SBP Staff Notes
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Saving and Investment in Pakistan

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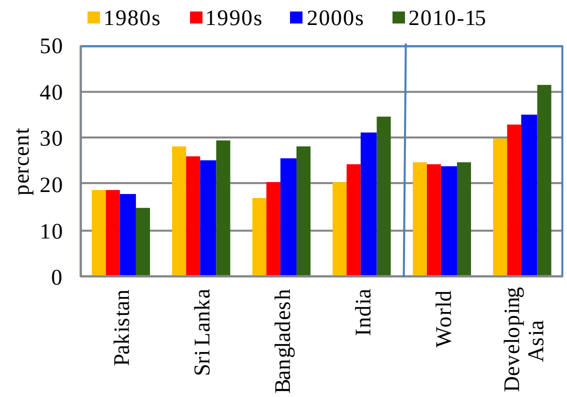
I. Introduction

Much of Pakistan's economic woes (both current and historic) center around low savings and investment rates in the country. Although levels of these indicators have never been comparable with the dynamic Asian region, a consistent decline in these ratios over the past few years has really put policy makers in a tight spot (**Figure 1**). In FY15, Pakistan ranked 151 among 175 countries in terms of investment rate, much below its neighboring countries like India (32), Sri Lanka (36) and Bangladesh (40).

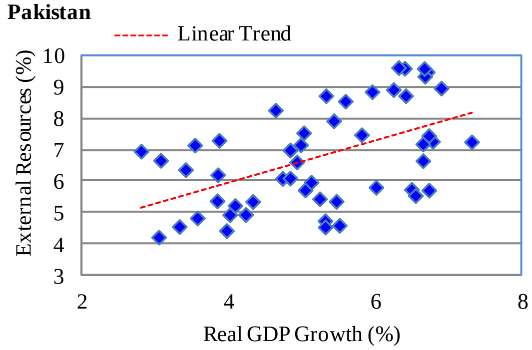
Figure 1: Investment to GDP ratio



Source: Haver Analytics/World Economic Outlook database

Fundamentally speaking, Pakistan seems to be stuck in a low-saving low-investment trap, which has seriously hampered its growth potential: a low savings rate reduces the volume of investible funds; low investments make growth spurts unsustainable; and low growth generates fewer domestic savings. It is not surprising therefore, that nearly all of Pakistan's high growth periods have coincided with abundant inflows of *foreign savings* (in the form of external loans, grants and remittances).[2] Accordingly, whenever such inflows dried up, economic growth slid back, as domestic saving and investment were never sufficient to keep up the growth momentum (**Figure 2**).

Figure 2: Economic Growth & Foreign Resources in Pakistan



External Resources = Grants, Loans and Remittances as percent of GDP
Source: SBP and Economic Survey

This study attempts to explore underlying factors behind low investment rates and resource mobilization in Pakistan. Broadly speaking, fragile business environment due to uncertain policies and poor governance; security issues for an extended period of time; energy shortages; and low public sector investment due to severe fiscal constraints, are some of the key factors responsible for depressed investment activities. Moreover, global economic conditions in the past few years also became unfavorable: great recession following the financial crisis during the last decade, debt crisis and economic slowdown in Europe, and turmoil in emerging markets have squeezed the international liquidity available with investors.

II. Business environment

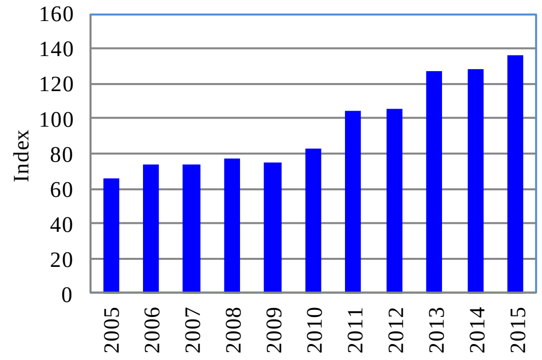
Business conditions have remained increasingly difficult for investment in Pakistan, particularly with the political uncertainty of 1990s, terrorism in 2000s, and deterioration of general law and order in big cities, like Karachi – the hub of economic activities of the country. In terms of business regulations also, Pakistan's performance has shown deterioration, as evident from World Bank's index of Ease of Doing Business (EDB), which has worsened during the last ten years (**Figure 3**).[3]

[2] Loans and grants include project aid, food aid, and non-food aid. There is no conclusive evidence in the literature about the impact of foreign aid on capital formation as there are always questions on the uses of aid. However, in case Pakistan, such foreign inflows together with remittances seem to have a positive relationship with growth (**Figure 2**).

