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# India: Today's Fiscal Policy Imperatives Seen in the Context of Longer-Term Challenges and Risks

#### 1. Introduction

Much has been written, both in the past and in the context of this conference, as to the reasons why India must pursue a course of fiscal consolidation. This paper adds another reason: that India will confront, looking ahead a decade or more, policy challenges and uncertainties arising both from its own political, social, demographic, environmental, and economic situation as well as from outside regional and global forces. As India contemplates the future, what is clear is that it is not well-positioned to take advantage of the opportunities and confront the challenges that these longer-term developments are likely to pose. A continuation of current fiscal policies—both in terms of the level of fiscal deficits and the character of government expenditures—would put India on an unsustainable course in terms of the constraints that it would impose *in the future* on the role that the public sector would be able to play in effectively addressing these longer-term challenges. Moreover, a failure to address the multiple policy challenges *now* facing Indian authorities makers will ultimately constrain the potential growth of the Indian economy and weaken its capacity to address the problems that are looming in the future or to take advantage of the opportunities that the future may bring.

Taking the long-term into perspective yields different messages to different countries. In Western Europe, Japan, and the United States, the policy imperative is to confront the excesses in policy commitments that have mortgaged their future. For such countries, cutbacks, particularly in commitments in the social insurance sphere, will be vital in order to prevent government expenditure from rising sharply, in the context of aging populations, to unmanageable levels. For India, the message is different. In the future, India will need to have a capacity to respond, in part (through certainly not exclusively) through the budget to a number of evident long-term challenges.

<sup>&</sup>lt;sup>1</sup> In preparing this paper, the author has benefited from the many helpful insights of Montek Ahluwalia, Robert Gillingham, P.N. Naverkar, Peter Schwartz, and Abusaleh Sharif. I am particularly indebted to Robert Gillingham for his help in drafting the section of the paper dealing with the issues associated with long-term pension reform. Naturally, the views expressed here are those of the author and do not reflect the views of the International Monetary Fund.

Thus for India, the challenge of the long-term does not require a significant cutback in existing policy commitments that are sensitive to longer-term demographic developments. Only to a limited extent will it be necessary to anticipate longer-term trends in the character of R&D and investment outlays. *Far more relevant* is that *existing polices*, reflected in high deficits, high debt levels and a low revenue share, already place the fiscal situation in an unsustainable position, and without offering any compensatory benefit in terms of the growth effects of the deficit spending. *Equally, existing government policies constrain rather than support* the realization of a rapid rate of economic growth. And this lack of fiscal room *will* prevent India from being able to provide a coherent response to a number of long-term developments which appear reasonably certain to eventuate as well as to events which are less predictable.

At the outset, it is important to underscore that many of the challenges that India will face will need to be addressed through actions and investments by the private sector, with the government's role principally focused on establishing a clear regulatory framework. However, for some issues that entail significant externalities or public goods provision, the government will need to take a more active role in responding through the budget. And for these, the challenge of the long-term for India is to get its fiscal and policy house in order *now* so that it is better prepared, in terms of the level of income and degree of fiscal leeway, to confront the new problems that will almost surely be confronted in the future. This is a fruitful time for India to seize control of its fiscal position. Growth this year is projected to be upwards of 7 percent. The Fund is projecting a 6 percent annual growth over the next five years, and the World Bank has an even more optimistic forecast. With buoyant economic growth and a healthy reserve position, it is far easier to institute reforms now than would be the case if India's economy were to be in crisis.

In what follows, the next section will very briefly and summarily review the present fiscal and policy imperatives that should be motivating Indian policy makers. This is well-trodden ground, both from this conference and by Indian government and outside commentators on India's economic policy. The following section will then describe what I believe to be the principal longer-term challenges that will confront Indian leaders in the future, with particular attention to those that will have a larger fiscal dimension and for which fiscal leeway in the future will be especially important. Obviously, more informed analysts may differ in their identification of such challenges and in the weight of their importance. Beyond the imperative of getting the fiscal house in order now, I will also then briefly lay out the additional policy messages which consideration of the long-term suggests. These include caution in the formulation of new policy commitments to avoid excessive preemption of future budgetary resources (i.e., not making the mistakes of the industrial countries) and the need for greater attention to long-term risks in the context of the evolving fiscal responsibility legislation.

#### 2. Current Fiscal and Policy Imperatives

Earlier papers have already laid out the case for significant fiscal policy consolidation. The existing nominal debt to GDP ratio is already high compared to most emerging market countries; the burden is further aggravated when one adds unfunded pension liabilities, contingent liabilities, government guarantees of state enterprise debts, and the prospect of recapitalization of a number of state-owned financial institutions. The fiscal deficit has reached over 10 percent of GDP. With financial liberalization and increasing exposure of India's financial markets to the global economy, it is unlikely that the nominal growth rate will exceed nominal interest rates by an amount significant enough to result in the debt to GDP ratio being reduced over time by economic growth alone and in the absence of a reduced primary deficit. Over time, India may require sustained high primary surpluses simply to limit the growth of the debt ratio (analogous to the situation of several countries in Western Europe today, e.g., Belgium and Italy). The prospect of any fiscal leeway, in the future, to address future policy challenges, thus becomes increasingly narrow. These observations are hardly original nor simply the views of an outside observer. The targets embedded in the recent Fiscal Responsibility Legislation as well as the views of a number of respected Indian economists and policy makers are sufficient to lend credibility and authority to this argument (see Srinivasan(2001), Acharya (2002b), Ahluwalia (2002))..

The agenda of policy reforms that India must undertake, if it is to raise its real growth rate to target levels, are equally well-recognized. Whether coming from outside academics, the World Bank, or from India's Planning Commission, the list includes:

- **Rationalization of the budget:** Achieving fiscal consolidation will require both policy reforms as well as a restructuring of revenues and expenditures, both at the Central government level and among the states. Subsidies-for fertilizer and food grains—need to be better targeted. Losses with respect to the State Electricity Boards, water, and transportation need to be eliminated. The over employment that characterizes much of the government bureaucracy needs to be pared. But equally, both the level of outlays and the productivity of existing spending on social services, particularly in the primary education and health sectors, is likely to be a heavy burden on the potential growth rate of the economy. The continued poor performance on many critical basic health indicators is unlikely to be lowered. And the failure to raise human capital levels will be a major limiting factor in India's ability to transfer effectively its large and, in future years, growing pool of potential workers out of low productivity sectors, particularly in the rural sector, into manufacturing and services. Equally, spending on physical infrastructure—on ports, roads, telecommunications, and water supplies—are well recognized as vital if India is to realize its potential for a higher real growth rate. And finally, recent efforts to rationalize the fiscal federal transfer system are necessary to provide both greater discipline at the level of the States and to reduce the moral hazard associated with the grants system.
- Mobilization of Revenues: A higher revenue effort is necessary, requiring reduced taxes on trade and a broadening of the tax base to include services and agriculture as well as urban property.

