

Reading productivity and economic trends

Part 3. The role of structural shifts in productivity enhancement



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Productivity gains from structural shifts could be highly significant in economic development. More specifically, it has been argued that the rapid shift of capital and labor into the "modern sector" of higher labor productivity played a pivotal role in the Asian Miracle by preventing a decline in the return on capital despite the sustained high investment ratios in these high-performing economies (see, for example, Nelson, R. and Pack, H., The Asian Miracle and Modern Growth Theory, *Economic Journal*, 1999; 109: 416–436).



Per capita purchasing power parity-GDP relative to that in the USA, 1975-2005

Since the 1960s, a handful of East Asian economies, notably Singapore, the Republic of China, Hong Kong, and the Republic of Korea, have managed to set themselves off on a path of impressive growth. With their real per capita GDP growing at a pace of 4–5% per year on average, these economies outperformed other comparable developing countries in the 1960s and stand out as the only region that has managed to catch up to the living standards of the advanced countries. The accompanying figure (Figure 5 in the *APO Productivity Databook 2008*) shows how these economies rapidly closed the per capita income gap with the USA from 1975, against the background of little progess made by the region as a whole. Because of its potential policy significance, what has been the recipe for the Asian Miracle has been a subject of vigorous academic debate.

Among other views, narrowing the "idea gap" was put forward as an explanation by Paul Romer (Idea Gaps and Object Gaps in Economic Development, *Journal of Monetary Economics*, 1993; 32: 543–573). He argued that underlying the success of the East Asian economies was their ability to adopt existing technologies from the advanced economies. If true, this represented a less costly approach to economic development than the accumulation view whereby the road to prosperity is through savings and investment, in other words, forgone current consumption, which many poor countries cannot easily afford.

Empirical evidence, however, has lent little support for this view. East Asia's rapid growth has been found to be largely driven by factor accumulation, with total factor productivity (TFP) growth accounting for only one-fourth of the region's growth in labor productivity between 1960 and 1994 (Collins, S. and Bosworth, B., Economic Growth in East Asia: Accumulation versus Assimilation, *Brookings Papers on Economic Activity*, 1996; 2: 135–203). The main lessons from East Asia's success therefore are not about which policies best promote TFP growth. Rather, the focus should be on how to achieve and sustain high rates of savings and investment, defying the law of diminishing returns.

With an investment ratio of over 20% of GDP, Nelson and Pack (1999) argued that the success of the fast-growing Asian economies lay in their extraordinary ability to absorb and assimilate technologies superior to their own at a rapid pace sustained over a long period without slowing. This process involved uncertainty and economic risk in an essential way. To sow the seeds of success, a favorable policy environment was first required to nurture learning, innovation, and entrepreneurship. Subsequently, it was the shift of resources into the more modern, capital-intensive technologies through aggressive entrepreneurship and progressive learning that held the key to sustaining high rates of return on capital and in turn investment, which drove growth. In other words, the observed dramatic shift in the product mix and firm size in these Asian economies should be seen as an integral part of their success story which ran far deeper than simply factor accumulation.