

**Comments on
“Towards Estimating India’s Implicit Pension Debt”:**

by

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I. My Summary of the Paper

This paper estimates India’s implicit pension debt (IPD) in 2004 and finds that India’s implicit pension debt (hereafter IPD) in 2004 was huge--64.5% of GDP (as compared to an internal public debt of 84.9% of GDP), even though the coverage ratio of India’s public pension system is very low and even though the aforementioned figure is downward biased for a number of reasons. About 99% of the total IPD is attributable to the pension schemes for government workers and only 1% thereof is attributable to the pension schemes for private company workers, partly because the pension schemes for government workers was until recently non-contributory (and financed by general tax revenues) whereas the pension schemes for private company workers are contributory, partly because the coverage ratio is much lower in the case of the pension schemes for private company workers than in the case of the pension schemes for government workers, and partly due to differences in benefit levels between the pension schemes for government workers and those for private company workers (is this true?).

II. My Overall Evaluation of the Paper

This paper is the first attempt to measure India’s implicit pension debt, even though it is very important for policymakers to know how large India’s implicit pension debt is, and thus this paper is an important contribution to the literature. Moreover, the analysis appears to be done carefully and the calculation method appears to be correct.

III. My Detailed Comments on the Paper

I have the following specific comments on the paper: (1) The paper lacks a basic description of the various public pension schemes in India, (2) the calculation of India’s implicit pension debt is downward biased for a number of reasons, and (3) using the price of annuities sold by life insurance companies to calculate the unfunded liabilities of the government worker pension system may not be justified.

I now elaborate on each of these comments.

IV. Information on Public Pension Systems in India

In India, there are (broadly speaking) three pension systems: (1) the pensions and gratuities of central government employees, (2) the pensions and gratuities of state (local) government employees, and (3) the Employees’ Pension System (EPS) (which replaced the former Family Pension Scheme) for private company workers.

It would be very useful if the type (defined benefit vs. defined contribution, funded vs. unfunded or pay-as-you-go, and contributory vs. non-contributory, etc.), pensionable age, vesting period, contribution rate, benefit level or replacement rate, etc., of each pension scheme could be summarized, perhaps in the form of the table. Moreover, it would be useful if

an explanation of the provisions of the new public pension system that is being phased in could be provided.

V. Downward Biases in the Implicit Public Debt of India

The calculation method used in this paper causes several downward biases in the authors' estimates of India's implicit pension debt.

Bias 1: The implicit pension debt calculated by the authors includes the implicit pension debt of central government employees and state (local) civil employees and the funding gap in the Employee's Pension Scheme but excludes the implicit pension debt of central civil pensioners, central defense employees, central defense pensioners, and state civil pensioners.

Bias 2: The authors assume no improvements in mortality (life expectancy) even though such improvements can be expected.

Bias 3: The authors use the price of nominal annuities even though government workers receive inflation-indexed pensions, which will, needless to say, be more expensive than nominal annuities.

Bias 4: This paper assumes that administrative responsibility for verifying death and delivering pension payments will be outsourced to insurance companies. Thus, to the extent that the government continues to insource pension administration and delivery, IPD will be underestimated.

Bias 5: Future "pay commissions" (increases in the real wages of government workers) are assumed to be 18.09% even though in the past pay commissions have ranged from 18.09 to 70.77%, depending on the post.

Thus, the authors' estimate of implicit public debt is downward biased for at least five reasons, and it is essentially a lower bound estimate.

VI. Using the Price of Annuities Sold by Life Insurance Companies

The authors estimate the unfunded liabilities of the government worker pension system using the prices of annuities sold by life insurance companies. This is fine as long as the annuities sold by life insurance companies are actuarially fair, but is this really the case? I propose trying the alternate method of estimating the unfunded liabilities of the government worker pension system using survival probabilities.

VII. Recommendations for Improving the Paper

I have the following three recommendations for improving the paper, which are based on the three comments above:

- (1) Add a basic description of the various public pension schemes in India.
- (2) Estimate the impact of the five (or more) downward biases and calculate an *upper bound* for the implicit pension debt of India.
- (3) Try estimating the unfunded liabilities of the government worker pension system using survival probabilities.

VIII. Recommendations for Improving India's Public Pension System

Last but not least, I have some criticisms not of the paper itself but of India's public pension system. There appear to be substantial inter-occupational inequities in the system, with all government workers being eligible for a generous non-contributory pension, only a small proportion of private company workers being eligible for a *contributory* pension, and workers in small companies and informal sector workers not being covered at all. It seems desirable to achieve a more equitable public pension system with universal and uniform coverage, and the new public pension system that is being phased in is a move in the right direction although it may be too little, too late.

IX. Conclusion

This is a path-breaking and important paper, but it can be expanded and improved in a number of ways.