Policy reforms: The agenda is equally large. To achieve greater flexibility and mobility in the labor market, the reservations policy will need to be eliminated, labor laws revised, and some basic social insurance policies introduced, particularly in terms of unemployment insurance (see Acharya (2002a), and Ahluwalia (2002)). Tariff reform will be necessary to reduce the high rates of protection presently afforded to many elements of the manufacturing sector and some parts of agriculture. A further opening of the economy to foreign direct investment and liberalization of the capital market is necessary for India to open itself to potential gains in productivity.

One perspective on these reforms is simply to underscore that in their absence, India's real growth rate, while certainly high relative to many countries, is unlikely to reach the levels that are widely recognized to be necessary if India is to substantially raise its per capita income levels within the next few decades. But a longer-term perspective offers another motivation for the urgency of these reforms. India faces a window of opportunity, much akin to what was provided to many of the East and Southeast Asian economies in recent decades. Its demographic transition towards lower fertility rates and higher life expectancy offers the prospect of a significant bulge in the size of its productive labor force in the next few decades, matched by a reduced dependency rate. The challenge is whether this expanding labor force can be absorbed into high productivity sectors, or whether it will remain largely lodged in the rural and agricultural sectors or in low productivity segments of the informal sector (where two thirds of the labor force are presently employed). China offers a continuing example of an economy that is relentlessly pushing to achieve such a resource transfer. The question is whether India can achieve comparable results.

This provides the rationale to dramatically address deficiencies in primary education and health; to promote increased foreign investment; to provide the physical capital infrastructure to render private investments attractive; to move beyond the domestic market and take advantage of the global markets for which India, with its low cost labor, should be highly competitive. And if India fails, in the course of the next several decades, to profitably absorb its large labor force into more productive sectors, then it will be far less prepared to address the inevitable challenges that will be raised as its population ages, several decades into the future (as discussed below).

There are other, more qualitative, arguments which argue for a more urgent policy agenda. First, the failure to maintain adequately existing public physical infrastructure is a form of implicit borrowing, accelerating depreciation and thus reducing the real rate of *net* investment in the economy as well as increasing the net real debt of the public sector. Second, for some types of problems, delay may increase the cost of future solutions. For example, failure to rationalize the course of urban development may make it more difficult, in the future, to do so, whether it relates to the transport infrastructure or settlement patterns in the context of a rise in the sea level (see below). Delaying reform of institutions (e.g., civil service reform) may increase the political economy as well as financial costs of future reforms; such delays yield a form of "institutional hysteresis" that becomes hard to overcome as inertial trends evolve.

## 3. What are the principal long-term challenges/uncertainties facing India?

Looking ahead, one can identify a number of issues which will weigh heavily on Indian policy makers in the future. Some are developments which are India-specific, arising from its own political, social, demographic, and economic situation. Others relate to external forces that will affect India directly (e.g., climate change, capital market developments, global economic growth patterns) or for which private or public sector economic agents in India would be likely to respond. No attempt is made in this paper to attach hard quantitative measures to the potential fiscal dimensions of each issue or even to assert the extent to which a fiscal response will be required.

#### a. Demographic developments:

India is undergoing the same forces of demographic transition that have been experienced in most other parts of the industrial and emerging market world, albeit delayed a few decades. Fertility rates have halved over the last fifty years (from almost 6 in 1950), and life expectancy, while still low (as reflects continued high rates of infant and maternal mortality), continues to rise (Table 1). Life expectancy which was only 55 in 1985 is almost 64 now, and is projected by the United Nations Population Division to reach 74 by 2045-2050. The pace of improvement can also be illuminated by contrasting the current estimates of life expectancy for the period 2045-50 with the projection made in 1990 for the same period of 69.2 years. The consequence of these changes will be, of course, a slowing in the rate of population growth, from its present rate of about 1.8 percent to about 1.2 percent by 2010-2015 and to barely growing, at 0.26 percent, by 2045-50.

Several uncertainties cloud these projections. Obviously, it is assumed that fertility rates will continue to decline—to 1.85 in the UN's medium population scenario (2.35 in the high population scenario variant); life expectancy, if it continues to be underestimated, will be a force for increasing the size of the population and the share of the elderly. Migration rates largely reflect the assumption of the continued out migration that has characterized India in recent decades. But there is also a possibility of a significant expansion of immigration to India, if climate change were to have adverse effects on the habitable land area of Bangladesh. And of course, while the projections assume a peaking of HIV/AIDS in 2019, a failure of adequate policies for prevention could result in a more adverse outcome, reversing the positive trends in life expectancy and cutting the size of the potential labor force. Exploration of the consequences of alternative demographic scenarios should very much be a preoccupation of fiscal policy makers.

The characteristics of such a demographic transition are well-known. Population will continue to grow, rising by almost 50 percent in the medium population variant—from 1.02 billion to 1.531 billion—in the next 40-45 years. If the decline in fertility is more gradual, the population could be as much as 350 million higher by 2050 rising to 1.87 billion persons. The age structure will dramatically change. Today, about a third of the population is under age 14. That share will be reduced by a third to a half by 2050,

depending on fertility trends (falling to 19-24 percent). The share of those over 60 and over will at least double if not triple by 2050, from 7.5 percent to 16.5--20.1 percent.

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|---|----------------------|-------|---------|---------|---------|---------|
|   |                      |       | Medium  | Medium  | High    | High    |
|   |                      |       | Variant | Variant | Variant | Variant |
|   |                      | 2000  | 2025    | 2050    | 2025    | 2050    |
| Population size (in billions)               |                      | 1017  | 1369    | 1531    | 1475    | 1870    |
| Population (in percent)                     |                      |       |         |         |         |         |
| Age 0-14                                    |                      | 34.1  | 24.6    | 18.6    | 28      | 23.7    |
| Age 15-59                                   |                      | 58.3  | 63.1    | 61.3    | 60.5    | 59.8    |
| Age $60+^2$                                 |                      | 7.5   | 12.3    | 20.1    | 11.5    | 16.5    |
| Age 80+                                     |                      | 0.6   | 1.3     | 3.1     | 1.2     | 2.5     |
| Youth Dependency Rate (ratio of             |                      | .6    | .38     | .3      | .46     | .4      |
| aged 0-14 to aged 15-59)                    |                      |       |         |         |         |         |
| Elderly Dependency Rate (ratio of           |                      | .13   | .20     | .29     | .19     | .28     |
| aged 60+ to aged 15-59)                     |                      |       |         |         |         |         |
| Urban Population (in millions) <sup>3</sup> |                      | 286   | 508     | 689     | 560     | 842     |
| Population infected with HIV/AIDS           |                      | 4     |         |         |         |         |
| Difference in number of males and           |                      | 22    | 19      | 16      | 22      | 18      |
| females, aged 15-44 (in millions)           |                      |       |         |         |         |         |
| Ratio: males to females) <sup>4</sup>       |                      | 106.5 | 104.3   | 101.4   | 105.9   | 102     |
| Life expectancy at birth: Males             |                      | 63.2  | 67.1    | 71.9    |         |         |
|   | Females <sup>5</sup> | 64.6  | 70.7    | 75.8    |         |         |
| Fertility rate: med                         | 3.01 <sup>6</sup> 1  | .85   |         |         |         |         |
| High  | <b>High</b> 3.26     |       | 2.35    |         |         |         |

Table 1: Basic Demographic Statistics and Projections: 2000-2050

India's population structure will, in 2050, mirror that presently found in the major industrial countries—the US, France, Italy, and Germany.

