent during 1971–76 and 10½ percent during 1991–98.

Figure II.6. Pakistan: Economic Growth and Inflation, 1960–2004



21. **A depreciation of the real exchange rate tends to result in higher growth.** While world demand was not found to have a statistically significant effect on growth, real exchange rate depreciations tend to be correlated with stronger growth. Pakistan is not an economy that is highly integrated into the world, based on the relatively low ratio of trade to GDP, but this underscores the export industry's importance for the country's overall economic performance. It also suggest that the State Bank of Pakistan is correct in monitoring real exchange rate developments closely and aiming to avoid a real appreciation.

D. Concluding Remarks

22. **From the above findings, it is not clear that the current growth acceleration will be sustained.** While the results of this paper confirm that growth remains highly unpredictable, it does suggest that an increase in investment—including in water management—would be needed for growth to remain strong. The increase in TFP witnessed in the last few years may have reflected in part a reduction in excess capacity, as well favorable weather conditions that boosted agricultural production. With many sectors of the economy approaching full capacity, it now becomes necessary to move the production frontier outward through new investments. Meanwhile, inflation has picked up and, if left unchecked, could undermine confidence and thus investment and growth. With the continuation, however, of the authorities' sound economic policies and structural reforms of the last few years, the business environment will continue to improve and inflation should return to lower levels. Several institutional improvements have been implemented that should help ensure that policies remain on the right track: the central bank has been strengthened, the financial system's health has improved, and a fiscal responsibility law was adopted to ensure fiscal sustainability. Thus, investment can be expected to increase in the coming years, helping to maintain strong economic growth.

References

Barro, Robert J., 1991, "Economic Growth in a Cross section of Countries," *Quarterly Journal of Economics*, Vol. 106, No. 2, pp. 407–33.

———, and Xavier Sala-i-Martin, 1995, *Economic Growth*, (New York: McGraw-Hill).

Bosworth Barry P., and Susan M. Collins, 2003, "The Empirics of Growth: An Update," *Brookings Papers on Economic Activity: 2*, Vol. 2 (September), pp. 113–206.

Crego, Al, 1998, "A New Database on Investment and Capital for Agriculture and Manufacturing," World Bank Policy Research Working Paper 2013.

Easterly, William, 2001, *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*, (Massachusetts: MIT Press).

———, and Ross Levine, 1997, "It's Not Factor Accumulation: Stylized Facts and Growth Models," *World Bank Economic Review*, Vol. 15, No. 2, pp. 177–219.

Hausmann, Ricardo, Lant Pritchett, and Dani Rodrik, 2004, "Growth Accelerations," NBER Working Paper 10566 (Cambridge, Massachusetts: National Bureau of Economic Research).

Rodrik, Dani, 2003, "Growth Strategies," NBER Working Paper 10050 (Cambridge, Massachusetts: National Bureau of Economic Research).

Senhadji, Abdelhak, 2000, "Sources of Economic Growth: An Extensive Growth Accounting Exercise," IM Staff Papers, Vol. 47, No. 1, pp. 129–57 (Washington: International Monetary Fund).

III. An Assessment of Pakistan's Medium-Term Outlook and Public Debt Vulnerabilities[4]

A. Introduction

23. **Pakistan's debt situation today stands in sharp contrast to the late 1990s and early 2000s, when both the overall and external debt ratios were very high.** At the end of June-2001, Pakistan's public debt peaked at 88.8 percent of GDP, slightly over half of which was external debt. In an environment of anemic growth, declining reserves, and a rapidly depreciating exchange rate, the Pakistani economy was under a great deal of pressure. However, in a dramatic turnaround, Pakistan's recent history has been characterized by a sound policy environment and favorable exogenous factors. Accelerating economic growth, a sizeable pick up in remittances and exports, low real domestic and external interest rates, and a stable real exchange rate policy have contributed to a declining debt path.

24. **Pakistan's pubic debt burden has declined sharply in the last four years but remains quite high.** By the end of 2004/05, Pakistan's public debt is estimated to have declined by nearly 30 percent of GDP since 2000/01. A sharp pick-up in economic activity and easing of liquidity conditions allowed for a substantial growth-interest rate differential, which was complemented by improved fiscal effort, resulting in a highly favorable debt dynamic. Still, over the past 30 years, a majority of sovereign debt crises in emerging markets have arisen when public debt levels were below 60 percent of GDP,[5] about where Pakistan is today. The country's debt-to-revenue and exports-to-debt ratios remain high as well.

25. **Looking ahead, a continuation of prudent polices would ensure that debt remains manageable and the economy's resiliency toward shocks is strengthened further.** However, it is important to examine the sources of risks, given that as Pakistan's economy is being further liberalized and better integrated with the world economy. It will have to become more flexible to deal with market volatility. This would entail building buffers against shocks, keeping debt relatively low, and judicious management of debt rollover risks. The dividend from such a strategy would be significant, especially as the fiscal space created by lower debt service costs could be used for much needed investment toward infrastructure building, human capital development, and poverty-eradication initiatives.

---

[4] Prepared by Taimur Baig (FAD) and Carlos Leite (PDR).

[5] Reinhart, Rogoff and Savastano (2003) documents the history of debt defaults since the early 1800s. They find that, since 1970, 53 percent of all debt crises in emerging markets have occurred when the ratio of debt to GNP was below 60 percent. For example, Mexico's 1982 debt crisis occurred with a debt-to-GNP ratio of 47 percent, and Argentina's 2001 crisis with a ratio just above 50 percent.

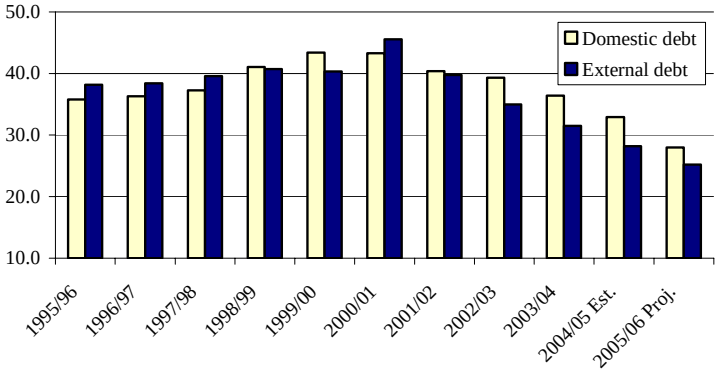
26. **The goal of this chapter is to assess Pakistan's medium-term outlook and public debt vulnerabilities.** Economic theory provides limited practical guidance on the optimal level of public debt; hence the question is examined through multiple approaches, by an analysis of the debt structure and composition; by comparing vulnerability indicators with other emerging markets; and by using standard debt sustainability analysis (DSA) and stress tests over a medium-term projection period. For the DSA, two medium-term scenarios are considered—a baseline scenario under continued prudent policies, and an alternative low-growth scenario with policy slippages. Risks under both scenarios are considered.

27. **The remainder of the chapter is organized as follows:** Section B gives an overview Pakistan's debt profile and historical dynamics. Section C assesses the vulnerability of the current debt profile with an analysis of individual indicators and overall economic conditions. Section D contains a discussion on both a baseline and an alternative medium term scenario, and associated bound tests; this is the standard debt sustainability analysis. Section E concludes.

B. Overview of Recent Debt Dynamics and Debt Profile

28. **An examination of the historical path of the variables driving Pakistan's debt dynamics—growth, real interest rate, and primary balance—is instructive (Figure III.1).**[6] Weak fiscal effort and low growth led to mounting debt through the 1990s. This problem was compounded in the late 1990s when liquidity conditions tightened, pushing up real interest rates. Even a change in the fiscal stance from 1998/99 onward, when the primary balance moved into a surplus, was not sufficient to contain the debt from rising.

Figure III.1. Public Sector Debt, 1995/96–2005/06
(In percent of GDP)



[6] The linkage between fiscal policy and debt dynamics is described by the following identity:
$\Delta d_t \equiv (r_t(d_{t-1}) - g_t)d_{t-1} + p_t(d_{t-1}, Z) + x_t$, where d_t is the debt-to-GDP ratio at time t; $r(d)$ is the real interest rate; g is the real growth rate; x is an exogenous shock to debt; and Δ is the first difference operator. The primary surplus p_t is a function of the lagged public debt and other non-debt determinants such as business cycle conditions. The above relationship illustrates the well-studied link between debt, growth-interest differential, and primary balance.

29. **A series of external developments and measures helped turn the debt dynamics around from late-2001 onward (Table III.1).** A Paris Club restructuring agreement in December 2001 allowed for a substantial easing of the external debt service burden, including debt service relief of close to more than $2.5 billion over the succeeding three years.[7] Fiscal policy was tightened, and the primary surplus averaged over 2 percent of GDP between 2001/02 and 2003/04. Domestic interest rates gradually declined, allowing for a lowering of the governments cost of borrowing at the margin. Prudent monetary policy and a pick up in remittances stabilized the exchange rate. Accelerating economic activities and rising confidence in the economy created favorable conditions for the government to tap the external debt market in 2004. This made possible the retirement of existing high interest external debt, financed by new, lower interest liabilities.

Table III.1. Public Debt Dynamics, 1994/95–2004/05

	1994/95	1995/96	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05 Est.
Growth 1/, 2/	5.0	4.8	1.0	2.6	3.7	4.3	1.9	3.2	5.0	6.4	7.8
Real interest rate 2/	-7.4	-0.5	-5.0	1.4	2.7	5.7	-0.3	4.2	1.5	-2.4	-4.2
Primary balance 3/	-1.3	-1.4	-0.2	-0.3	1.4	1.9	2.3	2.0	2.9	1.8	0.2
Total Public Debt 3/	73.9	74.0	74.8	76.8	81.7	83.8	88.8	80.2	74.3	67.9	61.1
Change in debt 3/		0.1	0.8	2.1	4.9	2.0	5.1	-8.7	-5.9	-6.4	-6.8
Memorandum item:											
External Debt 3/	...	38.2	38.4	39.5	40.7	40.3	45.6	39.8	35.0	31.5	28.2

Sources: Pakistani authorities; and Fund staff estimates.

1/ Real GDP growth in market prices.
2/ In percent.
3/ In percent of GDP

30. **The sharp downward trajectory of both domestic and external debt in recent years is striking.** Between 2000/01 and 2004/05, domestic debt is estimated to have declined by 11.6 percent of GDP, whereas the external debt declined by 17.4 percent of GDP during the same time. While the Paris Club restructuring helped lower the external debt service needs from 2001/02, the growth-interest differential has played the key role in the lowering of the debt ratio.

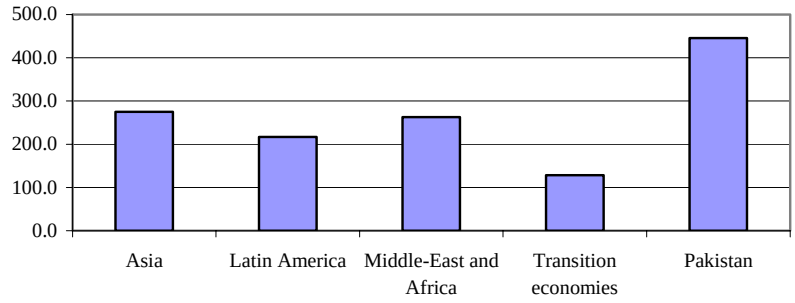
31. **Still, the level of debt is not particularly low by international standards (Figures III.2–III.4).** Compared to a select group of 24 emerging market economies, Pakistan's total debt stock-to-GDP ratio is higher than two-thirds of the sample. The external debt-to-GDP ratio is also in similar cohort. The debt-to-revenue ratio, however, is the fourth highest in the sample, as Pakistan's revenue base remains low.[8] The need for continuing on a

[7] The 2001 Paris Club agreement was preceded by a similar exercise in 1999. At the same time, a restructuring of $600 million in Eurobonds and $500 million in short-term credits held by commercial banks took place.

[8] The countries in the sample are from Asia (China, India, Indonesia, Korea, Malaysia, Philippines), Latin America (Argentina, Brazil, Chile, Costa Rica, Ecuador, Mexico, Peru, Uruguay, Venezuela), Middle-East and Africa (Morocco, Lebanon, Pakistan, Turkey, Cote d'Ivoire, Nigeria, South Africa), and transition economies (Bulgaria, Hungary, Poland).

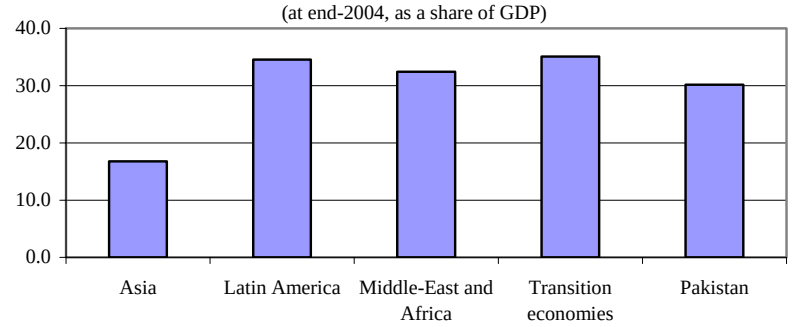
path of debt reduction is thus clear. The authorities are cognizant of this need, and the recently passed Fiscal Responsibility Law (FRL) requires that the outstanding debt stock is reduced by 2.5 percent of GDP each year through 2013.

Figure III.2. Regional Average of Emerging Market Debt
(at end-2004, as a share of revenue)



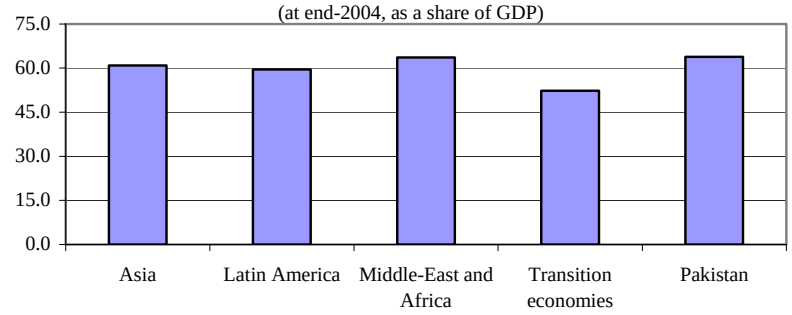
Sources: Pakistani authorities; and Fund staff estimates.

Figure III.3. Regional Average of Emerging Market Public External Debt
(at end-2004, as a share of GDP)



Sources: Pakistani authorities; and Fund staff estimates.

Figure III.4. Regional Average of Emerging Market Public Debt
(at end-2004, as a share of GDP)



Sources: Pakistani authorities; and Fund staff estimates.

32. **The improvement in the debt situation has led to some changes in the composition of domestic debt (Table III.2 and Figure III.5).** Following a period when institutional investors shied away from investing in fixed-rate government bonds, the holding of such paper has increased over the last four years. At end-2004/05, institutional investors

held fixed-rate long-term government paper in domestic currency worth over 8 percent of GDP, comprising of over a quarter of the total domestic debt.[9] At the retail end, institutional reforms led to a substantial net outflow.[10] While the holding of instruments offered under the National Savings Scheme has declined of late, they remain the largest part of domestic debt. The government has decreased its reliance on treasury bills as budget financing needs have eased, with floating interest short-term papers representing just 9.4 percent of GDP at end-2004/05, compared to 17.7 percent of GDP at end-200/01.

Table III.2. Composition of Public Domestic Debt, 1996/97–2004/05

(In percent of GDP)

	1996/97	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05 Est.
Total	36.3	37.3	41.0	43.4	43.3	40.4	39.3	36.4	32.9
Fixed interest debt (long-term, institutional) 1/	9.6	8.6	7.2	6.8	6.8	8.4	8.9	9.7	7.7
Foreign currency debt (long-term) 2/	0.5	0.4	1.8	1.8	1.7	1.4	0.9	0.6	0.4
Fixed interest debt (short-term) 3/	14.8	14.7	15.9	17.1	17.7	12.7	10.7	9.8	11.9
Retail Savings instruments 4/	11.4	13.6	16.2	17.7	17.1	18.0	18.9	16.3	13.0
Memorandum item:									
Interest cost	4.3	5.2	4.9	5.2	4.4	4.2	3.5	2.8	2.6

Sources: Pakistani authorities and staff estimates.

1/ Comprises mostly of three government papers available to institutional investors: Federal Investment Bonds, Pakistan Investment Bonds, and Prize Bonds.

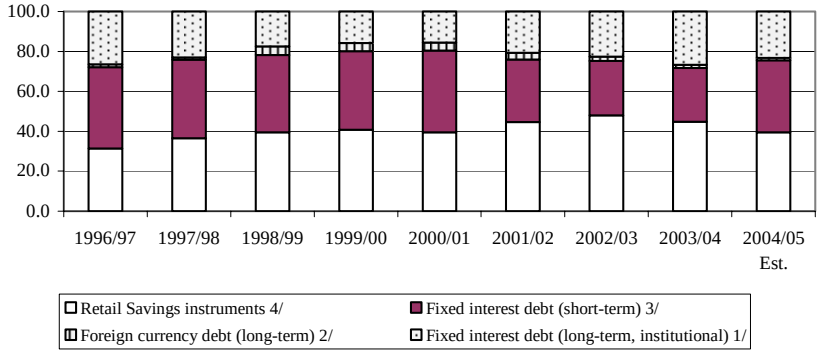
2/ Government bearer bonds denominated in U.S. dollars.

3/ Treasury bills.

4/ Mostly includes instruments available for retail investors under the the National Savings Scheme.

Figure III.5. Composition of Public Domestic Debt, 1996/97–2004/05

(In percent of total debt)



[9] In comparison, at end-2000/01, only about 15.6 percent of government debt was in fixed-rate long-term papers.

[10] In 2000, the government re-introduced long-term bonds and NSS rates were tied to these bonds to reduce the substantial mark-up over market returns. In 2001, institutional investors were prohibited from investing into NSS. Thus, NSS instruments became less attractive and the investor base shrunk substantially.

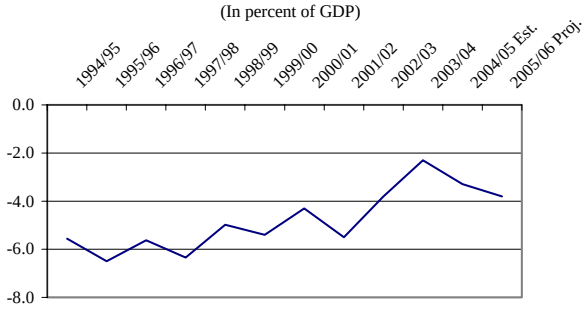
C. Public Sector Vulnerability: Individual Indicators

33. **The previous section illustrated the Pakistan's substantial achievement in reducing debt in recent years.** The debt burden, however, is still not low by emerging market comparisons, and needs to be reduced further. This section examines a set of indicators to assess the public debt vulnerability of Pakistan at the current juncture. Assessing public sector vulnerability entails looking at both flow and stock indicators. Key flow indicators are the overall fiscal balance and the primary gap (primary balance that would stabilize the public debt ratio at the level of the previous year minus projected primary balance for the current year). Stock indicators are the public debt ratio, and measures of rollover risk (debt at remaining maturity in percent of total debt) and exchange rate risk (foreign currency denominated debt as a share of total debt). Indicators of overall economic conditions are also analyzed.

Overall fiscal balance

34. **Pakistan's overall fiscal balance has improved substantially in recent years (Figure III.6).** The overall deficit averaged 3.7 percent of GDP during the past four years, compared to an average of 5.5 percent of GDP in the decade prior to that. The reduced overall deficit eased debt pressures, and will appropriately remain a key target variable in Pakistan's fiscal policy path in the coming years. Limiting the deficit to well below 4 percent of GDP in the coming years will help contain vulnerability.

Figure III.6. Overll Balance, Excluding Grants, 1994/95–2004/05
(In percent of GDP)



Primary gap

35. **Given Pakistan's current highly favorable debt dynamics, stabilizing the debt-to-GDP ratio would require very little fiscal effort.** Indeed, in 2005/06, Pakistan's primary balance would have to worsen by more than 7 percent of GDP before the debt is prevented from declining. Pakistan's primary gap is therefore highly favorable (thanks to a very favorable growth-interest differential), pointing at little risk of maintaining the current level of debt, at least from the point of view of fiscal effort.[11]

Public debt ratio

As discussed in the previous section, although Pakistan's debt ratio has been declining, the level of debt remains quite high. However, it is lower than countries that are rated similarly by ratings agencies (Table III.3). Unlike other countries with comparable debt ratios, Pakistan's debt is not concentrated in short-term floating rate papers, thus mitigating

[11] Unless, of course, there are major changes in the economic environment. In a latter section of this chapter, the debt path in under an alternative set of low-growth and policy setback assumptions is examined.

some of the risks. A large part of the debt is held by retail investors who do not have many alternative investment opportunities and thus are likely a stable source of financing. However, relative to its narrow revenue base, Pakistan's debt stock is high. The authorities have stressed the need for further debt reduction as well, and are presently being guided in that direction by the stipulations of the FRL discussed earlier.

Refinancing, exchange rate, and interest rate risk

36. **Based on the degree of reliance on domestic debt, Pakistan's vulnerability to both refinancing and exchange rate risks appears broadly in line with similarly rated emerging markets.** Comparable to the experience in other emerging markets in the 1990s, the domestic component of Pakistan's public debt has been rising (Table III.3). At end-2004, domestically issued securities comprised roughly half of Pakistan's public debt and close to the median of the select group of emerging countries.[12] Additionally, international reserves stand at roughly 200 percent of short-term debt by remaining maturity—a fairly liquid position. There are also no major rollover humps in the medium- and long-term debt service profile.

Table III.3. International Comparisons: Size of Public Debt, As of End-2003

Country	Moody's Rating 1/	Public Debt	
		Total	*of which:* External
		(In percent of GDP)	
Mexico	Baa2	47.1	15.1
Brazil	B1	80.0	46.6
Chile	Baa1	37.0	6.9
Colombia	Ba2	58.9	28.4
Croatia	Baa3	43.0	26.4
Hungary	A1	57.0	13.9
Poland	A2	48.4	16.3
Turkey	B1	84.5	26.4
Korea	A3	32.4	6.0
Indonesia	B2	54.0	34.0
Malaysia	Baa1	56.4	47.3
Pakistan 2/	B2	74.3	35.0
Philippines 3/	B1	78.1	...
Thailand	Baa1	34.5	36.2
South Africa	Baa2	37.1	6.5
Vietnam	Ba3	41.9	33.6
Group medians 4/			
Overall	...	48.4	26.4
A and higher	...	48.4	13.9
Ba-Baa	...	42.5	27.4
B and lower	...	79.1	34.0

Sources: Pakistani authorities official reports; IFS; GDF; and Fund staff calculations.

1/ See Moody's Statistical Handbook, September 2005. Ratings are for long-term foreign currency borrowing.
2/ Data for Pakistan refer to 2004.
3/ Published data on external debt for the Phillipines is not directly comparable.
4/ Excluding Pakistan.

[12] Overall, the table confirms the tendency for countries with a higher rating to rely less on external debt.

37. **Based on indicators of average maturity and duration, Pakistan's exposure to refinancing and interest rate risks appears limited.** On the external side, the unusually high degree of reliance on official concessional loans results in a long average duration. Short-term debt is a relatively small component of external debt (roughly 10 percent, including payments due next year on medium- and long-term debt). On the domestic side, information on remaining maturity of debt is patchy, especially as regards the National Savings Scheme instruments.[13] Overall, the stock of short-term debt is estimated to be less than 30 percent of total debt stock, which can be considered moderate among emerging market comparators (Table III.4).

Table III.4. International Comparisons: Maturity Indicators, As of End-2003

Country	Domestic debt				Foreign debt		
	Average term to maturity *in years*	Average duration *in years*	Short-term debt / Total domestic debt: By original maturity *in percent*	Short-term debt / Total domestic debt: By remaining maturity *in percent*	Average term to maturity *in years*	Short-term debt / Total external debt: By original maturity *in percent*	Short-term debt / Total external debt: By remaining maturity *in percent*
Mexico	2.49	1.44	20.7	36.9	9.95	2.1	14.7
Brazil	2.61	0.91	...	35.3	5.95	9.4	29.1
Colombia	3.90	2.30	...	16.0	7.20	...	6.7
Croatia	4.00	...	26.3	...	...	...	...
Hungary	...	...	26.3	33.7	...	...	10.1
Poland	2.66	2.12	19.5	37.9	...	0.0	...
Turkey	2.09	...	19.1	...	...	0.0	...
Korea	3.80	3.30	0.0	...	...	0.0	...
Indonesia	...	...	...	...	12.9	...	...
Malaysia	5.19	...	3.0	16.3	...	0.0	4.3
Pakistan	...	...	...	...	19.9	4.5	10.2
Philippines	...	...	29.1	...	9.70	0.0	...
Thailand	4.71	...	9.9	19.0	10.21	11.9	...
South Africa	7.85	4.67	6.6	14.3	4.83	0.0	4.3
Vietnam	...	...	...	...	28.0	...	...
Canada	6.50	4.50	26.6	34.7	...	12.3	33.1
Average	4.16	2.75	17.01	27.12	12.07	3.65	14.06
Median 1/	3.85	2.21	19.30	26.35	9.82	0.00	8.40

Sources: Pakistani authorities official reports; IFS; GDF; and Fund staff calculations.

1/ Excluding Pakistan.

Overall economic conditions

38. **Recent analyses of previous sovereign debt crises emphasize the need to go beyond unconditional thresholds of individual ratios in assessing debt sustainability.** Reinhart, Rogoff, and Savastano (2003) suggest that a country's initial level of debt may already be near historically "intolerable" levels. In this case, standard sustainability analyses and stress tests may not take full account of the vicious cycle of higher interest rates and sudden loss of market financing that may lead to a crisis.[14] IMF (2003) identifies a number of characteristics, including low ratios of revenue to GDP and low levels of trade openness,

[13] More information on the NSS would shed further light on rollover risks, but presently it is understood to be manageable.