[3] EDB index is based on a number of sub-indices, in most of which Pakistan ranks poorly: construction permits (61), protecting minority investors (25) and resolving insolvency (94), starting a business (122), getting electricity (157), registering property (137), getting credit (133), paying taxes (171), trading across borders (169) and enforcing contracts (151). Rankings are for 189 countries and are available at: http://www.doingbusiness.org/data/exploreeconomies/pakistan/

The unfavorable business conditions in Pakistan have not only kept foreign investors away from the country, but also dissuaded local businesses from expanding and/or reinvesting. Resultantly, the investment rate in Pakistan, which was around 18 percent in 2000s, declined to only 15 percent in recent years.

Figure 3: Ease of Doing Business in Pakistan



Index (1=Most Business Friendly)
Source: Haver Analytics/World Bank

III. Policy weaknesses

Although Pakistan has lately achieved a reasonable sense of stability on the political front, it has a history of frequent changes in political regimes, which had compromised the quality and consistency of economic decision making. Policies were mostly guided by adhocism, particularly in case of public sector investment, without taking care of long-term objectives and genuine national priorities.[4]

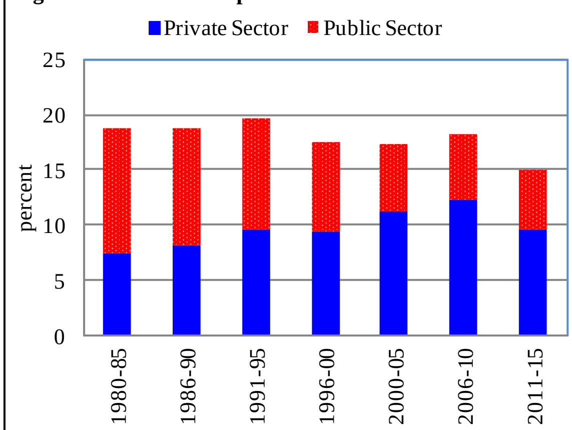
For example, successive governments introduced several incentives for power generation in the country, but transmission and distribution remained largely inattentive. As a result, despite large investments in power sector and use of tax payers' money to pay for this sector's inefficiencies, power shortages are still impacting businesses and households.

Similarly, a number of incentives were given for investment in fertilizer, power and CNG sectors with a commitment of uninterrupted gas supplies. But such commitments were made without having a fair assessment of available gas resources. Such weaknesses in policy making not only impacted existing businesses but also kept away new investment.

IV. Low public investments

Public sector investment, particularly in infrastructure, crowds in private investment. In case of Pakistan, the public sector has played a leading role in developing capital stock and had a very high share in total investment until 1990s. However, its share has been declining since then (**Figure 4**). One obvious reason is increasing fiscal constraints due to low tax-to-GDP ratio and meager external financing, which hardly allows the government to spend much on development programs. Moreoever, ailing PSEs have also been eating up public resources for last many years.

Figure 4: Investment as percent of GDP



Source: Haver Analytics

Lack of resources is not the only problem; misallocation of available resources has been equally responsible. More specifically, spending choices of the government have been inclined more towards short-term and publically popular programs like subsidizing public utilities and commodities. This has compromised the level of public investment in the country.

[4] The embedded adhocism in the governance structure, have seriously dented the capacity of sound decision making.