As with the countries of Southeast Asia and China that have undergone a similar demographic transition, India will witness a sharp increase for several decades in the number of its working age population—the share of the population aged 15-59 will rise from about 600 million today to almost 950-1118 million by 2050. At the same time, the size of the population in the younger groups that will need to be educated will fall dramatically. Both the fall in the overall dependency rate, plus the impetus that this will provide for increased savings in the productive years of the life cycle and thus the

<sup>&</sup>lt;sup>2</sup> Percentage of population aged 60+ in 2000: U.S.A. 16.1; France 20.5; Germany 23.2; UK 20.7 0-14 in 2000: USA 21.8; France 18.8; Germany 15.6; UK 19.1

<sup>&</sup>lt;sup>3</sup> Author assumes 45 percent urbanization rate for 2050 and the same urbanization rate for the high population variant for 2025 as is assumed for the medium variant of the UN Population Division (2002). An urban agglomeration is defined by the United Nations as a population in excess of 750,000.

<sup>&</sup>lt;sup>4</sup> Sex ratio in 2000: Bangladesh: 105:4; China: 105.9; Greece: 97.3; Iran: 103.4; Pakistan: 105.1;

Philippines: 101.4; Sri Lanka: 107.8; Thailand: 97.0; Turkey: 101.7; UK: 94.5; U.S. 96.5; Vietnam 99.3; <sup>5</sup> Female life expectancy in 2000 (assumptions for 2045-50 in parentheses) Bangladesh: 59 (77); Brazil: 71 (82); China : 72 (80); Malaysia 75 (82); Philippines: 71 (81); Pakistan: 59 (76); Sri Lanka: 75 (82); Thailand: 73 (81); U.S.: 79 (84); U.K.: 80 (86).

<sup>&</sup>lt;sup>6</sup> Assumption for period 2000-2005

availability of resources for investment, will constitute an enormous force for India's potential development, as it was in Southeast Asia.

A final potentially interesting aspect of India's demographics is its resemblance to China in terms of the ratio of males to females in the population. In virtually all the industrial countries, the ratio of males to females is about 94 (Italy) to 96-97 (U.S., France, and Germany). In India, this ratio in 2003 was 106.5 (China was 106). Since the number of females in the elderly ranges exceeds that of males even in India, this suggests that the number of males in the prime marriageable age range 15-44 *exceeds* that of females by about 22 million (just under 10 percent of males in that age range). Current UN Projections suggest that these gaps will fall modestly—to 16-18 million--by 2050, but these projections are contingent on the assumption that there will be a significant improvement in the life expectancy of females relative to males (which presumably arises in part from an improvement in female child mortality rates).<sup>7</sup> In the absence of such an improvement, the absolute gaps could be higher. These are not small numbers, raising questions of whether the search for marriageable females might provoke pressures for emigration as well as pressure for subsequent repatriation with foreign wives (a phenomenon also speculated upon for China by Schwartz (2003).

Unlike the industrial countries, India does not have a Beveridgean social insurance system in place. Thus India's demographics do not necessarily portend explosion in government social insurance outlays arising from underlying existing policy commitments (which is not to say that the *existing* pension and social insurance schemes, with their far more narrow coverage, are actuarially in good financial share—see below). This being said, this does not mean that the demographics do not pose important government expenditure and social policy issues for the government.

As noted above, the weakness in the quality and coverage of India's primary education system is perhaps one of the most important and critical issues confronting its policy makers today. Some 40 million children are said to be out of school altogether, despite the recently passed (2002) compulsory education law.<sup>8</sup> Absenteeism is rife among primary school teachers, infrastructure is poor, the quality and availability of the educational materials is substandard, and the appropriateness of the focus of the teaching process, in terms of the demands that will need to met by a growing labor force in a globalizing world, questionable. For India to effectively absorb the large infusion of workers into the labor force in high productivity jobs in manufacturing and services will require a concerted effort by the public sector—notably by the States—at a time when fiscal resources are constrained as a consequence of the weaknesses in the present structure of public expenditures. Educational spending issues are a problem of today, but also of the next several decades. Even with the medium term population scenario suggests no more than a small change in the absolute number of school age children (aged 5-14); in the high population variant (with somewhat higher fertility rates), the

<sup>&</sup>lt;sup>7</sup> Presently, there is only a slight differential between the life expectancy at birth between males and females (63.2 vs. 64.6). This differential is assumed to rise substantially by 2050—to 71.9 vs. 75.8).

 $<sup>^{8}</sup>$  The Planning Commission in 2002 estimated that the enrollment rate of 6-15 year olds is only 60% and a third of these are not attending school. (p.4)

number to be educated will rise by 50 million children relative to today. Urbanization pressures will also mean that there will be particularly large increase in the number of children that will need to be educated in some States, reflecting rural to urban migration. The capacity of the present fiscal federal grants system to adjust for the shift in relative expenditure needs will also need to be assessed.

The facts of India's demographics will also, as discussed below, have important ramifications in terms of the need for infrastructural outlays (in light of the expected increased urbanization of this larger population) as well as the approach taken to the provision of medical care and the structure of India's evolving social insurance policy framework. The implications of the evolving epidemiology of India's population are discussed below. They do not necessarily imply a dramatic expansion in the size of the government health care system. But the need for a substantial strengthening of both this system and of the government's regulatory framework in the sector cannot be disputed. Even if India does not move in the direction of a national health insurance scheme, the level of primary care expenditures, let alone the quality of the system, is well-recognized as insufficient by the government insufficient. At a recent WHO-sponsored conference,

Ministry of Health authorities suggested the need for at least a doubling in the share of government primary health expenditure as a share of GDP by 2010. And as India's population becomes increasingly more affluent, with a rising middle class and an internet savvy society aware of the most sophisticated medical options, the demand for medical care in the economy will begin to rise sharply—a trend already observed in other emerging market countries of Southeast Asia—Thailand, Korea, Singapore, and Taiwan. The pressure for mechanisms to restrain cost inflation will become inevitable.