[14] "A country's record at meeting its past debt obligations and managing its macroeconomic in the past is relevant to forecasting its ability to sustain moderate to high levels of indebtedness" (*op. cit.*, p.1).

which tend to affect a country's tolerable level of debt. Manasse and Roubini (2005) find that episodes of debt crises (including involuntary restructurings) arise under a variety of circumstances, and that it is precisely the joint effect of a number of economic and political factors that allows for an adequate assessment of debt levels. They identify combinations of factors that lead to different types of risk, namely insolvency, illiquidity, or macroeconomic instability.

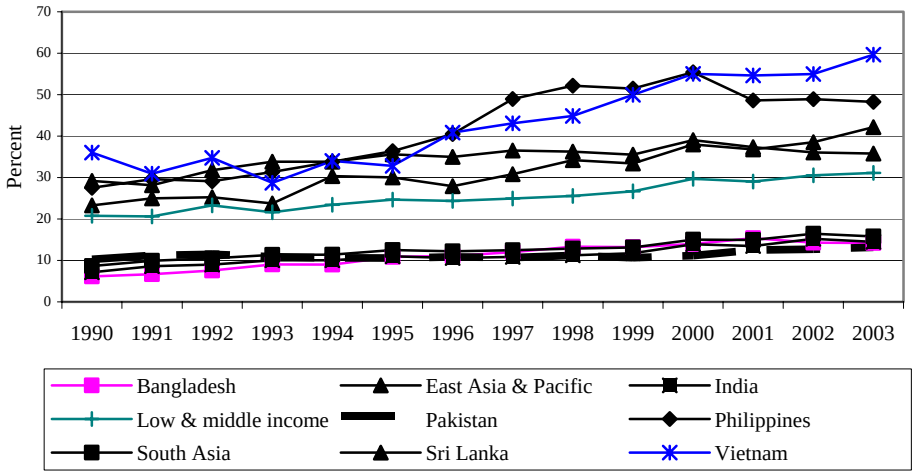
39. **Following IMF (2003), the level of debt that Pakistan can 'tolerate' appears to be lower than other emerging economies**, given:

- *A low public revenue ratio*. In Pakistan, a relatively narrow tax net combined with weak compliance have resulted in a comparatively low revenue ratio, possibly hampering its capacity to pay. Whereas the ratio of public revenue to GDP averages about 27 percent in emerging economies, it is roughly 14 percent in Pakistan.

- *A relatively inflexible composition of fiscal expenditures*. Although the interest burden has decreased in recent years, the share of interest expenditures in total expenditures remains relatively high, at close to 20 percent. This is slightly higher than the average of emerging economies, at about 17 percent. As a result, primary expenditure allocations will tend to be relatively rigid, partly explaining the fact that in emerging economies, the primary balance tends to respond less to changes in debt loads, and the conduct of fiscal policy tends to not be "consistent with ensuring sustainability once public debt exceeds a threshold of 50 percent of GDP" (IMF 2003, p. 128).

- *Low levels of trade openness*. Typical of South Asian countries, Pakistan is a relatively closed economy, with the ratio of exports to GDP significantly lower than other emerging economies, such as Philippines and Vietnam, which are similarly rated by credit agencies (see Figure III.7 below).

Figure III.7. Trade Openness: Ratio of Exports to GDP, 1990–2003



40. **Based on Manasse and Roubini (2005), Pakistan would currently be classified as 'relatively safe'.** Notwithstanding the value of individual indicators, Manasse and Roubini (2005) indicates that it is often a particular combination of factors that determines the probability of a debt crisis. Given the current combination of a relatively low ratio of external debt to GDP (less than 50 percent), good reserve coverage of short-term debt (ratio less than 1.3), low ratio of external debt to public revenue (ratio greater than 2), and low inflation (rate less than 10.7 percent), Pakistan would not be considered at risk. This finding is consistent with the country's long-term credit ratings.

41. **In summary, these indicators suggest that, despite substantial improvements in recent years, some vulnerabilities exist.** The flow variables (overall balance and the primary gap) indicate substantially reduced vulnerabilities, but the stock variables (debt ratio, revenue ratio, rollover risk, and exchange rate risk) point toward the need for additional consolidation. Further reduction in the debt ratio (as targeted by the authorities), and active steps to manage the rollover and exchange rate risks, would help reduce Pakistan's public sector vulnerability in the coming years and contribute significantly toward improving the economic outlook from the already favorable position.

D. Medium-Term Public Debt Sustainability Analysis

42. **A full-fledged debt sustainability analysis, moving beyond the indicators-based analysis in the previous section, provides a more comprehensive look at the medium-term risks and outlook.** First, a baseline scenario is examined, incorporating an unchanged policy stance, including maintaining deficits at under 4 percent of GDP. Various risks to this scenario are assessed through a series of bound tests. Second, an alternative, low-growth scenario is prepared where growth reverts back to the average of the 1990s, incorporating assumptions of a slowdown in reforms and setbacks in the economy (as a result of a confluence of external and domestic developments).

43. **The baseline scenario assumes a combination of favorable external and domestic factors, as well as a continuation of prudent policies (Table III.5).** Growth averages over 6 percent per annum through 2009/10. Monetary policy keeps inflation under control, which averages around 6.5 percent. Real interest rates move into positive territory in line with higher investment demand. The authorities pursue a fiscal policy of maintaining the overall balance (excluding grants) at 3.8 percent of GDP. This is achieved by a small increase in tax revenues (resulting from continued tax policy and administration reforms) and judicious management of expenditures (while at the same time boosting capital and social spending). Large-scale privatization boosts external financing in 2005/06 and 2006/07, thus keeping debt-creating flows under check. Debt dynamics remain highly favorable, and the debt-to-GDP ratio continues to decline, although at a flatter trajectory than seen in the recent years.

Table III.5. Pakistan: Medium-Term Fiscal Framework, 2002/03–2009/10
(In percent of GDP, unless otherwise indicated)

	2002/03 Est.	2003/04 Est.	2004/05 Est.	2005/06 Proj.	2006/07 Proj.	2007/08 Proj.	2008/09 Proj.	2009/10 Proj.
Revenue and grants	17.4	14.9	14.0	13.2	13.4	13.4	13.5	13.6
Tax revenue	11.5	11.1	10.0	9.9	10.0	10.1	10.2	10.3
Of which: CBR	9.5	9.4	9.0	9.1	9.2	9.3	9.4	9.4
Nontax revenue	3.4	3.3	3.8	3.0	3.0	3.0	3.0	3.0
Grants	2.5	0.6	0.3	0.3	0.4	0.3	0.3	0.2
Expenditure	18.5	17.3	18.3	16.8	16.9	16.9	17.1	17.2
Current expenditure	16.6	14.0	14.4	13.2	13.1	13.1	13.2	13.3
Interest payments	4.3	3.5	3.2	3.0	3.2	3.1	3.1	3.1
Provincial	4.0	3.9	3.9	3.7	3.7	3.8	4.0	4.1
PSDP	2.7	2.9	3.5	3.6	3.8	3.8	3.8	3.9
Net-lending	-0.9	0.4	0.4	0.0	0.0	0.0	0.0	0.0
Statistical discrepancy	0.3	-0.6	-1.2	0.0	0.0	0.0	0.0	0.0
Overall balance								
Excluding grants	-3.8	-2.3	-3.3	-3.8	-3.8	-3.8	-3.8	-3.8
Including grants	-1.4	-1.8	-3.0	-3.6	-3.4	-3.5	-3.6	-3.6
Financing	1.4	1.8	3.0	3.6	3.4	3.5	3.6	3.6
External	-0.5	-0.7	1.7	3.5	2.1	1.6	1.5	1.4
Domestic	1.8	2.5	1.3	0.0	1.3	1.9	2.1	2.2
Memorandum items:								
Primary balance								
Excluding grants	0.5	1.2	-0.1	-0.8	-0.6	-0.7	-0.7	-0.7
Including grants	2.9	1.8	0.2	-0.6	-0.2	-0.4	-0.4	-0.5
Interest Payments/Revenue (ratio)	28.8	24.7	23.4	23.3	24.6	23.9	23.7	23.5
PRSP expenditure	3.5	3.8	4.6	4.2	4.4	4.5	4.6	4.7
Total government debt	74.3	67.9	61.1	53.3	50.8	48.7	47.0	45.6
Domestic	39.3	36.4	32.9	28.0	25.7	24.4	23.6	23.1
External	35.0	31.5	28.2	25.2	25.1	24.2	23.4	22.5
Implicit interest rate (in percent) 1/	5.9	5.4	5.4	5.7	6.6	6.7	6.9	7.2
Domestic	9.1	8.2	7.9	9.0	9.6	9.8	10.1	10.4
External	2.5	2.1	2.2	2.4	2.9	3.2	3.4	3.6
Nominal GDP (billions of PRs)	4,823	5,533	6,548	7,659	8,715	9,840	11,058	12,426

Sources: Pakistani authorities; and Fund staff estimates and projections.

1/ Calculated by dividing interest expenditure by the outstanding debt stock at the end of the previous period.

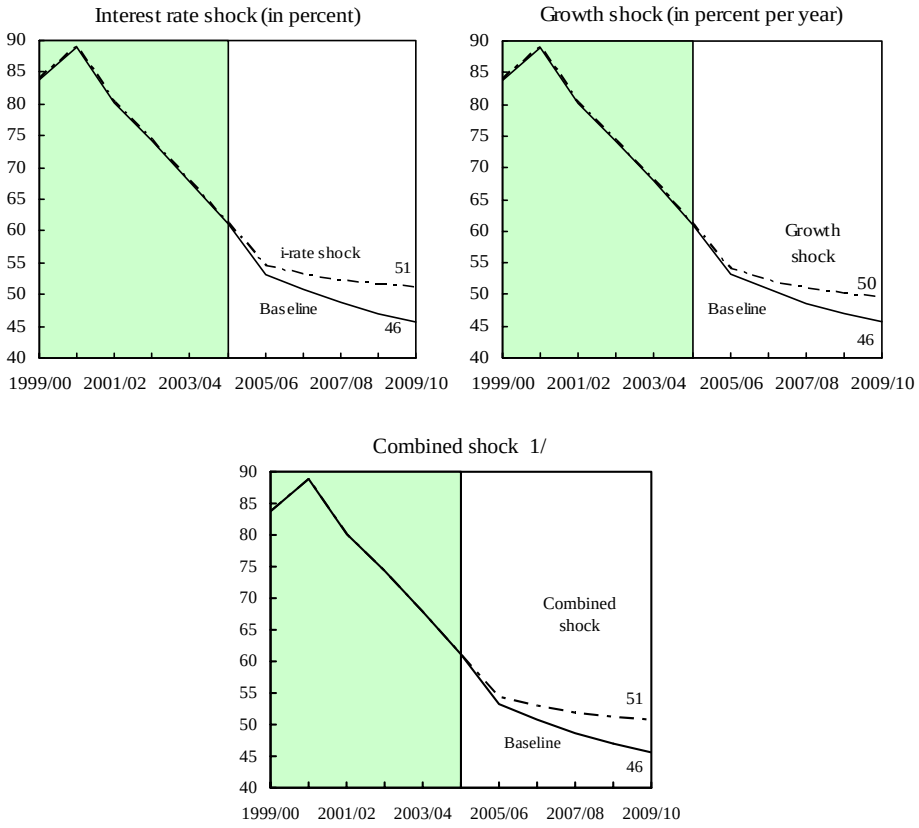
44. **To achieve the FRL's requirement of reducing debt by 2.5 percent of GDP each year, the primary balance would have to improve gradually.** Estimates show that the overall deficit (excluding grants) would have to be steadily reduced to 2.5 percent of GDP by 2009/10 (corresponding to a primary surplus of about 0.5 percent of GDP) to achieve the debt-reduction strategy laid out in the FRL. The authorities have noted that they intend to reduce the overall fiscal deficit to about 3.3 percent of GDP by 2009/10.

45. **The bound tests reveal only limited risks to the outlook.** A one-half standard deviation (derived from 10-year historical data) real interest rate shock affects the debt path, but still leaves it on a downward slope. The same is true for a growth shock that reduces growth by one-half standard deviation in 2005/06 and 2006/07.

46. **A combination of several shocks do not appear to pose major sustainability risks either (Table III.6, and Figures III.8 and III.9).** A permanent ¼ standard deviation shock applied to real interest rate, growth rate, and primary balance affects the debt path no more than seen in the bound tests discussed in the above paragraph. A large real exchange rate shock however is seen to impact the debt path substantially. A one-time real depreciation of 30 percent in the dollar value of the Pakistani rupee raises the debt ratio substantially, through the ratio returns to a downward path subsequently, reaching the 2004/05 level by the

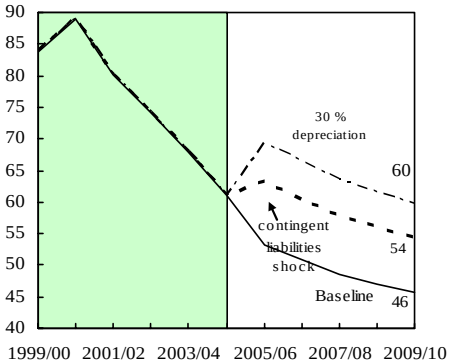
end of the five-year forecasting period. A 10 percent of GDP shock to contingent liabilities occurring in 2005/06, in contrast, appears to pose little risk to the debt path.

Figure III.8. Impact of Interest Rate and Growth Shocks to the Debt Path, 1999/2000–2009/10



1/ Permanent 1/4 standard deviation shock applied to real interest rate, growth rate, and primary balance.

Figure III.9. Real Depreciation and Contingent Liabilities Shock, 1999/2000–2009/10 1/



1/ One-time real depreciation of 30 percent and 10 percent of GDP shock to contingent liabilities occur in 2005/06, with real depreciation defined as nominal depreciation (measured by percentage fall in dollar value of local currency) minus domestic inflation (based on GDP deflator).

Table III.6. Public Sector Debt Sustainability Framework, 2005/06–2009/10

	History		Projections				
	10-Year Average	10-Year Standard Deviation	2005/06	2006/07	2007/08	2008/09	2009/10
Key Macroeconomic and Fiscal Assumptions							
Real GDP growth 1/	4.1	2.0	7.0	6.0	6.0	6.0	6.0
Average real interest rate 2/	0.3	4.1	-3.5	-0.4	0.5	1.3	1.5
Inflation rate 3/	7.0	3.8	9.3	7.3	6.5	6.0	6.0
Growth of real primary spending 4/	3.7	9.7	6.2	5.2	7.3	7.1	6.9
Primary deficit	-1.1	1.5	0.6	0.2	0.4	0.4	0.5
Public sector debt			53.3	50.8	48.7	47.0	45.6
Of which: foreign-currency denominated			25.6	25.4	24.5	23.6	22.5
A. Alternative Scenarios			**Stress Tests for Public Debt Ratio**				
A1. Key variables are at their historical averages in 2004/05-09/10			55.2	52.8	50.0	47.2	44.6
A2. No policy change (constant primary balance) in 2004/05-09/10			52.3	49.9	47.2	45.0	43.0
B. Bound Tests							
B1. Real interest rate is at baseline plus one half standard deviations			54.5	53.2	52.2	51.6	51.2
B2. Real GDP growth is at historical average minus one half standard deviations in 2005/06 and 2006/07			53.9	52.1	50.8	50.0	49.6
B3. Primary balance is at historical average minus one half standard deviations in 2006 and 2007			54.0	52.2	50.8	49.9	49.1
B4. Combination of B1-B3 using one standard deviation shocks			54.4	53.0	51.9	51.2	50.8
B5. One time 30 percent real depreciation in 2005/06			69.4	66.3	63.7	61.6	59.8
B6. 10 percent of GDP increase in other debt-creating flows in 2005/06			63.3	60.4	58.0	56.1	54.4

Sources: Pakistani authorities; and Fund staff estimates and projections.

1/ In percent.
2/ Nominal rate minus change in GDP deflator, in percent.
3/ GDP deflator, in percent.
4/ Deflated by GDP deflator, in percent.

47. **An alternative, low-growth scenario is also assessed (Table III.7).** The scenario examines the risks of a policy setback and a less favorable external environment. In this scenario, growth falls to about 4.2 percent per annum, as capacity constraints are not addressed and inflation is not tackled forcefully. Interest rates rise, and confidence in the economy wanes owing to a lack of progress in structural reform. Fiscal policy is geared toward maintaining expenditure at an ambitious level, but revenue efforts fail to keep pace with the rising spending. Higher interest rates also push up interest costs.

48. **As a result, the fiscal deficit worsens gradually, reaching 5 percent of GDP by 2009/10.** The debt path flattens, and the economy's vulnerability to shocks increase. A comparison of the debt path between the baseline and the alternative scenario illustrates the risks associated with the latter scenario (Figure III.10).

Figure III.10. Debt path Under Baseline and Low Growth Scenarios, 2004/05–2009/10
(In percent of GDP)

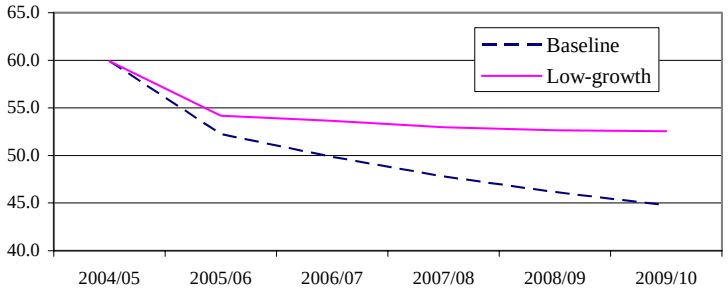


Table III.7. Pakistan: Low-Growth Medium-Term Fiscal Framework, 2002/03–2009/10
(In percent of GDP, unless otherwise indicated)

	2002/03 Est.	2003/04 Est.	2004/05 Est.	2005/06 Proj.	2006/07 Proj.	2007/08 Proj.	2008/09 Proj.	2009/10 Proj.
Revenue and grants	17.4	14.9	14.0	13.3	13.4	13.4	13.5	13.5
Tax revenue	11.5	11.1	10.0	9.9	10.0	10.0	10.1	10.2
Of which: CBR	9.5	9.4	9.0	9.1	9.2	9.2	9.3	9.3
Nontax revenue	3.4	3.3	3.8	3.1	3.0	3.0	3.0	3.0
Grants	2.5	0.6	0.3	0.3	0.4	0.3	0.3	0.3
Expenditure	18.5	17.3	18.3	17.3	17.7	17.8	18.0	18.3
Current expenditure	16.6	14.0	14.4	13.6	13.9	14.0	14.2	14.4
Interest payments	4.3	3.5	3.2	3.2	3.6	3.7	3.7	3.8
Provincial	4.0	3.9	3.9	3.8	3.7	3.8	4.0	4.1
PSDP	2.7	2.9	3.5	3.6	3.7	3.7	3.8	3.9
Net lending	-0.9	0.4	0.4	0.0	0.0	0.0	0.0	0.0
Statistical discrepancy	0.3	-0.6	-1.2	0.0	0.0	0.0	0.0	0.0
Overall balance								
Excluding grants	-3.8	-2.3	-3.3	-4.3	-4.7	-4.7	-4.8	-5.0
Including grants	-1.4	-1.8	-3.0	-4.0	-4.3	-4.4	-4.5	-4.7
Financing	1.4	1.8	3.0	4.0	4.3	4.4	4.5	4.7
External	-0.5	-0.7	1.7	3.7	2.3	2.1	1.6	1.8
Domestic	1.8	2.5	1.3	0.3	2.1	2.2	2.9	2.9
Memorandum items:								
Primary balance								
Excluding grants	0.5	1.2	-0.1	-1.1	-1.1	-1.0	-1.1	-1.2
Including grants	2.9	1.8	0.2	-0.8	-0.7	-0.7	-0.8	-0.9
Interest payments/revenue (ratio)	28.8	24.7	23.4	24.4	27.7	28.0	28.5	28.8
PRSP expenditure	3.5	3.8	4.6	4.4	4.6	4.7	4.8	4.9
Total government debt	74.3	67.9	61.1	55.2	54.6	53.9	53.6	53.4
Domestic	39.3	36.4	32.9	29.2	28.1	27.4	27.5	27.7
External	35.0	31.5	28.2	26.0	26.5	26.5	26.0	25.7
Implicit interest rate (in percent) 1/	5.9	5.4	5.4	5.9	6.9	7.1	7.3	7.5
Domestic	9.1	8.2	7.9	9.5	10.2	10.5	10.8	10.9
External	2.5	2.1	2.2	2.4	2.9	3.1	3.4	3.5
Nominal GDP (billions of PRs)	4,823	5,533	6,548	7,430	8,248	9,133	10,083	11,131

Sources: Pakistani authorities; and Fund staff estimates and projections.

1/ Calculated by dividing interest expenditure by the outstanding debt stock at the end of the previous period.

E. Conclusion

49. **Using a number of indicators, as well as two medium-term scenarios, this chapter indicates that vulnerabilities have been reduced substantially in recent years.** A continuation of existing policies would ensure a downward debt trajectory, achieving a further reduction in risks. Pakistan's debt ratio, however, remains moderately high, and its narrow revenue base reduces fiscal flexibility given the relatively high debt service costs. While interest and rollover risks appear manageable, a large exchange rate depreciation would adversely affect the debt profile. Overall, policies geared toward further debt reduction in the medium term, anchored by the recently passed FRL, would ensure a further reduction in vulnerabilities.

References

Reinhart, C., K. Rogoff, and M. Savastano, 2003, "Debt Intolerance." *Brookings Papers on Economic Activity* 1:2003, pp. 1-74.

International Monetary Fund, 2003, *World Economic Outlook: September 2003—Public Debt in Emerging Markets*, (Washington: International Monetary Fund).

Manasse, P. and N. Roubini, 2005, "Rules of Thumb for Sovereign Debt Crises", IMF Working Paper 05/42 (Washington: International Monetary Fund).

IV. Banking System and Stock Market Update[15]

A. Introduction

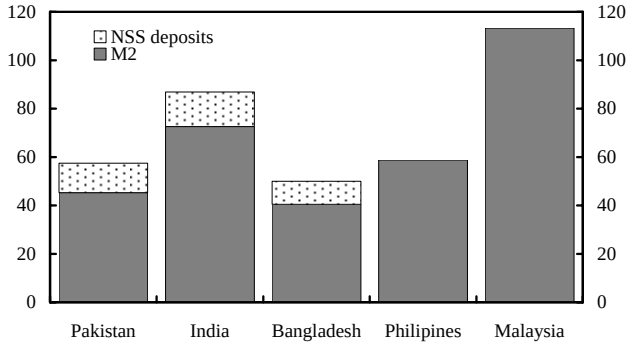
50. **The 2004 Financial System Stability Assessment (FSSA) attested to the turnaround in Pakistan's banking system** (IMF Country Report No. 04/215). Seven years of restructuring, recapitalization, and privatization had by mid-2004 transformed the ownership structure, risk management, profitability, and reach of the system, allowing asset quality to improve and credit to expand into previously underserved segments of the economy. Nonetheless, the FSSA cautioned that rapid credit growth "could be problematic if sustained."

51. **This chapter updates some of the FSSA findings and tracks developments over the last 1½ years.** Lending activity appears to have approached "boom" thresholds in the period since the FSSA, and the stock market underwent a contained boom-bust cycle in early 2005. Despite this, the banking system has continued to strengthen on an aggregate level, although trends at a few individual banks underscore the need for continued supervisory vigilance. Most financial soundness indicators (FSIs) remain on an improving trajectory. Nevertheless, bank-by-bank stress test results suggest that a few large banks are vulnerable to some shocks. The authorities have continued implementing their financial sector reform agenda and followed-up on FSSA recommendations. Development needs remain in the nonbank financial sector. On the stock market, several aspects still fall short of international good practice, as discussed in the FSSA, but ongoing reforms are moving in the right direction.

B. Financial Sector Overview

52. **Pakistan remains a moderately intermediated economy with pervasive development needs that call for further financial deepening.** Viewed through this prism, the rapid credit expansion of recent years is a welcome development. The spread of financial intermediation, in turn, has been facilitated by a wide-ranging, largely home-grown financial sector reform program, appropriately focused on the banking system. At end-2003, the latest year for which sector-wide data are available, total assets of the consolidated financial sector—defined here to include the Federal government's direct deposit-taking operations through its National Savings

Figure IV.1. Pakistan: Money Supply, 2005 1/
(In percent of GDP)



Source: National authorities, and Fund staff calculations.
1/ Latest available data.

[15] Prepared by Ashok Vir Bhatia (MFD) with contributions from Axel Schimmelpfennig (MCD).

Schemes (NSS)—stood at the equivalent of about 70 percent of GDP (Table IV.1). Money supply (cash, bank deposits, and NSS liabilities) amounted to 57 percent of GDP at mid-2005, compared with 87 percent for India (at end-March, including its Small Savings Schemes, which are essentially the same as Pakistan's NSS; Figure IV.1).

Table IV.1. Pakistan: Financial Sector Assets, 2003

	Billions of Pakistani rupees	Percent of GDP	Percent share
Financial sector	3,922	70.9	100.0
NSS 1/	844	15.3	21.5
Banking system 2/	2,538	45.9	64.7
Commercial banks	2,438	44.1	62.2
Public sector commercial banks	959	17.3	24.5
Local private banks	1,212	21.9	30.9
Foreign banks	267	4.8	6.8
Specialized banks	100	1.8	2.5
Development finance institutions	79	1.4	2.0
Microfinance banks	4	0.1	0.1
Nonbank finance companies	166	3.0	4.2
Leasing companies	45	0.8	1.1
Investment banks	25	0.5	0.6
Housing finance companies	21	0.4	0.5
Mutual funds	75	1.4	1.9
Modarabas 3/	14	0.3	0.4
Pension funds	150	2.7	3.8
Insurance companies	126	2.3	3.2
General insurance companies	30	0.5	0.8
Life insurance companies	96	1.7	2.4

Sources: SBP; SECP; and Bank-Fund staff estimates.

