8 Financial Development, Economic Stability and Growth

It is a generally accepted belief that a sound financial sector is a pre-requisite for macroeconomic stability; particularly the East Asian Crisis of 1997 reinforced this view vigorously. However, macroeconomic stability is also required to support the growth and expansion of the financial sector. In this way, a bi-directional causality exists between macroeconomic stability and soundness of the financial sector. In this backdrop, it is important to make an assessment of the macroeconomic environment that would also help to assess the future prospects for the financial sector development and its linkages to stability and economic growth.

8.1 Macroeconomic Environment

Pakistan's economy has witnessed a broadbased improvement in its macroeconomic indicators during the last couple of years. The economy grew at an average rate of only 3.2 percent during FY97-FY02 period; the growth rate accelerated sharply to 5.1 percent in FY03 and increased its pace further to 6.4 percent in FY04 (see **Table 8.1**). The target for next year is 6.6 percent, which seems achievable barring exceptional external and domestic shocks. Moreover, both the government and some International Financial Institutions have predicted that the country would achieve a growth rate of 8.0 percent by FY08.

More importantly, FY04 real GDP growth largely stemmed from the commodityproducing sector. Despite below target growth in the agriculture sector, the overall commodity-producing sector grew by 7.7 percent. It is expected that the role of the financial sector would become more important with the rise in economic activity in the commodity-producing sector, particularly in the manufacturing sub-sector. Rapid expansion of the economy is normally associated with higher profitability and lower chances of business failure. The present surge in the financial sector activities also supports this view. Thus the financial sector is likely to remain sound and stable in the years ahead.

Although annualized inflation accelerated from a three-decade low of 3.1 percent in FY03 to 4.6 percent in FY04 (see **Figure 8.1**), it is still low as compared with the historical trend and far below the estimated average

1 able 8.1: Major Macroeconomic Indicators											
)1	FY02	FY03	$FY04^1$								
.2	3.4	5.1	6.4								
.2	0.1	4.1	2.6								
.6	2.6	5.8	13.1								
.5	3.5	7.2	17.1								
.7	4.8	5.3	5.2								
.4	-0.7	20.8	10.0								
.1	-3.6	17.8	26.6								
.9	8.5	16.0	8.1								
.4	3.5	3.1	4.5								
.0	15.4	18.0	17.6								
1	9.6	14.5	23.7								
.1	6.7	19.0	31.7								
.6	6.7	3.7	-0.6								
20	6432	10719	12328								
87	2389	4237	3872								
32	475	820	922								
.3	4.3	3.7	3.3								
.2	-0.5	-0.6	-2.0								
.6	4.8	6.3	2.9								
	105 6	-									
.3	407.6	746.0	1402.7								
	22 22 66 55 77 4 11 9 9 4 0 11 11 1 6 6 87 32 33 2 2 6 6 37 32 33 2 33 2 2 6 6 5 5 7 7 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	D1 FY02 .2 3.4 .2 0.1 .6 2.6 .5 3.5 .7 4.8 .4 -0.7 .1 -3.6 .9 8.5 .4 3.5 .0 15.4 .1 9.6 .1 6.7 .0 6432 .3 4.3 .2 -0.5 .6 4.8 .3 407.6	D1 FY02 FY03 .2 3.4 5.1 .2 0.1 4.1 .6 2.6 5.8 .5 3.5 7.2 .7 4.8 5.3 .4 -0.7 20.8 .1 -3.6 17.8 .9 8.5 16.0 .4 3.5 3.1 .0 15.4 18.0 .1 9.6 14.5 .1 6.7 19.0 .6 6.7 3.7 .20 6432 10719 .3 2389 4237 .32 475 820 .3 4.3 3.7 .2 -0.5 -0.6 .6 4.8 6.3 .3 407.6 746.0								

²Appreciation (+) / Depreciation (-).



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threshold level¹ of inflation for developing countries.² Further, the present surge in inflation is mainly due to supply shocks, which are temporary in nature. High inflation is harmful both for growth and financial sector stability.³ Given the high level of domestic economic activity and rising international commodity prices, the current moderate level of domestic inflation is indicative of a higher realizable potential output. Low inflation with lower variance makes savings and investment decisions easier because individuals and firms can estimate their future cash flows with greater certainty. And it also reduces the relative price distortions that encourage entrepreneurs to take decisions without fear of adverse changes against their investment plans. In case of Pakistan, for example, the continued high pace of machinery imports is a reflection of a boost in investor confidence during recent years. Increased economic activity on the back of easy monetary policy, as mentioned above, also provided an impetus to the financial sector.

Monetary policy was conducted amidst increasing flows of foreign exchange, especially during FY02 and FY03. SBP reduced the discount rate significantly. Interest rates declined rapidly due to rising liquidity in the financial system. To channelize the surplus liquidity into useful purposes, SBP encouraged financial institutions to introduce new financial products, particularly in the area of consumer financing. SBP amended prudential regulations to accommodate the rapidly growing housing, auto and personal loan markets. In response, private sector credit witnessed a massive expansion of over Rs 300 billion during FY04 compared with Rs 152 billion in the preceding year. As a result of increased activities, despite narrowing of spread, the profitability of the financial institutions rose significantly. In this way, activities expanded both in the real and financial sectors supported by an easy monetary policy.

Apparently it seems that the increase in money supply at 18.0 percent in FY03 and 17.6 percent in FY04 (see Figure 8.2) may create future inflationary pressures. However, this monetary overhang has to be analyzed judiciously in view of some new emerging trends. First, the relationship between monetary aggregates and inflation is probably weakened as a result of financial innovation during last few years, as it has already happened in many other countries.⁴ Second, the tightening of monetary policy would increase the financial cost of the firms (in terms of higher interest rates), ultimately these firms would pass on this effect to consumers and the general price level would



consequently increase. Therefore, the central bank has to move in a gradual manner that would not hurt the long-run growth prospects of the economy. Finally, the pressures of heavy external inflows on monetary policy are now easing off due to a visible slowdown in these inflows since Q2-FY04.

