

Literati

Do demographic dividends outweigh policy reform?

While India's demographic dividend is fairly well known, the geographic spread of these demographics and their impact on the development of different Indian states is interesting to note. Here are some of the key takeaways from a recent IMF Working Paper – *The Demographic Dividend: Evidence from the Indian States*, authored by Shekhar Aiyar and Ashoka Mody.

In *Literati*, we will continue to bring to you important, thought provoking academic literature with findings that have a significant impact on the markets.

India's well-known demographic dividend: India will become the single largest positive contributor to the global workforce over the next three decades. This increase in the working age ratio is expected to raise the rate of economic growth even as it contributes to higher savings rates and hence additional domestic resources for productive investment.

Demography a key driver of growth along with reforms: The paper analyses demographic evolution and income growth trends in India from a sample set of six states. The states have been chosen as representative of two groups: 'Leaders' or high-growth states (Tamil Nadu, Karnataka and Gujarat) and 'Laggards' (Uttar Pradesh, Madhya Pradesh and Bihar).

The divergence in per capita income growth between the Leaders and Laggards is well known, with the disparity being the highest for the most recent period of 1991–01. While policy reforms had an important role to play in the growth acceleration starting in the 1980s, the paper cautions that this had less of an impact than commonly perceived once the concurrent rise in working age ratios is taken into account. Over a given time period, both the initial working age ratio and the growth rate of this ratio should be positively related to per capita income growth.

What does this mean for the future?: The demographic dividend is projected to peak over the next two decades—adding ~2ppt to annual per capita income growth over the period. The largest expansion in working age ratio to date has occurred in the southern and western states that have led India in terms of recent economic growth. The bulk of the remaining demographic transition will be concentrated in laggard states, thus raising the prospect of substantial income convergence among the rich and poor states.

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The Demographic Dividend: Evidence from the Indian States

The Facts

- ❖ In the next 40 years, the world's population will grow by ~2.4bn people, almost all of them in developing countries. The large bulk of this increase will be between the ages of 15 and 64, the so-called "working age" population.
- ❖ About a quarter of the projected increase in the global population aged 15–64 years between 2010 and 2040 will occur in India. The working age ratio in the country is set to rise from ~64% currently to 69% in 2040, reflecting the addition of just over 300mn working-age adults. This would make India—by an order of magnitude—the largest single positive contributor to the global workforce over the next three decades.
- ❖ This increase in the working age ratio can raise the rate of economic growth, and hence confer a "demographic dividend."
- ❖ Also, because workers save while dependants do not, a bulge in the working age ratio contributes to higher savings rates, thereby increasing the domestic resources available for productive investment.

The Study

- ❖ The paper aims to study demographic evolution and income growth trends from a sample set of six states. The states have been chosen as representative of two groups: 'Leaders' or high-growth states (Tamil Nadu, Karnataka and Gujarat) and 'Laggards' (Uttar Pradesh, Madhya Pradesh and Bihar).
- ❖ The divergence in per capita income growth between Leaders and Laggards is well known, with the divergence being the highest for the most recent period of 1991–01. What may be less well known is that these trends in income growth are mirrored in the demographic data.
- ❖ A large and widening gap has opened up between the working age ratios in Leaders and Laggards over the 40-year period (1961–2001). In the decade 1991–01, the gap reached 8.7ppt or 2.6 standard deviations (across state-time observations).
- ❖ From the 1970s onwards, between 40% and 50% of the per capita income growth was attributable to the ongoing demographic dividend.
- ❖ While policy reforms had an important role to play in the growth acceleration starting in the 1980s, the paper cautions that this had less of an impact than commonly perceived once the concurrent rise in working age ratios is taken into account. Over a given time period, both the initial working age ratio and the growth rate of this ratio should be positively related to per capita income growth.

