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The Diminishing Demographic Dividend and Implication for Wage Inflation

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Predictions made by various organizations all show that the working age population aged 16 to 64 will stop growing during the period of 12^{th} Five-year Plan. That is, the demographic dividend, which has contributed substantially to the rapid economic growth in China's reform period, will disappear. As this happens at a stage of upper-middle income, it can be phrased as aging before affluence and it challenges the sustainability of China's growth. On the other hand, the labor shortage and its resulting wage increase for ordinary workers open an opportunity for improving income distribution and therefore, China tends to approach its Kuznets turning point. In this critical period, therefore, sound policy orientation and options are urgently needed to cease the opportunity.

1. Demographic Dividend Is Disappearing

Nowadays, most demographic predictions for China are based on the country's total fertility rate (TFR) of 1.8 – unchanged for 20 years. But population-survey data published by the National Bureau of Statistics suggests that the TFR has been lower than 1.5 for many years, and the United Nations' newly published report *World*

Fertility Patterns 2009 revises China's TFR to 1.4 in 2006, placing it among low-fertility countries.

A long period of low fertility means that China's population is aging and growth in the working-age population is slowing. According to the UN, the working-age population will stop growing in 2015, while the share of the population that is 65 and older will rise to 9.6% (130 million people), up sharply from 6.8% in 2000.

Since the reform period began in the early 1980's, a large working-age cohort has ensured a sufficient supply of labor and a high saving rate. The declining ratio of the dependent population (children and the elderly) to the working-age population (16-64 years old) contributed 26.8% to per capita GDP growth in 1982-2000. But, according to conservative estimates, the dependency ratio will stop falling in 2013 and then begin rising. That means that the demographic dividend as an important source of rapid economic growth in the past over 30 years will disappear.

Population aging is a universal law of economic development and its accompanying social transformation. But China is unique, because it has arrived at a late stage of demographic transition at a relatively early stage in its economic development. In 2010, 8.3% of China's population was 65 and older, compared to 7.5% worldwide, while its GDP per capita was only 47.7% of the global average. South Korea and Thailand will soon face a rising dependency ratio as well, but their per capita GDP is higher than China's – three times higher in the case of South Korea.

Therefore, instead of expressing the current challenge as population aging, which is worldwide phenomenon, it would be more relevant to phrase it as "aging before affluence”, which characterizes the specific challenge facing China.

2. Challenge of Middle Income Trap

The characteristic of aging before affluence immediately brings about a challenge for the sustainability of China’s future growth. Economists find that countries at more advanced stages of development can gain more from the economic globalization, because they are in technological frontier and thus hold significant comparative advantage in technology- and capital-intensive industries, and countries at stages of less development can produce the cheapest labor-intensive goods and therefore become beneficiaries of the globalization, whereas countries in between benefit less due to lack of apparent comparative advantage in either factors of production. This explains why its characteristic of aging before affluence puts China to the risk of falling into middle income trap.

What relevance does the characteristic of aging before affluence have to the middle income trap then? First of all, the population aging has been rapidly changing the endowments of production factors – namely, labor force becomes scarcer and more expensive factor of production. As the increase of working age population is diminishing, the labor shortage has become severe in recent years. This tends to weaken the Chinese comparative advantage in labor-intensive industries, which have supported the China growth miracle.

Secondly, with China’s old comparative advantage of cheap labor diminishing, but its new comparative advantage not yet revealed. The fact that China just joined the club of upper-middle income countries means that it has not gained a compensating level of competitiveness in capital- and technology-intensive industries. One can clearly understand this just by looking at the existing gaps in human capital, technology, and institutions inspiring innovation between China and the advanced countries. As a result, China faces the risk of falling into the middle-income trap, which has prevented many other countries from achieving advanced-economy status.