V. Role of the financial sector

Financial sector plays a crucial role in promoting investment activities in the country, as it mobilizes resources from savers and allocate them to borrowers. In its different phases of development strategies, Pakistan has adopted long-term financing from specialized financial institutions, like PICIC, IDBP, NDFC, etc. However, such institutions lost their importance due to growing inefficiencies. Many of these institiitions were unable to extend credit to small borrowers and other desired sectors of the economy such as SME.[5] Government had either privatized them or merged them with other institutions due to their poor management, increasing non performing loans and their burden on the exchequer.[6]

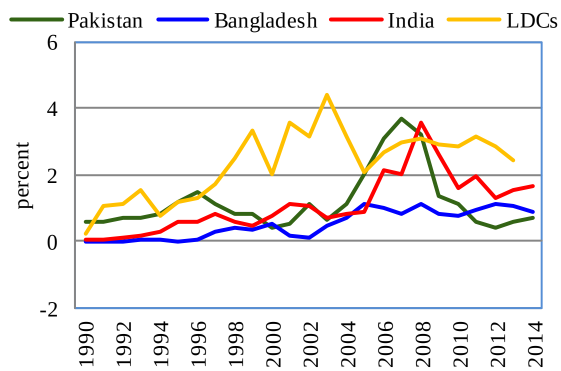
Presently, Pakistan's financial sector is dominated by commercial banks that have gained tremendous strength following the privatization and de-regulation process from 1990s onwards. However, these institutions are not specialized for long-term financing.[7] Moreover, government's reliance on budgetary borrowing from commercial banks has increased lately as: (i) its overall borrowing needs increased significanly due to high budget deficits; (ii) there are statutory limits on borrowing from the cental bank; and (iii) external funding, which only recently showed revival, had almost dried up after FY08.[8]

On the flip side, commercial banks are also more interested to invest in risk-free government securities instead of locking their funds in long-term private sector proejcts.[9] Thus the role of financial sector has not been supportive for investment in the country. In recent years, policy makers have given attention to development finance; but they are more focused toward financial inclusion – incentive structure for financing long-term projects is still not very accommodative.

VI. Declinig foreign investment

As domestic resources are insufficient to finance the investment in developing economies, foreign direct investment (FDI) is a viable external resource to fill the gap. FDI not only helps in improving production processes, it also contributes in transferring technology, capacity building of locals and better product development.

Figure 5: Net FDI to GDP ratio



Source: Haver Analytics/World Development Indicators, World Bank

Pakistan has been attracting foreign companies since independence.[10] However, there are many phases of ups and down, due to changing government policies, domestic business conditions, and global economic environment. In early period of 1950s, and 1960s, FDI picked up mainly due to public policies as well expansionary strategies of foreign companies. This trend was discouraged by the nationalization of 1970s. In 1980s and onward, FDI again increased due to favorable policies and incentives for foreign companies.[11]

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[5] Small and Medium Enterprises

[6] For instance, NDFC was merged with National Bank of Pakistan (NBP) on October 31, 2001 while PICIC was privatized in 2007.

[7] In fact, commercial banks, by their very nature, are not meant for long-term project financing, as maturity mismatches between their sources of funds and uses do not allow them to hold non-liquid assets for a longer time period.

[8] External resources, which have been about half of the total budget deficit in Pakistan, declined to less than 15 percent after global financial crisis of FY08.

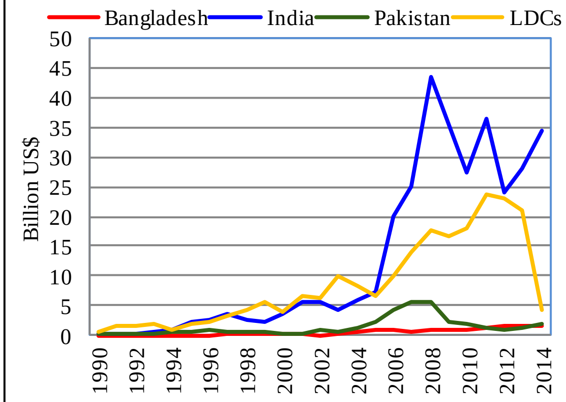
[9] The share of government securities in total assets of banks doubled from an average of 17 percent in 2006-10 to 35 percent in 2011-15.

[10] FDI was initially permitted in manufacturing, and large investment had to be in the form of joint stock companies with local equity participation. These restrictions were relaxed in 1976 and removed altogether in 1977. [Source: Amjad, R., & Burki, S. J., 2015. *Pakistan: Moving the economy forward*. Delhi, India: Cambridge University Press.]