In fact, a rise in external inflows in FY02 and FY03 helped to improve the economic fundamentals substantially. Though declining, the external balances are still in surplus in FY04. It is also visible in

¹ *Threshold level of inflation* refers to the situation when unemployment in the economy equals the natural rate of unemployment; theory says that inflation does not accelerate or decelerate at this level of unemployment. ² Khan, Mohsin (2002) Inflation, Financial Deepening and Economic Growth, Banco de Mexico Conference on

Macroeconomic Stability, Financial Markets and Economic Development, Mexico City, November 12-13, 2002. ³ Montiel, Peter J. (2003) <u>Macroeconomics in Emerging Markets</u>, Cambridge University Press.

⁴ For example, New Zealand, Canada, Chile, Thailand etc.

yet another exceptional level of workers' remittances of US\$ 3.9 billion in FY04, against a target of US\$ 3.6 billion. It may be noted that a decline in workers remittances in FY04 compared with the US\$ 4.2 billion in the preceding year is not surprising, as an unusual spike in remittances during FY03 was mainly due to a reverse capital flight amidst an appreciating rupee and post 9/11 developments. A similar negative development on the external front is an increase in the trade deficit from US\$ 1.2 billion in FY03 to US\$ 1.9 billion during FY04 mainly due to a stronger growth in imports, primarily including machinery (see Figure 8.3). This is a welcome development



from the perspective of a medium term growth scenario because despite an increase in import payments, higher machinery imports would enhance the country's productive capacity. Due to persistent external account surpluses, country's forex reserves also rose sharply to a record high of US\$ 12.3 billion, equivalent to more than 11 months of import bill during FY04. As a result of a significant level of forex reserves and a healthy increase in forex earnings, Pakistan's economy is currently less vulnerable to external shocks and this fact is reflected by the improvement in the country's credit rating during the last couple of years.

The benefits of pro-growth monetary policy and gains emanating from the external sector were reinforced with the improvement in tax collections and increased fiscal prudence. The combined impact of higher revenues and a control over expenditures is evident from a substantial fall in budget deficit which declined gradually from 4.3 percent of GDP in FY01 to 3.3 percent by FY04. This performance is commendable as developmental expenditures rose sharply during the period. Specifically, development expenditures rose from Rs 89.8 billion (1.7 percent of GDP) in FY01 to Rs 152.0 billion (3.0 percent of GDP) in FY04 (see **Figure**



8.4). The prudence achieved in the fiscal sector would go a long way not only in sustaining macroeconomic stability but would also help to maintain the financial stability in the economy.

In brief, a stable, sound and positive outlook of Pakistan's economy has provided a favorable environment for the growth and prosperity of the financial sector at the macro level while appropriate amendments in the prudential regulations, and continued thrust on reforms and privatization are promoting competition and opening new avenues for financial innovations at the micro level.

8.2 Macro-financial Vulnerability

Financial sector plays an important role of intermediation; it receives funds from the non-financial sectors in the form of savings in various financial instruments (deposits, certificates, bonds, equities etc.) and directs these resources to the real sector in the form of credit, investments etc. These interlinkages make both the financial and the real sectors sensitive to the developments in either sector. In addition, some other factors at the macroeconomic level may affect and could potentially create instability in the financial sector. More specifically, country's economic transactions with the rest of the world bear a greater probability of impact on financial sector stability. The impact of external transactions on the domestic financial sector largely depends on the degree of openness of the domestic economy. The significance of external shocks is evident from the fact that most of the financial crises during the 1980s and 1990s were triggered by the adverse developments on the external front, which included changes in international interest rates, pressures on exchange rates, reversal in short-run capital inflows, decline in exports etc.

The transmission mechanism of macroeconomic developments to financial sector instability mainly works through inter-temporal (interest rates) and intra-temporal prices (exchange rate and commodity prices). Instability in these prices could influence the savings and investment decisions in the economy. Another source of financial vulnerability is cross-border contagion effects, which makes it difficult to establish a perfect early warning system.

An evaluation of specific factors related to financial sector vulnerability would be more instructive to analyze the trends in the domestic financial sector stability.

Economic Growth

A growth in economic activity also requires expansion in financial services and vice versa. It is a direct effect of changes in the size of the economy. The indirect impact of economic expansion stems from rising value of assets. While a drastic fall in growth rate or emergence of a recession may result in a drastic fall in prices of assets, which were previously accepted as collateral by the financial institutions at higher values, the erosion in realizable value of these assets may eventually result in a substantial rise in non-performing loans (NPLs) of the financial sector. Even if only a few big financial institutions are adversely affected, it is likely to trigger a systemic instability in the financial sector.

Pakistan's economy is enjoying an acceleration in economic growth since FY02. As a result, a substantial rise in the prices of equities and real estate is evident in the economy (see Figure 8.5). The pace of growth is likely to continue at least in medium-term according to some independent estimates,⁵ therefore, there is no immediate threat of any shock to the financial sector from the channel described above. However, it also calls for extra vigilance by the central bank to assess the sensitivity of the financial institutions to various market shocks that could potentially emerge as a result of slowdown in the growth rates. Mindful of this vulnerability aspect, SBP has introduced



new prudential regulations as mentioned earlier, which restrict banks from investing heavily in equities.⁶ Moreover, as a precautionary measure, the SBP has also imposed a 5 percent mandatory provisioning for housing loans.

⁵ For example, Asian Development Bank.

⁶ For details see Prudential Regulations for Corporate/Commercial Banks 2004; Regulation R-6 (1.B) and Prudential Regulations for Consumer Financing 2004; Regulation Nos. R-14, R-23 and R-28.

Given the above steps coupled with prudent banking supervision, financial sector in Pakistan currently has enough safeguards to vulnerability shocks from decline in growth.

Inflation

Generally, high inflation is a major source of concern for all segments of the society; from households to producers to policymakers. However, a number of economists found that low inflation promotes growth. More specifically, Khan $(2002)^7$ found the threshold level of inflation for developing countries at 11 percent; he also concluded that inflation beyond the 18 percent level causes negative growth in these economies. In addition, the findings of Chang and Black (2002)⁸ also confirm a non-linear relationship between inflation and growth; they found that low inflation promotes growth, while higher inflation hinders it. Investment decisions become difficult during an environment of high inflation, thus the intermediary role of the financial sector shrinks considerably.