Pressures for reform of present approaches for the accumulation of retirement savings have already emerged and India is likely to proceed, as with other countries, in the direction of schemes that involve a mandatory savings tier channeled into funded plans managed by private sector firms subject to various regulatory provision. But the pressures will still be considerable for the government to address (i) the issue of "guarantees" for such schemes—in the event that the schemes fails to produce a minimal income guarantee; and (ii) the approach to take to low income workers outside the formal sector for which the mandatory scheme may be difficult to apply.

**b.** "Institutional" demographics<sup>9</sup>: Beyond the aggregate demographics of a country, the actuarial position of public and private pension schemes is primarily determined by a combination of the demographics of the insured population of the scheme (which in the case of India, is likely to be very different from the national population demographics) and the nature of the policy parameters of the particular pension scheme.<sup>10</sup> Thus, one may observe a country for which the country's

<sup>&</sup>lt;sup>9</sup> This section on institutional demographics was prepared by Robert Gillingham of the IMF.

<sup>&</sup>lt;sup>10</sup> Usually, in the context of defined benefit schemes, this relates to the age of eligibility for pension benefits, the benefit accrual rate, the indexation formula, the terms of survivors and disability benefits as well as any provisions for early retirement. For defined contribution schemes, the principal contingent

demographics suggest only a modest increase in the total dependency rate (youth and elderly), but for which the dependency ratio of the social insurance scheme may be far more adverse (a situation often witnessed in many Eastern European countries).

In the case of India, only about 11 percent of the current working-age population participates in mandatory, formal programs designed to provide income security during old age. The participants in these schemes—salaried employees in the formal private sector and government—are among the highest-income workers in India and do not extend to the almost 85 percent of workers that operate in the relatively informal sectors of the economy and have little ability or opportunity to save for old age. The formal programs consist of three funded programs, two of which are of a defined-contribution nature (viz., the Employees' Provident Fund (EPF) for formal private sector employees and the government-wide provident fund--the Government Provident Fund) and one which is a defined-benefit scheme (the Employees' Pension Scheme (EPS)). There is also one unfunded program—the Civil Servants Pension Scheme (CSPS), which is a non-contributory, pay-as-you-go pension system administered by both the central and state governments.

For two of the schemes, the CSPS and the EPS, the government is likely to face significant long-run contingent liabilities. For the former, as Table 2 demonstrates, there is a fundamental imbalance between wages and pension benefits in the civil service. First, given the average dependency rate of 59.4 percent, the pension age is almost certainly too low.<sup>11</sup> Second, even with a low pension age, the average replacement rate is still over 45 percent. Consequently, the pension bill is over 25 percent of the wage bill. This represents a huge "hidden" cost that is not taken into account when human resource

|                    | Dependency Rate:<br>(Pensioners/<br>Wage Earners) | Average<br>Replacement Rate<br>(Average Person/<br>Average Wage) | Pension Burden in<br>Total Compensation<br>Outlays<br>(Pension Outlays/<br>Wage Bill) |
|--------------------|---|--|---|
| Central government | 77.5  | 42.1   | 32.7  |
| Railways           | 67.8  | 48.2   | 32.7  |
| Telecommunication  | 27.6  | 47.4   | 13.1  |
| Defense            | 177.9   | 31.7   | 56.3  |
| Other              | 38.8  | 56.4   | 21.9  |
| State governments  | 48.3  | 45.0   | 21.7  |
| Total              | 59.4  | 45.1   | 26.8  |

#### **TABLE 2. PARAMETERS OF THE CIVIL SERVICE PENSION SYSTEM**

liabilities to the public sector may arise as a function of whether the scheme is fully funded or on a pay-asyou go basis, and whether there is a minimum guarantee to the pension benefit.<sup>11</sup> The only other explanation would be that there has been a drastic reduction in the size of the civil

<sup>11</sup> The only other explanation would be that there has been a drastic reduction in the size of the civil service, and the high number of current beneficiaries is a result.

Sources: Shah (2000) and Fund staff estimates.

decisions are made. The situation is much more serious in the central government, led, as is well known, by defense, with railways also very high. The ratio in telecommunications is lower, but this may reflect that this is a growing area within the government. low.<sup>12</sup> Second, even with a low pension age, the average replacement rate is still over 45 percent. Consequently, the pension bill is over 25 percent of the wage bill. This represents a "hidden" cost that is not taken into account when human resource decisions For the latter, the Employees Pension Scheme is, in principle, funded. Employers and government contributions (at respective rates of 8.33 percent and 1.16 percent, of employees' basic wages plus dearness allowances) are intended to finance pension benefits. However, exempt funds do not receive the government contribution. The EPS provides pension benefits which are calculated on the basis of a worker's average salary in the 12 months preceding retirement, and a multiplicative factor calculated as years of service divided by seventy.<sup>13</sup>

However, it is very unlikely that the EPS is financially sustainable in the long run. The World Bank (2001) estimates that the cash-flow deficit in the EPS will grow to almost 1 percent of GDP over the next several decades, even if the coverage of the system is static. If, as one might expect, the share of workers in the formal sector increases over time, the cash flow projections would deteriorate at a slower rate—as increased coverage increases the contributions flow (i.e., the positive effective of the demographics of the scheme)—but would be significantly more negative in the long term.

The reason why the EPS is financially unsustainable is because its defined benefit promises too high a rate of return on contributions. With a retirement age of 58, 33 years of service, a life expectancy at age 58 of 17.2 years, a contribution rate of 8.33 percent and inflation of 3 percent, the implicit *real* rate of return on contributions necessary to fund pensions, *abstracting from survivor and disability benefits and any indexation for inflation*, is roughly 4 ½ percent. This rate of return is well beyond the feasible return under the current restrictive investment regulations and approaches the rate that can be expected from a well-diversified portfolio in the most developed financial markets. Once survivor and disability benefits are added into the equation, even a reform of the investment policy could not reverse the long-run financial trends reported by the World Bank. Increasing coverage, moreover, simply increases the number of workers accruing unaffordable benefits.

<sup>&</sup>lt;sup>12</sup> The only other explanation would be that there has been a drastic reduction in the size of the civil service, and the high number of current beneficiaries is a result.

<sup>&</sup>lt;sup>13</sup> The maximum replacement rate is 50 percent, and workers who have more than 20 years of service or have reached the retirement age of 58 years of age get credit for 2 additional years of service.

Consequently, a 58-year-old worker with 33 years of service can retire with the maximum replacement rate. Finally, early retirement is possible at age 50 with a reduction in benefits for each year between the age of retirement and 58. A portion of EPS benefits is payable as a lump sum at retirement.