1/ Direct deposit-taking by the Federal government. Figures are for total liabilities, not assets.
2/ Consolidates operations of foreign branches of domestic banks.
3/ Islamic industrial finance companies.

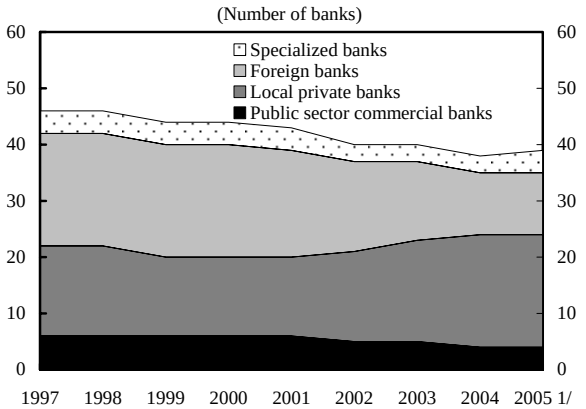
53. **As in most developing countries, the financial sector is dominated by banks**. Nonetheless, nonbank financial institutions play a significant supporting role. The banking system, which includes commercial banks and four small, state-owned specialized banks, accounts for approximately two-thirds of total financial sector assets. The banking system, as well as a small number of development finance institutions and microfinance banks, is regulated by the State Bank of Pakistan (SBP). The NSS account for another one-fifth of the financial sector and compete directly with banks for deposits. The remainder of the financial sector, including nonbank finance companies, pension funds, and insurance providers, is regulated by the Securities and Exchange Commission of Pakistan (SECP).

54. **Eight years of reforms have transformed Pakistan's banking system**. Before reforms began in 1997, the system was dominated by chronically loss-making public sector commercial banks weighed down by substantial nonperforming loans (NPLs). Today,

following a period of sustained restructuring, recapitalization, and privatization, the core of the system is made up of local private banks; assets are growing robustly; overall NPLs are falling even in nominal terms; and profitability is at record levels. The decline in the NPL ratio since 1997 has been helped by recovery drives, promulgation of a foreclosure law, restructuring of loans, issuance of write-off guidelines, and the takeover of some large NPLs by an asset management company (corporate and industrial restructuring corporation). Moreover, the flow of new NPLs has come down significantly. Led by consumer lending, credit is expanding into previously underserved segments of the economy without (thus far) undermining asset quality, and capital is growing faster than risk-weighted assets.

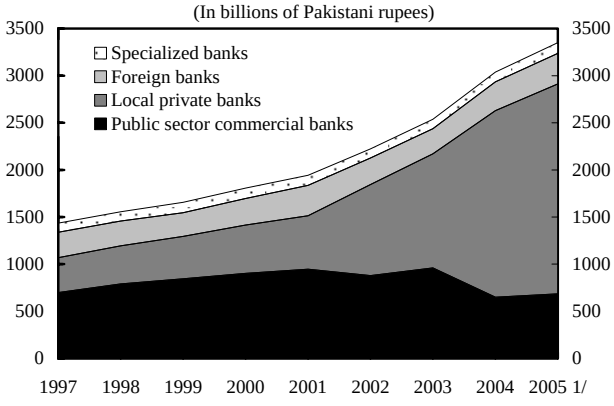
55. **The ownership structure of the banking system has changed radically and competition has increased** (Figures IV.2–IV.3; Table IV.2). Following the privatization of United Bank Ltd. in 2002 and Habib Bank Ltd. in 2004, the market share (by assets) of public sector commercial banks had by end-2004 fallen to 21 percent, most of which was with the National Bank of Pakistan (the largest bank in the system). Between 1997 and 2004, the market share of local private banks increased from 26 percent to 65 percent, reflecting the two large privatizations, several acquisitions of foreign banks, and more rapid growth overall. At the same time, the market share of the five largest banks in the system dwindled from 62 percent to 56 percent. By assets and on several other measures, the market share of the next five banks increased marginally, and that of the remainder of banks by a more substantial amount.

Figure IV.2. Pakistan: Banking System Structure, 1997–2005



Source: Pakistani authorities.
1/ End-June.

Figure IV.3. Pakistan: Banking System Assets, 1997–2005



Source: Pakistani authorites.
1/ End-June.

Table IV.2. Pakistan: Banking System Concentration,1997–2004 1/

(Percentage shares)

	1997	2004
Total assets	100.0	100.0
Banks 1–5	62.0	56.0
Banks 6–10	15.0	17.0
Other banks	23.0	27.0
Gross loans	100.0	100.0
Banks 1–5	60.4	53.8
Banks 6–10	16.7	17.4
Other banks	22.9	28.8
Customer deposits	100.0	100.0
Banks 1–5	67.0	59.9
Banks 6–10	11.3	14.4
Other banks	21.7	25.7
Net interest income	100.0	100.0
Banks 1–5	48.1	54.0
Banks 6–10	28.1	18.2
Other banks	23.8	27.8
Noninterest income	100.0	100.0
Banks 1–5	61.5	59.0
Banks 6–10	10.0	18.8
Other banks	28.5	22.2
Net income after tax	100.0	100.0
Banks 1–5	130.3	58.5
Banks 6–10	-10.8	21.8
Other banks	-19.5	19.8

Source: SBP.

1/ Commercial and specialized banks; consolidates operations of foreign branches of domestic banks. Banks ranked by total assets.

56. **The system has been expanding rapidly since 2002**. Reflecting improved capitalization and the macroeconomic turnaround, the average annual rate of growth of total assets doubled from 8 percent in 1998–2001 to 16 percent in 2002–04. With the asset growth of the public sector commercial banks and foreign banks fluctuating from year to year, the expansion has consistently been spearheaded by the local private banks, which have emerged as the most dynamic group in the system. Asset growth has closely been tracked by deposit growth in almost every year of the period, and the share of net loans (gross loans less allowances) in total assets has been rising since 2003.

C. A Credit Boom?

57. **Credit growth in Pakistan has been rapid over the last two years but may not necessarily constitute a credit boom.** Rapid credit growth can stem from financial deepening, cyclical upturns, or credit booms (Box IV.1). While there are some indications that a boom may be evolving, there are also fundamental reasons why credit should be growing rapidly without constituting too much risk. Strict adherence to prudential standards by banks and careful oversight by supervisors will be crucial to ensure that the momentum remains benign.

Box IV.1. Reasons for Rapid Credit Expansion (IMF, 2004)

- *Financial deepening*. Financial intermediation moves in tandem with economic development and spurs economic growth. Thus, credit expansion can exceed economic growth, in particular as part of growth accelerations.
- *Cyclical upturns*. Credit can also expand more rapidly than growth during an upturn because firms' need for investment and working capital fluctuates with the cycle.
- *Credit booms*. A credit expansion can become unsustainable if it is no longer based on future fundamentals. The financial accelerator mechanism can lead to such booms when shocks to asset prices are amplified by balance sheet effects. Balance sheet effects can also arise due to an increase in the relative price of nontradables, for example, in response to capital inflows.

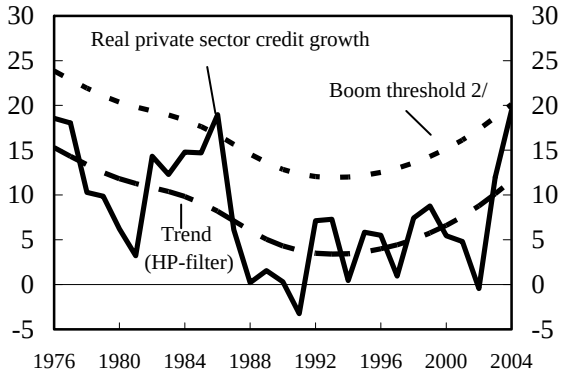
58. **International Monetary Fund (2004) discusses credit booms and assesses their risk for macroeconomic stability.** A credit boom is defined as an episode where real credit growth exceeds the standard deviation of credit fluctuations around an HP-filtered trend by a factor of 1.75. In a cross-section of emerging markets, such booms are typically preceded by episodes of high real credit growth, in excess of 17 percent. The study concludes that credit booms pose significant risks because they are typically followed by sharp economic downturns and financial crises. A tightening of monetary policy is suggested to restrain credit growth and excessive demand, even if inflationary pressures are not building. However, framing an appropriate policy response is complicated by the fact that credit booms are not easily identified when they are happening.

59. **Private sector credit is exhibiting some characteristics of a boom.** Credit to the private sector grew by 19 percent in real terms in 2004 and has remained strong in the first half of 2005. Real private sector credit growth also touched the threshold for credit booms as defined above, and seems poised to exceed it in 2005 (Figure IV.4). Moreover, there are other "telltale" signs that typically accompany credit booms (IMF, 2004):

- Investment has increased according to several indicators;
- The current account shifted into deficit in 2004, after being in surplus since 2001;
- The 12-month inflation rate reached 11 percent in April 2005 (before easing to 8.4 percent in August);

- The stock market surged by 65 percent in the first 2½ months of 2005, taking price-earnings (P/E) ratios to as high as 20 (before a large correction in March);
- Real estate prices reportedly increased by 70 percent in the six months to March 2005 (but have remained flat since); and
- The share of net private sector credit in bank assets increased to over 50 percent in 2004 (and to more than 65 percent at some banks) and has continued to climb in 2005, from about 40 percent in 2002.

Figure IV.4. Pakistan: Private Sector Credit Growth, 1976–2004
(In percent) 1/



Sources: International Financial Statistics; and Fund staff calculations.
1/ Change in average annual credit to the private sector deflated by the period average CPI.
2/ HP-filtered trend plus the standard deviation of the cyclical fluctuation around the trend multiplied by 1.75.

60. **Developments in Pakistan bear some semblance to typical crisis anatomies, but are more likely to reflect a growth takeoff** (Box IV.2). The current economic boom was triggered by a political and policy change that restored confidence, followed by an easing of monetary policies and unexpectedly high private transfer that resulted in ample liquidity. Expectations became positive as economic growth accelerated, and the economy started to heat up—as witnessed, for example, by the acceleration in inflation, the asset price boom, and surging imports. But, put in historical perspective, the boom phase has not lasted very long, and the orderly correction of the Karachi Stock Exchange (KSE) in late March 2005 had virtually no impact on the economy and may have prevented a more severe bursting of a bubble later on.

Box IV.2. Crisis, Volatility, and Long-Run Growth

Kindleberger (2000) sketches the "anatomy of a typical crisis". At the outset, there is an exogenous shock that results in a displacement and alters the outlook of economic agents. In response, agents try to take advantage of new opportunities. A boom commences, which is fed by an expansion of bank credit that enlarges the money supply. Eventually, some agents will engage in speculation, trying to benefit purely from rising prices. At some stage, insiders start to get out of the market, taking their profits. At the peak, a specific signal occurs that precipitates the crisis, for example, a bank failure. Agents try to liquidate their positions, which can become disorderly and turn into an outright panic or run.

Similar precrisis developments are identified in other studies. Allen and Gale (1999) identify financial liberalization and the ensuing credit expansion as the exogenous shock that leads to a displacement. Kaminski and Reinhart (1996, 1999) find that most crises are preceded by financial liberalization and credit expansion, followed by an average rise in equity prices of 40 percent per annum and a significant increase in real estate prices. An appreciating real exchange rate tends to precede an external crisis.

While bubbles and financial crises have severe ramifications, they may also be associated with strong growth performance over the long run. Ranciere, Tornell, and Westermann (2005) find that countries choosing a riskier growth path that involves credit booms and crises grow faster over the long run than countries that choose a less volatile growth path. As an example, they cite Thailand and India. The authors identify financial liberalization as triggering episodes of above-average growth that often end in crisis. However, the output gains during the high growth period more than offset the losses during the crisis.

61. **While there are some warning signs, there are also fundamental developments that warrant strong credit growth.** The recent credit expansion reflects financial deepening and a base effect. Reforms have yielded a more healthy banking system that is now well placed to lift financial intermediation above the low levels that had prevailed previously. In addition, with real credit growth having fallen to zero in 2002, the subsequent procyclical acceleration of credit as the economy rebounded from crisis was boosted by a base effect.

62. **The broad-based nature of the credit expansion also suggests that vulnerabilities may be contained.** The composition of net commercial credit by debtor shows credit to most sectors having grown at double digit rates since 2003, with exceptionally high credit growth witnessed in telecommunications, construction, and services (Table IV.3). In addition, consumer financing is growing by more than 100 percent, albeit from a very low base. The composition of net commercial credit by originating institution shows a similarly even distribution across the main bank groupings, with the notable exception of the specialized banks (which are mostly in workout mode). These developments suggest that the banking system may not have become more vulnerable to shocks in any specific sector and that risks are not likely to be concentrated in specific groups of banks.

Table IV.3. Pakistan: Banking System
Net Commercial Credit, 2003–05 1/
(Annual percentage change)

	2003	2004	2005 2/
By type of bank:			
Banking system	28.9	34.7	32.0
Commercial banks	36.3	43.7	35.7
Public sector commercial banks	49.9	-29.6	39.9
Local private banks	45.3	86.0	35.6
Foreign banks	-20.9	51.5	28.9
Specialized banks	-3.3	-20.4	-0.8
By economic sector:			
All sectors	28.9	34.7	32.0
Agriculture and fishing	16.1	7.1	18.8
Mining and quarrying	160.4	-34.0	-30.4
Manufacturing	42.1	27.7	27.8
Of which: textiles and garments	N.a.	N.a.	30.6
Ship breaking and waste, scrap, junk, etc.	-7.2	75.7	37.3
Construction	20.2	48.2	71.7
Electricity, gas, water, and sanitation	12.9	86.9	52.4
Commerce	-0.8	67.2	40.6
Transport, storage, and communications	13.5	106.7	88.9
Of which: telecommunications	112.6	137.6	195.4
Services	-22.1	60.2	34.1
Other	10.0	105.4	60.4

Source: SBP.

1/ Gross domestic loans, less specific allowances, to nonfinancial public sector enterprises and the nonfinancial private sector, excluding individuals.
2/ End-June.

D. Financial Soundness Indicators

63. **Although credit growth has approached boom thresholds, there are no signs at present of compromised lending standards.** Between mid-2004 and mid-2005, NPLs have fallen by 3 percent in nominal terms, even as total gross domestic loans have increased by 34 percent. The overall NPL ratio has declined by 4 percentage points, to 10 percent (Table IV.4). Importantly, the NPL ratio on credit to the corporate sector has declined by 6 percentage points, to 9 percent, underscoring the improvements in credit controls and risk management skills and practices at banks. Even the historically troubled area of agricultural credit has recorded a 5 percentage point improvement in asset quality, with its NPL ratio falling to 37 percent as of mid-2005. The one notable exception to the generally positive trajectory has been credit to small or medium enterprises (SMEs), where the NPL ratio increased by 4 percentage points in the 12 months to mid-2005, to 13 percent.

Table IV.4. Pakistan: Banking System Performing and Nonperforming Loans, 2004–05 1/

	June 2004		June 2005	
	Loans (% share)	NPL ratio (%)	Loans (% share)	NPL ratio (%)
Gross domestic loans	100.0	14.0	100.0	10.1
Commercial credit	80.1	16.3	77.0	12.5
Corporate sector	54.9	14.6	52.3	8.9
SMEs	17.2	9.3	17.4	13.1
Agricultural production	8.0	42.2	7.3	37.0
Consumer finance	7.6	1.0	11.4	0.9
Credit card advances	0.8	3.6	1.1	1.4
Automobile loans	2.5	0.6	3.7	0.7
Consumer durables loans	0.1	7.1	0.1	6.2
Mortgage loans	0.6	0.0	1.5	0.3
Personal loans and other	3.6	0.6	5.1	1.0
Commodity operations	6.7	1.2	7.8	1.2
Staff loans 2/	2.9	1.3	2.2	1.4
Other 3/	2.7	28.3	1.6	16.9

Source: SBP.

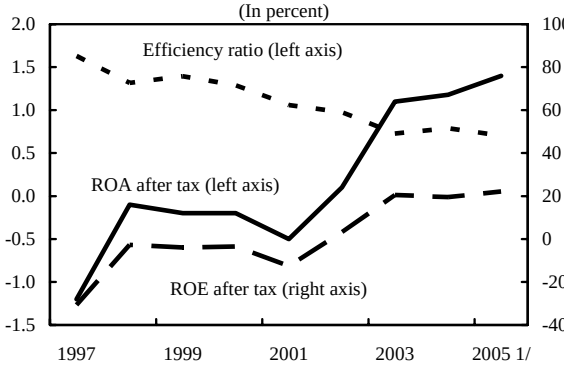
1/ Domestic loans only.
2/ Loans by banks to their own employees.
3/ Includes loans to the Federal and provincial governments.

64. **Asset quality has benefited from a sectoral shift in loan composition.** Even as the NPL ratio on consumer finance has remained at or below 1 percent, the share of consumer finance in total gross loans has surged from 2 percent at end-2002 to 11 percent at mid-2005, a staggering average annual rate of growth of 142 percent. Almost half of consumer financing is in personal loans (mostly secured against salaries) and another one-third is in automobile loans (typically with 15–20 percent down payment, monthly installments, and a recovery rate of about 99 percent). The remainder of consumer finance is in mortgage loans (with down payments of as little as 15 percent, floating rates, and maturities of up to 10 years) and credit card advances. The NPL ratio on credit card advances had risen to 4 percent in mid-2004 but has fallen subsequently as customers began to find that delinquencies obstructed their access to other categories of credit. Banks report that consumer durables loans, as well as loans for two-wheeler vehicles, have grown less rapidly because of their higher ratios of administration cost to loan value.

65. **Profitability has surged as a result of loan growth and efficiency gains, although applicable taxes remain high.** In perhaps the single most remarkable indication of the restructuring of the Pakistani banking system, the ratio of noninterest expenses to total gross income (the “efficiency ratio”) has fallen from 85 percent in 1997 to 48 percent at mid-2005 (Figure IV.5). Before-tax returns on average assets (ROA) and average equity (ROE) reached a very healthy 2.3 percent and 35 percent, respectively, in the second quarter of 2005, while

after-tax ROA and ROE reached 1.4 percent and 22 percent. The wide differential between pre- and post-tax profitability reflects a discriminatory corporate income tax rate (41 percent for banks vs. 35 percent for other corporations—although the differential has been reduced over the last three years and will be eliminated in 2006) and the non-tax deductibility of loan-loss provisions (a departure from international best practice, as pointed out by the FSSA).[16]

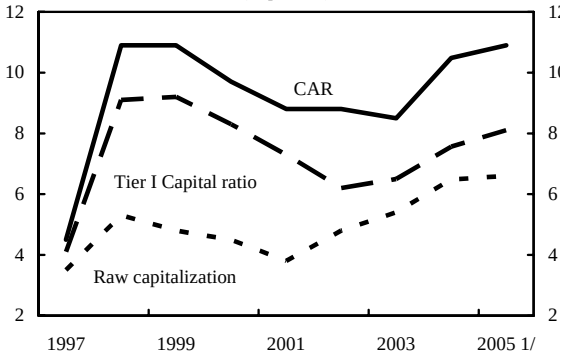
Figure IV.5. Pakistan: Banking System Efficiency and Profitability, 1997–2005
(In percent)



Source: Pakistani authorities.
1/ End-June

66. **Strong profitability and capital injections have buffered the system against unexpected losses.** In 2004, for example, Allied Bank Ltd. received a cash injection of PRs 14.2 billion ($238 million) from its shareholders. The "raw" capitalization ratio (capital and surplus to total assets) for all banks increased from 3.5 percent in 1997 to 6.6 percent at mid-2005 (Figure IV.6). More impressive still was the improvement in the capital adequacy ratio (CAR, total regulatory capital to risk-weighted assets), which increased from 4.5 percent to 10.9 percent during the same period, with only modest reliance on subordinated debt, unrealized gains on investments, and other "supplementary" capital. Capital adequacy guidelines have been progressively tightened: Basel I norms were instituted in 1997; risk-weighting misclassifications by banks were corrected in 2003; and country risk guidelines as well as capital charges for market risk were introduced in 2004.[17]

Figure IV.6. Pakistan: Banking System Capitalization, 1997–2005
(In percent)



Source: Pakistani authorities.
1/ End-June

[16] SBP proposals to make provisions tax deductible have met with longstanding opposition from the Central Board of Revenue.

[17] The introduction of country risk guidelines and capital charges for market risk in late 2004 filled two important lacunae identified by the FSSA assessment of Pakistan's compliance with the *Basel Core Principles of Effective Banking Supervision.*

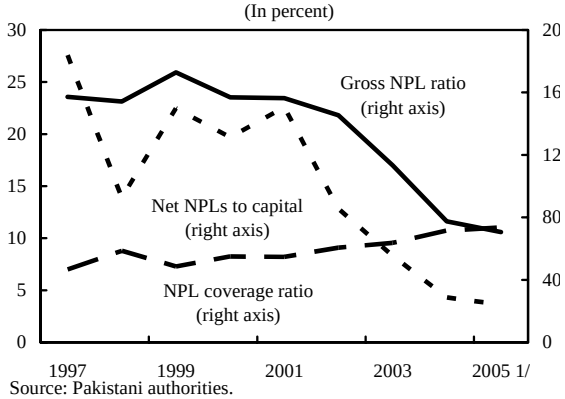
Box IV.3. Pakistan: Absolute Capital Requirements and Provisioning Norms

The SBP has used absolute capital requirements as a tool to influence system structure. The minimum paid-up capital requirement for banks has been increased from PRs 1 billion to PRs 1.5 billion with effect from end-2004 and PRs 2 billion ($34 million) by end-2005. Of the 39 banks in operation at mid-2005, nine had yet to achieve the PRs 1.5 billion figure. Despite this, the SBP has announced its intention to further raise the capital floor, to the rupee equivalent of $100 million by around 2009, in order to weed out those small banks that it views as providing few banking services while imposing a significant regulatory burden. It should be noted, however, that the absolute capital floor in the Euro zone, often viewed as a benchmark, is only €5 million; that small banks can be a key source of innovation; and that mandatory equity injections risk leaving banks with a choice between depressed ROE or rapid (often excessively rapid) credit growth to lift ROA.

Specific provisioning requirements remain lenient. Minimum criteria for NPL recognition are adequate, with loans required to be classified as "other assets especially mentioned" ("OAEM") when interest or principle falls 90 days past due. "OAEM" do not, however, carry specific provisioning requirements. "Substandard," "doubtful," and "loss" loans do carry such requirements, but a medium- or long-term commercial credit, for instance, need not be classified as "loss" until 3 years past due. International good practice would suggest that loans be classified as "substandard", "doubtful", and "loss" at 90 days, 180 days, and 1 year past due, respectively. In the current environment of falling NPLs and record profitability, banks are well positioned to absorb tighter specific provisioning requirements, which in turn would better prepare them for possible future problems. Secured and unsecured consumer financing carry cautious general provisioning requirements of 1.5 percent and 5 percent, respectively.

67. **Loan-loss allowances have also grown strongly.** Prudential guidelines laying out minimum standards for the classification and provisioning of commercial credit, SME credit, and consumer finance were issued in 2003. The guidelines include objective criteria governing the forced sale value of collateral, with a three-year phase-in period. Overall, the NPL coverage ratio (total allowances to gross NPLs) increased from 47 percent in 1997 to 74 percent at mid-2005, while the ratio of net NPLs (gross NPLs less allowances) to capital and surplus declined from 184 percent to 24 percent (Figure IV.7). As of end-2004, no less than 87 percent of the commercial banks' gross NPLs consisted of fully provided loans classified as "loss" (banks show a reluctance to write off "loss" loans and thereby risk extinguishing legal claims, and are allowed to keep such loans on their balance sheets for up to three years).

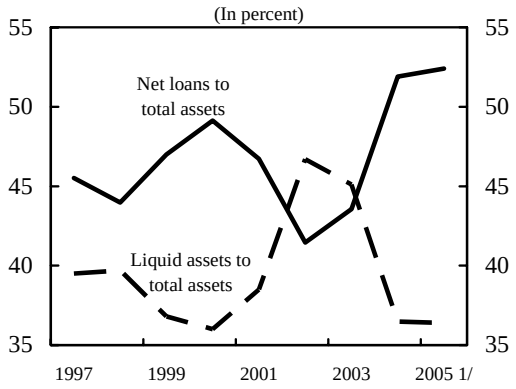
Figure IV.7. Pakistan: Banking System Asset Quality, 1997–2005
(In percent)



Source: Pakistani authorities.
1/ End-June

68. **As loans have expanded, liquidity has tightened.** The ratio of net loans to total assets increased from 46 percent in 1997 to 52 percent at mid-2005 (Figure IV.8). As a natural corollary of the portfolio reallocation in favor of loans, the ratio of liquid assets (cash and balances with the SBP and other banks, call money and repurchase lending, and investments in government securities) to total assets fell from 40 percent to 36 percent during the period.[18] The tightening of liquidity thus far is unlikely to be problematic, especially given the relatively deep interbank "call money" market in Pakistan.

Figure IV.8. Pakistan: Banking System Liquidity, 1997–2005



Source: Pakistani authorities.
1/ End-June

69. **In sum, FSI aggregates for the banking system point to impressive and ongoing improvements in capital adequacy, asset quality, and earnings** (Table IV.5). Indeed, the number of banks with CARs below the minimum required level of 8 percent had by end-2004 fallen to just one, from five only three year earlier. The specialized banks as a group are an exception to the rule, however, with the Industrial Development Bank of Pakistan remaining in a negative net worth position pending restructuring and privatization.

E. Stress Test Methodology and Results

70. **Stress tests complement the FSI-based findings.**[19] Stress tests were conducted to assess whether improving FSI aggregates mask any erosion of capital adequacy at individual large banks such that they would be less prepared to absorb (fairly severe) potential shocks. The exercise was conducted based on the FSSA methodology, with bank-by-bank data for September 2003 (the FSSA data set) and end-2004 (Table IV.6). Bank-specific data were confined to the 12 largest commercial banks (by assets), with the specialized banks excluded from the exercise. Six shocks were simulated (Box IV.4).