[11] A number of measures were taken, including: (i) Foreign Private Investment (Promotion and protection) Act of 1976 (ii) guarantee capital repatriation and remittance of profits and dividends, and (iii) encouraging investment in capital goods industries. [Source: *ibid*]

Pakistan was able to attract substantial foreign investment in mid 2000s in banking and telecommunication sectors.[12] However, due to deteriorating security situation after 2007, foreign investors avoided Pakistan as an investment destination.

Figure 6: Net Inflows of Foreign Direct Investment



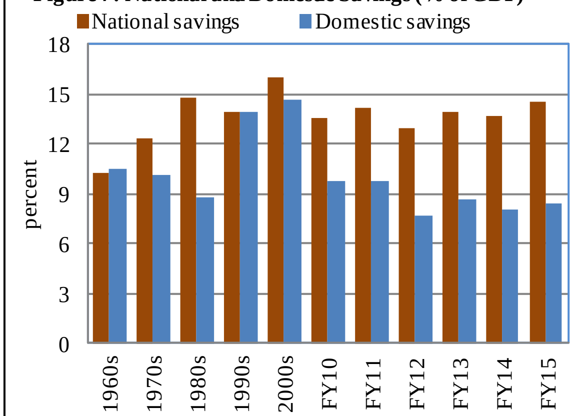
Source: Haver Analytics/World Bank

Pakistan was unable to perform due to its poor global image, compared to other peer countries, which have enjoyed significant FDI inflows (**Figure 5 & 6**). Pakistan was not even able to attract foreign investment in lucrative sectors like oil and gas.[13] The foreign investment, which did come, was concentrated in services sector, having little spillover impact on manufacturing sectors

VII. Low savings rate

While foreign savings are important in financing the saving-investment gap, the most reliable source of funds for investment in a country is its own saving – Pakistan's record in this aspect is also not encouraging. National savings as percent of GDP were around 10 percent during 1960s, which increased to above 15 percent in 2000s, but declined afterward (**Figure 7)**. Pakistan's saving rate also compares unfavorably with that in neighboring countries: last five years average saving rate in India was 31.9 percent, Bangladesh 29.7 percent, and Sri Lanka 24.5 percent.

Figure 7: National and Domestic Savings (% of GDP)



Source: SBP and Economic Survey

Similarly, domestic savings (measured as national savings *less* net factor income from abroad) also declined from about 15 percent of GDP in 2000s, to less than 9 percent in recent years (see **Box 1** for methodology of measuring savings). Domestic savings are imperative for sustainable growth, because inflow of income from abroad (remittances and other factor income) is uncertain due to cyclical movements in world economies, exchange rates, and external shocks.

Box 1: Measurement of Savings

By definition, savings are part of income not consumed. These are measured indirectly through national income identities by Planning Commission, which uses information about investment estimated by Pakistan Bureau of Statistics; and current account deficit compiled by SBP. Given the data for investment and current account balance, National Savings are worked out as a residual from the identity of dual gap, which says "savings and investment gap is always equal to the current account balance".[14] Workers' remittances and net investment income are then subtracted from National Savings to arrive at Domestic Savings.

[12] Pakistan ranked 10 out of the top ten Asian countries in terms of FDI inflows in 2007. [Source: United Nations Conference on Trade and Development [UNCTAD], 2008, pp. 48.]

[13] Compared to Henry Hub (the international gas price index), the wellhead gas price offered in Pakistan is at a premium which shows a potential opportunity for the foreign investors in this sector. However, only US$ 246 million FDI came in the sector in FY15. And if we look at the distribution of returns of already invested foreign investment; only 34 percent was re-invested and the rest was repatriated to the origin of investment. With a fact that petroleum policy had recently been revised favorably for investors, such a high proportion of returns repatriated is a point of concern for policy makers.

[14] Dual gap identity (S-I = X-M) is derived from two basic identities of national accounts, i.e.: (1) Y = C + I + X-M; and (2) S = Y – C. Here S is savings, I is investment, X is exports, M is imports, Y is GNP, and C is consumption.