The current rising inflationary trend in Pakistan has to be viewed in this context. The current inflation is still far below the 7.5 percent average inflation rate during FY94-03. The current inflation in Pakistan is also below the average threshold level for developing countries as mentioned above (see **Figure 8.6**). However, the threshold level for Pakistan is likely to be less than this estimate, as threshold levels vary from country-to-



Table 8.2: CPI Inflation in Developing Countries

percent	

	2001	2002	2003
Developing Asia	17.5	9.4	8.6
Pakistan	3.1	2.9	3.6
India	3.8	4.3	3.8
Sri Lanka	14.2	9.6	6.3
Bangladesh	1.5	3.8	4.9
Nepal	2.4	2.9	4.7
Indonesia	11.5	11.9	6.6

Source: World Economic Outlook 2004, IMF.

country, depending upon the level of economic development. In any case, the present inflation is in the lower range compared with the prevailing inflation rates in most of the developing countries (see **Table 8.2**).

Budget deficit

Awareness regarding adverse impacts of imprudent fiscal policies increased considerably since the debt-crisis of the 1980s in Latin America. The demand management policies of IMF in various countries are also focused on curtailing budget deficits. Huge budget deficits alter the resource allocation in the economy mainly in two ways: (1) the government borrows the bulk of available credit from the domestic financial sector, in addition to borrowing from abroad; and (2) the presence of the government in the money market puts upward pressure on interest rates and as a consequence, some private sector projects become unfeasible due to higher financial cost given that investment decisions of private sector are based on return on capital. Moreover, a budget deficit implies an increase in aggregate demand without a corresponding (proportionate) rise in aggregate supply, which

⁷ Khan, Mohsin (2002) Inflation, Financial Deepening and Economic Growth, Banco de Mexico Conference on

Macroeconomic Stability, Financial Markets and Economic Development, Mexico City, November 12-13, 2002.

⁸ Chang, Gene Hsin and Black, David C. (2002) *Nonlinearity of Inflation-Growth Relationship and the Optimal Inflation Rate*, University of Toledo.

generates inflationary pressures in the economy. Another source of concern is an imprudent monetary policy in response to a high budget deficit, given that the central banks print money to finance the budget deficit in most developing countries, which further compounds inflationary pressures.

The financial sector, in turn, is vulnerable to fiscal indiscipline in various ways. First, as mentioned above, high inflation as a result of budget deficits could slow down investment, initiate capital flight and hence reduce the activities of the financial sector. Second, a high debt-GDP ratio may result in a decline in credit rating, thus the government has to pay a higher risk premium that would further increase the debt-servicing burden and risk of sovereign default. Third, a sustained high budget deficit increases the debt burden and most of the revenue resources are spent on debt servicing. In this situation, the government is unable to invest in human development and social services, which



severely hurts long-term growth prospects, besides restricting the future expansion in financial sector. Finally, sustained high budget deficit also leads to a high current account deficit (famous twin-deficit hypothesis).⁹ In turn, a high budget deficit generates inflationary cycle through pressures on the domestic currency (due to adverse current account balance), thus exposing the domestic economy and financial sector to external shocks. **Figure 8.7** shows that an improvement in budgetary balance in Pakistan is also mirrored in the current account surplus (a reversal in historical trend), however, a rise in the current account balance is more pronounced because of positive contributions of post 9/11 developments.

The improvement in fiscal prudence is also evident in the behavior of the government borrowings from the banking sector. Substantial retirement of budgetary borrowings witnessed in the preceding two years and proportionately smaller absorption of the available liquidity by the government in FY04 helped to curtail the debt burden and kept interest rates in the lower range (see **Figure 8.8**). The crowding-in impact of these developments is visible in an exceptional rise in the private sector credit during FY04.

It seems that improved fiscal prudence (with



higher developmental outlays) is likely to extend benefits to the economy and make financial sector less vulnerable to domestic and external shocks in terms of lower inflation, reasonable current account balance and stable exchange rate in the years ahead.

 $^{^{9}}$ It is observed that the dis-savings by the government mainly lead to current account deficits. Specifically, Current account balance (CAB) = Savings (S) – Investment (I), a bifurcation of S and I reveals that:

 $CAB = (S_{public} - I_{public}) + (S_{private} - I_{private}).$ Twin deficit hypothesis implies that current account deficit is a result of the deficits in the first term on right hand side i.e., $(S_{public} - I_{public})$.

Current account balance

Current account deficit emerges when a country borrows additional resources from rest of the world and a current account surplus is a reflection of transfer of resources to abroad. The borrowed resources through current account deficit may be used either for consumption or enhancement of the productive capacity of the economy. Current account deficit is not sustainable if the additional borrowed resources are spent on consumption. Similarly, a sustained transfer of resources from a developing country is not desirable, unless the country is making adjustments in earlier accumulated deficits.

Although current account has generally been in deficit in Pakistan, the trend was reversed in FY01 when current account recorded a surplus. The current account surplus augmented further in FY02 and reached its peak at US\$ 4.2 billion in FY03 before declining to US\$ 2.2 billion in FY04. However, the sources of decline, which include enlarged trade deficit, higher outflows under services account and lower workers' remittances, are not worrisome. Specifically, a higher trade deficit is resulted largely due to an increase in machinery imports, which led to higher payments for services (shipment), and finally, even though workers' remittances declined to US\$ 3.9 billion in FY04 compared



with US\$ 4.2 billion in FY03, these remained above the target of US\$ 3.6 billion for the year.

Moreover, the deterioration in the current account surplus was evident throughout FY04. Despite these developments, present current account surplus/deficit do not pose any threat to the financial sector. In fact, substantial forex inflows and subsequent sterilization in recent past flushed the banking sector with liquidity that forced the financial sector to introduce new products with aggressive marketing. As a result of increased activity, profitability of the financial sector rose substantially (see **Figure 8.9**).