[18] Government securities in banks' held-to-maturity accounts are eligible for repurchase with the SBP and are therefore counted as liquid assets.

[19] The SBP has integrated the FSSA stress testing methodology into its supervisory toolkit. Univariate and multivariate stress tests are conducted quarterly, with summary findings published in the SBP's "Quarterly Performance Review of the Banking System".

Table IV.5. Pakistan: Selected Banking System FSIs for Middle East and South Asia, 2000–04 1/

(In percent)

	2000	2001	2002	2003	2004 2/
CAR:					
Bahrain	23.4	26.4	26.5	26.7	30.3
Bangladesh	6.7	6.7	7.5	8.4	8.8
Egypt	10.2	10.2	9.9	11.0	11.1
India	11.1	11.4	11.9	12.9	13.4
Iran	...	6.6	6.9	4.5	7.2
Jordan	19.4	17.4	16.7	15.9	17.8
Kuwait	22.2	22.0	19.7	18.4	...
Lebanon	16.9	18.0	19.4	22.3	...
Nepal	...	4.0	-7.3	-11.7	...
Oman	16.5	15.6	17.1	17.6	17.6
Pakistan	*9.7*	*8.8*	*8.8*	*8.5*	*10.9*
Saudi Arabia	21.0	20.3	18.7	19.4	18.0
Sri Lanka	8.2	7.8	9.4	10.4	9.1
United Arab Emirates	19.4	19.6	18.6	18.2	16.3
GCC average	20.5	20.8	20.1	20.1	20.6
South Asia average	9.2	7.7	5.2	4.5	11.0
Gross NPL ratio:					
Bahrain	11.2	11.6	11.2	12.6	8.9
Bangladesh	...	...	28.1	22.1	17.6
Egypt	13.6	15.6	16.9	20.2	24.2
India	12.8	11.4	10.4	8.8	6.6
Iran	4.3	4.4	5.4	5.7	5.2
Jordan	18.4	19.3	21.0	19.7	13.6
Kuwait	19.2	10.3	7.8	6.1	...
Lebanon	7.8	10.0	12.4	12.8	12.2
Nepal	...	29.3	30.4	28.7	...
Oman	7.5	10.6	11.3	15.5	13.5
Pakistan	*23.5*	*23.4*	*21.8*	*17.0*	*10.6*
Saudi Arabia	10.4	10.1	9.2	5.4	3.1
Sri Lanka	13.6	15.3	15.3	13.7	10.0
United Arab Emirates	12.7	15.7	15.3	14.3	12.5
GCC average	12.2	11.7	11.0	10.8	9.5
South Asia average	18.2	21.4	22.7	19.2	11.6
ROA after tax:					
Bahrain	1.8	1.8	1.5	1.9	2.3
Bangladesh	...	0.7	0.5	0.5	0.7
Egypt	0.9	0.8	0.7	0.5	0.5
India	0.7	0.5	0.8	1.0	1.2
Iran	...	...	0.9	0.6	...
Jordan	0.3	0.7	0.5	0.7	1.0
Kuwait	2.0	2.0	1.8	2.0	...
Lebanon	0.7	0.5	0.6	0.7	...
Nepal	-0.7	-3.7	-4.3	-1.4	...
Oman	1.3	0.2	1.5	0.3	1.9
Pakistan	*-0.2*	*-0.5*	*0.1*	*1.1*	*1.4*
Saudi Arabia	2.0	2.2	2.3	2.3	2.5
Sri Lanka	0.8	0.7	1.1	1.4	1.2
United Arab Emirates	1.8	1.9	1.9	1.9	2.1
GCC average	1.8	1.6	1.8	1.7	2.2
South Asia average	-0.1	-0.8	-0.7	0.3	1.1

Sources: Pakistani authorities; and Fund staff estimates.

1/ Figures for Pakistan are for commercial and specialized banks, consolidating operations of foreign branches of domestic banks.

2/ Latest available. Figures for Pakistan are for the second quarter of 2005.

Table IV.6. Pakistan: Stress Test Pre-Shock Summary Statistics for the 12 Largest Commercial Banks, 2003–04 1/

(In percent)

	September 2003			December 2004		
	Weighted average	Simple average	Standard deviation	Weighted average	Simple average	Standard deviation
Risk-weighted assets to total assets	36.1	41.7	11.5	55.2	58.8	13.0
CAR	11.9	11.3	9.3	10.7	11.1	3.2
Gross loans to regulatory capital	964.3	717.3	638.5	940.8	964.4	205.8
Gross NPL ratio	17.6	11.9	11.7	9.9	7.3	6.9
Composition of gross NPLs	100.0	100.0	...	100.0	100.0	...
OAEM	2.9	6.0	8.7	4.1	5.2	8.1
Substandard	4.5	6.1	4.3	4.1	4.7	7.1
Doubtful	7.7	11.2	14.1	5.0	11.3	18.0
Loss	84.9	76.6	15.1	86.9	78.7	22.6
Allowances to gross NPLs 2/	62.4	59.6	16.9	74.3	114.2	135.6
OAEM 3/	0.2	6.3	19.0	8.6	6.3	19.0
Substandard 3/	14.5	14.0	7.5	16.0	14.0	7.5
Doubtful 3/	27.3	27.3	19.5	23.7	27.3	19.5
Loss	63.9	58.6	30.0	78.6	73.6	14.8
Collateral to gross NPLs 4/	35.5	42.2	20.7	22.0	26.7	15.1
OAEM	0.0	0.0	...	0.0	0.0	...
Substandard	27.9	38.1	38.8	20.4	32.4	35.1
Doubtful	45.4	51.1	38.4	52.9	46.7	36.9
Loss	36.2	43.5	25.5	21.4	26.4	14.8
Remaining time-to-repricing gap to regulatory capital 5/	118.2	109.2	19.1	302.4	320.5	91.8
$t \leq 3$ months	-347.7	-248.9	471.5	-63.0	-28.7	195.9
3 months $< t \leq 1$ year	426.2	275.0	395.9	153.8	135.9	269.7
$t > 1$ year	39.7	83.2	449.3	211.7	213.3	172.2
Net open foreign currency position to regulatory capital	-36.9	-16.9	39.9	25.2	0.8	61.7
Gross foreign currency loans to regulatory capital 6/	170.2	121.5	92.9	155.5	110.3	78.9
Total equity exposure to regulatory capital	34.5	14.5	34.8	21.8	19.6	15.4
Equity investments	20.4	10.8	18.5	14.5	12.8	11.5
Carry-over-transaction financing	2.0	2.4	3.8	3.2	3.4	6.6
Equity collateral 7/	12.0	1.2	17.6	4.1	3.4	2.9
Real estate collateral to regulatory capital 8/	48.2	4.7	70.3	16.5	13.6	11.6

Sources: SBP; and Fund staff estimates.

1/ Banks ranked by assets; consolidates operations of foreign branches of domestic banks.
2/ Includes general allowances; September 2003 ratio of general allowances to total allowances assumed to be identical to the (actual) ratio for December 2004.
3/ Specific allowance coverage ratios for September 2003 assumed to be identical to the (actual) ratios for December 2004.
4/ Collateral values imputed by assuming that specific allowance coverage ratios conform with regulatory requirements.
5/ Remaining time-to-maturity gap for September 2003.
6/ Actual data for September 2003. December 2004 figures assume gross foreign currency loans constitute 50 percent of gross foreign currency assets.
7/ Equity assumed to constitute 20 percent of total collateral.
8/ Real estate assumed to constitute 80 percent of total collateral.

Box IV.4. Pakistan: Details of Stress Test Shocks

- *Regulatory risk*. The first shock sought to gauge the preparedness of banks for a potential tightening of specific provisioning norms. It was assumed that NPLs classified in the unprovisioned "OAEM" category would be reclassified as "substandard" (with an obligatory minimum coverage ratio of 20 percent); those in the "substandard" category would become "doubtful" (50 percent); and those in the "doubtful" category would become "loss" (100 percent).
- *Credit risk*. The second shock assumed a 35 percent nominal increase in gross NPLs, with the incremental NPLs classified as "doubtful" (and provisioned at 50 percent).
- *Interest rate risk*. The third shock assumed a steepening of the yield curve, with the effective interest rate for assets and liabilities due to reprice within 3 months increasing by 100 basis points; that for assets and liabilities due to reprice between 3 months and 1 year increasing by 300 basis points; and that for assets and liabilities due to reprice beyond 1 year increasing by 500 basis points.
- *Exchange rate risk*. The fourth shock sought to gauge the preparedness of banks for the direct and indirect effects of a potential rupee depreciation. In addition to the direct valuation effects of a 10 percent weakening of the Pakistani rupee vis-à-vis the U.S. dollar on the net open foreign currency position of each bank, it was also assumed that 20 percent of unhedged gross foreign currency loans would be reclassified from performing to "doubtful" (provisioned at 50 percent).
- *Equity price risk*. The fifth shock assumed a 30 percent decline in the value of equity investments and equity collateral, with 30 percent of equity-related financing reclassified from performing to "doubtful" (provisioned at 50 percent). It was further assumed that equity constitutes 20 percent of imputed collateral.[1]
- *Real estate risk*. The sixth and final shock assumed a 50 percent decline in the value of real estate collateral, assumed to constitute 80 percent of imputed collateral.

---

[1] Minimum specific allowance coverage ratios are set as a percentage of gross classified loans less collateral (booked at forced sale value). Accordingly, with specific allowance data provided by each NPL subcategory for end-2004, it was possible to impute collateral values by assuming that actual allowances conformed with required amounts.

71. **Test results reveal a mixed picture and underscore the need for continued supervisory vigilance** (Table IV.7). Resilience to a regulatory tightening may have fallen marginally, but vulnerability to a (severe) credit shock is broadly unchanged—although, as noted below, the results are not fully comparable. Vulnerability to an interest rate shock has increased somewhat, as has vulnerability to an exchange rate shock or an equity price shock (such as that witnessed in March 2005). Resilience to a property price crash, conversely, has improved as loan-loss allowances have increased and reliance on collateral, including real estate collateral, has wound down.

Table IV.7. Pakistan: Stress Test Results
for the 12 Largest Commercial Banks, 2003–04
(No. of undercapitalized banks; percent deposit share in parentheses) 1/

	2003 2/	2004
One-category reclassification of NPLs	1 (5.9)	2 (8.3)
35 percent increase in NPLs 3/	4 (37.2)	4 (35.1)
Yield curve steepening 4/	3 (10.9)	3 (25.0)
10 percent rupee depreciation 5/	1 (5.9)	3 (11.9)
30 percent stock market decline	1 (5.9)	2 (8.3)
50 percent real estate market decline	3 (27.5)	3 (25.0)

Sources: SBP; and Fund staff estimates.

1/ Undercapitalization defined as CAR < 8 percent. Results for 2003–04 not strictly comparable.

2/ End-September.

3/ Incremental NPLs provisioned at 50 percent.

4/ Rate increase by 100 b.p. for $t \leq 3$ mo.; 300 b.p. for 3 mo. $< t \leq 1$ yr.; and 500 b.p. for $t > 1$ yr.

5/ With 20 percent of foreign currency loans becoming NPLs, provisioned at 50 percent.

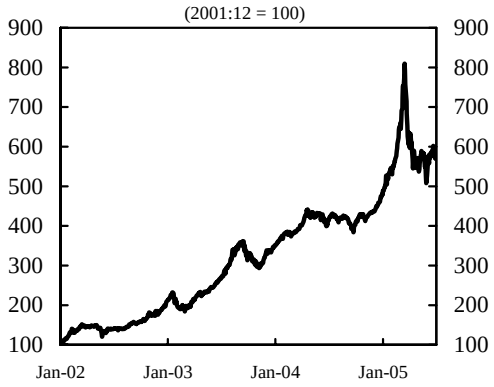
72. **Strict comparability between test results for 2003 and 2004 is hampered by a number of factors.** First and foremost, CARs for September 2003 are overstated because banks had until then been misclassifying loans collateralized by commercial real estate (with a required risk weight of 100 percent) as if they were collateralized by residential real estate (with a risk weight of 50 percent); the resulting understatement of risk-weighted assets was corrected during the fourth quarter of 2003, but the stress test results for September 2003 were unrealistically favorable look better than they would otherwise be. Second, the test for a regulatory tightening used an imputed distribution of specific loan-loss allowances for September 2003 (it was assumed that specific allowance coverage ratios by NPL subcategory were the same as at end-2004). Third, the test for interest rate risk used maturity gap data for September 2003 and (more accurate) repricing gap data for 2004. Finally, the test for exchange rate risk used foreign currency loan data for 2003 and foreign currency asset data for 2004 (it was assumed that unhedged foreign currency loans constituted 50 percent of gross foreign currency loans at the first test date, and 25 percent of gross foreign currency assets at the second test date).

F. Equity Market Developments and Reforms

73. **The stock markets had a rollercoaster ride in the first quarter of 2005** (Figure IV.9). Much of the buoyancy since 2002 can be attributed to the strong economy and the privatization program in addition to ample liquidity stemming from easy monetary conditions and inflows from abroad. However, the 65 percent price increase during the first 2½ months of 2005 (with P/E ratios reaching 20 at the peak) and the subsequent 30 percent correction in the latter half of March has been blamed on speculation and market manipulation, prompting an official inquiry. The inquiry found that a small number of key players had first fuelled prices by injecting liquidity into the “ready” (or spot) market and

engaging in illegal "wash trades" (simultaneous purchase and sale of the same share to create an impression of active trading) and then depressed prices by withdrawing liquidity, after locking in high selling prices in the futures market.[20] Following the March correction the market has stabilized (with P/E ratios now at 12) and several regulatory actions have been taken. Banks' exposure to the stock market was and remains limited so that their balance sheets were not significantly affected by the correction.

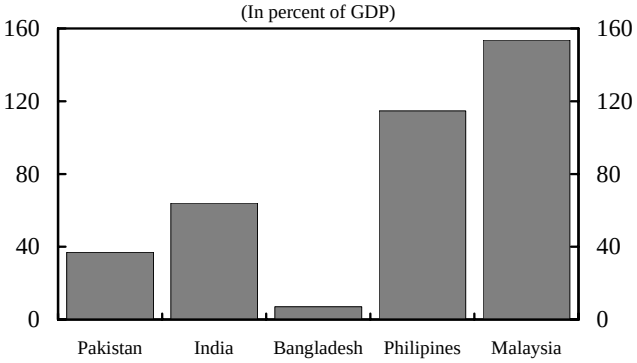
Figure IV.9. Pakistan: Karachi Stock Exchange 100 Index, 2002:1–2005:8



Sources: Pakistani authorities; and Fund staff calculations.

74. **The equity market is modest in size, highly speculative, and "mutualized" in structure** (Box IV.5). KSE market capitalization is about 37 percent of GDP (Figure IV.10). The benchmark index is the capital-weighted KSE-100, although trading is mostly confined to six public sector companies in oil, telecommunications, and banking. KSE trading concentration (the proportion of traded value accounted for by the ten largest companies) was 67 percent in 2004 (compared, for instance, with 29 percent for the Nasdaq); turnover velocity (traded value as a proportion of market capitalization) averaged 304 percent in 2004 (250 percent for the Nasdaq) and reached a very high 630 percent in the first quarter of 2005; the settlement ratio (settlements as a proportion of traded value) averaged only 7 percent in the first five months of 2005; and the free float is estimated at about 20 percent. Settlement in the ready market is on a t+3 rolling cycle.

Figure IV.10. Pakistan: Stock Market Capitalization, 2005 1/



Sources: Pakistani authorities; Bloomberg; and Fund staff calculations.
1/ Latest available data.

[20] The report is available at: *http://www.secp.gov.pk/Reports/rpt_Taskforce_StockMarket%20.pdf*.

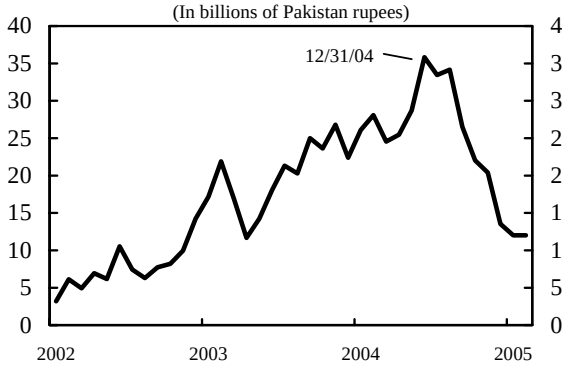
Box IV.5. Pakistan: Demutualization of the Stock Exchanges

Pakistan's three stock exchanges are owned by market participants. The KSE (the largest and oldest), the Lahore Stock Exchange, and the Islamabad Stock Exchange are all "mutualized", i.e., owned by their members, most of whom are brokers, creating a conflict of interest in their role as self-regulatory organizations. The KSE, for instance, has 200 members, 155 of whom are active in the market, and a member-controlled Board of Directors. The SECP is the apex regulator. Custody services are provided by the Central Depository Company (CDC), and clearing and settlement services by the National Clearing Company.

Demutualization of the exchanges is likely to prove contentious. In neighboring India, which inherited a similar securities trading architecture as Pakistan, the traditional hegemony of the stock broking establishment over the colonial-vintage stock exchanges was broken only through the launch and subsequent rapid growth of a new National Stock Exchange. The SECP has consulted with the Securities and Exchange Board of India on the issue. The Lahore Stock Exchange and the Islamabad Stock Exchange appear amenable to some form of merger, but the KSE remains reticent.

75. **Financing in the ready market has until recently been dominated by the uniquely South Asian "*badla*" or carry-over-transaction (COT) system.** *Badla* was a form of post-trade financing that resembled a repurchase transaction with equity collateral. Shares were traded each morning, and financing arranged in a one-hour sitting each afternoon. *Badla* rates were capped at 18 percent per annum at the KSE (increased to 24 percent during the recent boom) but were uncapped at the Lahore Stock Exchange (where they rose to over 100 percent during the boom). The exchanges facilitated the *badla* financing by serving as a platform, but were not involved as counterparties. *Badla* providers were mostly brokers and to a lesser extent banks, with the five largest and ten largest financiers providing about 50 percent and 75 percent of total *badla* financing, respectively. Total *badla* financing peaked at PRs 40 billion ($674 million) in mid-February 2005 before falling to PRs 27 billion ($455 million) at end-March (Figure IV.11).

Figure IV.11. Pakistan: Total COT Financing, 2002:7–2005:6 1/
(In billions of Pakistan rupees)



Source: Pakistani authorities.
1/ Latest available data.

76. ***Badla* carried added risk for the clearing houses because it was post-trade financing.** To cover this risk, the exchanges imposed additional margin requirements of 5–11 percent on *badla*-financed trades, over and above their standard margin requirements of 5–20 percent. In the event of default by a broker, he would first forfeit his collateral, then his assets would be liquidated, and any residual losses to the clearing house would be met from the Clearing House Protection Fund (up to PRs 50 million per default) and the Investor Protection Fund (up to PRs 10 million per member); as of end-March 2005 the two funds had assets of PRs 684 million ($12 million) and PRs 386 million ($7 million), respectively.

77. **The chief problem with *badla* was that it facilitated very high levels of investor leverage—up to 100 percent—at very high interest rates and was provided without adequate due diligence.** Instead, inordinate emphasis was placed on the perceived "guarantee" provided by the exchanges via the Clearing House and Investor Protection Funds. A second problem was that the concentration of lenders, most of whom were also market participants on a proprietary basis, allowed manipulation of market liquidity, as allegedly was the case in early 2005. Finally, abuses also reportedly took place, with some brokers raising financing for themselves by posting shares deposited with them by their investors; this was possible to the extent that such shares were pooled together and held in "group accounts" at the CDC, with insufficient clarity on beneficial interests. To close this loophole, group accounts have been eliminated, with brokers required (since April 2005) to maintain separate, client-specific subaccounts at the CDC. Experience with the CFS will be reviewed in early 2006.

78. **The SECP recognizes the intrinsic problems with the COT system and has been unsuccessfully trying to phase out *badla* since 2002.** *Badla* financing was limited to 30 listed companies with effect from mid-December 2003, with the number of eligible companies to be gradually reduced to zero by June 2005. The intention was to replace *badla* by margin financing from banks, with the margin requirement set at 30 percent. The phase-out was suspended in April 2005 following protests from brokers citing illiquidity concerns.

79. **In August 2005, a compromise was agreed under which *badla* was replaced with immediate effect by a new Continuous Funding System (CFS).** The CFS has been described by some observers as a modified *badla*, and characterized by some within the SECP as a one-year transitional arrangement ahead of a more fully developed futures market. The main difference between *badla* and the CFS is that under the latter the financing session will remain open all day, eliminating the post-trade-financing aspect of *badla* and hence reducing the risk to the clearing houses. There will be a new CFS account at the CDC, and the total volume of CFS financing is capped at PRs 25 billion.

80. **The futures market remains embryonic and its further development will be central to efficient price discovery.** Futures are confined currently to 30-day single-scrip contracts that resemble ready-market transactions with t+30 settlement, as opposed to modern futures contracts in lots of, say, 1,000 shares with clear terms and conditions. Futures settlement is based on deliverables only, because cash contracts are considered unIslamic. The exchanges, as well as some market participants, have emphasized the need for deeper derivatives markets, arguing that in India it was futures, not margin financing, that replaced *badla*. Accordingly, plans are being formulated to introduce 60-day and 90-day (single-scrip) futures, as well as a new 30-share Sensitive Index at the KSE, to be followed by index-linked futures and other derivative products.

81. **In sum, reforms are systematically addressing those aspects of Pakistan's stock markets that still fall short of international good practice.** With several brokerage houses reportedly having taken losses in March 2005, it seems likely that the orderly market correction has served as a timely "wake-up call", adding to the impetus for all stakeholders to work together to modernize market structure and trading practices.

References

Allen, Franklin and Douglas Gale, 1999, "Bubbles, Crises, and Policy," *Oxford Review of Economic Policy*, Vol. 15, No. 3, pp. 9–18.

International Monetary Fund, 2004, *World Economic Outlook April 2004*, Washington, D.C.

Kaminski, Graciela and Carmen Reinhart, 1996, "Banking and Balance-of-payments Crises: Models and Evidence," Working Paper, Washington DC, Board of Governors of the Federal Reserve.

———, 1999, "The Twin Crises: The Causes of Banking and Balance-of-payments Problems," *American Economic Review*, Vol. 89, pp. 473–500.

Kindleberger, Charles P., 2000, *Manias, Panics, and Crashes—A History of Financial Crises*, 4th edition.

Ranciere, Romain, Aaron Tornell, and Frank Westermann, 2005, "Systemic Crises and Growth," NBER Working Paper 11076, (Cambridge, Massachusetts: National Bureau of Economic Research).

V. How Vulnerable is the Corporate Sector in Pakistan?[21]

A. Introduction

82. **Pakistan's corporate sector has witnessed a remarkable recovery in recent years.** Market capitalization of enterprises listed on the Karachi Stock Exchange (KSE), profits of listed enterprises, and advances of commercial banks to the corporate sector have all risen sharply (Table V.1). Large-scale manufacturing production increased, cumulatively, by almost 70 percent over the past five years to 2004/05.

Table V.1. Pakistan: Indicators of Corporate Sector Performance, 1999/2000–2004/05

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
Market capitalization (in billions of Pakistani rupees)	392	339	408	746	1,357	2,066
Large scale manufacturing (growth, in percent)	...	11.0	3.5	7.2	18.2	15.4
Profit (before taxation) of listed companies (in billions of Pakistani rupees)	...	62	93	136	230	...
Banking sector credit to corporate sector (growth, in percent)	2.8	11.3	-0.3	12.8	29.0	35.0

Sources: Karachi Stock Exchange; State Bank of Pakistan; and IMF.

83. **These developments in good part reflect the success of the government's reform program**. This program has focused on macroeconomic stabilization and market-oriented structural reforms, and has induced a strong positive response from the private sector. By re-building confidence and promoting greater efficiency, the program laid the foundation for a sustained recovery in growth. Implementation of the program also benefited from a favorable external environment, including low interest rates abroad and at home and sizeable foreign exchange inflows.

84. **The objective of this paper is to examine the vulnerability of the corporate sector in Pakistan, as the economy enters its third year of strong growth**. The speed and scale of the corporate sector's recovery has raised the question of sustainability and the sector's ability to withstand shocks. While sustainability will in part depend on overall economic growth in the coming years, the corporate sector's vulnerability to shocks would also depend on more structural factors related to the sector's governance system and balance sheet. Section B looks at corporate governance and transparency in Pakistan, and compares these with best international practices and standards. Section C examines various indicators of financial vulnerability, and assesses their implications, based on regional and cross-country comparisons. A sectoral analysis of these indicators for Pakistan provides further insights. Section D draws some conclusions.

[21] Prepared by Henri Lorie and Zafar Iqbal. They thank, in particular, the State Bank of Pakistan (SBP) staff for making available their database on the nonfinancial corporate sector and useful comments.

B. Corporate Governance and Transparency

85. In a market economy, strong corporate governance and transparency should reduce corporate sector vulnerabilities.

Ownership structure

86. **The Asian crisis of the late 1990s drew attention to ownership and control structures as an important factor for corporate governance.** In Pakistan, government and domestic private sector ownership are estimated to account for about 34 percent and 53 percent, respectively, of the top 40 listed companies, while foreign ownership accounts for the remaining 13 percent.[22, 23] Within the domestic private sector, family control through direct holding or through associated companies of the controlling family is especially high (see Box V.1) and is often obtained through the extensive use of "pyramiding" and cross-shareholdings practices. Hence, although superficially ownership concentration appears to be lower in Pakistan than in East Asia, concentration of control could actually be higher. This concentration, combined with high thresholds to initiate corporate actions, has been found to limit the effective protection of external investors.[24] International evidence suggests that a concentration of control can extract value from the firm for the benefit of the controlling group, at the expense of minority shareholders. This can undermine good governance, corporate efficiency, and incentives to mobilize additional capital through equity issuance, and thus capital market development.[25, 26]

[22] Ali Cheema (2003).