Domestic Savings are then bifurcated into public and private savings. While public savings are estimated from fiscal data; private savings are taken as residual. Within private savings, an amount equal to 2 percent of GDP is assumed as corporate savings and the rest is household savings.

Although theoretically there is no issue in this approach for estimating savings, practically the measurement errors cannot be ruled out. Some important sources of errors are the following:

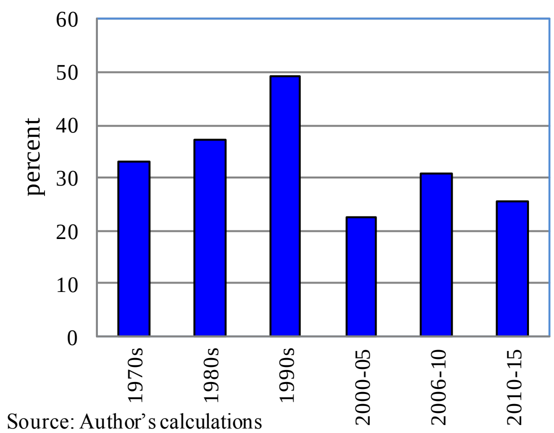
(a) The existence of a large informal economy, which leads to underestimation of national accounts including gross investment – the starting point of estimating savings;
(b) Illegal outflow of capital, which does not appear in official balance of payments statistics. Theoretically, capital flown out is part of our national savings, but this is not available for domestic investment.
(c) Savings kept in the form of precious metals and stones, which are not used in capital formation – and thus do not appear in savings calculations;
(d) Savings also kept in foreign exchange, particularly during the periods of exchange rate volatility, which is again not available for addition to capital stock.

Thus it is possible that actual savings in Pakistan are higher than the reported numbers. However, as the sources of measurement errors are mostly structural in nature, it leaves the trend of measured savings rate more or less similar to the actual (unobserved) savings.

VIII. Financial savings

Low level of saving is one aspect of the problem; other equally important issue is channelizing of saving through financial sector for their efficient allocation to investment. It is found that less than 50 percent of the national savings find its way in to financial sector (**Figure 8**). The rest is used in real estate or other form of capital formation by informal ways. Interestingly, financial savings (i.e., savings kept in form of financial instruments) declined sharply to 22 percent of the total national savings during 2000-05 – a period of real estate boom.[15] Incidentally, the interest rates were also very low during this period.

Figure 8:Financial Savings as % of Total National Savings



Source: Author's calculations

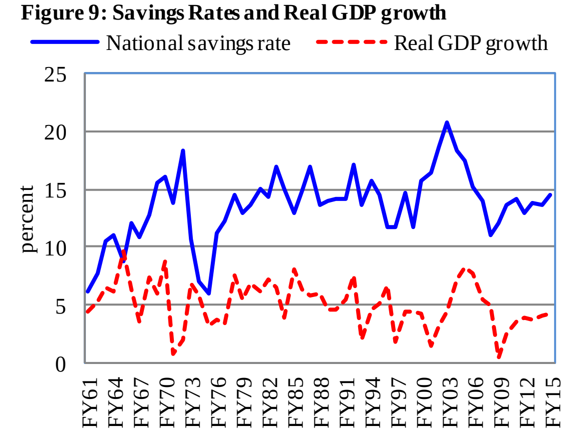
IX. Determinants of saving rate

Saving behavior of economic agents is a complex phenomenon which is the outcome of interaction of a large number of social and economic factors. However, key determinants of saving rates are the following three macroeconomic variables:

(i) Income level

Savings are positively associated with income. There is a general consensus in economic literature that people with low level of income have lower propensity to save and vice versa. One reason for collapse of saving rates in Pakistan in recent years is persistently low real GDP growth (**Figure 9**).