Debt and Debt Servicing

Debt burden and debt servicing capacity are probably the most important factors in the assessment of the vulnerability of the financial sector and the economy. A high level of debt is unsustainable, particularly in the event when economic growth is subdued, inflation is upward trending, forex receipts are limited and Government's credibility is doubtful. It indicates that more resources have to be allocated for debt servicing and repayment. This creates a vicious cycle, since a considerable part of the budget has to be spent on debt servicing, and the government has to borrow more funds to meet the other obligations. This flared up to the debt burden and future debt servicing as well. Prolonged fiscal imbalance creates other macroeconomic problems like high monetary expansion, inflation, high interest rates, low growth, frequent depreciation of domestic currency etc. Poor macroeconomic performance coupled with mounting debt leads to deterioration in country's credit rating, raises the interest rates on public debt (due to risk premium) and additional debt/debt-servicing burden leading to a sovereign default. The overall economy in general, and the financial sector in particular, becomes vulnerable to external and domestic shocks. The most probable solution in this situation is a painful fiscal consolidation through tax reforms and curtailment in expenditures, which is usually politically undesirable and causes various social problems.

Contrary to a deteriorating trend until FY01, debt and debt service indicators witnessed a significant improvement in Pakistan during the last three years. This improvement was visible in both domestic and external debt, however, it was more pronounced in the latter. Specifically, the domestic debt to GDP ratio gradually fell from 43.2 percent in FY01 to 37.2 percent by FY04, while the external debt to GDP ratio declined from 52.1 in FY01 to 37.8 percent in FY04. As a result, total debt to GDP ratio fell substantially from 95.3 percent in FY01 to 75.0 percent in FY04 (see **Table 8.3**). This remarkable progress is resulted from number of factors: (1)

Table 8.3: Debt and Debt S	ervicing			
	FY01	FY02	FY03	FY04
as percent of GDP				
Total Debt	95.3	90.9	82.0	75.0
Domestic	43.2	39.9	39.0	37.2
External	52.1	51.0	43.1	37.8
Debt servicing	5.6	5.6	4.3	3.7
Domestic	4.4	4.2	3.3	3.0
External	1.2	1.4	1.0	0.8
as percent of total revenue				
Debt servicing	42.4	39.4	29.1	26.0
Domestic	33.2	29.6	22.3	20.7
External	9.2	9.9	6.8	5.3

Source: Pakistan Economic Survey 2003.04.

rescheduling of external debt; (2) pre-payment

of expensive external debt; (3) retirement of government debt with the banking sector during FY02 and FY03; and (4) exceptional GDP growth.

The decline in debt indicators is also mirrored in the debt servicing ratios with respect to GDP and revenues. Debt service to GDP ratio exhibited a decline from 5.6 percent in FY01 to 3.7 percent in FY04, domestic debt servicing to GDP ratio fell from 4.4 percent to 3.0 percent and external debt servicing to GDP ratio decreased from 1.2 percent to 0.8 percent during the same period. The strong improvement in domestic debt service ratios was largely attributed to historically low interest rates in the country.

Increasing exports and substantial workers' remittances are some other significant factors, which improved foreign exchange earnings significantly during the last two years. The combined impact of higher earnings and a decline in debt, and debt related ratios to foreign exchange earnings showed a significant improvement. For example, external debt service to export earnings ratio witnessed a gradual fall from 10.5 percent in FY00 to 5.8 percent in FY04 (see Figure **8.10**). The decline in the external debt servicing and external liabilities to foreign exchange earning ratio was more pronounced due to the combined impact of a significant rise in workers' remittances, exports and



interest income on reserves and a sharp fall in external liabilities.

In this background, it appears that the financial sector is well prepared to withstand any adverse shock at least in the medium-term due to improved debt related indicators. It can be safely concluded that Pakistan's economy and its financial sector are much less vulnerable to debt obligations today than ever before. It is also noteworthy that this improvement in debt and debt service indicators is not a result of a trade-off between lower developmental expenditures and fiscal gains, rather it is based on strong economic fundamentals. This improvement is also reflected in the improved credit rating of the country by all major credit rating agencies.

Forex reserves

A comfortable level of foreign exchange reserves makes a country less vulnerable to external shocks, particularly with respect to meeting its short-term payment obligations. As a result of a substantial rise in liquid forex reserves with the central bank from a meager US\$ 1,358 million by end-FY99 to US\$ 10,554 million by end-FY99 to US\$ 10,554 million by end-FY04, the shock absorbing ability of the economy has enhanced considerably. This is reflected in the import coverage ratio, which rose sharply from 45.9 weeks of imports in end-FY03 to over 50 weeks of imports in end-FY04, despite a 26.6 percent increase in the import bill during FY04.



Moreover, though the level of external debt saw an up-tick in FY04 after a continued decline since FY00, the level of net external debt witnessed a fall due to accumulation of reserves (see **Figure 8.11**). Major reserves related indicators, a sharp decline in net external debt, increase in reserves to external debt & liabilities ratio and rise in import coverage ratio depict that the financial sector is less vulnerable to external shocks.

Exchange rate

Exchange rate volatility could potentially destabilize the financial sector, particularly a substantial depreciation may trigger a currency crisis, which generally leads to a financial crisis. In fact, exchange rate misalignment is a source of speculative attacks on a currency, as it evidenced in Thailand and other countries during the 1990s.

Pak Rupee, which was depreciating substantially since 1982, witnessed a trend reversal in October 2002 and appreciated sharply. However, the exchange rate remained quite stable during FY04. Another important factor contributing to a relatively stable position of the Pak Rupee was a substantial decline in the kerb market premium since FY02. Though the kerb premium has recently inched up to 0.51 percent in June 2004, it is still far below the historical trend (see Figure 8.12). It may be noted that there is a two-way risk involved in foreign exchange transactions because of fluctuations in the value of the domestic currency (Rupee witnessed both appreciation



and depreciation in FY04). To manage the two-way risk in forex transactions, financial institutions need the expertise and new products in the financial markets. This is precisely the reason that the swaps and derivative instruments have been introduced in Pakistan recently. However, despite a two-way movement in exchange rate, currently the foreign exchange risk is much lower than the one-way movement of currency (depreciation) due to a relatively low variance in the exchange rate of Pak Rupee.