[23] In terms of market capitalization, the shares are 53, 30, and 17 percent, respectively, reflecting the large market capitalization of a few state-owned companies.

[24] Draft ROSC, Corporate Governance Country Assessment (2005), World Bank.

[25] Lins and Warnock (2004).

[26] Claessens, Djankov, and Lang (1999).

Box V.1. Concentration of Corporate Ownership and Control

Ownership: How much of the share capital of an average company is owned by the top five shareholders?

	In percent
Pakistan	37.0
Korea	38.5
South-East Asia [1/]	60.8

Control: How frequently do families control more than 40 percent of a company?

	In percent
Pakistan	
Textiles	50.0
Non-textiles	38.9
Korea	3.5
South-East Asia [2/]	30.0

Source: Cheema (2003).

1/ Average for Indonesia, Malaysia, Philippines, and Thailand.
2/ Average for Indonesia, Malaysia, and Thailand

Corporate governance

87. **Pakistan has made considerable progress in strengthening the corporate governance framework in recent years.** In 2003, the Securities and Exchange Commission of Pakistan (SECP) issued a Code of Good Governance. Compliance with this code is mandatory for listed nonfinancial and financial companies, as well as for nonlisted commercial banks.[27] The SECP has also strengthened its enforcement capabilities. The de-listing of several companies from the KSE is indirect evidence of the more demanding standards now imposed by the new code.

88. **The draft Corporate Governance Assessment (2005) by the World Bank generally gives high marks to Pakistan.** The assessment notes in particular: (a) the existence and quality of an effective overall corporate governance framework; (b) the affirmation of shareholders' basic rights; and (c) the legal rights of stakeholders in corporate governance. However, the assessment also identifies several weaknesses, including: (a) the only partial compliance with disclosure of arrangements whereby a person has acquired more than 10 percent of voting shares; (b) the lack of facilitation for the exercise of ownership

[27] The code defines, in particular, the respective roles and responsibilities of directors and managers (including of the Chief Economic Officer, Company Secretary, and Chief Financial Officer), the importance of internal control systems, and the reporting requirements.

rights by all shareholders (in particular, institutional investors); and (c) the lack of ability of the boards of listed companies to exercise objective and independent judgment.

Creditor rights and insolvency framework

89. **Creditor rights have generally been much weaker in emerging markets than in mature economies and Pakistan is no exception.** But after significant reforms in recent years, it scores generally better than many other South Asian countries with regard to legal rights, credit information, disclosure, the cost of enforcing contracts, and closing a business. Exceptions are the costs of creating collateral, and the number of procedures and time to enforce contracts, for which Pakistan lags somewhat behind its South Asian neighbors.[28] Generally, weaker creditors rights undermine the prospects for achieving a better financing mix, in particular, financing through marketable securities.

Financial transparency

90. **Pakistan has now largely adopted the International Financial Reporting Standards**. Full enforcement of these standards, which regulate the quality and timeliness of financial data made available by corporations, has, however, been constrained by a lack of human resources and technical ability. Related party transactions among nonbank companies are reportedly not always properly disclosed in practice.[29]

C. Indicators of Financial Vulnerability

91. **Since the Asian crisis, considerable work has been undertaken to identify possible early indicators of corporate vulnerability.** This section looks at how Pakistan fares with regard to key financial vulnerability indicators. Two data sources are used. First, the Fund's Corporate Vulnerability Utility (CVU), whose main advantage is to allow reasonably consistent cross-region and cross-country comparisons. For Pakistan, this database covers some 65–80 major firms listed on the KSE. While this sample represents only about 10 percent of the number of firms listed on the KSE, it accounts for close to 80 percent of the overall market capitalization. This paper will focus on China and India as comparator countries, and on Developed Asia, Emerging Asia, and Global as comparator regions. Second, the SBP compiles detailed information on the accounts of the nonfinancial companies listed on the KSE, offering a much broader database, as well as a more detailed sectoral classification. The SBP is also the main source of information for the financial

[28] See Lorie and Iqbal (2005), which drew on the World Bank's "Doing Business" and "Investment Climate Surveys".

[29] Draft ROSC, Accounting and Auditing (2005), World Bank.

sector, mainly banks. Details on the sectoral coverage of the SBP database in terms of contribution to overall market capitalization are provided in Box V.2.[30]

Box V.2. Sectoral Contribution to Market Capitalization

As of end-December 2004, the SBP maintained information on the accounts of all 504 nonfinancial companies listed on the KSE. In terms of market capitalization, the last few years have seen a massive growth in the fuel and energy sector, now accounting for about half of market capitalization, at the expense of the textile, chemical and pharmaceutical, and transport and communication sectors. Notwithstanding significant absolute increases in their own market capitalization, these sectors have seen their share in overall market capitalization decline by almost half, to 7, 11, and 17 percent, respectively. The now much smaller share of the textile sector in overall market capitalization is in sharp contrast with the sector still accounting for more than 60 percent of Pakistan's exports.

Pakistan: Sectoral Contribution to KSE Market Capitalization, 1998–2005

	No. of companies	1998	1999	2000	2001	2002	2003	2004	2005
		(In percent of aggregate market capitalization)							
Textile	217	11.0	10.7	12.3	12.8	11.7	10.1	7.5	6.6
Chemical and phramaceutical	38	20.8	18.7	15.8	15.9	14.4	16.6	13.5	10.8
Engineering	49	4.3	3.7	3.3	3.8	4.2	6.1	4.4	3.8
Sugar	37	1.9	1.6	1.1	1.5	1.3	1.1	0.9	0.8
Paper and board	13	1.1	1.1	1.1	1.5	1.9	1.9	1.4	0.8
Cement	21	2.7	2.3	2.9	3.4	4.3	5.1	5.7	4.2
Fuel and energy	26	19.4	20.6	24.6	26.5	29.7	29.5	41.9	50.1
Transport and communication	14	27.9	31.1	29.8	23.5	19.9	19.0	16.3	17.1
Miscellaneous	89	10.9	10.2	9.2	11.0	12.7	10.5	8.3	6.0

Source: State Bank of Pakistan.

1/ End-March 2005, Pakistan Economic Survey, 2004/05.

Leverage

92. **Leverage in Pakistan is broadly in line with most other emerging economies.** According to the CVU, the nonfinancial corporate sector of Pakistan has, at around 75 percent, a debt/equity ratio roughly in line with that of Emerging Asia, lower than Developed Asia and Global, but significantly higher than India (Table V.2a and Figure V.1). Along with the other comparator countries and regions, with the exception of China, Pakistan has seen a decline in debt/equity ratios since the late 1990s. However, there appears to have been a modest reversal in this trend since 2003, in line with the acceleration in bank credit growth. Similar trends are observed in the SBP data with respect to the total liabilities/equity

[30] Lack of full data for some of the smaller companies has necessitated covering only 446 out of 504 listed companies for the analysis below.

ratio and "gearing" (i.e., total fixed liabilities/total capital employed—whether through equity or debt). This trend is seen in most sectors, with the exception of sugar an cement.

Figure V.1. Pakistan: Nonfinancial Corporate Sector Leverage Indicator, 1998–2003

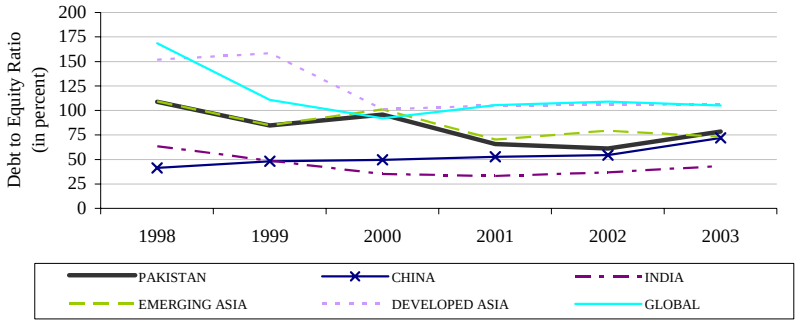


Table V.2a. Pakistan: Corporate Sector Leverage Indicators (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Debt/equity ratio (CVU)						
China	41.2	48.1	49.6	52.7	54.3	71.9
Developed Asia	151.8	158.5	101.2	105.1	106.1	106.4
Emerging Asia	109.3	85.0	101.2	70.3	79.4	73.1
Global	168.4	110.7	92.1	105.3	109.2	105.0
India	63.6	48.6	35.3	33.3	37.0	43.3
Pakistan	108.8	84.6	95.9	65.8	61.2	78.5
Total liabilities/equity (SBP)						
Pakistan	206.4	142.3	137.4	141.8	149.3	149.9
Textile	212.1	164.1	104.5	105.7	158.0	149.6
Chemical and phramaceutical	143.8	128.5	116.3	108.0	114.0	97.3
Engineering	493.3	154.1	120.7	98.7	121.8	149.5
Sugar	102.3	111.3	145.2	149.3	-78.2	532.1
Paper and board	170.2	156.9	105.2	96.5	76.0	125.4
Cement	2189.1	190.2	173.4	14.5	104.8	299.5
Fuel and energy	42.1	149.1	171.4	178.3	160.9	146.2
Transport and communication	100.2	107.2	96.1	106.9	107.5	79.9
Miscellaneous	285.2	221.8	243.1	246.4	229.6	255.0
Gearing (SBP) 2/						
Pakistan	28.4	32.0	23.7	23.4	15.3	16.1
Textile	35.4	70.2	24.1	27.5	26.6	22.1
Chemical and phramaceutical	28.1	26.1	24.1	13.7	22.0	15.9
Engineering	9.5	13.4	-2.8	7.4	-23.3	6.7
Sugar	26.9	20.2	23.1	37.3	-95.0	25.7
Paper and board	34.3	30.8	23.8	22.7	19.2	6.2
Cement	39.8	47.8	12.6	-34.2	28.8	37.5
Fuel and energy	35.8	32.5	31.1	47.5	20.7	20.7
Transport and communication	29.7	26.9	21.3	12.1	6.1	7.7
Miscellaneous	8.9	27.1	24.3	17.0	12.2	11.0

Sources: IMF; and SBP.

1/ Market capitalization weighted.
2/ Total fixed liabilities/total capital employed.

Table V.2b. Pakistan: Corporate Sector Leverage Indicators (Financial), 1998–2004

(In percent)

	1998	1999	2000	2001	2002	2003	2004
Debt/equity ratio (CVU) 1/							
China	45.4	35.4	75.7	249.3	467.3	317.7	...
Developed Asia	190.3	198.0	248.9	216.9	202.7	235.6	...
Emerging Asia	278.2	181.9	213.9	209.7	307.3	266.9	...
Global	454.2	503.2	459.8	519.7	523.0	488.4	...
India	245.8	229.4	223.4	282.4	215.7	205.0	...
Pakistan	193.1	185.3	205.3	221.8	272.6	285.1	...
Borrowings/equity; all banks (SBP)							
Pakistan	210.0	270.0	330.0	370.0	260.0	210.0	150.0

Sources: IMF; and SBP.

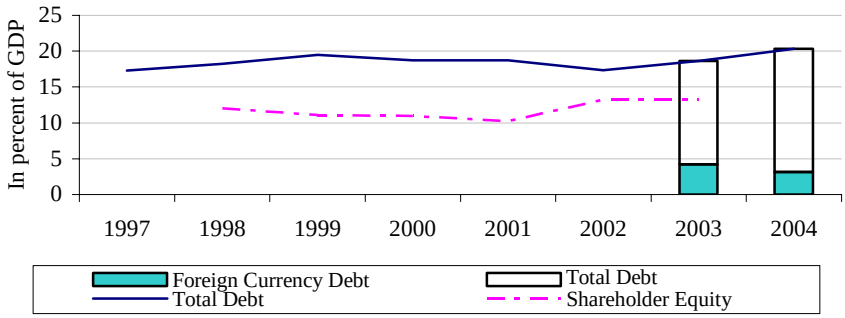
1/ Market capitalization weighted.

Debt

93. **Corporate sector indebtedness and foreign currency exposure are low compared with most other emerging economies.** In percent of GDP, in Pakistan indebtedness is estimated to have decline from a peak of 19.5 percent in 1999 to 17.4 percent in 2002, but has rebounded to 20.3 percent through 2004 (Table V.3 and Figure V.2), due to the increase in loans from the banking sector. In fact, bank loans now account for as much as 95 percent of total corporate debt. Foreign currency denominated debt accounted for more than 20 percent of total debt in 2003, but had declined to about 15 percent by 2004. The fast growth in the issuance of Term Finance Certificates (TFCs) since 2001 came to a halt in 2004, as banks were able to offer loans at highly competitive rates. By international standards, the level of corporate debt in Pakistan in percent of GDP is more in line with emerging Europe and Latin America than emerging Asia (Box V.3). This reflects the still relatively under-developed state of financial markets in Pakistan, rather than low leverage. Indeed, Table V.2a and V.2b in fact show that the debt/equity ratio (a measure of leverage) in Pakistan is in line with Emerging Asia. Through 2003, the percentage of total debt denominated in foreign currency in Pakistan was similar to that in other emerging markets of Asia, but by 2004, Pakistan had managed to reduce this percentage to well below comparator countries.

94. **The share of short-term debt in total debt for the nonfinancial corporate sector in Pakistan is relatively high by Global and Developed Asia standards, as well as compared with India.** At about 50 percent in Pakistan, it is close to Emerging Asia and significantly lower than in China. The SBP data further suggest an upward trend in the share of current liabilities in total liabilities in recent years (Table V.4). The sectors apparently responsible for this trend are fuel and energy, transport and communication, as well as chemical and pharmaceutical.

Figure V.2. Corporate Sector Indebtedness and Shareholder Equity, 1997–2004



Box V.3. Corporate Indebtedness: Some International Comparisons

Corporate debt outstanding in percent of GDP (2003)

All emerging markets	62.0
Asia	76.0
Europe	24.0
Latin America	28.0
Pakistan	20.3 (2004)

Foreign currency debt in percent of total debt

China	21.3
India	20.9
Malaysia	29.8
Thailand	30.8
Pakistan	22.8 (2003); 15.5 (2004)

Sources: IMF Global Financial Stability Report (April 2005); and SBP.

Table V.3. Pakistan: Corporate Sector Indebtedness, 1997–2004 1/

(In billions of Pakistani rupees)

	End-June							
	1997	1998	1999	2000	2001	2002	2003	2004
Term finance certificates	2	3	4	5	10	19	44	45
Nonfinancial	2	2	3	3	6	13	33	34
Financial	0	1	1	2	4	6	11	11
Banks	0	0	0	0	0	0	3	4
Others	0	1	1	2	4	6	8	7
External debt	...	...	...	207	184	154	143	112
Nonfinancial	...	...	...	165	152	131	117	99
Financial	37	28	44	42	32	23	26	13
Loans from financial sector	468	557	641	663	736	722	830	1,065
Nonfinancial 2/	449	537	612	629	700	687	776	991
Of which: in foreign currency	…	…	…	…	…	…	61	62
Financial	19	20	30	34	37	35	53	74
Banks: borrowing from other FIs	2	2	4	6	6	8	11	13
Others: borrowing from banks and other FIs	17	18	26	28	31	27	42	60
Total debt	507	588	689	710	778	764	899	1,123
Nonfinancial	451	539	614	631	706	700	809	1,025
Financial	56	49	75	79	73	64	90	98
Memorandum items:								
Total debt (in percent of GDP)	17.3	18.2	19.5	18.7	18.7	17.4	18.6	20.3
Loans from financial sector (in percent of total debt)	92.3	94.7	93.0	93.3	94.6	94.5	92.3	94.8
Foreign currency debt (in percent of total debt) 3/	…	…	…	…	…	…	22.8	15.5

Sources: SBP; and IMF staff calculations.

1/ Excludes debt to government, government-guaranteed external debt, and borrowing from the SBP.
2/ Loans from banks and other financial institution.
3/ External debt and domestic loans in foreign currency.

Table V.4. Pakistan: Corporate Sector Debt Indicators (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Short-term debt/total debt (CVU)						
China	78.6	83.3	80.1	77.3	82.5	82.1
Developed Asia	40.4	37.6	38.6	41.8	41.3	39.6
Emerging Asia	41.0	44.1	46.7	43.1	43.1	53.0
Global	34.7	35.4	35.8	34.3	31.0	30.3
India	31.0	34.5	35.4	34.6	35.8	31.6
Pakistan	41.3	45.2	51.7	57.7	55.2	51.3
Current liabilities/total liabilities (SBP)						
Pakistan	67.9	66.8	71.5	78.3	79.7	80.4
Textile	74.8	70.5	66.8	69.1	71.9	73.8
Chemical and phramaceutical	69.1	67.7	72.3	85.6	75.7	79.0
Engineering	92.7	91.5	91.5	94.0	95.9	96.1
Sugar	80.4	79.4	79.5	85.7	86.8	84.5
Paper and board	65.5	68.6	71.6	69.1	68.9	88.3
Cement	51.0	55.6	66.0	64.3	62.1	51.8
Fuel and energy	61.8	59.8	70.7	71.1	75.0	74.6
Transport and communication	57.0	62.7	68.8	83.3	92.3	91.3
Miscellaneous	91.7	81.9	85.0	89.3	87.1	88.7

Sources: IMF; and SBP.

1/ Market capitalization weighted.

Equity

95. **Mobilization of capital through equity has accelerated somewhat, but equity remains modest in comparison with debt in Pakistan** (Table V.5). However, the data needs to be interpreted carefully because of a significant impact of the privatization process. Hence, although listed capital increased by almost PRs 200 billion between 2001 and 2005, fresh equity capital mobilized in the period was less than PRs 13 billion through 2004.[31] In 2002, and to some extent in 2003, shareholder equity did increase significantly, by PRs 157 billion and PRs 55 billion, respectively. However, half of the increase in 2002 resulted from the retention of profits in the nonfinancial sector. In 2003, most of the increase in shareholder equity reflected the increased capitalization of banks. In percent of GDP, overall shareholder equity, which had declined to 10.2 percent by 2001, rebounded to 13.2 in the following two years, but was still only marginally higher than in 1998. The findings appear to be consistent with the view that structural factors, including the state of corporate governance, may continue to hamper the growth of the equity market.

[31] This is the relevant number for assessing the contribution of the equity market towards raising funds for capital investment.

Table V.5. Pakistan: Corporate Sector Equity Capital Mobilization, 1998–2005

(In billion of Pakistani rupees)

	End-June							
	1998	1999	2000	2001	2002	2003	2004	2005
Listed capital 1/	211	215	236	236	291	301	374	422 2/
Fresh equity capital in the year 3/	0	0	2	2	6	1	4	...
Shareholder equity; nonfinancial 4/	284	309	318	319	433	447	...	...
Of which: ordinary share capital	175	185	192	190	228	247	...	...
surpluses	108	124	127	129	205	201	...	...
Shareholder equity; financial 5/	104	84	98	107	150	190	...	...
Of which: ordinary share capital	104	84	98	107	150	190	...	...
surpluses	...	...	...	...	...	...	...	...
Shareholder equity; all	388	393	417	426	583	637	...	...
Of which: ordinary share capital	280	269	290	297	378	437	...	...
surpluses	108	124	127	129	205	201	...	...
Memorandum items:								
Shareholder equity (in percent of GDP) 6/	12.0	11.1	11.0	10.2	13.2	13.2	...	...
Of which: ordinary share capital	8.7	7.6	7.6	7.1	8.6	9.1	...	...
surpluses	3.4	3.5	3.3	3.1	4.7	4.2	...	...

Sources: Karachi Stock Exchange (KSE); Security and Exchange Commission of Pakistan (SECP); and SBP.

1/ On the KSE. The amounts also reflect the impact of privatization.
2/ Through end-March 2005.
3/ SECP. The amounts cover primary offerings only (hence exclude privatization). May include some already paid-up capital.
4/ SBP data base.
5/ SBP data base (excluding insurance companies).
6/ Nonfinancial and financial.

Liquidity

96. **Corporate liquidity is lower in Pakistan than in most comparator regions and countries.** This is evident from both the current ratio (current assets/current liabilities) and the Quick ratio (current assets minus inventories/current liabilities) (Tables V.6a and V.7). In the financial sector, liquidity also appears to be lower in Pakistan than in comparator regions or countries (Table V.6b).[32] Based on the Quick ratio, the cement, sugar, paper and board, and textile sectors have especially low liquidity, although the ratio for the textile sector did improve significantly in 2003 (Table V.7).

Table V.6a. Pakistan: Corporate Sector Liquidity—Current Ratios (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Current ratio (CVU)						
China	2.5	1.7	1.7	1.6	1.4	1.3
Developed Asia	1.6	1.7	1.8	1.6	1.8	1.8
Emerging Asia	1.7	1.6	1.6	1.8	1.8	1.8
Global	1.5	1.5	1.8	1.7	1.7	1.7
India	1.4	1.5	1.7	2.1	1.7	1.8
Pakistan	1.1	1.2	1.1	1.1	1.2	1.2
Current ratio (SBP)						
Pakistan	1.3	1.5	1.3	1.4	1.5	1.4
Textile	1.2	1.2	1.3	1.2	1.2	1.6
Chemical and phramaceutical	1.7	2.0	1.7	2.2	2.5	2.2
Engineering	1.5	1.5	1.6	1.8	1.7	1.7
Sugar	1.1	1.0	1.1	1.2	1.7	1.5
Paper and board	1.6	1.6	1.6	1.6	1.8	1.3
Cement	0.8	0.9	0.9	1.0	1.1	1.2
Fuel and energy	1.5	2.0	1.5	1.5	1.4	1.4
Transport and communication	1.0	1.1	1.0	1.0	1.2	1.2
Miscellaneous	1.1	1.2	1.2	1.2	1.3	1.2

Sources: IMF; and State Bank of Pakistan.

1/ Market capitalization weighted.

[32] Note that the liquid liabilities of banks include all the deposits and liabilities rather than the short-term deposits and borrowings due to data constraints.

Table V.6b. Pakistan: Corporate Sector Liquidity—Current Ratios (Financial), 1998–2004 1/

(In percent)

	1998	1999	2000	2001	2002	2003	2004
Current ratio (CVU)							
China	1.6	2.1	1.6	1.8	1.6	1.7	
Developed Asia	1.3	1.4	1.4	1.4	1.4	1.5	
Emerging Asia	1.9	2.5	3.1	2.3	2.5	2.2	
Global	1.4	1.4	1.6	1.7	1.5	1.7	
India						1.4	
Pakistan						0.5	
Liquid assets/ liquid liabilities; all banks (SBP)							
Pakistan	0.4	0.4	0.3	0.4	0.5	0.4	0.4

Sources: IMF; and SBP.

1/ Market capitalization weighted.

Table V.7. Pakistan: Corporate Sector Liqudity—Quick Ratios (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Quick ratio (CVU)						
China	2.3	1.4	1.2	1.1	1.0	0.9
Developed Asia	1.2	1.3	1.5	1.2	1.4	1.4
Emerging Asia	1.2	1.2	1.2	1.3	1.4	1.3
Global	1.0	1.1	1.4	1.3	1.3	1.2
India	0.9	0.9	1.0	1.4	1.1	0.7
Pakistan	0.8	0.8	0.8	0.8	0.7	0.8
Quick ratio (SBP)						
Pakistan	0.5	0.5	0.5	0.5	0.6	0.6
Textile	0.2	0.3	0.3	0.2	0.2	0.6
Chemical and phramaceutical	1.0	1.1	0.9	1.1	1.6	1.3
Engineering	0.6	0.4	0.6	0.6	0.7	0.8
Sugar	0.2	0.3	0.5	0.3	0.6	0.3
Paper and board	0.4	0.4	0.5	0.5	0.4	0.3
Cement	0.2	0.2	0.3	0.3	0.3	0.4
Fuel and energy	0.5	0.5	0.4	0.4	0.4	0.5
Transport and communication	0.3	0.4	0.5	0.5	0.5	0.6
Miscellaneous	0.1	0.1	0.2	0.3	0.3	0.3

Sources: IMF; and SBP.

1/ Market capitalization weighted.

97. **The interest coverage ratio has sharply recovered to about 25 percent in 2003.** This reflects the decline in interest rates as well as the recovery in profits. Its level is now roughly in line with all regional comparators, but considerably below India and considerably above China (Table V.8). A low interest coverage ratio has continued to characterize the cement, sugar, and textile sectors according to the SBP data. Transport and communication

and paper and board have seen a significant improvement in this ratio in recent years, while the engineering and chemical and pharmaceutical and engineering sectors have continued to show high coverage.

Table V.8. Pakistan: Corporate Sector Liquidity—Interest Coverage Ratios (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Interest coverage ratio (CVU)						
China	14.7	18.5	19.6	18.3	17.9	14.9
Developed Asia	22.2	24.7	31.6	39.1	31.8	30.8
Emerging Asia	14.0	18.4	16.5	23.0	27.1	28.1
Global	18.4	20.4	28.0	15.6	17.1	24.3
India	14.6	23.1	36.7	55.4	84.9	73.9
Pakistan	6.6	8.9	12.9	15.0	24.1	24.3
Operating profits/ financial expenses ratio (SBP)						
Pakistan	…	…	…	13.7	29.8	26.4
Textile	…	…	…	5.1	5.3	5.2
Chemical and phramaceutical	…	…	…	33.0	138.9	37.4
Engineering	…	…	…	55.5	67.4	127.3
Sugar	…	…	…	1.9	3.9	5.2
Paper and board	…	…	…	3.4	6.6	22.1
Cement	…	…	…	2.5	4.3	1.7
Fuel and energy	…	…	…	8.4	7.5	11.7
Transport and communication	…	…	…	9.8	12.2	28.2
Miscellaneous	…	…	…	11.3	21.6	30.4

Sources: IMF; and SBP

1/ Market capitalization weighted.