Figure 9: Savings Rates and Real GDP growth

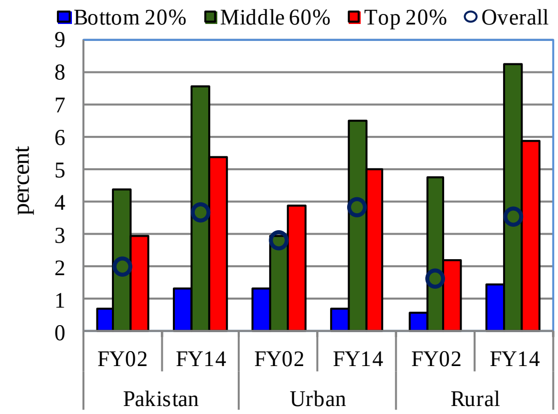


Source: Various issues of Pakistan Economic Survey

[15] We have considered savings and fixed deposits of banks, national savings schemes (NSS), and postal saving deposits as Financial Savings. Demand deposits and currency in circulation are not included as they are kept by public primarily for transaction purposes. Some households may keep cash with savings motive; however, its amount may not be very significant.

Role of income in determining savings rate is also clear from micro data of Household Integrated Economic Survey (HIES). An analysis of this makes several revelations: (a) overall saving rate of urban household is higher than rural household, as per capita income is higher in urban areas; (b) in both urban and rural areas, rich class has the highest saving rate; and (c) interestingly, saving rate in rural areas increased during recent years as rural income increased significantly due to increase in agricultural commodity price (going forward this trend may reverse due to the recent fall in commodity prices) (**Figure 10**).

Figure 10:Urban amd Rural Savings Rates from HIES Data



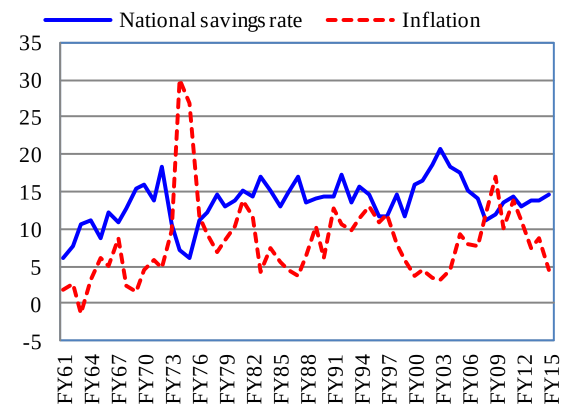
Source: Household integrated economic surveys

Although remittances (which are savings of Pakistanis working abroad, and are part of National Savings) have been showing robust growth for the past several years, their contribution to sustainable growth is less clear.[16]

(ii) Inflation

High inflation reduces the value of saving; and with given nominal interest rates, it is a disincentive to save in financial instruments. The evidence in Pakistan clearly shows a negative association between inflation and saving rate (**Figure 11**). Thus a continuous five years of double digit inflation between FY08-FY12 has also contributed to decline in saving rates during this period.

Figure 11: Inflation and Savings (% of GDP)

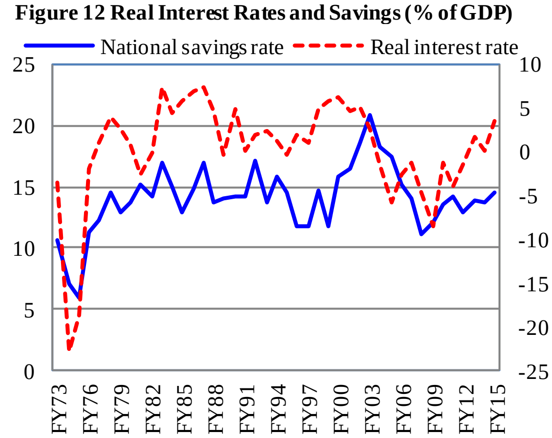


Source: Various issues of Pakistan Economic Survey

(iii) Rate of return

Rate of return on saving is the most important factor affecting saving rate. Data for Pakistan suggests that national saving rates have followed the trend on real interest rate in general (**Figure 12**). Particularly, private sector savings have strong association with the real interest rate – having a correlation coefficient of 0.62.[17] However, public savings are not interest sensitive (with a correlation coefficient of 0.12).