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In view of the above and given the comfortable level of forex reserves, it is expected that the exchange rate of Pak Rupee is not likely to see any abrupt change in near future. Even if some pressure was to result from a deterioration of external account balances, Pak Rupee is likely to be depreciated moderately. Therefore, the current stable exchange rate is reinforcing financial stability and is likely to strengthen the overall economy as well.

Interest Rate

Real interest rates are an important indicator of financial stability, because extremely low real interest rates may lead to a speculative use of financial resources instead of directing these resources to productive ends. A longterm analysis of real interest rates would be more instructive because of concerns regarding the prevailing negative real interest rates on deposits. Figure 8.13 shows that real interest rate on deposits were negative during most of the 1990s. The below target inflation rate in FY98 and a subsequent deceleration in inflation rate pushed up the real interest rate on deposits to a positive range. At present, real interest rates on advances, though low, are still positive, while negative real interest



rates on deposits pose a threat to deposit growth, however, a strong growth in deposits during FY03 and FY04 seem to defy this fear. Partially, speculative hoarding of wheat and some other commodities may be attributed to low real interest rates on advances. To discourage this tendency, strict regulations such as margin requirements are required to be implemented. The present rising inflation is likely to dissipate around October 2004 onward due to high base effect, then real interest rates are expected to rise as well.

Another important indicator of financial sector stability is the differential between domestic and international interest rates. A high differential show weaknesses in the domestic financial sector, which is vulnerable to various shocks. In this context, it is evident that the differential between domestic and international interest rate has reduced substantially since October 2002 mainly due to a sharp fall in domestic interest rates (see Figure 8.14). In fact, the differential almost disappeared in August 2003. Since then, the interest rate differential has been quite stable and has moved in a narrow range, which reinforces the view that the domestic financial sector is not vulnerable to international interest rate movements in near future.



In brief, interest rate structure is required to be monitored closely in the line with the changes in the domestic inflation and international interest rates. This monitoring is necessary for the allocation of financial resources in the most efficient manner.

Private Sector Credit

Private sector credit is not only an important indicator of financial sector operations, it is also a barometer for measuring economic activity in the economy. An expansion in private sector credit appears to be a positive development for the economy, however, if banking regulations/ supervision is poor and lending decisions are not prudent, then ample evidence is available that a robust growth in private sector credit could create a systemic banking crisis.¹⁰ Particularly, a mismatch in assets and liabilities of the banks could make the situation more vulnerable. Specifically, central banks may temporarily extend assistance to banks with domestic liquidity problems, if long-term asset and short-term liability mismatch exists. However, if currency mismatch also exists (*long-term assets* in domestic currency through private sector credit and *short-term liabilities* denominated in foreign currency), any adverse domestic or external development can create a full-fledged banking crisis.

In Pakistan, private sector credit growth did not pick up until FY02, reflecting a recessionary trend in the economy. However, private sector credit expansion witnessed a sharp increase from an already high Rs 152 billion in FY03 to Rs 301 billion in FY04 mainly due to low interest rates, aggressive marketing of new financial products by the financial institutions and rising economic activity. It is important to note that a substantial part of this rise in credit is attributed to consumer financing including long-term housing finance (see Figure 8.15). As mentioned earlier, SBP has already issued Prudential Regulations to appropriately guide banks in this area. Another positive aspect is



that the domestic banking sector is not facing a double mismatch of assets and liabilities (short-term forex denominated liabilities with long-term domestic currency assets). More specifically, the short-term forex liabilities are negligible.

However, if a substantial part of the consumer financing is based on floating interest rates, then any upward movement in the interest rates would increase the probability of unanticipated defaults. In any case, financial sector exposure to risk has increased as a result of a substantial growth in private sector credit during the last two years. This perception is reinforced given that the commercial banks are also actively participating in the agri-credit market and their share has exceeded that of ZTBL in a short period of two years. In this context, there is a growing concern that the repayment capacity of the agriculture sector depends on various uncontrollable factors such as weather, therefore the risk exposure of the banking sector is also high. It is expected that relatively high level of credit extended by the banks as a result of private sector credit growth will be managed through a combination of factors, for example; appropriate provisioning for consumer financing & agri-loans (where banks are relatively inexperienced), strict compliance to the Prudential Regulations, effective supervision of banks by the SBP and improvement in the banks' own risk management capability and adoption of best practices.

¹⁰ International Monetary Fund (2004) Pakistan: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics: Monetary and Financial Policy Transparency, Banking Supervision, and Securities Regulation, Country Report No. 04/215, Washington DC, July, Page-13.

Income Velocity of Money

Income velocity of money is defined as the number of times the existing stock of money (M2) is used to finance the total transactions of goods and services in the economy during a year. Thus, it is a simple ratio of nominal GDP to M2. If income velocity of money is predictable, then estimation of nominal GDP becomes easier, given that the money stock (M2) is known.

In this backdrop, it is evident that the income velocity of money is observing a declining trend over time. Interestingly, income velocity of money was relatively stable during FY94-FY01, the period of structural changes



and stagnation in the economy. However, from FY02 onward, income velocity of money resumed its downward trend again (see **Figure 8.16**). A fall in income velocity of money during recent years is particularly a welcome development as it is accompanied with low inflation and high growth. A continued slide in the income velocity of money is a reflection of broadening the domain of monetary policy in the economy. It also implies that the non-monetized sector is gradually becoming a part of the documented sector, thus the effectiveness and scope of monetary policy is also intensifying in the economy.

Equity Market

Stock markets are responsive to macroeconomic fundamentals and upward rallies are common during high growth. Similarly, a low inflationary environment is associated with low interest rates that make corporates more profitable, thus equity prices also witness a rising trend. During upward rallies, the element of speculation also goes hand-in-hand. It is quite difficult to separately identify the impact of actual market potential and the formation of an asset price bubble. Asset bubbles are mostly incorrectly considered to be sustainable. The risk involved in corrective actions is that any pre-emptive tightening in policies could hurt even an actual process of improvement in the economy. The developments in equity market have both direct and indirect impacts on the financial sector. Financial institutions' investment in the stock market exposes them to market risk, as a fall in equity prices adversely affects their balance sheets. On the other hand, causes of fall in equity prices (low profits, weaker growth etc.) put downward pressures on assets prices, which may hurt potential repayment capacity and future financing needs of the firms, these developments have negative impacts for the health of the financial sector.

