Academic Script

INTRODUCTION

Capital requirements of a country depends on two factors, the desired rate of economic growth and the incremental capital-output ratio.
The secular uptrend in domestic growth is clearly associated with the consistent trends of increasing domestic savings and investment over the decades. Gross domestic savings have increased continuously from an average of 9.6 per cent of GDP during the 1950s to almost 35 per cent of GDP at present; over the same period, the domestic investment rate has also increased continuously from 10.8 per cent in the 1950s to close to 36 per cent by 2006-07. A very significant feature of these trends in savings and investment rates is that Indian economic growth has been financed predominantly by domestic savings. The recourse to foreign savings – equivalently, current account deficit – has been rather modest in the Indian growth process.

The long-term upward trends in savings and investment have, however, been interspersed with phases of stagnation.

In particular, during the 1980s, the inability of the Government revenues to keep pace with the growing expenditure resulted in widening of the overall resource gap. Accordingly, the public sector saving-investment gap, which averaged (-) 3.7 per cent of GDP during the period 1950-51 to 1979-80, widened sharply during the 1980s culminating in a high of (-) 8.2 per cent of GDP in 1990-91. The resultant higher borrowing requirements of the public sector led the Government to tap financial surpluses of the household sector through enhanced statutory pre-emptions from financial intermediaries at below market clearing interest rates.

In response to the balance of payments crisis, a programme of macroeconomic stabilisation and structural adjustment was put in place. Fiscal consolidation constituted a major plank of the policy response to the macroeconomic crisis; however, public sector savings continued to deteriorate during the 1990s, and even turned negative over the 5-year period 1998-2003 owing to sharp deterioration in savings of the Government administration.

The higher order of investment activity in the country over the past few years has also been mirrored in strong demand for credit from the banking sector since 2003-04 onwards.

For the purpose of estimating the domestic saving, the economy has been divided into three broad institutional sectors:

1. Public Sector: it comprises of government administrative departments and enterprises.
2. Private Corporate sector: it comprises of non-government non-financial companies, private financial institutions and corporate institutions.
3. Household sector: it comprises of financial savings and savings in the form of physical assets of the households.

Performance of Public sector savings

In view of the deterioration in fiscal deficits over the period 1997-98 to 2002-03 and rising public debt, and its adverse impact on public investment and growth, a renewed emphasis was laid on improving the health of public finances on a durable basis. In order to achieve this objective, fiscal consolidation has been guided by the Fiscal Responsibility and Budget Management (FRBM) Act, 2003 at the Centre and similar fiscal responsibility legislations at the State-levels. Since 2002-03, significant gains have been witnessed in the fiscal consolidation process, both at the Centre and the States, partly as a result of the implementation of the rule-based fiscal policies at the Centre and the States.

The revenue augmenting strategy encompassed moderating the tax rates and broadening the tax base through expansion in the scope of taxes, specifically service tax, removal of exemptions, some improvement in tax administration with a focus on arrears recoveries. Reflecting these measures, the tax-GDP ratio of the Centre has steadily risen from 8.8 per cent in 2002-03 to 11.3 per cent in 2006-07 and 11.8 per cent in 2007-08. The entire increase in tax revenues was mainly on account of direct taxes.

The dis-savings of Government administration declined from 5.2 per cent of GDP in 2002-03 to 1.3 per cent in 2006-07. The savings of the departmental enterprises improved marginally from 0.5 per cent in 2002-03 to 0.6 per cent of GDP in 2006-07.

The major component of public sector savings, i.e., savings of non-departmental undertakings, has exhibited a steady improvement since the 1970s and this process has continued during the reforms period. Thus public sector enterprises have exhibited continued and steady improvement in their commercial functioning since the early 1990s. Consequently, since 2003-04 onwards, total public savings have turned positive again. The savings rate of the overall public sector improved from 0.6 per cent of GDP in 2002-03 to 3.2 per cent of GDP in 2006-07. Notwithstanding the striking improvement over the past few years, it may be noted that the public sector savings rate at 3.2 per cent during 2006-07 was still less than the peak of over five per cent touched in 1976-77. Nonetheless, the turnaround of 5.2 percentage points of GDP in public sector savings – from a negative 2.0 per cent of GDP in 2001-02 to a positive 3.2 per cent of GDP in 2006-07 – has been a key factor that has enhanced domestic savings from 23.5 per cent to 34.8 per cent over the same period. The public sector investment rate increased from 6.9 per cent of GDP in 2001- 02 to 7.8 per cent in 2006-07, but this level is still significantly lower than the public sector investment rates of the 1970s, 1980s and early 1990s. Despite this increase, this sector's saving-investment gap has narrowed down from 8.9 per cent of GDP to 4.5 per cent during 2001-2007, reflecting a turnaround in the public sector savings (which rose from (-) 2.0 per cent to 3.2 per cent) enabled by the implementation of the fiscal rules.