India's working age ratio set to rise from ~64% now to 69% in 2040

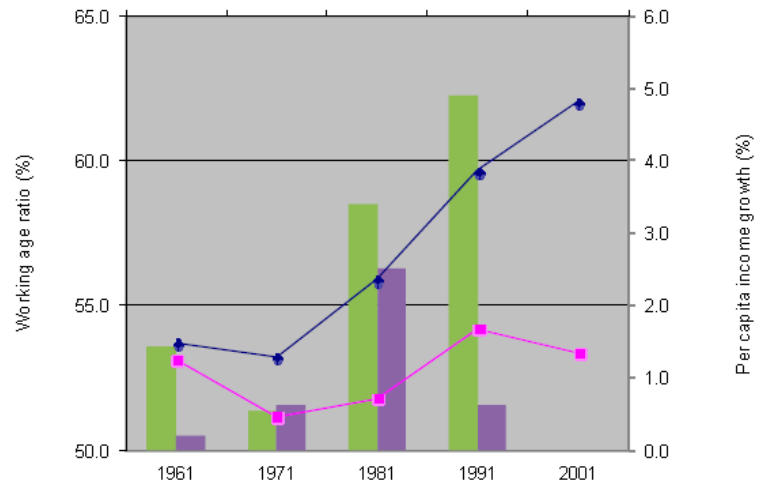
Study reveals large gap between working age ratios in Leader and Laggard states over 1961–2001



Fig 1 - Income growth and Working age ratio in selected states

Legend

- Leaders' p.c. income growth (over next decade)
- Laggards' p.c. income growth (over next decade)
- ◆ Leaders' working age ratio
- ◆ Laggards' working age ratio



Source: *The Demographic Dividend: Evidence from the Indian States*

So what does this mean for India going forward?

- ❖ The demographic dividend is projected to peak over the next two decades—adding ~2ppt to annual per capita income growth over the period. Subsequently the dividend should begin to decrease gradually (though remaining positive) based on the UNPD projections, and decrease rapidly according to the IDB projections.
- ❖ The calculations also suggest that over the current decade, the increment to per capita income growth from demographic change has been between 1.5ppt and 2ppt per annum.
- ❖ The largest expansion in working age ratio to date has occurred in the southern and western states that have led India in terms of recent economic growth. The bulk of the remaining demographic transition will be concentrated in laggard states, thus raising the prospect of substantial income convergence among the rich and poor states.

Remaining demographic transition likely in laggard states, implying income convergence between rich and poor

[The original paper can be found here](#)



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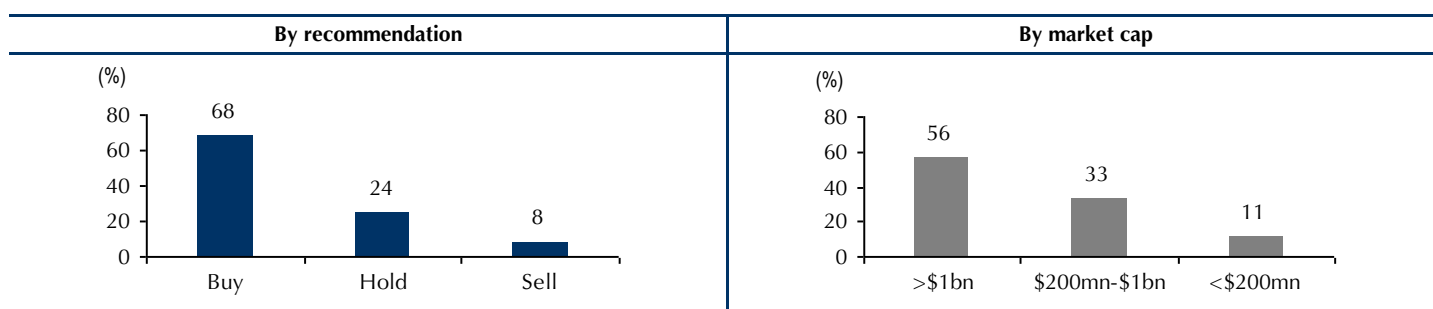
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