In this backdrop, present surge in KSE-100 index needs to be analyzed cautiously. In fact, profitability of businesses also grows strongly with robust economic growth, and it is also visible in higher dividend payouts by the listed companies in the local Stock Exchanges in Pakistan. The KSE-100 index gradually crossed the 5000 level on March 24, 2004 from a low of 2356 on February 27, 2003, and has maintained its level above 5000 points despite various shocks since then. Apparently, the KSE-100 index is likely to maintain this rising trend (see **Figure 8.17**). Another supporting feature is that the volume traded at the stock exchanges has also witnessed a substantial increase with rising equity prices. However, a negative element in the stock market is *badla* financing, which allows investors to take highly leveraged positions, and may increase the risk for financial institutions and the stock market. As a matter of concern, various regulatory steps have been taken by SECP and SBP including: (1) introduction of margin requirement from July 2004, (2) *badla* financing to be phased out by end-December 2004, and (3) banks' exposure in the equity market has been restricted. These factors suggest that KSE-100 index is not as volatile as perceived and it is safely concluded that there

is no bubble formation at least in the equity market in Pakistan. However, unwarranted tightening in monetary policy could hurt the prospects of growth, which may also lead to an equity market collapse. Even in this situation, it is highly unlikely that these developments could trigger a systemic financial crisis in the country.

8.3 Financial Sector Development and Economic Growth

A well-developed financial sector is considered to be an important prerequisite for promotion and sustenance of economic growth. The specialized type of services provided by the financial sector and their outreach become the



most important elements of linkages between financial development and economic growth. **Box 8.1** briefly describes the nature of financial services and their causal links to economic growth.



Literature on economics and finance has extensively explored a number of financial services that are conducive for the promotion of growth. The first and foremost is that financial intermediaries

mobilize savings. This helps to pool individual savings to be channelized into longer lumps of investment. Second, the financial sector manages risks by diversifying and pooling constituents' risks. This function enables the financial sector to undertake projects, which otherwise are not feasible due to their relatively higher risks. Third, financial sector lowers the costs of information and transactions, which promotes specialization and innovation--important catalysts for growth. Fourth, financial sector helps optimize the allocation of resources available in the economy. Since multiple agents solicit scarce capital, financial intermediaries filter the inefficient agents and select the best firms, and allocate capital accordingly. Finally, well-developed financial intermediaries promote economic growth by monitoring managers and exerting corporate governance because these are more capable and equipped to project this function than individual investors. Quantity and quality channels add to economic growth through increasing rate of saving, investment and productivity respectively, as illustrated in **Box 8.1**.

8.3.1 Financial Sector Development Indicators

Financial sector development can be assessed on the basis of the level and extent of financial sector depth and efficiency¹¹ (see section 8.1a.2)

Financial sector depth

It is generally believed that the traditional measures of financial deepening, which are based on, monetary and credit aggregates are a poor guide to a country's financial development¹². Hence alternative measures are required for a more meaningful assessment, which cover a wide range of varying levels of financial sector development. This section covers a number of such measures, alongwith the traditional indicators.

Financial sector depth refers to increasing the ratio of financial assets to GDP. One of the most common quantity¹³ measures used for this purpose is the money (liquid liabilities) to GDP ratio, which assesses the degree of monetization in the economy. The M2 (broad money)¹⁴ to GDP ratio (see **Table 8.3**) increased from 36.9 percent in FY00 to 49.2 percent in FY04¹⁵. It should be noted that this ratio has recorded a gradual growth of 14.2 percent in FY04, as compared to FY03 when the growth rate was around 8 percent. A slowdown was partially expected, given that the factors that contributed to the growth of this ratio in FY03 (continued post 9/11 developments, e.g. increase in worker remittances, subsequent appreciation of the rupee) have largely stabilized since then.

As shown in **Table 8.3**, money multiplier registered an upward trend since FY 00 to FY04 continuously. Its value was 3.2 in FY04, the highest since FY00. The higher value reflects the level of stability and policy responsiveness of the financial sector. This movement also shows, SBP efforts to keep the growth of reserve money in line with an unusual growth in monetary assets due to unprecedented expansion in net foreign assets of SBP.

The ratio of Private Sector credit to GDP, which focuses on credit given to the 'productive' sector is another important measure of financial depth. A high ratio indicates an efficient allocation of funds by the banking sector. Even though this ratio has been increasing gradually over the years, there is ample

¹¹ Efficiency of financial sector (analyzing through NPLs, interest rate spread, bank spread, and NIM) is discussed extensively in SBP report 'Banking System Review 2003'.

¹² For example, China has a higher ratio of broad money to GDP than Australia, and around the same level as Japan. However China's financial system is not as well developed as either of these two. This aspect is highlighted by David Lynch in CMBF Paper No. 5 – September 1993.

¹³ Quantity indicators are based on monetary and credit aggregates and are the traditional measures of financial deepening. They capture the level of savings and credit intermediation in an economy. Classification detailed in CMBF Paper No. 5. ¹⁴ Broad money best captures the saving function of money

¹⁵ The higher the M2/GDP ratio, the more developed and efficient financial intermediation is perceived to be.

Table 8.3: Indicators of Financial Deepening												
percent												
	FY-00	FY-01	FY-02	FY-03	FY-04	Change (2002-03) Change (2003-04)					
M2 / GDP	36.9	36.7	39.9	43.1	49.2	7.9	14.2					
Money Multiplier	2.8	2.9	3.0	3.1	3.2							
Currency / Total Deposits	34.0	32.6	32.8	31.2	30.3	-4.7	-2.9					
Currency / M2	25.4	24.6	24.7	23.8	23.3	-3.6	-2.1					
Currency / GDP	9.4	9.0	9.9	10.3	10.6	4.1	3.3					
S.Capitalization / GDP	10.3	8.1	9.3	15.5	26.0	67.2	68.2					
P.Sector Credit / GDP	19.9	18.0	18.2	19.7	23.3	7.9	18.6					
P. Sector Credit / T. Credit	53.3	55.5	54.3	61.3	93.4	13.0	52.4					
S.Bank Assets / Total Assets	66.6	64.1	70.5	70.1	71.0	-0.6	1.3					

room for further growth given the recent privatization of large public sector commercial enterprises (PSCEs).