Performance of the private corporate sector

The improved corporate financial performance resulted in doubling of the private corporate sector saving rate (from 3.9 per cent in 2002-03 to 7.8 per cent in 2006-07), which has also contributed to the pick-up in the overall savings rate.

From the long-term perspective, it is interesting to observe that the rate of savings of the private corporate sector has increased from around 1.7 per cent in 1980s and 3.8 per cent in 1990s, to almost 8 per cent in current period. Higher retained profits along with availability of resources from the banking sector facilitated by the lower financing requirement of the Government and the increased access to the domestic and international capital markets led to a sharp increase in the investment rate of the corporate sector from 5.7 per cent of GDP in 2002-03 to 14.5 per cent in 2006-07. Thus, despite the increased savings rate, the saving-investment gap of the corporate sector widened from 2.1 per cent of GDP in 2001-02 to 6.8 per cent in 2006-07.

Sustained growth in private sector infrastructure investment can take place in only those sectors that exhibit adequate return, either on their own or through public private partnerships. The performance of the telecom sector has exhibited this convincingly.

Household savings

A remarkable feature of the Indian macroeconomic story since independence has been the continuous rise in household savings over the decades. As might be expected, this rise has been characterised by continuing increases in financial savings as a proportion of GDP. Savings of the household sector can be measured as:

1)<u>The total of financial savings</u>: The financial savings involves possession of currency, net deposits, investment in shares and debentures, net claims on government in the form of central and state government securities and small savings, net increase in the claims in life insurance and provident funds.

2)<u>Saving in the form of the physical assets</u>: The physical assets include construction, machinery, equipment and stocks held by individuals, firms and other institutions constituting the household sector.

The financial savings and The physical assets

The spread of the financial sector, of bank branches in particular, post office savings and the like, helped in mobilising household financial savings. Their financial liabilities did not grow correspondingly since there were few financial products available for household credit. This situation has changed in recent years with the introduction of new private sector banks, who introduced retail credit for housing and for consumer durables in large measure. The public sector banks have followed the private sector in doing the same.

Hence, while gross financial savings of the household sector have continued their upward trajectory in the recent few years, households' financial liabilities have also been increasing rapidly. Gross financial savings grew from 13.8 per cent of GDP in 2004-05 to 18.3 per cent in 2006-07, while their financial liabilities rose from 3.8 per cent of GDP during 2004-05 to 6.8 per cent during 2006-07. The ongoing financial deepening is facilitating larger access of bank credit for the households. As a result, household financial savings (net) have increased only marginally in the current decade – from 10.9 per cent of GDP to 11.3 per cent during 2001-2007.

On the other hand, with increased availability of housing finance, household sector's investment rate (physical savings) increased from 10.5 per cent in 1997-2003 to 12.7 per cent in 2003-07. Thus, the widening of S-I gaps of the public and private corporate sectors combined was partly financed from household financial savings and partly by foreign savings. This is reflected in a widening of the current account deficit from 0.4 per cent of GDP in 2003-04 to 1.1 per cent of GDP in 2006-07.

Reflecting the improved finances at the sectoral levels, the gross domestic saving rate, after varying in the range of around 21-24 per cent of GDP during the 1990s, has steadily risen to 34.8 per cent in 2006-07. The investment rate also picked-up significantly from 22.9 per cent of GDP in 2001-02 to 35.9 per cent in 2006-07.

Sustenance of the growth momentum would hinge upon the continued progress in public finances, enhanced role of the private corporate sector and further deepening of the financial sector to boost household financial savings.