There is a final strain on government finances induced by the present pension scheme. This arises from tax preferences accorded to contributions by employees and employers into retirement saving schemes. These are tax exempt up to Rs 60,000, so that the maximum tax free contribution per worker is Rs 120,000, well beyond the limits on contributions in the mandatory schemes. Interest income and lump sum withdrawals from provident funds are also tax exempt, but benefits or annuities are not. The tax preferences in the current pension system add to the strain on government finances and are not well focused. Absent an incidence analysis, it is impossible to tell exactly who benefits, but it is almost certainly the highest-income workers. In addition, the tax system provides a counterproductive incentive to realize benefits as lump-sum distributions rather than annuities or programmed withdrawals.

c. Climate Change: While there remains uncertainty as to the pace and magnitude of global climate change that will occur over the next several decades, there is little doubt in most quarters that climate change will indeed occur. The effects will be manifested in varying degrees in changing precipitation rates, an increased frequency and intensity of extreme weather events, a rising sea level, and a rising average temperature. But these effects are not homogeneous across regions or countries. What are the current guesses of climate change scientists as to the likely manifestations of climate change for India and its neighboring countries (principally Nepal and Bangladesh, given the sensitivity of these countries to the effects of warming on the snow depth of the Himalayas and the likely runoff effects on the rivers basins) and what are likely to be the principal economic effects?

One starts with the recognition that the effects will be very much determined by the pace and magnitude of global climate change. This is an uncertainty which needs to be accepted and worked with in assessing the potential risks to which India and elements of its economy are exposed. Obviously, the effects of a rise in the sea level by a meter over the next century would be very different for such cities as Kolkata and Mumbai then would a rise of no more than 30cm, both in terms of the flooding that would emerge of urban infrastructure and the vulnerability of both cities to storm surges associated with hurricanes and typhoons. Equally, given the size of India's coastline, a significant sea level rise would have very different effects on the agricultural productivity and tourism sectors of certain states than a more modest rise. And of course, the vulnerability of Bangladesh, with the consequent ripple effects that are possible in terms of the size of the refugee population that would seek safe haven in India, would equally be a function of the rapidity and level of the increase in the sea level.

The present scientific forecasts suggest that climate change will result in increased precipitation rates in the summer but decreased precipitation rates in the winter months. The mean maximum and minimum surface air temperatures will rise about 0.7C-1.0C over land by 2040 (Lonergan 98). The mean forecast change in temperatures and precipitation will have varying effects on the productivity of existing crop varieties (modern varieties, irrigation-intensive) and planting seasons (with higher temperatures having a negative effect and rising precipitation a positive one), with significant variations across regions. Water shortage conditions and thermal stress should adversely

affect wheat and even more severely rice productivity in India (even with positive effects from the elevated levels of CO2 in the atmosphere. While the aggregate effects on agriculture are likely to be small, reflecting combined positive and negative effects of increased precipitation, temperature and increased carbon fertilization, this reflects an averaging out of effects across regions. For some individual states, such as the coastal and inland regions of Gujurat, Maharastra, Karnataka, the effects are likely to be particularly negative, with smaller negative effects experienced by the Punjab, Hariyana, and Uttar Pradesh (Dinar et al,1998).

There will be extreme pressures on the supply of water, as the population rises and surface and ground water is increasingly polluted. Competition will be particularly significant in the Indus, and Ganges/Brahmaputra river basins. Yet there is an increased risk of flooding in the Himalayan catchments regions during the wet season. Scientists indicate with a high confidence level that the rise in sea level will cause large scale inundations along the South Asian coastline, particularly for large deltas and low lying areas (IPCC, 2001, p. 49). For paddy fields, there is the risk of inundation and salinization. Cyclones will occur with an increased level of intensity which, combined with the rise in sea level, will result in an enhanced risk of loss of life and property. Adverse effects are likely to be borne by the tourism sector. The rising average temperature level will also result in a higher risk of severe vector borne diseases. Finally, there will be a significant loss in the total forested area, exacerbating pollution, increasing the risk of flooding and land degradation.

Climate change will thus have important economic consequences—in terms of the productivity of agriculture, the vulnerability of urban infrastructure to flooding and extreme weather events, the availability of water supplies, the susceptibility to flooding, the viability of tourism in certain areas, and the potential for immigration from neighboring states. It will undoubtedly call for adaptation by the populations and the state and municipal entities that will be affected. Though much of the adaptation will reflect responses by the private sector, fiscal entities will inevitably be forced to bear some of the consequences, either through its effects on the income and tax base, or by the necessity of responding to the effects on urban infrastructure or to population movements.

d. National security risks: Historically, political tensions with some of India's immediate neighbors—certainly Pakistan, but also China and Sri Lanka—have required significant military expenditures. In recent years, there has been a significant lessening of tensions with the latter two countries. However, relations with Pakistan, particularly over Kashmir but also given the religious undertone that colors many issues between the two countries, remain a continuing source of tension. Pakistan's population is projected to grow more rapidly in coming decades than India, reflecting its far higher fertility rate (5.08--5.33 in contrast to India's fertility rate which is closer to 3). Recent UN projections suggest that its population will more than double (under the medium variant assumptions) from 142 million to 350 million by 2050; in the high variant assumptions, its population would rise to 408 million. Much diplomatic work, good will, political vision on the part of the Indian and Pakistani leadership, and plain luck will determine

whether there will be much scope for India to reduce the share of its budget share accorded to the military. A further factor complicating relations with its neighbors may relate to water rights for some of the major rivers flowing from neighboring countries (including Nepal and Pakistan) for which India is heavily dependent.<sup>14</sup>

Also, if there were to be a substantial adverse effect from climate change on the habitable area of Bangladesh, one could anticipate migration pressures which might be seen as a security risk by India.<sup>15</sup> Looking ahead, military outlays should be seen as a significant contingency factor in assessing the future fiscal leeway of the Central Government's budget.

