



Internal Convergence and China's Growth Potential

Professor Yao Yang, Peking University & CCCS Asia Scholar

Wang Mengqi, Peking University

Amidst declining growth rates, the debate about China's growth potential has re-emerged. One of the ignored aspects in this debate, though, is the role played by internal convergence.

China's unprecedented growth over the last 30 some years, particularly in the years before the Global Financial Crisis (GFC), has been concentrated in eastern (coastal) provinces. The vast inland areas have, however, largely lagged behind. By 2015, per-capita GDP in the eastern region was 1.8 times that in the central and western regions. After the GFC, growth in the eastern provinces has slowed, but growth of inland provinces has picked up.

Because of the unbalanced development among the three regions in China, internal convergence could serve as a driver for China's future growth. The eastern region is approaching its steady state of growth; as a result, its growth rate is decelerating. However, the two other inland regions are still far away from their steady states, so their growth rates can be higher than that of the eastern region. In addition, the two inland regions can obtain higher growth rates if they can improve their investment efficiency and long-run rates of technological progress to reach the levels of the eastern region. Therefore, inter-regional convergence of efficiency and technological progress can help China sustain a longer period of high growth even though intra-regional convergence toward a region's steady state lowers the country's overall growth rate. Our econometric and associated simulation analysis based on provincial-level panel data confirms this claim.

First, the level of GDP per capita captures the effect arising from intra-regional convergence. Given its own steady state, a region should grow more slowly when its per-capita GDP increases. This provides the basis of the advantage of backwardness. Compared with the other two regions, the eastern region has a higher per-capita GDP level, which is closer to its own steady state, its estimated speed of convergence (8.0%) is higher than those of the other two regions (7.1% and 7.7% for the central and western regions respectively). Relative to the case in which all three regions share the same high speed of convergence, the advantage of backwardness increases the aggregate growth rate of per-capita GDP by 11.7% for 15 years.

Second, differences in the growth rates among regions on the transition path can be attributed to their differences in the return rates of factors, for instance, the efficiency of investment. It is not surprising to

find that the investment efficiency of the eastern region is the highest, followed by the two inland regions. However, the magnitudes of the differences are not large. As a result, China's overall growth rate of per-capita GDP would not accelerate much if the investment efficiencies of the two inland regions caught up with the level of the eastern region.

Third, the steady state growth rate of a region depends on its rate of long-run technological progress. In addition to the steady state growth rate, a region's rate of technological progress also influences its growth rates on its transition path. We found technological progress in the eastern region to be the fastest, with a speed of 0.613% each year, followed by the central region at 0.606%, and the western region at 0.601%. Convergence toward the rate of technological progress in the eastern region would allow the inland regions to have substantially higher rates of growth. Specifically, the central and western regions would respectively grow 4.7 and 4.8% faster on average over 15 years, leading to an average of 2.6% increase in the national growth rate forecasted for the period 2016-2030.

Our analysis shows that unbalanced development and inequality among China's three geographical regions are a source for future growth. Convergence of the speed of technological progress plays the most important role to raise the country's overall growth potential.

To realise the convergence of technological progress, the two inland regions need to improve their institutional environments as well as their stock and quality of human capital. One of the decisive factors for the eastern region's success is its exposure to the outside world. At this stage, the eastern region needs not only deeper opening to the outside world, but deeper opening to its inland counterparts. Inland regions need to drum up their efforts to improve the policy environment to attract capital and talent from the eastern region, adopting a more rational regulatory framework and fostering a rule-based business culture. The provision of affordable housing, good education for the next generation, an amiable work environment, and preferential taxation will also help attract and retain talent.

A longer version of this Brief can be found in the [China Update 2017](#)