Regarding the household sector, the quick estimates indicate that financial savings stagnated at around 11.3 per cent of GDP during 2006-07, while physical saving rate moderated somewhat, but remained higher than financial savings at 12.5 per cent of GDP in 2006-07. Bank deposits constitute the largest proportion of household financial savings and their share in total, which fell during the 1980s, has been recovering since the 1990s. The buoyancy in bank deposits over the past year – growth of around 23.8 per cent, year-on-year, as of January 2008 – partly reflects some migration from small savings; as this signifies only a shift in the asset portfolio composition of households, the recent buoyancy in bank deposits is not suggestive of an uptrend in overall household financial savings. Looking forward, improvement in financial savings would depend on the further deepening of the financial sector, particularly through the continuation of insurance and pension reforms.

Efficiency in the use of resources

Not only has there been a consistent upward trend in India's investment rate since the 1950s, there is evidence that capital has been employed productively. Barring the decade of the 1970s, the incremental capital output ratio (ICOR) has hovered around 4. There are some signs of improvement in domestic productivity in the post-reforms period. Cross- country comparison indicates that ICOR has been amongst the lowest in India. This is especially true of the period since the 1980s onwards. Various reform measures aimed at increasing the competitiveness appear to be having the desired impact on the productivity of the Indian economy.

The Planning Commission has estimated that infrastructure investment ought to grow from the current levels of around 4.6 per cent of GDP to 8 per cent for sustaining the 9 per cent real GDP growth as envisioned in the Eleventh Plan. Thus, investment in infrastructure is expected to rise by over three percentage points of GDP over the Plan period; over the same period, the Planning Commission anticipates that overall investment rate of the Indian economy should grow by six percentage points. In other words, almost one half of the total increase in overall investments is expected to be on account of the infrastructure requirements. For such an increase in infrastructure investment to take place over the Plan period, both public sector and private sector investment will need to grow much faster than in any previous period.

Public investment has started increasing since 2003-04, reversing a long-period of declining trend that began in mid-1980s. Since 2003-04, private investment has also witnessed a large rise. Thus, it is apparent that higher public investment may crowd-in private investment, leading to a virtuous circle. In view of this, it is important that the current fiscal consolidation process needs to be persevered with so that higher public investment is possible, which may further attract larger private investment.

Population

Population is defined as the total number of people who reside in a particular locality at a particular point of time. If we divide the total number of workers in India by the population in India and multiply it by 100, you will get the worker-population ratio for India.
As Robert Cassen has remarked, the poor states are mostly growing slowly economically and fast demographically; and, conversely, the country's better-off states are mostly growing fast economically and slowly demographically.

The increase in life expectation experienced since 1947 constitutes the biggest single improvement in the conditions of life in modern India.

The Demographic Transition

Demographic Transition is the single most important feature for understanding India's development. The demographic transition represents both huge past achievements of the country, as well as substantial challenges that lie ahead. It provides an important framework for the study of much of the India's socio-economic development. The demographic transition has largely been responsible for the process of urbanization. It has had a huge effect in facilitating the process of economic growth (as well as being affected by it). Furthermore, the demographic transition allows us to make some comparatively firm statements about where the country is going.

India's demographic transition, therefore, is an immensely important subject.

The country's demographic transition really began, rather hesitatingly, with a reduction in the average death rate during the 1920s and 1930s. These decades saw a decline in the frequency and scale of major famines and epidemics, which previously had made people's lives so incredibly precarious. As a result, there was a modest increase in life expectancy and, with a prevailing crude birth rate of about 45 per thousand, these small gains in mortality were sufficient to raise the average annual rate of population growth to over one percent per year during the 1920s, the 1930s and the 1940s. This meant that by 1947 India's population had increased to around 336 million.

The late 1940s and the early 1950s then saw very rapid mortality gains—something that has often been missed by demographers. Indeed, it is possible that between 1946 and 1952 life expectation increased at a rate approaching two years per year.
Today average life expectancy is probably somewhere in the vicinity of 64 years; indeed, it may even be a little higher.
However, the increased control of many infectious and parasitic diseases (e.g. smallpox, malaria, cholera), the spread of immunization coverage (especially with the Expanded Programme of Immunization introduced around 1978), general progress in improving sanitation and water supplies, increased levels of education in the population, and a very considerable expansion of health facilities, have all been significant parts of the explanation for the sustained improvement in mortality. There has been an increasing secularisation in attitudes towards sickness and disease.