Whether or not China would fall into the trap, however, depends on what policy options it chooses. The experiences of some forthgoer economies show that such a trap can be avoided if sound strategy is implemented during this peculiar period. However, as the country arrives at the critical stage of moving from middle income to high income country, the strategies and practices that helped China accomplish the transition from lower middle income to upper middle income stages become less and less suited, as the international experiences show. Since next decade is a crucial period for China to achieve its goal of well-being society, it urgently needs to formulate a new strategy to meet the challenges raised by the stage of upper middle income.

3. Wage Increase and Kuznets Turning Point

As a result of the diminishing demographic dividend, wage rates of ordinary workers began to rise after the new millennium. One can see the rapid increase of the real daily wages of grain production workers and the monthly wages of migrant workers and workers in manufacturing and construction, with annual growth rates above 10% in real term. Notably, since 2003 after a long stagnation the rise in wage rates in both agricultural and non-agricultural sectors accelerated. With all those evidence, the enhancement of wage cannot be viewed as structural and temporal phenomenon but long-term trend.

For long there has been lack of skills and skilled workers earn higher wages. The demographic change-induced labor shortage, however, is more a shortage of unskilled workers. Consequently, the wage increase of unskilled workers is faster than that of skilled workers and there is a trend of wages convergence, which tends to reduce the wages differentials.

That implies that there emerges an opportunity for China to improve income distribution. Economists found a pattern of income distribution of a country that follows a reverse U-shape curve – namely, as per capita income increases, income inequality widens first and then narrows down after it reaches a peak. This pattern is called the Kuznets curve after its first academic observer, Simon Kuznets. The one-up increase of ordinary workers' wage tends to ripen condition of the Kuzinets turning point, which in tern promotes domestic consumption and spurs the shift of China's economic growth from export-led to consumption-led economic growth pattern. Although labor shortages have helped push up ordinary workers' wages, the existing, highly unequal income distribution cannot be altered spontaneously. A host of public policies will be needed to improve China's income distribution – and thereby stimulate household consumption.

At a country's middle income stage, the changes in comparative advantage inevitably lead to shrinkage of external demand. Usually, the adjustment of industrial structure may take place by a gradual approach. In the post-financial crisis era, however, the slow recovery and global rebalancing, which tend to reduce imports of the developed countries, and the jobless recovery frequently begetting trade protectionism in the United States unusually press China to deviate from its export-led growth pattern. Therefore, under the double pressures – that from changed stage of development and that from the trends of the world economy, China has to reply on domestic demand, particularly on the final consumption, if it seeks sustainable growth.

More importantly, the domestic consumption pattern is more adaptable with the present industrial structure (or thus comparative advantage) of China. The expansion of internal demand therefore allows to utilize the existing capacity of production and to gain time for rebalancing. According to a study conducted by the Asian Development Bank, the Chinese middle class – namely, those whose daily consumption expenditure is between 2 and 20 US dollars measured in PPP term, while making up 66 percent of the total population, contributes 79.2 percent of total consumption of China.

The ADB categorization has several implications. First, large proportion of Chinese residents is still low income consumers, whose demands match well the present structure of industries and/or exports – relatively lower end manufactured commodities. Secondly, as the size of such group of people enlarges, total consumption increases and sustains economic growth in China. Thirdly, it also shows the way of expanding domestic consumption – namely, it is the result of poverty alleviation, reduction of income inequality, and urbanization of migrants. That is, not only can poverty alleviation increase households' consumption level, but labor mobility and more significantly the obtaining of urban citizenship can increase consumption levels.

Therefore, social protection must be extended to migrant workers, whose participation rate in basic medical insurance in 2009 was 13.1%, while 9.8% were covered by the state pension scheme and just 3.7% had unemployment insurance. This requires removing the main institutional cause: the household registration system, which bars access to public benefits for migrants without urban residence permits.

On the other hand, as China's labor-supply constraints tighten, wages should be determined not only by the relationship between labor supply and demand, but also by labor-market institutions. For example, collective bargaining not only balances the distribution of productivity gains between employees and employers, but also serves as an institutional platform for resolving labor disputes.