Urbanization patterns: Recent United Nations projections suggest that India's e. urbanization rate will rise from almost 28 percent to almost 40 percent by 2025 (41 percent by 2030). In absolute terms, the increase will be dramatic-from about 285 million persons to more than 575 million persons by 2030—essentially a doubling! UN projections do not go beyond 2030 but assuming even a further gradual increase in the urbanization rate to 2050 (say to 45-50 percent), the urban population would range from 700-900 million by 2050 (with even larger amounts if the urbanization rate were to proceed faster).<sup>16</sup> Projections obviously suggest that some of this increase will be reflected in a further growth in the size of India's present major urban agglomerationsits megacities----with the population of such cities as Mumbai, Delhi, and Kolkata rising from 16, 12.5 and 13 million persons, respectively, in 2000 to 23, 21 and 17 million persons by 2015 alone, making Mumbai the 3<sup>rd</sup> largest city in the world and Delhi the  $5^{\text{th},17}$  Bangalore will also emerge as one of the top 30 cities of the world by 2015, with a population of 8.4 million. But the extent of urbanization will be reflected not only in the size of megacities. In 2000, 30 of India's cities exceeded 1 million inhabitants in size; that number will increase to 50 by 2015. Five cities now exceed 5 million; by 2015, 8 will exceed 5 million.<sup>18</sup> Clearly this will imply the need for a dramatic increase in spending on physical infrastructure—for energy supplies, telecommunication infrastructure, clean water, roads, and sanitation--as well as the provision of the social

<sup>&</sup>lt;sup>14</sup> In Global Forecast 2015, the CIA (2000) noted that "water will remain South Asia's most vital and most contested natural resource. Continued population and economic growth and expansion of irrigated agriculture over the next 15 year will increasingly stress water resources, and pollution of surface and groundwater will be a serious challenge. In India, per capita water availability is likely to drop by 50-75 percent. Because many of the region's waterways are interstate, water could become a source of renewed friction. Deforestation in India and Nepal will exacerbate pollution, flooding, and land degradation in Bangladesh."

<sup>&</sup>lt;sup>15</sup> Bangladesh's population is presently 138 million. With a higher fertility rate, current projections suggest its population will reach 210 million by 2025 (255 million with high population variant) and 225 million in 2050 (310 million with high population variant).

<sup>&</sup>lt;sup>16</sup> Presently, China, Malaysia, Philippines, and Thailand have urbanization rates of 42, 57.4, 59, and 20 percent, respectively. UN projections suggest these rates will increase, by 2030, to 60, 73, 75, and 33 percent, respectively.

<sup>&</sup>lt;sup>17</sup> Dhaka will rise from being the 9<sup>th</sup> largest city7 to the 2<sup>nd</sup> largest city o f the world, with a population of 22.8 million, though it is imperiled by issues of sea level rise, with possible ramifications for India.

<sup>&</sup>lt;sup>18</sup> Some argue that the problems of urbanization derive far more from the smaller cities of 1-3 million than megacities. A recent CIA report suggested that such "cities have nascent infrastructures, largely informal economies that provide few social benefits, and local regulatory bodies that are ill-prepared fro the demands of urban planning. " (CIA (2001), p. 57)

service and public goods infrastructure associated with the demands of urban populations (viz., schools and hospitals) within what has to be considered a very short time frame. As in the area of social insurance, India will need to move quickly to elaborate an adequate division of responsibilities between the public and private sectors for the construction of urban infrastructure. Mechanisms of public-private partnerships—increasingly common in industrial and emerging market countries—will need to be framed in such a way as not to transfer excessive risk--in the form of contingent liabilities--to the public sector.

**Prospective epidemiological patterns**: A number of factors will contribute to f. pressures for the expanded provision of high quality medical treatment facilities at the level that prevail in Western industrial countries. The most obvious is the growth of India's middle class, with rising aspirations and expectations concerning the quality of treatment that should be provided in the event of illness. Already said to reach 150 million (about 15 percent of the population), the size of this group can be envisaged to increase substantially within a decade or so. With the projected increase in life expectancy, the composition of illnesses and the sources of mortality for much of the population will far more closely approximate the patterns observed in emerging market and industrial countries—a high incidence of cancers, cardiovascular diseases, tuberculosis, geriatric type issues, and injuries arising from accidents-than the more developing country, communicable disease problems presently observed. Table 3, based on work carried out in the early 1990s by Murray and Lopez (1996) at Harvard, provides some sense of the evolution of the sources of morbidity in India (though this probably underestimates the impact of HIV/AIDS, which has expanded far more rapidly than envisaged at that time). The high rate of tobacco consumption in India, which particularly relates to lower income groups (where the shift from local tobacco products to cigarettes is seen as a mark of rising income status) is another factor which, with lengthening life spans, will contribute to an increased incidence in cardiovascular diseases and cancers. Such illnesses are likely to require more sophisticated treatment approaches, in terms of outpatient and inpatient care, laboratory work, and pharmaceuticals. While India may, through its increasingly sophisticated pharmaceutical industry, be able to moderate

| Life Years by Source of Timess |              |              |              |              |  |  |  |  |
|--------------------------------|--------------|--------------|--------------|--------------|--|--|--|--|
|                                | <u>1990</u>  | <u>2000</u>  | <u>2010</u>  | <u>2020</u>  |  |  |  |  |
| <u>Total</u>                   | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> | <u>100.0</u> |  |  |  |  |
| Communicable                   |              |              |              |              |  |  |  |  |
| Diseases                       | 56.4         | 44.2         | 34.1         | 24.4         |  |  |  |  |
| Noncommunicable                |              |              |              |              |  |  |  |  |
| Diseases                       | 29.0         | 38.7         | 47.5         | 56.5         |  |  |  |  |
| Neoplasm                       | 2.5          | 3.8          | 5.4          | 7.1          |  |  |  |  |
| Diabetes                       | 0.8          | 0.8          | 0.8          | 0.8          |  |  |  |  |
| Respiratory                    | 2.6          | 3.6          | 4.8          | 6.4          |  |  |  |  |
| Cardiovascular                 | 8.2          | 11.4         | 14.6         | 18.4         |  |  |  |  |
| Neuropsychiatric               | 7.0          | 9.6          | 11.4         | 12.6         |  |  |  |  |

# Table 3: India: Composition of Projected Total Disability Adjusted Life Years By Source of Illness

Injuries 14.6 17.1 18.8 19.1 Source: Murray and Lopez (1996)

somewhat the cost of medical care, there will be inevitable upward pressures in the share of medical outlays in the economy. Presently, the bulk of medical care is provided through the private sector. The relative roles of public and private medical insurance will increasingly come to the fore as a public policy issue.

Another important issue relates to the prospect that the prevalence rate of HIV/AIDS will rise significantly in coming decades, resulting in the absolute number of HIV/AIDS cases in India rivaling only that of China (despite the fact that the prevalence rate will still be lower than in many African countries). The official UNAIDS estimate of HIV/AIDS in India is about 4 million; however a recent report by the U.S. National Intelligence Council (U.S.NIC)(2002) suggests that India may now have "between 5-8 million HIV sufferers." Current UN projections suggest that the prevalence rate (presently at about 0.9 percent) will not peak until 2019 (at about 2 percent of the adult population) implying that the number of HIV/AIDS cases will rise to about 10 million cases during this period. The U.S. NIC (2002) suggests that the prevalence rate might range between 3-4 percent of adults by 2010, suggesting 20-25 million HIV carriers by 2010, with the spread of the disease reflecting the "current trajectory of the disease, limited public awareness and the lack of resources for major anti-AIDS programs."<sup>19</sup> This will add to the burden placed on the medical care system, particularly that in the public sector. The costs posed to the potential growth rate are also potentially serious.

