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Brandt (2015) provides an informative, careful, and thoughtful micro-economic perspective on China’s productivity. His approach is “an assessment that comes from the bottom up, based on a combination of extensive firm-level analysis and several hundred firm interviews over the years.” I applaud the author’s work and effort. The findings on the differences in capital returns between SOEs and POEs are fascinating and will be consistent with the arguments I later develop.

The paper argues that there exists “huge distortions and inefficiency” in China’s firm dynamics; and it focuses on improvements in productivity. As pointed out by the author, the reasons for such distortions that may underlie these inefficiencies are not the paper’s central focus.

In this discussion, I provide a different perspective by broadening the picture, focusing instead on the main reasons for the distortions mentioned in the paper, as these reasons are inextricably linked to China’s institutional details and its financial system and thus China’s growth prospects.

Questions about how fast China’s economy will grow in the future have tantalized policymakers and researchers alike. To provide an answer, one must understand not only positive but also negative consequences of China’s past performance. Indeed, a deep analysis of China’s macroeconomy poses more questions than answers. There are four visible questions about China’s growth prospects that must be reckoned with:

1. What is a trade-off between short-term and long-term growth prospects?
2. Is China’s spectacular growth in the past two decades an unalloyed progress?
3. What macroeconomic policy is mainly responsible for the past growth?
4. Why are financial reforms crucial to achieving sustainable growth in the future?

The first question is a practical policy-related question, which I will quantify.

I. What is a trade-off between short-term and long-term growth prospects?

At what level China’s economic growth is sustainable in the long run is almost impossible to reckon. To a large degree it will probably depend on the success of financial reforms as will be elaborated in sections below. One thing remains clear: there will be a painful trade-off between short-term and long-term growth prospects. Based on the time-series model estimation of Chang, Higgins, Zha, and Zhong (2015), it is reasonable to expect China’s GDP growth to slow down to 5.5%-6% if the government is willing to reduce growth of fixed-asset investment (FAI) to 8%. This forecasting model has been tested for its out-of-sample performance of GDP growth. The RMSE error over the 4-year horizon is only 0.9%, compared to the 2% error produced by the random-walk model.
According to our estimation, a five-percentage-point reduction from the current FAI growth rate leads to a half-percentage-point fall in GDP growth in the short run (over 1-5 years), but increases the consumption-output ratio by 20% over the 5-year horizon from the current level.\(^1\) The trade-off between consumption and investment is a lesser-known fact. At the same time, our simulations indicate that rapid adjustments in reducing investment growth run a risk of significantly slowing down the economy in the short or medium run.

II. WHY DOES CHINA’S SPECTACULAR GROWTH IN THE PAST TWO DECADES FAIL TO CONTINUE?

Which is an important question in the face of these trade-offs. One answer to this question lies in the imbalance of China’s past growth—an imbalance of first order. Figure 1 provides two striking facts about China’s economy that are seldom discussed but essential to comprehend China’s growth prospects. Consumption as percent of GDP steadily declined during the period of rapid GDP growth (the top chart of Figure 1), while investment as percent of GDP steadily increased in the same period (the top chart of Figure 2). Brandt (2015) indicates that China’s investment may be over-estimated or consumption may be under-estimated. We have done such adjustments ourselves, including questionable housing services, given the underdeveloped rental market in China. Nonetheless, no matter how one adjusts the time series of China’s GDP components, these level adjustments do not change the basic growth pattern displayed in Figure 1.

How important is the rise of the investment-output ratio to GDP growth? A growth-accounting exercise confirms that capital deepening (investment) accounts for a majority of GDP growth, about 74% between 1998 and 2011. It is not a mystery that China’s growth has been driven by a boom in investment. What is less known is that much of the unprecedented investment boom has gone into overcapacity and real-estate sectors. As argued by Chang, Chen, Waggoner, and Zha (2015), such imbalance is a negative consequence of resources misallocated from the productive light (labor-intensive) sector to the less productive heavy (capital-intensive) sector. The heavy industry is largely composed of large capital-intensive firms (both SOEs and POEs); many of them associated with overcapacity and real-estate sectors. Unless this misallocation is reduced and eventually eliminated, China’s growth prospects will continue to face serious problems.

III. BUT WHAT MACROECONOMIC POLICY IS MAINLY RESPONSIBLE FOR SUCH CAPITAL MISALLOCATION?

One serious problem is over-investment in the heavy industry on the one hand and the difficulty of obtaining bank loans by vibrant and productive small firms on the other. This

\(^1\)This estimation is nonlinear and depends on the initial state of the economy.
Figure 1. Consumption and investment rates in China. Data source: CEIC and the National Bureau of Statistics.

The paradox has been recognized by the media and researchers, but how was this problem created in the first place?

Over-investment in China’s heavy industry would not have taken place without active government policy. Since the late 1990s, the government has been actively promoting the heavy industry as part of its strategic plan. Encouraged by the central government’s policy, local governments made implicit guarantees of long-term bank loans to the heavy industry. The easy access to long-term loans distorted business finance and crowded out short-term loans needed by vibrant and productive small firms (Chang, Chen, Waggoner, and Zha, 2015), as shown in Figure 2. Indeed, long-term and short-term loans are negatively correlated (-0.4), in sharp contrast to the U.S. economy in which the correlation, over 0.6, is significantly positive. Such preferential policy was largely responsible for credit distortion of large versus small businesses and of productive versus unproductive firms.
IV. Why are financial reforms crucial to achieving sustainable growth in the future?

The seeds of this distorted credit policy were sown in the latter part of the 1990s when the 8th National People’s Congress passed a historic long-term plan in March 1996 to adjust the industrial structure over the next 15 years in favor of strengthening the heavy industry. This strategic plan, coupled with the preferential credit policy in favor of large firms, brought forth the success of China’s past growth. Ironically, the same financial arrangement turned out to be the thin edge of a wedge driven into the heart of the problem faced by China in the future: the sustainability of past growth. This problem has alarmed Chinese policymakers. The 18th National People’s Congress in 2012 explicitly expressed concerns about low consumption and income growth in China.

Moreover, the preferential credit policy has begotten the debt problem faced by China’s large corporations and local governments alike. Concurrently, the rapid rise of shadow banking, especially entrusted loans, may have created a serious problem for China down
the road (Figure 3). ² Financial reforms dealing simultaneously with distorted loan policies, shadow-banking practices, and local government debts seem more important than ever to ensure the sustainability of China’s growth. The State Council, on June 11, 2015, issued policy guidelines on firm dynamism, so called massive entrepreneurships and innovations in modern China. In these guidelines, the Council made clear that financial reforms were crucial to reduction of capital misallocation and other resource misallocations to garner productivity gains.

![Entrusted loans as percent of total social financing net of stocks and bonds](image1)

![Entrusted loans as percent of total shadow-bank lending](image2)

**Figure 3.** China’s shadow-banking sector with all series being newly originated credits. Data source: CEIC and WIND.

V. Conclusion

In a nutshell, China’s imbalances brought forth by past dazzling growth may have had more to do with deliberate macroeconomic and credit policies than improvements in productivity. With proper financial reforms to correct the imbalance and effectively cool over-investment in the heavy industry, the pains of reducing GDP growth in the short run are perhaps necessary to achieve a sustainable and balanced growth path in the long run.

²Total shadow-bank lending is the sum of entrusted loans, trusted loans, and bank acceptances.
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