Figure 12 Real Interest Rates and Savings (% of GDP)



Source: Various issues of Pakistan Economic Survey

While the past trend in saving rate as well as its recent fall can fairly be explained by real GDP growth, inflation and real interest rate, there is still a need to understand the structural factors that have kept savings rate historically low in Pakistan. Empirical literature on determinants of saving behavior finds education,

[16] In Pakistan 62.2 percent of remittances are used for consumption, 21.7 percent in real estate, 12.1 percent for investment, and 4.0 percent for other purposes. [Source: Gilani, I., M.F. Khan, and M. Iqbal 1981 "Labor Migration from Pakistan to the Middle East and Its Impact on the Domestic Economy". Research Report No. 127, Islamabad: Pakistan Institute of Development Economics.]

[17] Weighted average deposits rates have been used for this analysis. SBP policy rate and NSS rates (on Special Savings Certificates) have almost perfect correlation with weighted average deposits rates.

financial deepening, culture, religion,[18] and demographic factors (like labour force participation rate, dependency ratio, etc.) as major factors affecting private sector saving rate; and political stability as a key determinant of public saving rate.[19] While some of these factors may be quantifiable, many are qualitative in nature.

X. How to increase investment and saving?

With improved security situation and business sentiments in the country, we expect investment to pick up going forward. Encouragingly, the environment of low inflation, low global oil prices, and relatively safer external macro balances has provided a room for government to address structural problems.

An important task is to ensure continuity of conducive environment for businesses (e.g., consistent policies, smooth energy availability, improved governance, etc.). Next, the government should design a coherent industrial policy and provide adequate incentives so that manufacturers can move up in the value chain, and invest in technology that will allow shift from producing low value added products to high value products.[20] At the same, the regulatory institutions should be strengthened so that private intellectual rights are suitably enforced and protected.

The direct role of the government includes public investment in infrastructure (primarily in electricity and gas distribution, construction, transport and human capital), which crowds in private investment. Given the strong spillover of education on productivity growth, the public investment on R&D and better skill set is critical. A focus on expanding network of technical and vocational education institutions, and establishing industry-academia linkages can yield fruitful results.[21]

In terms of domestic resource mobilization, the role of the financial sector is critical. Commercial banks in particular should focus on unlocking household savings placed in real estate and precious metals (e.g. gold), and then channelize them into productive investments. Similarly, more schemes are needed to attract contractual saving schemes in private sector like pension, provident fund, gratuity, old age benefit schemes, as well as small savings (like committee/bisi system) into the formal financial system.[22] Another area is expanding the network of Islamic banking and offering competitive rate of return on Islamic financial instruments.

The role of the government cannot be overemphasized. For example, given government's heavy reliance on commercial banks for financing its fiscal deficit, banks have little incentive to offer attractive saving schemes and strengthen their capacity to finance long term projects. Thus the government should reduce its overall budget deficit, and also focus on mobilizing funds from non-bank sector.

[18] Interestingly, Pakistan has cultural values similar to India and Bangladesh, and religious values similar to Middle East and North African Muslim countries, but has savings rates significantly lower than these countries.
[19] See for example: (a) Edwards, Sebastian 1995; Why are Savings Rates so Different Across Countries? An International Comparative Analysis; NBER Working Paper No. 5097; and (b) Kazmi, Aqdas Ali 2001; A Study on Saving Functions for Pakistan: The Use and Limitations of Econometric Methods; Lahore Journal of Economics; 6:2; Jul-Dec.
[20] Pakistan needs to adopt an approach based on three considerations: (1) selecting the winners, both industries and enterprises, that could exploit niches for themselves in the rapidly changing global system of production; (2) decentralizing industrial policymaking to the provinces so that each province can take advantage of its endowments; (3) choosing the industries that can play a role in creating a large number of jobs for the country's rapidly increasing work force. [Burki, S. J. 2008), Industrial Policy: Domestic Challenges, Global Imperatives, and Pakistan's Choices, The Lahore Journal of Economics, September 2008, 23-34.]
[21] However, given the severe fiscal constraints, the government would need increase tax-to-GDP ratio, and privatize loss making public sector enterprises on priority basis. The latter would provide an opportunity to attract foreign direct investment into the country.
[22] Savings mobilized through informal system (bisi/committee) are used more for consumption of durables than for capital formation.