Profitability

98. **Historically, Pakistan has tended to achieve high rates of return on assets and equity.** For the nonfinancial sector, these returns have continued to rise in recent years, following a dip in 2000, to around 15 and 30 percent, respectively (Tables V.9a and V.10a). These returns are almost identical to those achieved in India, but significantly higher than the returns realized in the other comparator regions and countries. The high rates of return on assets suggest that in Pakistan (and in India) capital is relatively scarce. Sector-wise, the chemical and pharmaceutical, engineering, fuel and energy, transportation and communication, and paper and board sectors have enjoyed high and growing profitability in recent years, while the profitability of the sugar, cement, and even textile sectors has remained relatively low. This is a cause for concern for the textile sector given its share in Pakistan's exports and the possibility of external shock.

99. **CVU data for the financial sector show a steady recovery of the rate of return on assets in Pakistan from the low point in 1998.** While the rate of return was lower in Pakistan in 1998 than in any comparator region or country, it was higher than in any comparator region or country from 2002 onward (Table V.9b). Similar trends are evident for the rate of return on equity (Table V.10b).

Table V.9a. Pakistan: Corporate Sector Profitability—Return on Assets (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Return on assets (CVU)						
China	7.6	6.6	8.5	5.9	5.3	5.1
Developed Asia	4.1	3.9	5.2	5.7	3.8	4.6
Emerging Asia	8.0	10.1	10.8	7.4	8.2	8.2
Global	8.5	10.1	9.2	5.2	4.6	7.6
India	12.2	13.2	14.6	14.9	14.2	14.5
Pakistan	13.2	13.2	10.0	12.8	14.3	14.3
Return on assets (SBP)						
Pakistan	10.4	10.1	11.6	14.4	13.8	16.4
Textile	2.0	3.2	9.0	5.8	2.2	4.9
Chemical and phramaceutical	17.8	11.7	10.4	16.1	16.6	18.2
Engineering	0.7	8.3	19.2	17.5	15.9	21.6
Sugar	-2.1	3.2	5.2	0.3	6.0	6.1
Paper and board	6.1	10.8	12.5	11.2	14.8	21.6
Cement	-2.8	-3.0	2.6	-0.7	3.2	0.5
Fuel and energy	10.5	9.3	5.7	13.1	8.7	12.8
Transport and communication	11.4	12.1	15.0	20.0	23.0	26.2
Miscellaneous	12.4	14.8	23.8	19.4	24.0	23.6

Sources: IMF; and SBP.

1/ Market capitalization weighted.

Table V.9b. Pakistan: Corporate Sector Profitability—Return on Assets (Financial), 1998–2004 1/

(In percent)

	1998	1999	2000	2001	2002	2003	2004
Return on assets (CVU) 1/							
China	3.8	4.1	4.5	1.5	1.7	1.8	
Developed Asia	2.1	2.1	3.1	2.4	1.9	1.5	
Emerging Asia	1.4	0.9	2.6	1.5	2.1	1.5	
Global	3.0	2.9	3.0	2.1	2.0	2.4	
India	3.0	2.1	2.5	2.5	3.0	2.8	
Pakistan	1.2	1.7	1.9	2.5	3.2	3.7	
Return on assets; all banks (SBP)							
Pakistan	-0.3	0.4	0.3	0.1	0.9	1.9	1.8

Sources: IMF; and SBP.

1/ Market capitalization weighted.

Table V.10a. Pakistan: Corporate Sector Profitability—Return on Equity (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Return on equity (CVU)						
China	16.1	9.5	13.6	8.8	7.4	7.8
Developed Asia	7.0	6.5	7.8	10.5	5.7	8.6
Emerging Asia	13.0	16.5	18.4	13.8	14.6	14.6
Global	17.6	21.0	16.7	11.6	11.8	16.9
India	24.9	28.3	34.1	29.7	29.8	26.9
Pakistan	32.0	24.5	16.9	30.7	28.6	25.8
Return on equity; all banks (SBP)						
Pakistan	12.4	21.7	26.7	34.6	33.9	35.1
Textile	5.3	8.8	10.0	21.2	8.0	11.0
Chemical and phramaceutical	29.3	13.2	16.1	27.0	32.2	31.9
Engineering	-66.4	22.7	37.1	33.0	32.5	47.9
Sugar	-14.5	5.2	36.0	4.9	68.0	-33.6
Paper and board	11.8	22.8	25.4	21.7	25.3	36.8
Cement	-435.0	-8.7	2.5	10.2	4.9	-19.5
Fuel and energy	50.8	28.6	20.8	34.7	21.5	27.8
Transport and communication	22.5	22.1	25.3	32.8	35.6	40.4
Miscellaneous	42.4	44.3	94.0	80.6	96.0	101.8

Sources: IMF; and SBP.

1/ Market capitalization weighted.

Table V.10b. Pakistan: Corporate Sector Profitability—Return on Equity (Financial), 1998–2004

(In percent)

	1998	1999	2000	2001	2002	2003	2004
Return on equity (CVU) 1/							
China	5.2	4.1	5.9	10.8	12.8	11.2	
Developed Asia	5.3	7.3	11.9	8.8	6.0	5.6	
Emerging Asia	2.8	-5.6	3.9	8.5	9.5	9.7	
Global	15.7	17.2	17.9	11.9	11.5	14.7	
India	22.1	14.6	19.7	16.8	23.6	19.0	
Pakistan	8.4	7.8	14.6	8.5	23.8	34.8	
Return on equity; all banks (SBP)							
Pakistan	-2.7	-3.9	-3.5	-12.6	3.2	20.5	19.5

Sources: IMF; and SBP.

1/ Market capitalization weighted.

Valuation

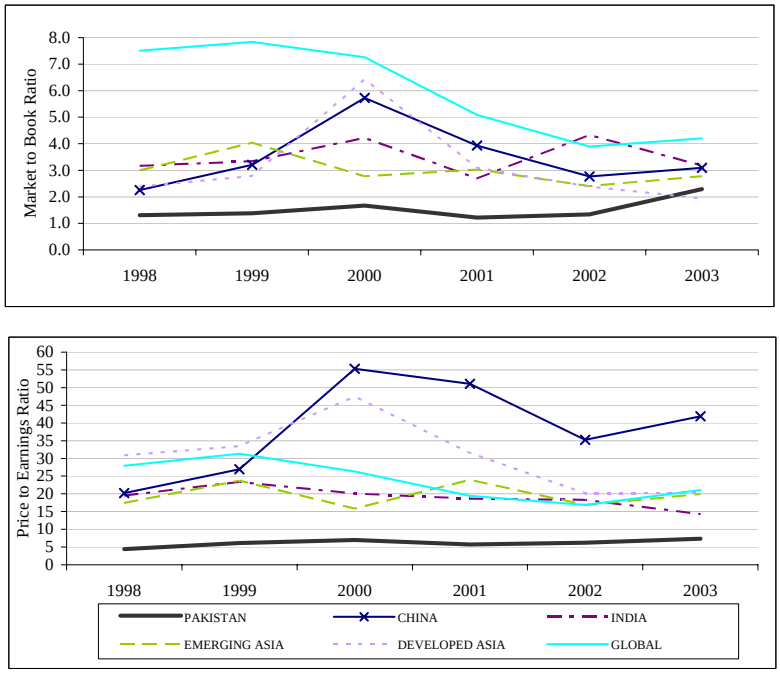
100. **Valuations on the Pakistan stock market are still quite low.** The market-to-book ratio in Pakistan's nonfinancial sector has been lower than in almost any comparator region or country, despite the increase witnessed in 2003 (Table V.11a and Figure V.3). Following a similar increase from very low levels, the market-to-book ratio for the financial sector, at 1.7 in

2003, was more in line with the comparator regions and countries, and higher than in India, though still significantly lower than in China (Table V.11b).

101. **Low valuations in Pakistan are even more evident looking at the price-to-earnings ratio.** The average ratio of about 8 in the nonfinancial sector was, despite a steady rise since 2001, in 2003 still less than half of that in most comparator regions and countries (Table V.12a and Chart V.3). The situation was almost the same for the financial sector, although in 2003, the price-to-earnings ratio for the financial companies in India fell below that in Pakistan (Table V.12b).

102. **Low valuations may reflect risks and uncertainties.** The low valuation may reflect a higher level of risk and uncertainty that the market attaches to earnings expectations in Pakistan relative to other countries. This could reflect political and security risks, but also a still imperfect governance and transparency framework and other shortcomings of the business and legal environment. Hence, the market-to-book value or the earnings ratio may not reflect so much doubts on the ability of a firm to generate strong earnings, but the risks and uncertainties about external factors affecting that firm. This perspective could help explain apparent contradictory findings: the simultaneous prevalence of low market-to-book and price-to-earnings ratios and of high rates of return on assets and equity. The latter uses only contemporaneous information and does not reflect future risks and uncertainties.[33]

Figure V.3. Pakistan: Valuation Indicators for Nonfinancial Corporate Sector, 1997–2003



[33] A similar interpretation, of course, is to say that the applicable discount rate is higher for Pakistan.

Table V.11a. Pakistan: Corporate Sector Valuation—Market-to-Book Ratios (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Market-to-book ratio (CVU)						
China	2.3	3.2	5.7	3.9	2.8	3.1
Developed Asia	2.4	2.8	6.4	3.1	2.4	1.9
Emerging Asia	3.0	4.0	2.8	3.0	2.4	2.8
Global	7.5	7.8	7.3	5.1	3.9	4.2
India	3.2	3.3	4.2	2.7	4.3	3.2
Pakistan	1.3	1.4	1.7	1.2	1.3	2.3
Market-to-book ratio (SBP)						
Pakistan	1.5	1.3	1.7	1.4	1.5	2.3
Textile	0.7	0.7	0.5	0.5	0.6	0.9
Chemical and phramaceutical	1.4	1.3	1.2	1.5	1.3	1.9
Engineering	1.3	1.2	1.6	1.2	1.2	2.1
Sugar	0.4	0.4	0.4	0.5	0.4	1.4
Paper and board	0.8	0.7	0.9	0.8	1.1	1.8
Cement	3.6	0.3	0.5	0.3	0.5	1.8
Fuel and energy	0.8	0.8	1.4	1.1	1.1	1.9
Transport and communication	0.9	1.0	1.3	0.8	0.7	1.2
Miscellaneous	5.0	4.1	6.7	4.7	5.3	8.3

Sources: IMF; and SBP.

1/ Market capitalization weighted.

Table V.11b. Pakistan: Corporate Sector Valuation—Market-to-Book Ratios (Financial), 1998–2004

(In percent)

	1998	1999	2000	2001	2002	2003	2004
Market-to-book ratio (CVU) 1/							
China	1.6	2.4	8.0	5.5	4.1	3.4	
Developed Asia	1.8	2.0	2.5	1.9	1.7	1.5	
Emerging Asia	1.9	2.1	2.0	2.1	1.8	1.8	
Global	3.0	3.1	3.3	2.6	2.0	2.2	
India	1.6	1.1	1.8	2.0	1.6	1.4	
Pakistan	0.7	1.0	1.1	1.0	1.3	1.7	
Market-to-book ratio; all banks (SBP)							
Pakistan	…	…	…	…	0.2	0.6	1.5

Sources: IMF; and SBP

1/ Market capitalization weighted.

Table V.12a. Pakistan: Corporate Sector Valuation—Price-to-Earnings Ratio (Nonfinancial), 1998–2003 1/

	1998	1999	2000	2001	2002	2003
Price-to-earnings ratio (CVU)						
China	20.2	27.0	55.3	51.1	35.3	41.9
Developed Asia	30.9	33.4	47.4	31.5	20.1	20.4
Emerging Asia	17.4	23.7	15.9	23.9	16.9	20.0
Global	28.0	31.3	26.3	19.5	16.9	21.1
India	19.5	23.4	20.1	18.7	18.3	14.3
Pakistan	4.4	6.2	7.0	5.8	6.3	7.4
Price-to-earnings ratio (SBP)						
Pakistan	4.4	5.2	4.3	3.6	4.1	10.1
Textile	5.6	6.4	5.8	3.4	6.4	12.3
Chemical and phramaceutical	2.1	2.2	-1.4	3.8	4.1	4.2
Engineering	1.2	1.1	10.7	3.5	5.0	-11.8
Sugar	-2.3	7.3	1.5	-0.4	3.0	-2.1
Paper and board	6.1	2.6	3.7	3.8	4.3	4.6
Cement	-1.2	9.5	1.6	3.2	2.1	9.2
Fuel and energy	3.0	3.4	3.6	3.5	2.9	5.5
Transport and communication	5.8	5.6	6.0	3.0	2.8	3.9
Miscellaneous	9.4	12.2	7.8	6.3	7.6	57.3

Sources: IMF; and SBP.

1/ Market capitalization weighted.

Table V.12b. Pakistan: Corporate Valuations—Price-to-Earnings Ratios (Financial), 1998–2004

	1998	1999	2000	2001	2002	2003	2004
Price-to-earnings ratio (CVU) 1/							
China	31.7	34.5	39.4	43.5	37.5	31.8	
Developed Asia	24.3	19.4	24.0	24.1	16.8	13.2	
Emerging Asia	18.5	11.8	18.9	18.5	15.3	13.8	
Global	22.6	20.7	20.3	23.4	15.6	15.7	
India	8.2	8.6	12.4	11.1	9.6	7.0	
Pakistan	4.4	10.0	9.2	2.9	6.3	7.8	
Price-to-earnings ratio (SBP)							
Pakistan	…	…	…	…	2.1	4.3	8.0

Sources: IMF; and SBP.

1/ Market capitalization weighted.

103. The apparent contradiction between the high rates of return on assets and equity and low market-to-book ratios in Pakistan is reflected in Tobin's q values.[34] Although rising significantly in recent years, and above 1 from 2002, Tobin's q values have remained lower

[34] Empirically, Tobin's q is estimated as the ratio of market value of equity plus debt/book value of assets. But since the book value of assets is also the sum of book value of equity plus liabilities, Tobin's q should follow the behavior of the market-to-book ratio.

in Pakistan than in most comparator regions and countries (Tables V.13a and V.13b).[35] This contrasts with India, which has relatively high values for Tobin's q, at least for the nonfinancial sector, as would be expected when capital is scarce. The prevalence of both relatively high rates of return on assets and relatively high Tobin's q values in India is consistent with the view that the scarcity of capital reflects a financing constraint. In Pakistan, given the relatively low Tobin's q values despite relatively high rates of return, the scarcity of capital could reflect a relatively high cost to invest.

Table V.13a. Pakistan: Corporate Sector Valuation—Tobin's q Values (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Tobin' s q (CVU)						
China	1.6	1.7	2.6	2.2	1.7	1.7
Developed Asia	1.2	1.4	1.6	1.5	1.4	1.1
Emerging Asia	1.6	1.6	1.4	1.6	1.4	1.5
Global	2.3	2.5	2.6	2.3	1.7	1.9
India	2.5	2.1	2.8	2.5	2.2	2.6
Pakistan	0.8	1.0	1.0	0.8	0.8	1.2
Tobin's q (SBP)						
Pakistan	1.1	1.1	1.2	1.1	1.1	1.5
Textile	0.9	0.9	0.9	0.9	0.9	1.0
Chemical and phramaceutical	1.2	1.2	1.1	1.2	1.1	1.5
Engineering	1.1	1.1	1.3	1.1	1.1	1.6
Sugar	0.8	0.8	0.8	0.9	0.9	1.1
Paper and board	0.9	0.9	0.9	0.9	1.0	1.5
Cement	0.7	0.7	0.8	0.8	0.7	1.1
Fuel and energy	1.0	0.9	1.2	1.1	1.0	1.4
Transport and communication	1.0	1.0	1.2	0.9	0.8	1.1
Miscellaneous	2.0	2.1	2.5	2.0	2.2	3.0

Sources: IMF; and SBP.

1/ Market capitalization weighted.

[35] Except for the banking sector in most recent years.

Table V.13b. Pakistan: Corporate Sector Valuation—Tobin's q Values (Finanicial), 1998–2004

(In percent)

	1998	1999	2000	2001	2002	2003	2004
Tobin's q (CVU) 1/							
China	1.1	1.7	2.6	0.9	0.7	0.9	
Developed Asia	0.6	0.6	0.6	0.6	0.6	0.5	
Emerging Asia	0.5	0.6	0.5	0.5	0.5	0.5	
Global	0.6	0.6	0.6	0.6	0.5	0.6	
India	0.4	0.3	0.4	0.4	0.4	0.4	
Pakistan	0.2	0.3	0.3	0.3	0.3	0.4	
Tobin's q (SBP)							
Pakistan	…	…	…	…	0.3	0.5	1.0

Sources: IMF; and SBP.

1/ Market capitalization weighted.

International exposure

104. **Pakistan's corporations have modest and declining international exposure.**[36] This contrasts with the growing international exposure of most other comparator regions and countries, especially Emerging Asia with the exception of India (Table V.14). Only the textile, and to a lesser extent sugar, sectors have significant international exposure.

Table V.14. Pakistan: Corporate Sector International Exposure Indicator (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Foreign sales/ total sales (CVU)						
China	0.0	0.2	0.1	0.7	2.3	4.4
Developed Asia	22.5	21.9	24.3	26.7	27.4	28.5
Emerging Asia	1.0	1.2	3.6	4.2	7.5	7.9
Global	30.0	30.3	30.9	33.0	33.2	33.5
India	0.0	0.0	0.0	0.0	2.6	1.9
Foreign sales/ total sales (SBP)						
Pakistan	…	…	…	4.8	4.7	4.3
Textile	…	…	…	32.4	33.2	33.3
Chemical and phramaceutical	…	…	…	0.4	0.7	0.7
Engineering	…	…	…	2.5	2.5	1.5
Sugar	…	…	…	8.9	11.9	4.6
Paper and board	…	…	…	1.0	1.2	1.1
Cement	…	…	…	0.0	0.6	1.6
Fuel and energy	…	…	…	0.5	0.4	0.5
Transport and communication	…	…	…	0.0	0.0	0.0
Miscellaneous	…	…	…	3.0	2.8	2.6

Sources: IMF; and SBP.

1/ Market capitalization weighted.

[36] As measured by the share of foreign sales in total sales of the nonfinancial sector. The CVU does not include data on the international exposure of Pakistan's corporate sector, although it provides data for the comparator regions/countries. This discussion draws only on the SBP data source for the nonfinancial sector of Pakistan.

Dependence on external sources of finance

105. **The nonfinancial corporate sector in Pakistan relied on internal sources of financing more than in most comparator regions and countries** (Table V.15).[37] The CVU uses the so-called Rajan–Zingales Index to evaluate this dependence. From this index, an internal finance ratio can be derived.[38, 39] An alternative internal finance ratio is available from the SBP data source and defined as the ratio of retention in business to the change in capital employed.[40] This is a stricter definition, which, in contrast to Rajan–Zingales, subtracts both depreciation and dividends. Significantly lower internal finance ratios are therefore derived from this definition. The reliance on internal sources of financing is not surprising in view of the still relatively underdeveloped channels of financial intermediation in Pakistan. It also suggests that dependence on external sources of finance is not a source of corporate sector vulnerability in Pakistan (nor India).

106. **However, the lower internal finance ratio derived from the SBP data source raises questions on the validity of this conclusion.** The internal finance ratio calculated using SBP data is not only low, but has also fallen in recent years. In addition to depreciation, an explanation for the divergent movements of the Rajan-Zingales index and the SBP internal finance ratio is the different treatment of dividends, which are netted in the SBP's internal finance ratio. This is important because companies in Pakistan have tended to distribute large dividends, possibly because of a reluctance to use internally generated funds to invest (Table V.16). The availability of cheap credit in recent years may have encouraged the corporate sector to favor financing investment through credit. This could make companies more vulnerable to a credit crunch. The textile sector seems to have relied least on internal finance, and relied most on bank financing, and therefore might be the most vulnerable (Figures V.4 and V.5).

---

[37] There can be several broad reasons for this: a relatively low investment demand can easily be met by the cashflow; a "constraint" on external sources of financing forces the firm to undertake only investment which can be internally financed; or the relatively higher cost of external finance encourages the firm to rely on internal sources of finance.

[38] The Rajan-Zingales index measures the amount of capital expenditures (excluding amounts associated with acquisitions) not covered by the operating cashflow, in percent. The cashflow consists of income plus depreciation/amortization; plus the decrease in inventories; plus the decrease in receivables; plus the increase in payables. The lower the index (including in negative territory), the less is the dependence on external sources of financing. Note that this concept of cashflow includes the change in the nonfinancial components of net working capital as a source of funds.

[39] The internal finance ratio is simply 1 minus the Rajan-Zingales Index/100.

[40] Retention of business consists in net profits after tax (which treats depreciation as a cost) minus dividends paid. Capital employed consists of shareholder equity plus total liabilities. Change in capital employed thus coincides to the resources available for investment.

Figure V.4. Pakistan: Reliance on Internal Finance of Nonfinancial Corporate Sector, 1998–2003

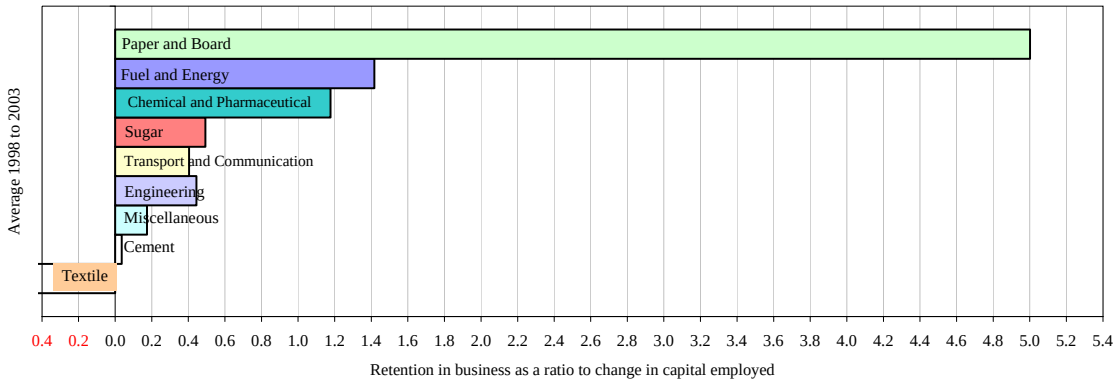


Figure V.5. Pakistan: Scheduled Banks' Advances to Various Sectors

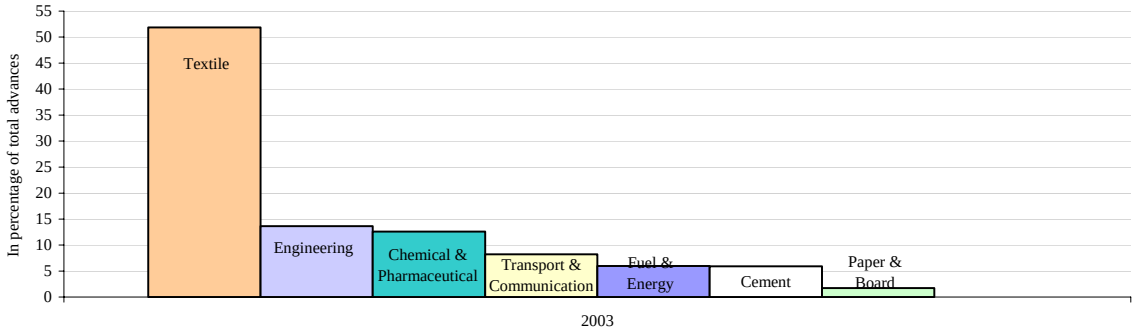


Table V.15. Pakistan: Corporate Sector Internal Finance Indicator (Nonfinancial), 1998–2003 1/

(In percent)

	1998	1999	2000	2001	2002	2003
Internal finance ratio (CVU)						
China	1.4	1.1	2.1	2.3	1.7	1.3
Developed Asia	0.9	1.5	2.3	2.2	1.6	2.0
Emerging Asia	2.2	1.8	2.0	2.2	2.3	2.3
Global	2.0	2.1	2.2	2.5	2.5	2.8
India	3.0	2.6	2.7	2.4	3.9	3.0
Pakistan	1.7	3.2	3.4	3.8	2.8	3.6
Internal finance ratio (SBP) 2/						
Pakistan	1.9	1.8	0.4	0.1	0.4	-0.4
Textile	0.3	-1.1	-1.4	1.3	-1.8	-0.1
Chemical and phramaceutical	1.9	5.7	-0.1	-1.3	0.6	0.2
Engineering	-2.7	0.7	1.5	0.8	1.2	1.2
Sugar	1.1	1.5	0.2	0.7	0.5	-1.1
Paper and board	30.5	-0.8	-2.8	2.2	1.2	-0.3
Cement	0.5	-0.8	1.0	1.1	-0.5	-1.0
Fuel and energy	5.0	1.3	0.3	1.4	0.5	0.0
Transport and communication	0.1	1.9	1.3	-1.4	1.8	-1.4
Miscellaneous	2.1	0.5	0.0	0.2	-0.5	-1.3

Sources: IMF; and SBP

1/ Market capitalization weighted.

2/ Does not add depreciation and amortization, and subtracts dividend payments in the numerator, and takes the overall change in capital employed (equity plus liabilities) as denominator.

Table V.16. Pakistan: Corporate Dividend Policy, 1999–2004

(In percent)

	1999	2000	2001	2002	2003	2004
Dividend-yield (CVU)						
All emerging markets	1.5	2.1	2.3	2.4	2.3	2.6
Emerging Asia	1.0	1.7	1.7	1.8	2.0	2.5
Pakistan	4.0	5.1	16.0	11.0	8.6	7.0
Dividend-payout ratio (CVU) 1/						
All emerging markets	41.3	31.0	32.2	33.9	33.8	31.7
Emerging Asia	41.4	26.5	28.9	26.9	32.8	27.9
Pakistan	70.4	43.0	72.5	88.4	74.9	66.5
Pakistan (SBP) 2/	44.2	49.6	55.6	56.9	63.2	...
Textile	56.0	28.9	33.6	35.0	37.6	...
Chemical and phramaceutical	42.3	38.8	73.1	65.9	53.4	...
Engineering	41.3	37.5	41.1	50.4	36.7	...
Sugar	43.5	36.3	22.5	23.0	22.5	...
Paper and board	36.7	35.0	44.6	54.5	40.0	...
Cement	35.0	12.4	34.9	28.4	97.8	...
Fuel and energy	15.1	30.4	50.1	65.0	75.4	...
Transport and communication	53.9	74.6	61.4	63.0	71.1	...
Miscellaneous	71.2	83.5	75.2	51.0	60.5	...