For the country as a whole, it appears that female life expectation has generally tended to slightly exceed that of males. The work of Mari Bhat (1989) suggests that in the twentieth century it was only during the period 1951-81 that average male life expectancy was marginally higher than that of females. It is notable too that during 1961-2001 the momentum of mortality improvement—as measured by the average increment in life expectancy per decade—has apparently been somewhat greater for females. The average male increment has been smaller, and it has also diminished in size from decade to decade. Today, female life expectancy probably exceeds that of males by one or two years. Of course, fertility decline is another factor that probably helps to explain the slightly faster mortality improvement experienced by Indian females in recent times. The fact that women are now having fewer births— especially at very young and later reproductive ages—has almost certainly worked to improve their health status, relative to what it would otherwise have been.

In India, as elsewhere, there was a considerable delay between the occurrence of a sustained fall in the death rate and the start of a major—and compensatory—decline in the birth rate.

During the 1960s women were still having about six live births each. Moreover, the level of fertility rose a little in the late 1950s and early 1960s. This rise was probably partly due to reductions in widowhood consequent upon the advent of sustained mortality decline. However, it may also have reflected various other modernization effects— like increases in coital frequency and disruption to traditional patterns of breastfeeding.

A fall in the country's birth rate is only really detectable in the 1970s. The average age of women at marriage has risen from about 15 years in 1951 to over 20 years for women marrying today—a trend that has certainly contributed to the fall in fertility at young ages (i.e. 15-19). That said, the main proximate cause of the decline in fertility, of course, has been a major rise in the use of contraception—especially female sterilization. The proportion of married women aged 15-49 who are currently using modern methods of contraception is put at about 49 percent by NFHS-3, and about three-quarters of these women are protected by sterilization. It is this fact which explains why the total fertility rate at the beginning of the present century (i.e. during 2001-06) was probably around 2.9 births per woman, with an associated crude birth rate of perhaps 25 per thousand population.

In other words, the remote cause of fertility decline in India, as elsewhere, has been mortality decline.

This is the transition from a former state in which both the crude death rate and the crude birth rate were high, highly variable and roughly equal— to another state—still several decades away—in which both the death rate and the birth rate are low, fairly stable, and roughly equal. This, of course, is the demographic transition. India's crude death rate during 1991-2001 was probably around 9 per thousand. It will probably never fall much lower than 7 per thousand. And, with population aging, at some time in the not-too-distant future the death rate will begin to increase a little. However, it will take several decades before the crude birth rate has fallen to roughly the same level as the crude death rate.

Again, many factors—including general ideological change in the area of family and sexual matters, and rising levels of education—have played important conditioning and often facilitator roles in this process of adjustment. And India's family welfare programme has also helped to promote the idea of birth control, and service the rising demand for modern methods of contraception.

The process of urbanization occurs because the urban sector grows faster than the rural sector. It does so because during the demographic transition it has two main sources of growth—i.e. urban natural increase and rural to urban migration—rather than just one (i.e. natural increase, as holds in the rural sector). The volume of urban growth from either source reflects the overall population growth rate— which itself reflects mortality decline especially in the urban sector.

SUMMARY

Improvement in public finances and public sector savings has contributed significantly to the set-up in domestic savings and investment rates since 2002-03 onwards. Higher savings and investment rates, in turn, have led to a higher growth trajectory of the Indian economy. It is apparent that fiscal consolidation in the Indian context has led to acceleration of growth. The conventional view holds that fiscal prudence might lead to contraction of domestic demand and growth. However, as the Indian experience suggests, fiscal prudence can lead to higher domestic savings and this could increase resources for domestic investment. Accordingly, it is of utmost importance to adhere to the fiscal consolidation process of the past few years so as to sustain current savings/investment rates and the ongoing growth momentum. The macroeconomic review of the Indian economy does suggest a strengthening of the fundamentals in terms of movement to a higher growth path in recent years, supported by investment, savings and improvement in productivity. Moving forward, there is a need to delineate the likely prospects for savings and investment in the coming five years and address some critical issues to sustain the growth momentum.

The study's central demographic projection implies that India's population will increase by about 400 million between 2001 and 2026. By mid-century, the country’s population will have surpassed that of China—it may do this around the year 2030—and it may well be approaching 1.6 billion. More than half of the demographic growth during 2001-26 will occur in the main northern states i.e. Bihar, MP, Rajasthan and UP.

Turning to fertility and mortality, it seems reasonable to consider that by 2026 the total fertility rate for the country as a whole will be approximately two births per woman. The average life expectation for both sexes combined in 2026 may well be about 69 years.