The 'level' of financial intermediation is also a useful tool to assess financial sector development. Various measures to gauge this level include: a) Currency to deposit ratio¹⁶, which is lowest in FY04 since FY00, that shows that the growth in the deposit base has been greater than the growth in the currency in circulation relative to the previous year, b) Reserve money to total deposits ratio which signifies the strength of the banking sector; the lower the ratio, the higher the level of confidence in the banking sector. c) Currency to M2 ratio has decreased in FY04 again because of the increase in total deposits relative to the currency in circulation, d) Currency to GDP ratio reflects the degree of monetization in the economy and was at its highest level in FY04 given the period of analysis.

A favorable movement in some of the indicators discussed above can be attributed to flexible monetary policy instruments and transparent liquidity management. In addition to this, SBP plans to establish a formal deposit insurance scheme aimed at promoting financial stability and providing protection to small depositors. These measures are expected to contribute to the enhancement of the aggregate deposit base in the short to medium-term. It must be pointed out that the trend behavior of some indicators gives the impression of a relatively high level of intermediation in FY04 as compared to the previous fiscal year.

Table 8.3 also shows the progress of alternative indicators of financial sector development. Stock market capitalization to GDP ratio is one such measure. This ratio has shown remarkable improvement in both FY03 and FY04. Another measure 'scheduled bank assets to total assets' has also been taken into account to assess financial sector independence. An increasing trend in this ratio signifies independence and efficiency of the banking sector in the allocation of savings. Again the highest level of this ratio so far has been recorded in FY04 at 71 percent. This ratio particularly shows that the financial sector in Pakistan is dominated by commercial banks.

These developments in financial sector depth indicators can be attributed to the following different causative factors.

- Pakistan's stocks markets were fueled by the improved macroeconomic environment.
- A consistently low interest rate structure and excess liquidity which resulted in unprecedented • credit off-take
- The supervision of securities markets according to the international norms

¹⁶ It shows the payment habits of the public, how much currency is held relative to deposits; currency deposit ratio is affected by the cost and convenience of obtaining cash. This ratio has a strong seasonal pattern being highest around festivals.

• Credit to the previously relatively unexplored segments such as consumer financing, SMEs and Agriculture sectors has expanded markedly.

8.3.2 Correlation Between Financial Sector Development and Growth Indicators

This section explores the mechanism through which the financial sector aids economic growth by assessing the degree of correlation between the indicators discussed above and identifying the associated channels.

Table 8.4 shows the correlation between the financial depth indicators with gross domestic product, total factor productivity and incremental capital.

In general a positive correlation can be seen between them. Stock market capitalization is highly correlated with GDP whereas credit to the private sector is highly correlated with TFP as compared to the other growth indicators. Similarly, M2/GDP also has the highest correlation with TFP.

Figures 8.18 graphically present a view of financial sector development since FY72 to FY04. **Figure 8.18a** depicts the behavior of financial depth (M2/GDP) during the period of analysis.

As shown in the **Figure 8.18a**, M2/GDP shows a fluctuating pattern over the period of analysis, with instance of a sharp decline in FY75. From FY79 to FY90, it averaged around 40 percent with little evidence of volatility. There was another drop witnessed at the end of the 1990s. Since FY01, it has exhibited an increasing pattern, FY04 registering the highest level ever over the period of observation.

Figure 8.18b depicts the developments in private sector credit to GDP showing a volatile pattern over the period of observation, fluctuating between a minimum level of 15.8 percent in FY76 to a maximum level of 26 percent in FY86. In FY04 its level was recorded at 21.9 percent.



Table 8.4: (Correlation	Matrix	between	Finance	and Growth	
Indicators						

	M2/GDP	PC/GDP	STC/GDP					
Gross Domestic Product	0.63	0.43	0.71					
Total Factor Productivity*	0.65	0.50	0.59					
Incremental Capital	0.46	0.22	0.66					
*TFP is computed as difference between GDP per worker and								

*TFP is computed as difference between GDP per worker and weighted share of capital per worker.

PC' is credit to the private sector

STC' is stock market capitalization

Figure 8.18c displays the trend of the stock market capitalization to GDP ratio. From FY72 to FY90 the trend line shows little variation. Several spikes can be seen during the '90s subsequent to which it dipped again in FY00, started rising in FY01 and once again reached the highest level of 26 percent in FY04.

Figure 8.19 below presents the historical view of financial sector development with respect to growth indicators (so called quantity and quality effect channels).

Figure 8.19a depicts trend in financial sector depth (M2/GDP) with respect to investment¹⁷ from FY72 to FY04. It is observed that with an increase in financial sector depth, investment also rises. However, financial sector depth does not show smooth trend as investment. It implies that fluctuations in M2/GDP do not explain the investment trend. This can also be interpreted to understand that



fluctuations in M2/GDP were necessary to keep investment on rising pattern.

Figure 8.19b shows the behaviour of M2/GDP with respect to the TFP¹⁸. In the beginning M2/GDP was relatively high as compared to TFP. M2/GDP rose sharply in FY79 and TFP follwed a similar trend. Both these indicators show a rising trend on average upto FY04. Again fluctuations in M2/GDP were frequent and the TFP was relatively smooth while rising.

Figures 8.19c & 8.19d depicts historical pattern of private sector credit with respect to investment and TFP. **Figure 8.19c** shows that the credit to the private sector relatively volatile in the initial period and recorded its highest level in FY87. However investment rose gradually from FY72 relative to the private sector credit to GDP ratio. Fluctuations in this indicator do not fully explain the investment behaviour in case of Pakistan's economy. Investment does not seem to be driven by credit to the private sector. In **Figure 8.19d**, TFP is seen to have grown at a higher level in relation to credit to the private sector.