Source: IMF Global Financial Stability Report (April 2005).

1/ Derived from multplying the average dividend yield by the average price-earnings ratio.
2/ Average of companies; market capitalization weighted.

D. Conclusions

The main insights from this paper can be summarized as follows:

- **The corporate governance framework has improved significantly over the past five years.** The main remaining challenges are fully enforcing the framework, strengthening the quality of financial information on corporations, and building human capacity in the corporate governance and accounting fields.

- **The concentration of corporate control within families remains a constraint to effective governance, efficiency, and the development of the equity market.** But the solution to this problem largely lies with the families themselves. They must learn about the benefits to themselves, in addition to other shareholders, from practicing best corporate governance, openness, and transparency standards. But in the absence of such enlightenment, policy measures could be needed.

- **Many financial indicators point to reduced vulnerabilities in recent years, and comparisons to comparator regions and countries are favorable.** In particular:

  - de-leveraging relative to the situation prevailing until 2000, although the process appears to have reversed since 2003, at least for the nonfinancial corporate sector;

  - significant reduction in the share of corporate sector debt denominated in foreign currencies;

  - relatively high and growing profitability, as measured by the rates of return on assets and equity;

  - an improvement in valuation indicators, although these remain significantly below those prevailing in comparator regions and countries. The apparent contradiction between high profitability and still relatively low valuation indicators suggests an unusually large discounting of future earnings due to higher perceived levels of risk and uncertainties; and

  - a low and even declining level of external exposure, in contrast to most comparator regions and countries.

- **A few financial indicators, however, suggest remaining vulnerabilities**. In particular:

  - a re-leveraging of the nonfinancial corporate sector since 2003;

  - the share of short-term liabilities is high by international standards;

  - liquidity appears to be lower than in comparator regions and countries;

  - while some indicators (based on the Rajan-Zingales Index) show that the corporate sector in Pakistan relies more on internal finance for capital investment than elsewhere, the indicator based on retention in business suggests otherwise. This reflects the payment of large dividends in Pakistan. Indications are that, as capital employed has expanded in recent years, the practice of large dividend payments has continued, resulting in lower internal finance ratios. This might reflect the low level of interest rates.

- **The cross-sectoral analysis adds further insights on corporate vulnerability.** Perhaps most striking is the relatively higher vulnerability of the textile sector, based on relatively low liquidity and profitability, and heavy dependence on external rather than internal finance (the cement and sugar sectors share similar characteristics). This outcome may be related to the ownership structure of the sector, in addition to the fierce international competition that characterizes the sector. The large exposure of

the banking system to the textile sector suggests that any adverse shock to the sector could have a significant impact on the banks as well.

107. **Going forward, key challenges remain for the policy makers.** These include: (a) further strengthening the effective enforcement of the corporate governance framework to encourage public listing and acceptance of the role of institutional and minority shareholders. This is critical for the development of financial markets; (b) monitoring and managing any deterioration in corporate debt indicators associated with a credit-driven acceleration in economic growth. Greater reliance on fresh equity capital and long-term financing (through TFCs in particular) would reduce vulnerability and should be encouraged; and (c) addressing risks and uncertainties that result in low valuation and discourage investment. While explanatory factors may be political and security risks, measures to address remaining deterrents to doing business could produce high returns.

References

Brooks, Robin and Kenichi Ueda, 2005, *User Manual for the Corporate Vulnerability Utility*, (Washington: International Monetary Fund).

Cheema, Ali, 2003, "Corporate Governance in Pakistan: Issues and Concerns," *The Journal*, Vol. 8, pp. 7–19, (NIPA, Karachi).

Claessens, Stijn, Simeon Djankov, and Larry H. P. Lang, 1999, "Who Controls East Asian Corporations? (Manuscript), Financial Economics Unit, Financial Sector Practice Department, World Bank.

Government of Pakistan, 2005, *Pakistan Economic Survey: 2004/05*, Finance Division, Economic Advisor's Wing, Islamabad.

International Monetary Fund, 2005, *Global Financial Stability Report: Market Developments and Issues*, pp. 92–133, Washington, D.C.

Karachi Stock Exchange (various publications).

Lins, Karl and Francis Warnock, 2004, "Corporate Governance and the Shareholder Base," International Finance Discussion Papers No. 816.

Lorie, Henri and Zafar Iqbal, 2005, "Pakistan's Macroeconomic Adjustment and Resumption of Growth, 1999-2004," IMF Working Paper 05/139, (Washington: International Monetary Fund).

Rajan, Raghuram G. and Luigi Zingales, 1998, "Financial Dependence and Growth," *American Economic Review*, Vol. 88, pp. 559–86.

Securities and Exchange Commission of Pakistan, 2005, *Annual Report for the Year 2003–04*.

State Bank of Pakistan (various issues), "Balance Sheet Analysis of Joint Stock Companies Listed on the Karachi Stock Exchange."

——— (various issues), *Annual Report.*

Tobin, James, 1969, "A General Equilibrium Approach to Monetary Theory," *Journal of Money, Credit, and Banking*, Vol. 1, pp. 15–29.

World Bank, 2005, "Report on the Observance of Standards and Codes: Corporate Governance Country Assessment, Pakistan," (unpublished).

World Bank, 2005, "Report on the Observance of Standards and Codes Pakistan: Accounting and Auditing," (unpublished).

Table 1. Pakistan: Sectoral Origin of Gross Domestic Product at Constant Prices, 1999/2000–2004/05

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
	(In millions of Pakistani rupees at constant 1999/2000 prices)					
Agriculture	923,609	903,499	904,433	941,942	962,527	1,034,292
Crops	467,879	430,147	418,128	440,951	450,046	510,582
Major crops	342,200	308,474	300,911	321,505	327,463	384,216
Minor crops	125,679	121,673	117,217	119,446	122,583	126,366
Livestock	417,120	433,066	448,968	460,495	473,202	484,034
Fishing	15,163	14,715	12,901	13,346	13,611	13,898
Forestry	23,447	25,571	24,436	27,150	25,668	25,778
Industry	798,190	827,229	849,139	889,031	995,453	1,097,198
Mining and quarrying	48,377	47,561	51,031	59,266	61,509	64,609
Manufacturing	522,801	571,357	596,841	638,044	727,733	818,448
Large scale	338,602	375,687	388,859	416,955	492,937	568,987
Small scale	132,369	142,310	152,997	164,487	176,589	190,090
Slaughtering	51,830	53,360	54,985	56,602	58,207	59,371
Construction	87,386	87,846	89,241	92,789	86,402	91,783
Utilities	139,626	120,465	112,026	98,932	119,809	122,358
Services	1,807,546	1,863,396	1,952,146	2,053,979	2,176,564	2,348,360
Transport, storage, and communication	400,983	422,195	427,296	445,552	470,015	496,171
Commerce	621,842	649,564	667,615	707,665	764,688	856,531
Finance and insurance	132,454	112,455	131,761	130,081	135,972	165,553
Ownership of dwellings	110,425	114,593	118,604	122,466	126,764	131,214
Public administration and defense	220,291	225,152	240,585	259,148	269,959	267,750
Other services	321,551	339,437	366,285	389,067	409,166	431,141
GDP at factor costs	3,529,345	3,594,124	3,705,718	3,884,952	4,134,544	4,479,850
Indirect taxes	295,815	301,920	312,886	355,323	372,029	383,827
Subsidies	31,724	32,050	30,227	54,451	53,488	63,954
GDP at market prices	3,793,436	3,863,994	3,988,377	4,185,824	4,453,085	4,799,723
Per capita GDP at factor cost	25,662	25,606	25,883	26,473	27,628	29,370
Per capita GDP at market prices	27,583	27,529	27,858	28,524	29,757	31,467
		(Annual changes in percent)				
Memorandum items:						
Agriculture	...	-2.2	0.1	4.1	2.2	7.5
Crops	...	-8.1	-2.8	5.5	2.1	13.5
Livestock	...	3.8	3.7	2.6	2.8	2.3
Industry	...	3.6	2.6	4.7	12.0	10.2
Mining and quarrying	...	-1.7	7.3	16.1	3.8	5.0
Manufacturing	...	9.3	4.5	6.9	14.1	12.5
Large scale	...	11.0	3.5	7.2	18.2	15.4
Construction	...	0.5	1.6	4.0	-6.9	6.2
Utilities	...	-13.7	-7.0	-11.7	21.1	2.1
Services	...	3.1	4.8	5.2	6.0	7.9
Transport, storage, and communication	...	5.3	1.2	4.3	5.5	5.6
Commerce	...	4.5	2.8	6.0	8.1	12.0
Finance and insurance	...	-15.1	17.2	-1.3	4.5	21.8
Ownership of dwellings	...	3.8	3.5	3.3	3.5	3.5
Public administration and defense	...	2.2	6.9	7.7	4.2	-0.8
Other services	...	5.6	7.9	6.2	5.2	5.4
GDP at factor costs	...	1.8	3.1	4.8	6.4	8.4
Indirect taxes	...	2.1	3.6	13.6	4.7	3.2
Subsidies	...	1.0	-5.7	80.1	-1.8	19.6
GDP at market prices	...	1.9	3.2	5.0	6.4	7.8

Source: Pakistani authorities.

Table 2. Pakistan: Sectoral Origin of Gross Domestic Product at Current Prices, 1999/2000–2004/05

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
	(In millions of Pakistani rupees at current prices)					
Agriculture	923,609	945,301	968,291	1,059,316	1,149,129	1,322,641
Crops	467,879	456,258	449,993	500,567	559,313	641,495
Major crops	342,200	325,579	316,857	370,117	427,837	496,105
Minor crops	125,679	130,679	133,136	130,450	131,476	145,390
Livestock	417,120	446,058	476,310	512,976	542,242	628,305
Fishing	15,163	16,546	16,377	16,625	16,728	17,490
Forestry	23,447	26,439	25,611	29,148	30,846	35,351
Industry	798,190	895,044	938,394	1,031,108	1,282,054	1,540,444
Mining and quarrying	48,377	59,151	65,997	84,238	107,990	121,836
Manufacturing	522,801	608,132	642,850	725,434	902,870	1,118,391
Large scale	338,602	410,879	424,089	481,374	622,283	790,152
Small scale	132,369	143,463	161,734	179,266	195,782	229,865
Slaughtering	51,830	53,790	57,027	64,794	84,805	98,374
Construction	87,386	94,670	95,197	100,880	120,487	143,916
Utilities	139,626	133,091	134,350	120,556	150,707	156,301
Services	1,807,546	2,035,680	2,188,527	2,390,988	2,711,427	3,266,591
Transport, storage, and communication	400,983	512,997	542,828	609,929	699,782	902,247
Commerce	621,842	691,854	720,812	785,776	922,667	1,107,296
Finance and Insurance	132,454	116,997	142,424	144,989	158,476	210,683
Ownership of dwellings	110,425	124,359	126,454	135,139	146,293	165,456
Public administration and defense	220,291	235,039	260,042	285,854	312,105	337,560
Other services	321,551	354,434	395,967	429,301	472,104	543,349
GDP at factor costs	3,529,345	3,876,025	4,095,212	4,481,412	5,142,610	6,129,676
Indirect taxes	295,815	320,669	339,262	403,221	455,549	501,470
Subsidies	31,724	34,040	32,775	61,791	65,496	83,556
GDP at market prices	3,793,436	4,162,654	4,401,699	4,822,842	5,532,663	6,547,590
	(In percent of GDP at factor cost)					
Memorandum items:						
Agriculture	26.2	24.4	23.6	23.6	22.3	21.6
Crops	13.3	11.8	11.0	11.2	10.9	10.5
Livestock	11.8	11.5	11.6	11.4	10.5	10.3
Industry	22.6	23.1	22.9	23.0	24.9	25.1
Mining and quarrying	1.4	1.5	1.6	1.9	2.1	2.0
Manufacturing	14.8	15.7	15.7	16.2	17.6	18.2
Large scale	9.6	10.6	10.4	10.7	12.1	12.9
Construction	2.5	2.4	2.3	2.3	2.3	2.3
Utilities	4.0	3.4	3.3	2.7	2.9	2.5
Services	51.2	52.5	53.4	53.4	52.7	53.3
Transport, storage, and communication	11.4	13.2	13.3	13.6	13.6	14.7
Commerce	17.6	17.8	17.6	17.5	17.9	18.1
Finance and insurance	3.8	3.0	3.5	3.2	3.1	3.4
Ownership of dwellings	3.1	3.2	3.1	3.0	2.8	2.7
Public administration and defense	6.2	6.1	6.3	6.4	6.1	5.5
Other services	9.1	9.1	9.7	9.6	9.2	8.9
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Pakistani authorities.

Table 3. Pakistan: Gross Domestic Product—Expenditure Side, 1999/2000–2004/05

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
	(In millions of Pakistani rupees at constant 1999/2000 prices)					
Private consumption	2,791,346	2,856,556	2,900,987	2,915,436	3,153,903	3,684,438
Government consumption	390,691	312,070	358,968	384,825	392,957	401,864
Gross fixed capital formation	607,410	634,423	632,134	658,070	628,796	638,537
Change in inventories	51,700	58,138	53,491	71,051	77,006	79,065
Domestic demand	3,841,147	3,861,187	3,945,580	4,029,382	4,252,662	4,803,904
Export of goods and nonfactor services	514,280	576,936	634,399	814,425	801,982	862,717
Imports of goods and nonfactor services	561,990	574,130	591,602	657,983	601,559	866,898
Gross domestic product at market prices	3,793,437	3,863,993	3,988,377	4,185,824	4,453,085	4,799,723
Percentage change		*1.9*	*3.2*	*5.0*	*6.4*	*7.8*
Less indirect taxes	295,815	301,920	312,886	355,323	372,029	383,827
Plus subsidies	31,724	32,050	30,227	54,451	53,488	63,954
Gross domestic product at factor cost	3,529,346	3,594,123	3,705,718	3,884,952	4,134,544	4,479,850
Percentage change		*1.8*	*3.1*	*4.8*	*6.4*	*8.4*
Net factor income from abroad	-47,957	-47,284	22,594	127,050	90,721	86,135
Gross national product (market prices)	3,745,480	3,816,709	4,010,971	4,312,874	4,543,806	4,885,858
Percentage change		*1.9*	*5.1*	*7.5*	*5.4*	*7.5*
		(In millions of Pakistani rupees at current prices)				
Private consumption	2,851,346	3,163,874	3,278,905	3,548,157	4,052,901	5,235,382
Government consumption	330,691	327,562	388,446	428,689	462,462	512,926
Gross fixed capital formation	607,410	659,325	680,373	736,433	864,701	999,306
Change in inventories	51,700	56,200	58,000	80,629	94,294	103,299
Domestic demand	3,841,147	4,206,961	4,405,724	4,793,908	5,474,358	6,850,913
Export of goods and nonfactor services	514,280	617,148	677,855	815,158	883,704	1,001,011
Imports of goods and nonfactor services	561,990	661,455	681,880	786,224	825,399	1,304,334
Gross domestic product at market prices	3,793,437	4,162,654	4,401,699	4,822,842	5,532,663	6,547,590
Less indirect taxes	295,815	320,669	339,262	403,221	455,549	501,470
Plus subsidies	31,724	34,040	32,775	61,791	65,496	83,556
Gross domestic product at factor cost	3,529,346	3,876,025	4,095,212	4,481,412	5,142,610	6,129,676
Net factor income from abroad	-47,957	-54,482	23,665	151,812	124,478	125,224
Gross national product (market prices)	3,745,480	4,108,172	4,425,364	4,974,654	5,657,141	6,672,814

Source: Pakistani authorities.

Table 4. Pakistan: Consumer and Wholesale Price Indices, 1997/98–2004/05

(2000/01 = 100)

	Index (12-Month Average)		Annual Average Percent Change		Twelve-Month Percent Change 1/	
	CPI	WPI	CPI	WPI	CPI	WPI
			(Fiscal year data)			
1997/98	88.3	87.7	7.8	6.6	6.5	5.3
1998/99	93.4	93.3	5.7	6.3	3.7	4.6
1999/2000	96.7	95.0	3.6	1.8	5.1	3.4
2000/01	101.0	100.9	4.4	6.2	2.5	4.6
2001/02	103.5	102.1	2.5	1.2	3.4	1.9
2002/03	106.7	107.8	3.1	5.6	1.9	4.1
2003/04	111.6	116.3	4.6	7.9	8.5	12.8
2004/05	122.0	124.1	9.3	6.8	8.7	6.2
			(Monthly data)			
Jul-02	103.9	102.2	2.6	0.8	4.0	1.4
Aug-02	104.2	102.4	2.7	0.6	3.7	2.7
Sep-02	104.5	102.7	2.8	0.5	3.7	3.4
Oct-02	104.8	103.2	2.9	0.8	3.5	5.0
Nov-02	105.1	103.6	3.0	1.3	3.1	5.2
Dec-02	105.4	104.1	3.2	2.0	3.3	6.3
Jan-03	105.7	104.7	3.3	2.7	3.4	7.0
Feb-03	106.0	105.5	3.4	3.6	3.5	9.8
Mar-03	106.2	106.3	3.3	4.4	2.3	9.1
Apr-03	106.4	106.9	3.2	5.1	2.2	7.2
May-03	106.6	107.4	3.2	5.4	2.6	6.0
Jun-03	106.7	107.8	3.1	5.6	1.9	4.1
Jul-03	106.9	108.1	2.9	5.8	1.4	4.2
Aug-03	107.0	108.5	2.7	5.9	1.8	3.8
Sep-03	107.2	108.8	2.6	5.9	2.2	3.7
Oct-03	107.5	109.3	2.6	6.0	3.5	6.1
Nov-03	107.9	110.1	2.7	6.3	4.2	8.2
Dec-03	108.4	110.9	2.9	6.5	5.4	9.6
Jan-04	108.8	111.8	3.0	6.8	5.2	9.5
Feb-04	109.2	112.4	3.1	6.5	4.3	6.9
Mar-04	109.7	113.2	3.3	6.5	5.3	8.2
Apr-04	110.2	114.1	3.7	6.7	6.0	10.3
May-04	110.9	115.1	4.0	7.2	7.1	11.5
Jun-04	111.6	116.3	4.6	7.9	8.5	12.8
Jul-04	112.5	117.2	5.2	8.4	9.3	10.2
Aug-04	113.3	118.0	5.9	8.7	9.2	7.9
Sep-04	114.1	118.7	6.4	9.1	9.0	8.0
Oct-04	114.9	119.3	6.9	9.1	8.7	6.6
Nov-04	115.8	119.9	7.3	8.9	9.3	5.9
Dec-04	116.5	120.3	7.4	8.5	7.4	4.2
Jan-05	117.3	120.8	7.7	8.1	8.5	5.6
Feb-05	118.2	121.5	8.2	8.1	9.9	6.7
Mar-05	119.1	122.1	8.6	7.9	10.2	6.3
Apr-05	120.2	122.9	9.0	7.7	11.1	7.7
May-05	121.1	123.5	9.2	7.3	9.8	6.0
Jun-05	122.0	124.1	9.3	6.8	8.7	6.2
Jul-05	122.9	125.1	9.2	6.7	9.0	9.4
Aug-05	123.7	126.3	9.2	7.0	8.4	11.7

Sources: Federal Bureau of Statistics; and Fund staff calculations.

1/ For fiscal year data, refers to the change in indices at the end of the year.

Table 5. Pakistan: Domestic Retail Prices of Selected Petroleum Products, 1997/98–2004/05

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
	(In Pakistan rupees per litre unless otherwise indicated) 1/							
Regular petrol 2/	17.60	22.24	25.98	25.75	31.48	33.01	33.78	41.19
High-octane petrol	20.47	25.89	30.58	33.57	35.79	37.14	37.80	45.67
Kerosene	9.44	9.56	10.91	14.32	15.74	19.60	21.76	26.08
High speed diesel	9.66	9.78	11.49	15.58	16.51	21.05	22.61	27.02
Light diesel	7.79	7.87	9.28	13.57	14.30	17.27	18.66	23.61
Fuel oil (Pakistani rupees per metric ton.) 3/	6,251	5,567	7,170	11,176	10,594	12,714	11,515	n.a.

Sources: Ministry of Petroleum and Natural Resources; and Federal Bureau of Statistics.

1/ Annual averages.
2/ MS 87-RON.
3/ Fuel oil prices were deregulated with effect from July 1, 2000.

Table 6. Pakistan: Natural Gas Prices, 1997–2004 1/

	Jan-97	Aug-98	Jan-00	Mar-01	Mar-02	Jul-02	Aug-02	Oct-02	Jan-03	Jul-04	Dec-04
	(In Pakistan rupees per thousand cubic feet)										
Fertilizer industry	34.01	34.01	35.80	35.80	36.77	36.77	36.77	36.77	36.77	36.77	36.77
Other industries	102.46	120.00	145.26	166.18	166.18	166.18	166.18	166.88	172.26	182.09	182.09
Household											
Up to 3.55 mcf/month	49.09	55.23	66.85	66.85	66.86	66.86	66.86	67.95	69.31	73.95	73.95
From 3.55 to 7.1 mcf/month	50.75	65.58	79.51	93.39	100.73	100.73	100.73	102.37	104.42	111.42	111.42
From 7.1 to 10.64 mcf/month	69.30	89.66	108.54	138.93	161.16	161.16	161.16	163.78	167.06	178.25	178.25
From 10.64 to 14.20 mcf/month	83.16	107.58	130.23	168.09	201.45	201.45	201.45	213.06	217.32	231.88	231.88
Above 14.20 mcf/month				181.54	217.85	217.85	217.85	213.06	217.32	231.88	231.88
Commercial	115.28	135.02	155.27	163.44	186.98	186.98	186.98	190.02	193.82	204.88	204.88
Memorandum item:											
Weighted price index 2/	86.3	101.2	121.3	140.6	145.0	145.0	145.0	146.0	150.1	158.7	n.a.

Sources: Ministry of Petroleum and Natural Resources; and Fund staff estimates.

1/ Columns indicate date of price adjustments.

2/ The weights used, based on the 1984/85 consumption pattern, are as follows: fertilizer industry, 0.148; other industries, 0.644; household use, 0.165 (with equal shares for all classes of users); and commercial, 0.043.

Table 7. Pakistan: Federal Government Fiscal Operations, 1997/98–2004/05

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
	(In millions of Pakistan rupees)							
Total revenue (incl. grants)	310,978	368,432	396,133	420,799	525,115	622,988	600,021	629,939
Tax revenue (net)	220,975	257,721	243,604	259,414	287,786	336,285	382,736	359,839
Transfers to provincial tax pool	114,078	115,573	143,231	163,131	171,466	195,950	200,633	257,356
Tax revenue (gross)	335,053	373,294	386,835	422,545	459,252	532,235	583,369	617,195
Income and profit taxes	91,499	94,649	108,011	124,566	142,589	151,976	164,497	176,930
Wealth and capital taxes	7,723	8,812	4,597	0	0	0	0	0
Federal excise duty	58,795	60,572	55,630	49,018	46,920	44,002	45,823	58,670
Sales tax	49,046	68,680	116,697	153,474	166,316	195,138	220,607	235,533
Customs duties	81,644	78,654	61,638	65,013	48,072	68,835	90,940	117,243
Surcharges	46,346	61,927	38,912	30,290	54,258	68,230	61,381	26,769
Gas (net)	9,800	9,855	13,509	12,348	17,694	21,358	16,770	16,165
Petroleum	36,546	52,072	25,403	17,942	36,564	46,872	44,611	10,604
Foreign travel tax	0	0	1,350	184	1,097	4,054	121	2,050
Nontax revenue	90,003	97,008	119,086	120,843	154,182	167,748	186,757	250,743
Interest receipts (provinces)	26,010	25,469	28,270	29,368	29,528	27,996	26,126	24,557
Interest receipts (other)	16,556	16,205	25,070	21,885	23,821	24,988	39,308	33,761
Dividend	7,766	9,553	14,145	16,334	26,607	26,567	36,144	56,791
SBP profit	18,000	8,000	30,000	20,000	26,000	6,000	0	10,000
Sales proceeds and royalty	...	...	...	...	...	12,644	14,104	19,535
Postoffice profit/PTA	...	...	...	...	...	...	...	17,739
Other civil administration	7,767	6,226	3,186	3,387	22,186	54,683	50,232	57,095
Other federal miscellaneous	13,706	31,221	18,415	29,870	26,040	14,870	20,843	31,265
Capital revenue	198	334	0	0	0	0	0	0
Grants 1/	0	13,703	33,443	40,542	83,147	118,955	30,528	19,357
Expenditure and net lending	501,321	520,006	569,182	554,201	694,889	696,745	705,091	872,502
Current expenditures	411,980	444,603	501,281	495,826	561,037	632,961	587,867	719,402
Interest payments 2/	196,251	213,259	245,078	234,470	245,263	207,069	196,261	210,196
Domestic	167,513	175,273	198,417	183,450	184,632	166,873	154,817	170,466
Foreign	28,738	37,986	46,661	51,020	60,631	40,196	41,444	39,730
Defense 3/	136,164	143,471	150,390	130,819	149,029	159,925	180,361	211,717
General administration	47,539	46,907	47,525	75,424	83,482	108,029	108,028	114,114
Grants	16,175	16,324	33,617	35,622	59,361	49,994	64,841	125,318
O*f which:* to provinces	10,881	12,084	21,002	17,520	16,518	26,521	30,569	30,627
Other	5,294	4,240	12,615	18,102	42,843	23,473	34,272	94,691
Subsidies	6,267	9,533	14,748	19,850	23,742	51,463	40,462	57,800
Railway account	2,368	5,421	2,657	666	-2,295	-1,744	-2,476	-260
Food account	-2,565	4,532	-208	-1,185	2,213	341	43	7
Fertilizer and other accounts	1,174	-1,171	-44	-163	-56	-12	-261	10
Other	8,607	6,327	7,518	323	298	57,896	608	500
Development expenditure and net lending	89,341	75,403	67,901	58,375	133,852	63,784	117,224	153,100
Public Sector Development Program 4/	81,000	85,419	59,336	66,908	98,377	90,835	102,316	135254
Net lending	8,341	-10,016	8,565	-8,533	35,475	-27,051	14,908	17,846
O*f which:* to provinces	8,063	11,296	21,457	9,107	3,705	14,416	-5,513	-6,917
Other	278	-21,312	-12,892	-17,640	31,770	-41,467	20,421	24,763
Statistical discrepancy	13,819	18,941	4,606	30,476	13,947	7,254	8,521	-24,143
Overall balance	-204,162	-170,515	-177,655	-163,878	-183,721	-81,011	-113,591	-218,420
Financing	204,162	170,515	177,655	163,878	183,721	81,011	113,591	218,420
External	38,839	133,299	36,328	80,212	51,678	-23,874	-37,053	113,075
Of which: privatization reciepts	0	0	0	0	0	7,576	0	12,000
Domestic	165,323	37,216	141,327	83,666	132,043	104,885	150,644	105,345
Bank	47,194	-67,052	44,713	-8,349	38,724	-40,480	78,388	80,961
Nonbank	118,129	104,268	96,614	92,015	84,967	141,609	61,044	8,057
Privatization proceeds	0	0	0	0	8,352	3,756	11,212	16,327
	(In percent of GDP, unless otherwise indicated)							
Memorandum items:								
Revenue	9.6	10.4	10.4	10.1	11.9	12.9	10.8	9.6
Expenditure	15.5	14.7	15.0	13.3	15.8	14.4	12.7	13.3
Balance	-6.3	-4.8	-4.7	-3.9	-4.2	-1.7	-2.1	-3.3
GDP (in millions of Pakistani rupees)	3,227,511	3,541,773	3,793,436	4,162,654	4,401,699	4,822,842	5,532,663	6,547,590

Source: Ministry of Finance and Economic Affairs.

