China Economic Update

by NAB Group Economics

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A better education system could be the engine of China's future growth

Increasing productivity is one of China's most critical challenges over the next few decades, as the negative effects of its demographic changes constrains the country's capacity for growth. China's workforce is already declining – with a greater number of older workers leaving the workforce each year than there are younger workers entering the market, a legacy of improving health standards and lower birth rates (in part connected to the One Child Policy) since the early 1970s.

As a result, individual Chinese workers will be required to generate greater economic value to continue the country's growth and support a growing pool of retired people. Education is a key factor in raising the average level of productivity. New entrants to China's workforce already have (on average) around four extra years of education than those entering retirement, however more will need to be done.

New entrants to China's workforce have more years of education than those exiting

Average years of education



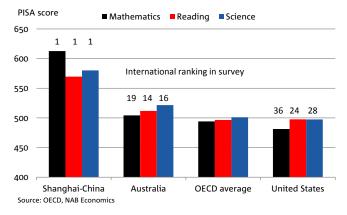
Source: UNSD Demographic Statistics, NAB Economics

China's public spending on education has increased over the past decade – rising from around 2.1% of GDP in 2004 to around 3.6% in 2014 – although this rate has pulled back from a peak in 2012. This level lags behind the spending in the advanced economies, with the OECD average level of education spending at 5.6% in 2011.

High quality schools for a select few, while others are left behind

Since 1986, when the Compulsory Education Law was passed, China's state school system has provided nine years of school education, in a uniform system with no tuition or miscellaneous fees. International surveys, such the OECD Programme for International Student Assessment, consistently rank Chinese schools (Shanghai in the case of the PISA survey) as among the best performing in the world.

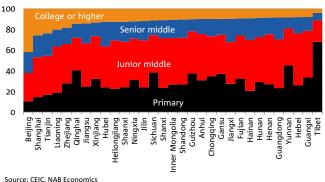
Shanghai's schools are the top ranked in international surveys, but not necessarily representative of the system



However, despite the strong test performances and the 'uniform implementation' of the school system, there are significant disparities across the country. Schools in rural areas and poorer provinces lack the resources to provide the same quality of education as the best schools of wealthy cities. Teachers in larger cities earn more than their rural peers, putting rural schools at a severe disadvantage in attracting talented educators.

Despite uniform goals, education levels vary widely across the country

Share of population by highest level of education (%)



Competition to gain access to these top schools is intense. Transparency International reports examples of bribery to secure placements – even to the extent of payments to secure desks closer to the teacher. Such informal payments contribute to China's inequality problems – with otherwise deserving children from lower socio-economic groups effectively locked out of the system.

China's hukou (household registration) system has also increased the level of disadvantage. There are an estimated 20 million children of migrant workers who are unable access their local school system, as their migrant parents lack the residential rights to access social services in their cities. The alternative is to leave school aged children with relatives in their home provinces – there are around 60 million children are 'left behind' students in rural areas, who typically underperform in measures of educational outcomes (Bloomberg, New York Times).

Foreign observers have also expressed concerns about teaching methodology – namely that it is focussed on strict rote learning which provides little opportunity for creativity and problem solving – skills particularly valuable in complex (and high value adding) employment – nor the development of leadership and interpersonal skills. Improving the quality of teaching across the country – and the average quality of teachers – is necessary to improve the performance and equity of the education system as a whole.

University system improving – with some globally recognised institutions – but need more graduates

China's university system has improved considerably over recent decades – as reflected in the country's performance in international surveys. For example, the Academic Ranking of World Universities for 2014 featured 32 Chinese universities in the top 500 (compared with just 8 in 2004), while The Times Higher Education World University Rankings 2014-2015 list 11Chinese universities in the top 400.

However, while standards have improved, access for students from less privileged backgrounds has worsened. According to a report in the New York Times, over the past decade Peking University – the country's top ranked institution – admitted around 10% of its students from rural areas, compared with around 30% in the 1990s. The inequality introduced at the school level persists into higher education.

Despite improving quality of universities, only a small percentage of China's population has tertiary education

Share of population with tertiary education (%) 50 40 30 20 10 0 China OECD average Australia United States Source: OECD NAR Economics

Despite the improvement in the overall quality of China's universities, the country is not producing enough graduates

to support the shift to a higher value growth model. In 2012, less than 4% of China's population held a tertiary qualification, compared with almost 33% in advanced economies and 41% in Australia.

Reversing the brain drain – China needs to keep its best and brightest

Since the late 1970s, China has allowed students to study overseas, with a view to improving the quality of their education. According to OECD data, Chinese students account for over one-fifth of all international students in the region's universities. In all, over three million Chinese students have studied overseas, with Ministry of Education estimates suggesting that only one-third of these students have returned to China (with some commentators questioning if even that many have done so). Foreign education has benefited the students, but not necessarily the country, with many graduates settling abroad, thanks to skilled migrant policies.

The brain drain isn't limited to students, but includes graduates of China's university system as well. A report by the Center for China & Globalization estimated that there were 8.5 million Chinese living abroad (mostly from the middle class), while less than one million people had moved to China. Environmental degradation is among the reasons cited by students in remaining in their adopted countries, along with employment opportunities based on merit rather than political and social connections.

Overseas education continues to provide significant opportunities for Chinese students, but authorities will need to improve the incentives for these students to return home.

Conclusions

Improving the quality and scope of China's education system, and access to it, may prove critical to the country's longer term growth prospects – with higher productivity offsetting the declining working age population. There are likely to be opportunities for foreign educational institutions, including those in Australia, to assist in the development of the education sector – both through domestic investment and overseas training – but Chinese authorities will have to ensure that the benefits are accrued domestically, by slowing the brain drain.

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