Figures 8.19e & 8.19f both depict the behaviour of the stock market capitalization ratio with respect to investment and TFP. **Figure 8.19e** shows that both of these indicators had a rising trend until FY94. From FY94 to FY98 stock market capitalization was volatile which did not affect investment in the same way. Stock market capitalization rose sharply from FY02 onwards and investment followed a similar pattern. The Stock market capitalization to GDP trend in relation to TFP is shown in **Figure 8.19f**.



Figure 8.20 presents the picture of the size of the financial assets (M2 shown in log scale) over the years (FY72-04) in the economy. Figure 8.21 displays the progress in TFP and capital intensity under the shadow of the size of the monetary aggregates. As shown in Figure 8.20, the size of the financial sector (M2) has risen over the period of assessment. In Figure 8.21 capital intensity and TFP exhibit a rising pattern in the initial period, FY72-74. It appears that the increase in the size of financial sector increases the overall efficiency and productivity of capital, implying that capital accumulation enhances GDP and increases productivity as well.



However, from FY85 to FY96 capital intensity remained almost constant and TFP continued to increase, with the implication that during this period the economy was relatively more efficient. It is important to note here that from FY97 to FY03 capital intensity was high relative to the increase in GDP which refelected in rise in TFP. In FY04 the increase in GDP was much higher relative to capital intensity. (**Figure 8.21**).

8.3.4 Financial Development in Peer Countries.

¹⁷ Investment is referred to as a Quantity channel effect of financial sector development.

¹⁸ TFP is referred to as a Quality channel effect of financial sector development.

While an isolated analysis of Pakistan reveals the trend behaviour of the financial sector over time, a cross-country comparison of the different indicators of financial deepening would certainly be more instructive. A group of different Asian countries (India, Bangladesh, Sri Lanka, Philipines, Thailand, Malaysia, and Korea)¹⁹ have been selected for the purpose of a peer comparison.

Table 8.5 shows that Pakistan's financial depth in terms of M2/GDP ratio is substantially higher than the ratios for Sri Lanka and Bangladesh²⁰ in 2002. It is important to note that the Pakistan economy made a greater progress in the financial sector



relative to other economies included in the sample over the period of assessment. Money multiplier is the lowest for Pakistan relative to the other economies in the selected group. This signifies a relatively low degree of effectiveness of the changes in reserve money by SBP on monetary assets (M2). It, therefore, implies that financial sector is still shallow in Pakistan's economy compared with the selected peer countries.

Table 8.5: Indicators of Financial Depth and Efficiency-2002-03

percent																		
	Pakistan India		dia	Bangladesh Sri Lanka			Phillipines Th		Thailand		Turkey		Malaysia		Korea			
	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003	2002	2003
M2/GDP	53.1	56.4	63.2	63.8	39.1	na	39.3	na	58.7	56.1	99.2	96.7	50.2	na	106.3	108.7	87.0	na
Money multiplier	3.0	3.0	4.5	4.5	4.6	4.9	4.9	na	5.8	5.5	7.2	6.1	6.5	na	9.0	9.4	13.7	13.6
Demand deposits																		
/ Total deposits	43.7	48.2	13.0	13.5	12.9	12.1	11.7	12.0	12.1	12.7	3.2	4.2	13.4	na	19.1	20.5	8.7	8.5
Time deposits to			~- ~			~ ~ ~												
Total deposits	56.3	51.8	87.0	86.5	87.1	87.9	88.3	88.0	87.9	87.3	96.8	95.8	86.6	n.a.	80.9	79.5	91.3	91.5
*Stock market																		
capitalization /	17.2		25 7		25		10.1		50.0		262		10 5		120.7		52.2	
GDP	17.3		25.7	na	2.5	na	10.1	n.a	50.0	n.a	36.3	n.a.	18.5	n.a.	130.7	na	52.2	na
Private credit /	07.0	20.0	22.6	22.0	20.5		20.5		22.4	20.1	01.1	70.0	14.0		00.0	07.0	105.0	
GDP	27.9	30.9	32.6	32.0	28.5	na	28.5	n.a	32.4	30.1	81.1	79.2	14.0	n.a.	99.8	97.2	105.3	na
Interest rate																		
spread	8.2	5.7	11.9	11.5	7.8	8.2	4.0	n.a	4.5	4.3	4.9	4.6	n.a.	n.a.	3.3	3.2	1.9	1.9

Source: International Financial Statistics, IMF, April 2004

:* World Development Indicators, The World bank, March 2004

Note: A major part of saving deposits in pakistan is included in demand deposits, therefore, this number is probably not strictly comparable with others reported in the Table.

Private sector credit to GDP ratio is also shown in the above mentioned table for the same group of countries. It is again the lowest in the group except for Turkey and Sri Lanka. In Pakistan, it is a reflection of the huge budget deficit during the last two decades which directed credit flows to financing the government's budgetary requirements, however the situation has improved in the recent

¹⁹ The group is heterogeneous, as selected countries have different per capita income and their financial sectors represent various levels of development. Further comparison will show relative standing of Pakistan vis-à-vis other countries at the similar stage of development and evaluation against relatively developed countries would reveal future prospects for the financial development in Pakistan.

²⁰ A comparatively lower value may reflect a large informal sector in the economy. Imposition of sales tax and increased documentation of the economy may improve the ratio.

past, and the trend is comparable with the economies of India, Bangladesh and Sri Lanka. The Korean economy had the highest level of this indictaor at 105.3.

Stock market capitalization to GDP ratio reflects the mobilization of capital and diversification of risks in the respective economies. **Table 8.5** shows that Pakistan's ratio is higher than the economies of Bangladesh, Sri Lanka and Turkey. Interest rate spread (or intermediation cost) is a measure of the efficiency of the financial institutions. A higher spread shows a less efficient financial system. This indicator for Pakistan is lower than India and Bangladesh and higher than all other selected economies. It should be noted that interest rate spread decreased sharply in FY03 as compared to FY02 relative to other economies in the group due to easy monetary stance of SBP on the back of substantial forex inflows.