Policy Perspectives from the Bottom Up: What Do Firm-Level Data Tell Us China Needs to Do?

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Loren Brandt provides an informative, careful, and thoughtful microeconomic 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 state-owned enterprises (SOEs) and privately owned enterprises (POEs) are fascinating and will be consistent with the arguments I later develop.

The paper argues that there exist "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:

- ${\bf 1}\ \ What is the tradeoff between short-term and long-term growth prospects?$
- **2** Is China's spectacular growth in the past two decades an unalloyed progress?

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- **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.

What Is the Tradeoff between Short-Term and **Long-Term Growth Prospects?**

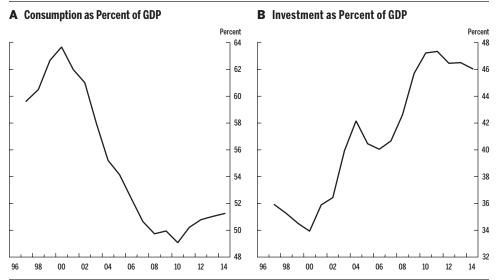
At what level China's economic growth is sustainable in the long run is almost impossible to reckon. To a large degree, it will probably depend on the success of financial reforms, as will be elaborated in sections below. One thing remains clear: there will be a painful tradeoff between short-term and longterm growth prospects. Based on the time-series model estimation of Higgins, Zha, and Zhong (2016), it is reasonable to expect China's gross domestic product (GDP) growth to slow down to 5.5-6 percent if the government is willing to reduce growth of fixed-asset investment (FAI) to 8 percent. This forecasting model has been tested for its out-of-sample performance of GDP growth. The root mean square error over the four-year horizon is only 0.9 percent, compared with the 2 percent error produced by the random-walk model.

According to our estimation, a 5 percentage point reduction from the current FAI growth rate leads to a .05 percentage point fall in GDP growth in the short run (over one to five years) but increases the consumption-output ratio by 20 percent over the five-year horizon from the current level. (This estimation is nonlinear and depends on the initial state of the economy.) The tradeoff 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.

Why Does China's Spectacular Growth in the Past Two Decades Fail to Continue?

This is an important question in the face of these tradeoffs. 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. Household consumption as percent of GDP steadily declined during the period of rapid GDP growth (Figure 1A), while investment as percent of GDP steadily increased in the same period (Figure 1B). Brandt indicates that China's investment may be overestimated or consumption may be underestimated. We have

FIGURE 1 **Consumption and Investment Rates in China**



Sources: CEIC Data and the National Bureau of Statistics.

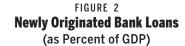
done such adjustments ourselves, including questionable housing services, given the underdeveloped rental market in China. Nonetheless, no matter how one adjusts the time series of China's GDP components, these level adjustments do not change the basic growth pattern displayed in Figure 1.

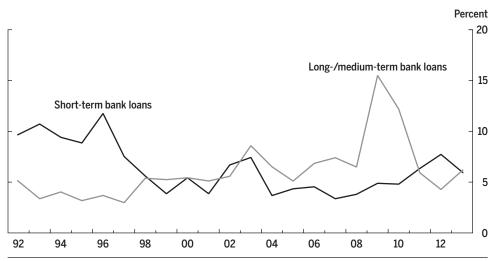
How important is the rise of the investment-output ratio to GDP growth? A growth-accounting exercise confirms that capital deepening (investment) accounts for a majority of GDP growth, about 74 percent between 1998 and 2011. It is not a mystery that China's growth has been driven by a boom in investment. What is less known is that much of the unprecedented investment boom has gone into overcapacity and real estate sectors. As argued by Chang et al. (2016), 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.

But What Macroeconomic Policy is Mainly Responsible for such Capital Misallocation?

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

Overinvestment 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 longterm loans distorted business finance and crowded out short-term loans needed by vibrant and productive small firms (Chang et al. 2016), 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.





Sources: CEIC Data and the National Bureau of Statistics.

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). (Total shadow bank lending is the sum of entrusted loans, trusted loans, and bank acceptances.) Financial reforms dealing simultaneously with distorted loan policies, shadow

FIGURE 3 China's Shadow Banking Sector with All Series Being Newly Originated Credits A Entrusted Loans as Percent of **B** Entrusted Loans as Percent of Total Social Financing Net of Stocks and Bonds **Total Shadow Bank Lending** Percent Percent

Sources: CEIC and Wind Information Co., Ltd.

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.

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 overinvestment 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.

REFERENCES

Chang, Chun, Kaiji Chen, Daniel F. Waggoner, and Tao Zha. 2016. "Trends and Cycles in China's Macroeconomy." NBER Macroeconomics Annual, Vol. 30, eds. Martin Eichenbaum and Jonathan Parker. National Bureau of Economic Research, pp. 1–84.

Higgins, Patrick, Tao Zha, and Karen Zhong. 2016. "Macroeconomic Forecasts for China." Unpublished manuscript.