Starting with the U.S. NIC data, Eberstadt (2002) lays out an epidemiological model which would imply that the number of new *HIV* cases between 2000 and 2025 could range from 30 million (in the case of a mild epidemic) to 140 million (if a severe epidemic were to take hold); this would imply that the number of new *AIDS* cases in 2015 could range from 1 to 5 million.<sup>20</sup> He argues that the economic consequences would emerge from the impact both on the size of India's population (which would be lower by 40 to 120 million people, depending on the severity of the epidemic) and on the size of its working age population (which would be lower by anywhere from 22 to 78 million workers). In these cases, life expectancy which is expected to reach 71 years by 2025 (in the absence of HIV/AIDS), could fall to 58-68, again depending on the severity of the epidemic. What would be the economic consequences?

For India, the model suggest that GNP absent HIV would be almost 170 percent higher in 2025 than in 2000—with growth driven both by a larger work force and by increasing worker productivity. Under the mild epidemic scenario, GNP would still rise substantially—but by about a third less over that quarter-century than the "no AIDS" baseline would have predicted. If there was an intermediate epidemic, predicted GNP in 2025 would be 40 percent lower than in the baseline scenario;

<sup>&</sup>lt;sup>19</sup> They note the high rates of TB in India, which "may be indicative of undiagnosed HIV/AIDS" cases.

<sup>&</sup>lt;sup>20</sup> In Eberstadt's model, a severe epidemic would mean an adult HIV prevalence rate by 2025 reaching as high as 7 percent in India; intermediate: 5 percent; and mild: 1.5 percent. He uses the SPECTRUM software package developed by the Futures Group International for US. AID.

national output would still grow, but growth would be cut by three-fourths over the next 25 years. (Eberstadt, 2002, p. 41).

Is a significant upsurge in the epidemic in India likely? Eberstadt notes that "from a purely ecological standpoint (that is, focusing on nutrition and endemic disease), India probably stands a greater risk today than either Russia or China for an HIV/IDS breakout. (p. 43)."

The critical questions that will determine the spread and economic impact include: will the disease remain among the rural and low skilled or will it spread among the young, educated, and urban professionals? Can government programs be made effective in halting the spread? Since at a minimum, this would entail a significant increase in health spending, even with access to generic medicines, will Indian state governments have the resources to mount expanded health care programs, given existing fiscal exigencies?

**g. Fissures from Regional Income Inequalities and cultural tensions:** In recent years, India has experienced cultural tensions arising both from religious factors (tensions between the Muslim and Hindu communities in a number of States as well as in terms of the secular-Hindu nationalist debate) and from economic backwardness (lawlessness in several of the poorer states) and significant income differentials across states. A further factor which may create tensions will be the coexistence of high poverty rates—about 26 percent of India's population, or about 260 million persons, are classified as living in poor households—with the rise of India's middle class, with expectations of rising standards of living akin to those found in other emerging market and industrial countries.

If India proves unable to achieve a significant absorption of its present agricultural labor force into higher productivity sectors, the prospect of growing income inequality, sharp divisions between the "haves" and "have-nots" and tensions between the modern and backward segments of the population, may result in internal security tensions. The prospect of poorer, Northern states draw resources in subsidies and social welfare benefits will constitute a potential further strain on the budget. These tensions will be abetted by the heightened awareness throughout society—with modern forms of telecommunication and internet connectivity—of what is potentially possible in terms of living standards, and of the prevailing discrepancies across income groups. The combination of religion-linked conflicts and those arising from income inequality are thus likely to require that India continues to maintain a significant level of internal security expenditures.

**h.** Effects of globalization: While there remain a number of elements of India's policy regime which have tempered the impact of globalization (in terms of the scale of foreign investments, the remaining restrictions on the capital market, the limited extent of financial liberalization, and relatively high prevailing tariff regime), there are many other ways in which India is very much affected by the forces of globalization. Certainly, its increasingly dominant role in the software industry and the export of many Western service industries to India is evidence of this. The evident surge in demand by Indian households for education in the English language (Waldman, 2003), manifested in the

sharp increase in lower-middle income households placing their children in private English language schools, also reflects an awareness of the marketability of such skills in a globalizing world. Indian workers in a number of skill categories are also well placed to migrate and fill major gaps in the labor markets of aging industrial countries and the Middle East, as well as niches in emerging market economies seeking to take advantage of India's human capital base in the software industry. This offers the prospect of a continued high levels of remittance income—already remittances equal about 2 percent of GDP, up from 0.7 percent a decade ago. This may also imply that a nontrivial share of the return to the human capital of Indian workers is outside the income tax net. Equally, there is little reason to believe that India will be able to limit its exposure to global market pressures to limit the level of its tax rates on capital incomes.

But perhaps the most important impact of globalization is the pressure that it will put on India to "radically [reshape its] economic, political and social institutions." Srinivasan argues that "Such reshaping is essential if the Indian economy is to be well-integrated, as it must, with the global economy that has changed and is changing rapidly." (Srinivasan, 2001).

i. Imperatives of social insurance reforms: A cursory review of India's social insurance framework suggests enormous gaps, both in coverage and in the regulatory structure. Unemployment insurance basically does not exist, adding to the factors which have made it difficult for enterprises to rationalize and reduce bloated and inefficient work forces. In the health sector, most of the population is covered at best by a limited and poorly staffed public health service. As a consequence, the bulk of health care is provided by the private sector (typically by unqualified practitioners) (Down to Earth (2003)). As characterized by Misra (2003)

The [poor] are subject to the most regressive method of health finance—fee for service paid as out of pocket expenses—a major contributing factor in perpetuation and aggravation of poverty. A recent World Bank (2001) study on India concludes that out of pocket medical costs (estimated to be more than 80% of the total medical expenditure) alone may push 2.2% of the population below the poverty line each year." (Misra, 2003, p. 7).\

And finally, as discussed above, the various formal retirement savings schemes cover no more than about 11 percent of the labor force (7.3 percent in the formal private sector, 3.5 percent in the civil service).<sup>21</sup> Large numbers of workers in both the rural and informal sectors are not covered by mandatory plans. Also, as noted above, some of these schemes are actuarially under funded, reflecting an inconsistency between the contribution formulae and the benefit parameters; others are restricted by the existing regulatory structure in terms of the allowable investments that can be included in their portfolios. Looking ahead, India will need to develop a framework for provision of mechanisms for social insurance consistent with a modern economy. While the answer is unlikely to be a

<sup>&</sup>lt;sup>21</sup> These include the Civil Service Pension Scheme, the Employees Pension Scheme, the Employees Provident Fund and the Government Provident Fund.

scheme dominated by the public sector, the role of the public sector in both regulation of the private sector and in the targeting of the poorest groups is inevitable.

