



## Reading productivity and economic trends

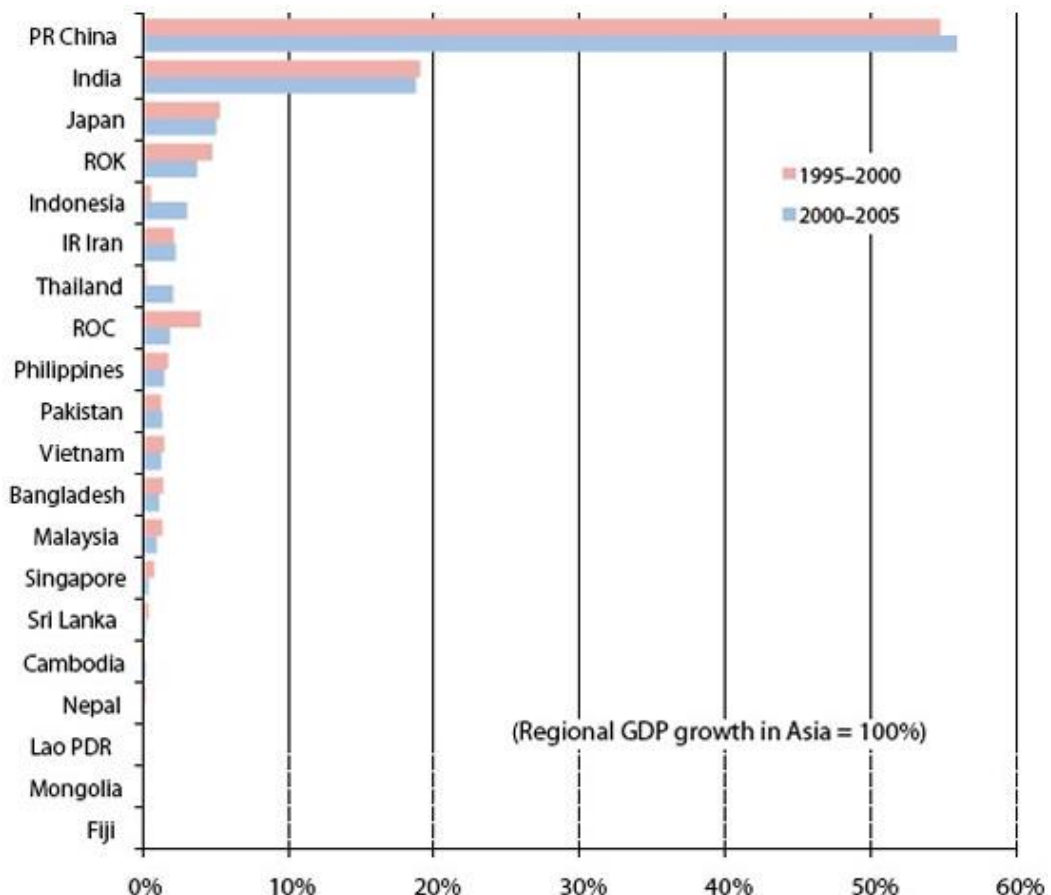
### Part 7. Think sustainable development



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Asia has been a fast-growing region. During 2000–2005, the Asian economy (including PR China) grew at 6.0% on average per year, compared with 2.5% in the USA and 1.6% in the EU15. Within the region, the performance was dominated by PR China, which achieved spectacular growth of 8.3% and 9.1% on average per annum in the periods of 1995–2000 and 2000–2005, respectively. Together with its size, it contributed to over 50% of the region's growth in both periods (see the accompanying chart). The pressure that the region's fast growth has put on the world's resources and the environment is well documented. Is this fast pace of growth sustainable?



Sustainability is the question of our ability to maintain the current level of well-being in the future. Currently, conventional economic statistics are simply inadequate to illuminate the issue, and GDP as a welfare measure is questionable. GDP is fundamentally an aggregate measure of production within a country. Key factors that have significant bearing on individual well-being, such as income inequality, household disposable income, environmental degradation, and changes in wealth, are omitted. The gap between our welfare concerns today and what we are measuring is so sizable that GDP measures alone are deemed inappropriate when sustainable development is considered. Currently, the Commission on the Measurement of Economic Performance and Social Progress, set up by the French President, attempts to find how the inadequacies of GDP measures can be feasibly addressed (see <http://www.stiglitz-sen-fitoussi.fr/>).

Among others, GDP net of depreciation has been put forward as a better welfare measure than GDP because allowances set aside for replenishing the capital stock are not available for consumption and in turn do not contribute to the current level of well-being. The same concept is useful in thinking sustainability, with capital stock extended to include natural resources, physical capital, and human and social capital. The World Bank operationalizes the concept of “net adjusted savings” (NAS) as net savings (i.e., GDP minus consumption minus depreciation) plus education expenditures minus the consumption of natural resources and the monetary evaluations of damages resulting from CO<sub>2</sub> emissions. Based on International Energy Agency (IEA) estimates in *CO<sub>2</sub> Emissions from Fuel Combustion* (2007), CO<sub>2</sub> emissions in Asia (including PR China) grew at an average 7.8% annually during 2000–2005, compared with an economic growth rate of 6.0%. Part of the environmental cost of PR China’s fast growth is reflected in the staggering acceleration in its CO<sub>2</sub> emissions from an average increase of 0.3% per annum during 1995–2000 to 10.2% a year during 2000–2005.

In gauging sustainability, the NAS approach has two major limitations. First, it is not equipped to analyze the impact of any irreversible events in the natural world. Second, any meaningful sustainability measures need to balance future risks against the uncertainty of future advancements, resource discoveries, and preferences of future generations.

Given our current knowledge, it is high time that sustainability concerns were more explicitly incorporated into national economic policy frameworks. Building a workable, coherent intellectual and statistical framework is an important step toward this goal.

*We regret to announce that this Reading Productivity and Economic Trends column will end with part 7. The APO News thanks Dr. Nomura and Ms. Lau for sharing their insightful analyses over the past seven months.*