1/ Fiscal year 2003/03 includes $1 billion (PRs 58 billion) U.S. special grants for debt retirement and also increase in project/other grants.
2/ Accrued payments. Excludes interest expenditure by the military which is included in the defense allocation.
3/ Includes interest and principal payments on military debt; excludes military imports financed by external grants and disbursements.
4/ Includes certain current outlays under the public sector development program.

Table 8. Pakistan: Provincial Government Fiscal Operations, 1997/98–2004/05

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
	(In millions of Pakistan rupees)							
Total revenue	156,983	169,021	220,608	228,577	231,764	284,206	275,812	339,870
Provincial share in fed. revenue	114,078	115,573	143,231	163,131	171,466	195,950	200,633	257,355
Provincial taxes	13,908	15,494	18,774	18,981	18,793	21,940	28,087	36,252
Property taxes	4,194	4,161	3,876	5,912	3,446	5,973	6,691	9,543
Excise duties	911	1,264	1,334	1,295	1,366	1,414	1,715	2,136
Stamp duties	4,814	5,267	6,398	5,098	5,729	6,958	10,329	10,571
Motor vehicles tax	2,113	2,362	2,803	3,100	3,203	3,634	4,722	5,745
Other	1,876	2,440	4,363	3,576	5,049	3,961	4,630	8,257
Provincial nontax	10,053	14,574	16,144	19,838	21,282	25,379	22,037	22,553
Interest	1,534	243	813	1,480	1,251	1,352	1,218	541
Profits from hydro electricity	5,442	6,000	6,000	5,244	6,000	4,919	5,581	6,000
Irrigation	0	0	0	0	0	0	0	2,653
Other	3,077	8,331	9,331	13,114	14,031	19,108	15,238	13,359
Federal loans and transfers	18,944	23,380	42,459	26,627	20,223	40,937	25,055	23,710
Loans (net)	8,063	11,296	21,457	9,107	3,705	14,416	-5,514	-6,917
Grants	10,881	12,084	21,002	17,520	16,518	26,521	30,569	30,627
Total expenditure	173,008	171,437	213,028	218,962	233,006	261,580	302,759	371,803
Current expenditure	148,798	147,862	176,775	196,066	205,133	222,420	244,529	279,024
Interest to federal government	26,010	25,469	28,270	29,369	29,528	27,996	26,126	24,557
Errors and omissions								
Other	122,788	122,393	148,505	166,697	175,605	194,424	218,403	254,467
Development expenditure	24,210	23,575	36,253	22,896	27,873	39,160	58,230	92,779
Statistical discrepancy	-15,191	-10,350	2,830	-15,133	-27,012	7,238	-41,636	-52,705
Overall balance	-834	7,934	4,750	24,748	25,770	15,388	14,689	20,772
Financing	834	-7,934	-4,750	-24,748	-25,770	-15,388	-14,689	-20,772
External	0	0	0	0	0	0	0	0
Domestic	834	-7,934	-4,750	-24,748	-25,770	-15,388	-14,689	-20,772
Bank	834	-7,934	-4,750	-24,748	-25,770	-15,388	-14,689	-20,772
Nonbank	0	0	0	0	0	0	0	
	(In percent of GDP unless otherwise indicated)							
Memorandum items:								
Total revenue	4.9	4.8	5.8	5.5	5.3	5.9	5.0	5.2
Total expenditure	5.4	4.8	5.6	5.3	5.3	5.4	5.5	5.7
Overall balance	0.0	0.2	0.1	0.6	0.6	0.3	0.3	0.3
GDP (in millions of Pakistani rupees)	3,227,511	3,541,773	3,793,436	4,162,654	4,401,699	4,822,842	5,532,663	6,547,590

Sources: Ministry of Finance and Economic Affairs; and Fund staff calculations.

Table 9. Pakistan: Government Debt, 1997/98–2004/05

(In billions of Pakistani rupees, unless otherwise indicated)

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05 1/
Total debt	2,479.2	2,894.6	3,175.4	3,695.4	3,528.2	3,583.6	3,754.7	4,000.0
Domestic debt	1,202.8	1,453.2	1,644.8	1,799.2	1,777.3	1,896.4	2,012.0	2,154.9
Short-term debt (treasury bills)	473.8	561.6	647.4	737.8	557.7	516.3	542.9	778.2
Medium- and long-term debt	290.0	317.5	325.6	349.1	427.5	470.6	570.1	526.7
Government securities	277.5	253.8	256.9	278.2	368.0	427.9	536.8	500.9
Market loans	17.5	12.9	12.2	4.0	5.6	4.7	3.0	3.0
Government bonds	10.3	10.3	13.6	9.9	9.6	9.6	9.6	9.5
State Life Insurance bonds	10.3	11.0	13.9	13.7	14.3	9.5	6.2	3.6
Bearer National Funds Pakistan	21.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Federal investment bonds (FIB)	146.6	138.4	136.0	113.0	81.5	45.5	33.5	14.6
Pakistan investment bonds (PIB)	0.0	0.0	0.0	46.1	153.9	228.7	331.6	307.6
Prize bonds	71.1	81.2	81.2	91.5	103.1	130.0	152.8	162.6
Foreign currency instruments	12.5	63.7	68.7	70.9	59.5	42.7	33.3	25.8
National saving schemes and others	439.0	574.1	671.8	712.3	792.1	909.5	898.9	850.0
Defense saving certificates	168.8	207.2	248.4	265.0	287.0	309.0	312.2	303.5
National deposit certificates	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0
Khas deposit certificates	0.8	0.8	0.7	0.7	0.6	0.6	0.3	0.6
Special saving certificates	148.1	178.1	202.4	215.7	256.2	346.2	335.9	251.1
Regular income schemes	85.0	144.1	170.2	178.9	189.9	175.0	125.9	85.4
Mahana Amdani account	1.9	1.9	1.9	2.0	2.1	2.2	2.3	2.4
Saving accounts	8.0	10.3	10.1	8.0	7.7	9.3	8.6	8.1
Pensioners' benefit account	...	...	...	...	...	10.2	23.4	41.1
Bahbood Savings Certificates	...	...	...	...	...	...	22.7	83.3
Postal life insurance	12.4	15.0	19.1	23.5	29.9	37.3	46.0	54.1
GP fund	13.9	16.6	18.9	18.5	18.7	19.7	21.6	20.3
External debt	1,276.4	1,441.4	1,530.6	1,896.2	1,750.9	1,687.3	1,742.7	1,845.1
Memorandum items:								
Total public debt (in percent of GDP)	76.8	81.7	83.7	88.8	80.2	74.3	67.9	61.1
Domestic debt	37.3	41.0	43.4	43.2	40.4	39.3	36.4	32.9
External debt	39.5	40.7	40.3	45.6	39.8	35.0	31.5	28.2
Nominal GDP	3,228	3,542	3,793	4,163	4,402	4,823	5,533	6,548

Sources: Pakistani authorities; and Fund staff calculations.

1/ Provisional

Table 10. Pakistan: External Debt 1997/98–2004/05

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
	(In million of U.S. dollars)							
Total external debt	36,072	39,696	37,759	37,183	36,541	35,572	35,321	35,882
Total public and publicly guaranteed external debt excluding external SBP liabilities	27,904	31,794	31,040	31,379	32,361	32,237	32,364	33,260
Medium and long-term	25,987	29,750	29,868	30,259	31,096	31,570	31,963	32,657
Project and nonproject aid	22,844	25,423	25,301	25,606	27,276	28,069	28,627	29177
Commercial Banks and IDB	1,100	730	1,100	1,103	314	231	198	182
Euro bonds	628	608	620	645	643	482	824	1266
Special dollar bonds	0	1,164	1,297	1,376	924	696	552	421
Fund credits	1,415	1,825	1,550	1,529	1,939	2,092	1,762	1611
Military debt	1,006	1,004	653	554	819	263	204	188
Foreign currency bonds (NHA/NC)	285	263	241	219	197	175	153	131
Public sector short-term	626	777	278	347	249	229	44	284
Commercial banks and IDB	298	582	130	257	183	187	22	271
FEBCs, DBCs, and FCBCs	328	195	148	90	66	42	22	13
Deposit liabilities of the banking system	3,425	3,578	3,350	2,958	1,861	1,301	1,286	1,280
State Bank of Pakistan (excluding IMF)	886	1,473	1,737	1,670	1,030	745	745	745
Of which: depoits of foreign banks	450	700	700	700	700	700	700	700
Deposit money banks	2,539	2,105	1,613	1,288	831	556	541	535
Liabilities to foreign banks	1,272	1,453	1,284	1,071	713	500	500	500
Other liabilities	1,267	652	329	217	118	56	41	35
Deposit liabilities of nonbank financial institutions	1,616	889	527	396	93	6	1	0
Private debt	3,127	3,435	2,842	2,450	2,226	2,028	1,670	1,342
.	(In percent of GDP)							
Total public debt	47.9	56.2	51.4	52.0	50.9	43.1	36.7	32.5
Medium and long-term public and publically guaranteed	34.5	42.1	40.7	42.3	43.3	38.2	33.2	29.6
Military debt	1.3	1.4	0.9	0.8	1.1	0.3	0.2	0.2
Foreign currency bonds (NHA/NC)	0.4	0.4	0.3	0.3	0.3	0.2	0.2	0.1
Public sector short-term	0.8	1.1	0.4	0.5	0.3	0.3	0.0	0.3
Deposit liabilities of the banking system	4.5	5.1	4.6	4.1	2.6	1.6	1.3	1.2
State Bank of Pakistan (excluding IMF)	1.2	2.1	2.4	2.3	1.4	0.9	0.8	0.7
Deposit money banks	3.4	3.0	2.2	1.8	1.2	0.7	0.6	0.5
Deposit liabilities of the nonbank financial institutions	2.1	1.3	0.7	0.6	0.1	0.0	0.0	0.0
Private debt	4.2	4.9	3.9	3.4	3.1	2.5	1.7	1.2
Memorandum items:								
GDP in millions of U.S. dollars	75,318	70,640	73,448	71,457	71,854	82,592	96,217	110,405

Sources: Pakistani authorities; and Fund staff calculations.

Table11. Pakistan: Direction of Trade, 1997/98–Jul.-Sep. 2004

(In Percent)

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	Jul.-Sep. 04
Exports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
European Union 1/	29.2	28.7	27.3	25.3	27.7	28.1	30.2	30.0
United Kingdom	6.9	6.6	6.8	6.3	7.2	7.1	7.6	7.2
Others	22.4	22.0	20.6	19.0	20.5	21.0	22.5	22.8
United States of America	20.5	21.8	24.8	24.4	24.7	23.4	23.9	27.1
Japan	4.2	3.5	3.1	2.1	1.8	1.3	1.1	1.5
Hong Kong	7.1	7.1	6.1	5.5	4.8	4.6	4.7	4.0
Singapore	0.5	0.5	0.6	0.5	0.5	0.8	1.0	0.2
China	1.9	1.9	2.1	3.3	2.5	2.2	2.3	2.0
CIS Countries 2/	1.4	0.5	0.3	0.4	0.3	0.3	0.4	0.5
Oil Producing Trading Partners 3/	4.8	4.6	3.8	5.2	5.4	6.1	4.5	4.4
Others	30.4	31.4	31.9	33.3	32.2	33.1	31.8	30.3
Imports	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
European Union	17.3	17.4	15.1	14.1	16.3	17.6	15.3	13.1
United Kingdom	4.1	4.4	3.5	3.3	3.5	2.9	2.8	2.4
Others	13.2	13.0	11.7	10.8	12.8	14.7	12.5	10.8
United States of America	11.2	7.7	6.3	5.3	6.7	6.0	8.5	8.2
Japan	7.8	8.3	6.3	5.4	5.0	6.6	6.0	6.8
Hong Kong	0.4	0.6	0.5	0.6	0.7	1.3	0.9	0.4
Singapore	2.1	3.5	2.5	3.0	3.1	3.5	3.2	1.6
China	5.1	4.2	4.6	4.9	5.6	6.9	7.4	10.2
CIS Countries	0.5	1.3	1.2	0.6	0.8	0.7	1.3	2.0
Oil Producing Trading Partners	15.8	15.8	23.9	25.3	22.6	21.8	21.9	21.5
Others	39.7	41.2	39.6	40.7	39.3	35.6	35.5	36.2

Source: Federal Bureau of Statistics

1/ Estonia, Lativia, Lithuania are now included in European Union, previously they were know as Baltic States.

2/ CIS countries includes Russia, Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyz Republic, Moldova, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan.

3/ Oil Producing Trading Partners includes indonesia, Iran, Kuwait, and Saudia Arabia.

Table 12. Pakistan: Monetary Developments, 2000/01–2004/05

(At current exchange rates)

	2000/01	2001/02	2002/03	2003/04	2004/05
	(In billions of Pakistani rupees)				
Banking system					
Net foreign assets	26	231	540	583	637
Net domestic assets	1,500	1,531	1,539	1,903	2,329
Net claims on government	564	639	561	619	711
Of which: budget support	500	567	511	575	643
Credit to nongovernment	902	922	1,069	1,364	1,773
Private sector	802	841	1,000	1,298	1,720
Public sector enterprises	100	81	69	66	53
Privatization account	-3	-3	-3	-3	-3
Other items, net	36	-27	-88	-77	-153
Broad money	1,526	1,761	2,079	2,487	2,966
Currency	375	434	495	578	666
Rupee deposits	996	1,170	1,458	1,763	2,119
Foreign currency deposits	154	157	126	146	180
State Bank of Pakistan					
Net foreign assets	-19	133	462	512	504
Net domestic assets	552	451	208	261	405
Net claims on government	330	274	29	91	249
Of which: budget support	361	303	53	113	268
Claims on nongovernment	40	23	11	1	-7
Clains on scheduled banks	198	196	181	196	210
Privatization account	-3	-3	-3	-3	-3
Other items, net	-13	-38	-10	-25	-44
Reserve money	533	585	669	773	909
Of which: banks' reserves	127	111	141	156	196
Of which: currency	395	460	525	615	709
	(12-month change in percent)				
Broad money	9.0	15.4	18.0	19.6	19.3
Private credit	6.5	4.9	18.9	29.8	32.6
Currency	5.6	15.5	14.0	16.9	15.2
Reserve money	34.0	9.6	14.5	15.4	17.6
	(In units as indicated)				
Memorandum items:					
Overall NDA to SBP NDA ratio	2.7	3.4	7.4	7.3	5.7
Money multiplier	2.9	3.0	3.1	3.2	3.3
Currency to broad money ratio (percent)	24.6	24.6	23.8	23.2	22.5
Currency to deposit ratio (percent)	32.6	32.7	31.2	30.3	29.0
Reserves to deposit ratio (percent)	11.1	8.3	8.9	8.2	8.5
Budget bank financing (billions of Pakistani rupees)	-32.3	67.3	-56.0	63.7	68.0
Excess reserves in percent of broad money	0.8	0.6	0.9	0.8	1.3

Sources: Pakistani authorities; and Fund staff calculations.

Table 13. Pakistan: Major Interest Rates, 1996/97–2004/05

	Treasury Bill Rate 1/	SBP Discount Rate 2/	Call Money Rate 3/	Lending Rate 4/	Lending Rate 5/	Deposit Rate 6/
			(Annual averages in percent)			
1996/97	15.6	19.2	13.0	17.1	14.3	9.6
1997/98	15.1	18.1	12.2	16.5	15.2	9.8
1998/99	12.5	15.6	7.8	15.4	15.1	9.3
1999/2000	8.8	12.0	8.5	14.0	14.0	7.5
2000/01	10.4	12.7	9.0	13.8	13.6	6.6
2001/02	8.1	10.1	6.7	13.1	13.5	5.6
2002/03	4.1	8.0	4.2	9.8	12.8	4.6
2003/04	1.4	7.5	1.9	5.2	8.4	1.8
2004/05	4.7	7.9	4.3	6.1	7.3	1.4
			(Monthly averages in percent)			
2001/02						
July	11.6	13.0	6.9	14.4	13.6	6.6
August	10.5	12.0	8.3	14.1	13.6	6.6
September	10.5	12.0	9.2	13.8	13.6	6.6
October	10.3	10.0	10.4	14.2	13.6	6.6
November	8.3	10.0	9.4	14.1	13.6	6.6
December	7.9	10.0	6.1	13.4	13.5	5.6
January	6.4	9.0	3.6	13.1	13.5	5.6
February	6.4	9.0	5.5	12.0	13.5	5.6
March	6.4	9.0	4.8	11.9	13.5	5.6
April	6.5	9.0	5.7	12.2	13.5	5.6
May	6.4	9.0	6.3	12.2	13.5	5.6
June	6.3	9.0	4.8	12.0	13.5	5.6
2002/03						
July	6.4	9.0	5.6	12.1	13.5	5.6
August	6.4	9.0	5.3	11.5	13.5	5.6
September	6.4	9.0	7.3	11.9	13.5	5.6
October	6.3	9.0	8.0	11.5	13.5	5.6
November	4.8	7.5	4.9	10.7	13.5	5.6
December	4.3	7.5	4.6	10.3	12.9	4.2
January	3.8	7.5	4.1	10.0	12.9	4.2
February	3.2	7.5	2.4	9.4	12.9	4.2
March	2.1	7.5	1.1	8.3	12.9	4.2
April	1.6	7.5	2.7	7.8	12.9	4.2
May	1.8	7.5	3.8	7.1	12.9	4.2
June	1.7	7.5	0.9	7.6	9.4	2.1
2003/04						
July	1.2	7.5	0.7	5.1	9.4	2.1
August	1.2	7.5	1.4	5.0	9.4	2.1
September	1.6	7.5	1.0	5.2	9.4	2.1
October	0.0	7.5	2.3	5.3	9.4	2.1
November	1.7	7.5	2.7	5.5	9.4	2.1
December	1.6	7.5	2.4	5.7	7.8	1.6
January	1.6	7.5	1.7	5.0	7.8	1.6
February	1.7	7.5	2.6	5.3	7.8	1.6
March	1.7	7.5	1.0	4.7	7.8	1.6
April	1.8	7.5	3.4	5.1	7.8	1.6
May	2.1	7.5	1.7	5.4	7.8	1.6
June	0.0	7.5	1.5	5.1	7.8	1.6
2004/05						
July	2.5	7.5	1.9	4.6	7.8	1.6
August	2.6	7.5	3.0	5.1	7.8	1.6
September	3.0	7.5	5.5	5.8	7.8	1.6
October	3.2	7.5	3.4	6.0	7.8	1.6
November	3.7	7.5	4.0	5.9	7.8	1.6
December	3.8	7.5	2.8	5.9	7.0	1.3
January	4.2	7.5	6.5	6.7	7.0	1.3
February	4.8	7.5	2.7	6.2	7.0	1.3
March	5.5	7.5	5.0	6.6	7.0	1.3
April	7.1	9.0	4.0	6.8	7.0	1.3
May	7.8	9.0	6.4	7.7	7.0	1.3
June	8.0	9.0	6.9	...	7.0	1.3
2005/06						
July	8.0	9.0	8.5	9.1	7.0	1.3
August	8.1	9.0	...	...	...	...

Source: State Bank of Pakistan.

1/ Primary auction rate on six-month treasury bills.
2/ SBP discount rate for its three-day repo facility.
3/ Defined as the monthly average of daily minimum and maximum rates.
4/ Weighted average lending rates for all commercial banks based on gross disbursement.
5/ Weighted average lending rates for all commercial banks based on stock data.
6/ Average rate of return on deposits under the profit and loss sharing system determined on a six-month basis.

Table 14. Pakistan: Foreign Currency Deposits, 1997/98–2004/05

(End-of-period stocks, in millions of U.S. dollars, unless otherwise specified)

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
Total foreign currency deposits	9,679	5,465	3,921	3,796	3,291	2,590	2,878	3,436
Residents' deposits	6,024	2,909	2,182	2,419	2,625	2,186	2,505	3,021
Of which:								
Frozen accounts	6,024	2,354	1,303	1,069	770	232	165	119
New accounts	…	555	879	1,350	1,855	1,954	2,340	2,902
Nonresidents' deposits	3,655	2,556	1,739	1,377	666	404	373	415
Of which:								
Frozen accounts	3,655	2,494	1,641	1,184	423	61	42	35
With domestic banks	2,039	1,605	1,114	788	331	56	41	35
Institutional deposits	772	953	784	570	213	0	0	0
Individual accounts	1,267	652	330	218	118	56	41	35
With domestic nonbank financial institutions	1,616	889	527	396	92	5	1	1
New accounts	…	62	98	193	243	343	331	380
Memorandum items:								
Share of resident FCDs in M2 deposits (percent)	29.6	15.1	10.9	13.4	11.8	8.0	7.6	7.6
Share of resident FCDs in M2 (percent)	22.9	11.7	8.1	10.1	8.9	6.1	5.9	5.8

Sources: State Bank of Pakistan; and Fund staff calculations.

Table 15. Pakistan: Market Share of Banks, 1997/98–2004/05 1/

(In percent)

	1997/98	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
Deposit market share 2/								
Nationalized commercial banks 3/	18.6	18.5	19.0	18.2	19.0	17.7	18.4	15.8
National Bank of Pakistan	18.3	18.3	18.8	17.8	18.6	17.3	18.0	15.4
First Women Bank	0.3	0.2	0.2	0.4	0.4	0.4	0.4	0.4
Privatized banks 4/	45.4	48.4	48.8	47.2	46.8	45.7	41.5	39.9
Muslim Commercial Bank	11.9	11.7	11.6	12.3	12.0	12.3	10.8	9.8
Allied Bank Limited	6.2	9.1	8.4	8.0	7.4	6.7	6.3	5.8
Habib Bank Limited 5/	18.6	18.5	18.9	18.6	18.4	17.8	16.1	14.8
United Bank Limited 5/	8.7	9.1	9.9	8.3	9.0	8.9	8.3	9.5
Specialized banks	1.0	1.4	1.4	0.0	0.0	1.0	0.8	1.0
Domestic private banks	12.6	14.3	14.7	17.3	20.3	24.3	29.1	33.6
Branches of foreign banks	22.4	17.5	16.0	17.2	13.9	11.2	10.2	9.8
Loan market share 6/								
Nationalized commercial banks	16.9	16.7	17.2	17.5	18.8	15.2	15.9	14.7
National Bank of Pakistan	16.8	16.6	17.1	17.4	18.7	15.0	15.7	14.5
First Women Bank	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Privatized banks 4/	40.7	41.4	42.2	41.0	37.0	35.9	34.9	37.8
Muslim Commercial Bank	9.9	8.4	8.7	8.8	7.7	7.5	7.6	8.8
Allied Bank Limited	5.3	7.3	7.8	6.7	6.1	4.7	4.0	5.4
Habib Bank Limited 5/	17.3	19.1	18.5	17.8	16.7	15.7	14.7	14.4
United Bank Limited 5/	8.2	6.6	7.2	7.7	6.5	8.0	8.6	9.2
Specialized banks	14.2	13.8	13.0	12.3	12.6	11.4	7.0	5.4
Domestic private banks	11.1	13.3	13.6	15.3	18.7	25.7	32.4	33.8
Branches of foreign banks	17.1	14.8	14.0	13.9	12.8	11.9	9.8	8.5

Source: State Bank of Pakistan.

1/ Based on end-June data.
2/ Deposits include banks' liabilities to nongovernment sector and deposits of federal and provincial governments.
3/ These do not include UBL and HBL from FY 2004.
4/ Privatized Banks also include UBL and HBL from FY 2004.
5/ Privatised as of 2003/04.
6/ Includes lending to the private sector, public enterprises, and autonomous bodies.