**j. Political Pressures associated with future Pay Commission Awards:** Acharya (2002) has noted the significant damage done to fiscal consolidation efforts by the excessive generosity in civil service remuneration rates associated with the 5<sup>th</sup> Pay Commission Awards. The obvious question is whether there is sufficient political will for future Pay Commissions to approach the issue of civil service compensation in a way that contributes to a market-based compensation structure and that facilitates the rationalization of a bloated civil service.<sup>22</sup> The issue is particularly important because there is a need for some elements of the civil service to be *expanded* in size. This relates in particular to the need for improved staffing and higher quality standards in primary education and medical care.

**k. Global demand effects:** Most economic and population forecasts for the industrial world suggest rising per capita incomes, a significant aging of the populations (reflected in a substantially increased share of the over-65 populations) and at best a stable absolute population size for the group of these countries as a whole (reflecting some growth in the size of the US population and a shrinkage in the size of such countries as Italy, Japan, and Germany. The size of the labor force in these economies is also likely to shrink unless there is a significant lengthening in the effective years of work. There is a question which can be raised as to whether such economies will continue to be a dynamic source of global demand or whether there will be a slowing in the growth of the global economy, at least from these sources, which will still constitute a substantial of the income of the global economy. Certainly, the share of China and India will rise, but the question can be posed as to whether there still will be a significant prospect for relying on exports as a principal growth engine, both for China and India.

I. Man-made Environmental Disasters: Some have expressed concern that India's nuclear power reactors constitute a serious threat in terms of nuclear contamination of soil, with dangerous levels of cesium. A recent CIA (2001) report notes that "Management that tolerates poor operating practices and measures its level of success in terms of building new projects rather than running existing ones safely supports the notion that contamination will most likely continue." With a rapidly rising population and increasing incomes, India's demands for energy sources will continue to rise sharply, and this will pose important challenges in terms of the balance between nuclear and non-nuclear sources of fuels.

# 4. Is the Indian Budget Process Sufficiently Focused on Long-Term Issues?

<sup>&</sup>lt;sup>22</sup> It is interesting to note Srinivasan's observation that Acharya was wrong in asserting that the Pay Commission awards were unanticipated and thus exogenous shocks. As Srinivasan argues, while the "size of the recommended increases could not have been fully anticipated, there was no doubt that some increase would be recommended."

To some extent, India, with its rich legacy of economic planning, should be more attuned to taking account of long-term issues. The recent Tenth Plan Document prepared by the Planning Commission, while not setting out targets or scenarios for the long-term, certainly displays an awareness of some of the larger issues that India will confront in coming decades in terms of the defined priorities. Witness the foreword by the Prime Minister in the section entitled "The Essence: India Economic Road Map: The Next Five Years: 2002-2007"

The most pressing challenge facing us in the coming years will be to provide every Indian with the opportunity to realize his or her full creative potential. Demographic trends indicate that the rate of growth of our working age population during the next ten years will be the highest we have ever experienced, and unless we achieve a significant improvement in the pace of creation of work opportunities, there will be an increase in the level of unemployment.

The Prime Minister's foreword also emphasizes the importance of removing the numerous barriers to interstate and intrastate trade and commerce; the need to eliminate a wide range of controls and restrictions on entrepreneurial initiatives; and the importance of effective delivery of basic social services. However, the translation of these concerns into an explicit quantification that could fully influence the shape of the fiscal policy framework is still very much of a work in process.

Witness the recently passed Fiscal Responsibility and Budget Management Act (FRBM). Certainly, this is an important first step, setting budgetary targets through 2008 (calling for the elimination of the revenue deficit by 2008), and beginning to lay out a framework of rules for succeeding years (requiring the building up of an "adequate" revenue surplus thereafter), and requiring the Central Government to set rules to specify "the annual targets of assuming contingent liabilities in the form of guarantees and the total liabilities as a percentage of gross domestic product." It also calls for the Central Government to "take suitable measures to ensure greater transparency in its fiscal operations in the public interest." Yet much clearly needs to be specified. This is anticipated in the legislation, which calls for the Central Government to make rules for carrying out the provisions of the Act in terms of the annual targets, the appropriate fiscal indicators, and the forms of the various statements called for under the Act (the Medium Term Fiscal Policy Statement, the Fiscal Policy Strategy Statement, and the Macro-economic Frame Work Statement).

To give this Act more substance in terms of its consideration of long-term risks and vulnerabilities, as well as long-term sustainability, a number of elements should be specified by the Central Government in implementing the terms of the legislation. *Inter alia*, this should include: a requirement that the government provide longer-term fiscal scenarios, either as an annex to the Medium Term Fiscal Policy Statement or as an annex to the annual budget exercise; a requirement that any policy reform likely to have budgetary consequences should include a specification of its long-term fiscal implications, including a specification of the underlying assumptions behind any projection scenario; and an assurance that the longer term implications of any contingent

liabilities or guarantees be specified. It would also be important to move toward the requirement that the States be similarly bound by the FRBM provisions. Since India has not elaborated a social insurance system that is already preempting future budgetary resources, it is now the time to ensure that the inevitable debate that will arise over such potential schemes is well-grounded by an assessment of their long-term fiscal ramifications.

### 5. Conclusions

What is the message of this paper? First, looking ahead, India faces many important structural challenges. Some will perforce be addressed by private agents in the household and enterprise sectors. Others will likely have important fiscal implications. That policy makers are aware of the qualitative consequences of many of these challenges is obvious from the recently prepared Tenth Plan Document. There is much uncertainty on the size of the fiscal costs that may need to borne, not only because of the uncertainties associated with how these many forces will evolve in coming decades, but because much will depend on how India's policy makers today and in future years, construct policy frameworks which will determine the reaction of Indian society to these fundamental forces and the relative roles to be played the private and public sectors. Unlike many industrial countries, much is not already cast in stone and subject to pressures for revision. For India, the choices are still very much on the future agenda. But certainly, there will be fiscal costs of a substantial order and there will be a need for the Indian government, both at the Central and State levels, to have the fiscal leeway to finance future necessary policy reforms and programs and to still have the fiscal capacity to respond to the inevitable surprises that will arise in an uncertain world.

What is patently clear is that India now has a fiscal policy framework that neither offers that future fiscal leeway, nor provides an appropriate expenditure program that is responsive to the obvious and immediate needs of the economy of coming decades. Current fiscal policy is recognized by most analysts as unsustainable. Vital spending—on primary education and medical care as well as on physical infrastructure—is not taking place because of unproductive outlays on subsidies and transfers and on excessive compensation and employment in unproductive areas of the public sector. Expenditures that could prevent even larger expenditures in the future are not being undertaken. And vital policy reforms that can underpin a more rapidly growing economy are only slowly being addressed. The long-term is bearing down hard. The question is: will India be able to address its short-term fiscal problems with sufficient vigor that it is ready confront these future challenges?

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