



The Domestic Solution

Can China's growth be sustained through good-neighbor policies?

A construction site in Guangzhou, China.

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FOR economists and political scientists—as much as for tourists seeking adventure—China is intriguing. It is huge and enormously populous. It has a multilayered ancient culture and history. It has become fully engaged with the global economy in recent years, and the blistering growth of its output and exports has had a significant global impact. Moreover, the country is large enough for its policies to influence the rest of the world. China is achieving comparatively strong growth even during the current global economic crisis, but a massive drop in employment is prompting a profound reconsideration of policy options.

Recent research at the IMF (Lipschitz, Rochon, and Verdier, 2008) has sought to use a formal growth model to answer some general questions about the process of growth in developing countries and specific questions about the driving forces in the case of China.

- How is China's catching-up process different from the norm? Does its large and significantly underemployed labor force help or hinder its performance?
- Does the extraordinary competitiveness of China's industry reflect underlying structural characteristics or—at least in the past few years—a mercantilist beggar-thy-neighbor exchange rate policy?
- Why, despite a very high domestic saving rate, does China still have sizable inflows of foreign direct investment?

A transitional growth model for catching up

For any country, output (and thus income) is created by combining capital and labor to produce goods and services. But much depends on the institutional and technological environment within which these factors of production are combined. For many countries the transition from a controlled economy to a market economy has changed the institutional and technological setting and elicited sizable increases in the productivity of labor and capital. These productivity increases have raised returns on capital and encouraged investment, and

thereby increased the productivity of labor and sustainable wages even further. Thus, an endogenous process of better institutions, improved technology, higher returns, increased investment, more employment, and higher incomes has resulted. Certainly, the reform and opening up of the Chinese economy since 1978 has been a development of this sort. Such a process, however, is transitional: at some point the institutional and technological environment will catch up with that in advanced economies and the era of easy growth gains will end, and thereafter growth will revert to a rate more similar to that in advanced economies.

One other part of this catching-up process is important: workers will be sucked out of the agrarian economy (as productivity there improves and labor mobility is increased) and into the high-growth (usually manufacturing) economy. Putting this “reserve army” of workers into higher-productivity jobs is a critical part of the high-growth catching-up process, especially in populous countries with large low-productivity agricultural sectors.

For China the stylized facts are unusual (see box). Both growth and investment rates have been very high. Although a low initial capital-to-labor ratio would ordinarily be associated with large returns to capital and substantial investment, this investment could be financed as easily through foreign borrowing as through high domestic saving. Nevertheless, the domestic saving ratio has been extraordinarily high—exceeding domestic investment in recent years.

A mercantilist strategy?

China critics (see, for example, Goldstein and Lardy, 2005) argue that the very high saving rate reflects an undervalued exchange rate that has suppressed consumption by skewing income distribution away from wages and toward profits. China's intervention in currency markets has certainly influenced the nominal exchange rate, but it is not clear whether the extraordinary competitiveness of Chinese industry has

been sustained by this policy or by more fundamental structural characteristics of the economy.

Consider the following thought experiment. If wages in Chinese industry were in equilibrium—that is, workers were paid the value of their marginal products—and the authorities were to engineer a 30 percent appreciation of the renminbi, would there really be a corresponding increase in real wages (that is, nominal wages deflated by the renminbi product price)? If so, to the extent that this could not be passed on entirely to buyers, it would surely eventually force a significant drop in employment and downward pressure on real wages—unless there were some *deus ex machina* that somehow simultaneously produced an increase in labor productivity.

An alternative, more subtle, version of the undervalued exchange rate argument starts from a disequilibrium situation and thus departs from the formal modeling exercise. Imagine that the starting position in China is one where workers are being paid less than the value of their marginal products, and that there is a natural tendency toward a *real* appreciation of the renminbi—that is, an increase in China's relative unit labor cost adjusted for the exchange rate—that is being deliberately slowed through a policy of intervening to prevent an appreciation of the exchange rate. In these circumstances, an appreciation would hasten the movement toward a new sustainable equilibrium, and the foot-dragging on exchange rate policy is slowing an inevitable process—perhaps with the objective of gaining short-term competitive

advantage. Of course, an argument along these lines would require some evidence of the initial disequilibrium—most obviously mounting inflation pressures.

Much of the debate on China has focused on this issue of its exchange rate policy as part of its growth strategy. There has often been more heat than light. It is for this reason that we have sought to formalize the issues more precisely and to uncover the underlying forces at work.

A real growth model for China

We have formulated a conventional real neoclassical growth model, set up to capture some telling characteristics of the Chinese economy and parameterized with numbers that plausibly reflect the situation in China.

- The Chinese economy of the model cannot influence the foreign interest rate at which it borrows, but it can influence prices in the world market for its industrial products.
- Production requires two kinds of capital—domestic and foreign—that are complements in production. Foreign capital can be acquired in global markets at a fixed rate. Domestic capital can be generated only by domestic saving. (This is intuitive if one thinks of domestic capital as human capital, with a very limited supply of Chinese language-proficient skilled workers available to import from abroad.)
- The model focuses on the urban industrial sector. However, the rural sector has a substantial surplus of workers willing to move to the urban sector whenever the urban wage exceeds that in the rural sector. The speed of migration depends on the degree of labor mobility.

These latter two characteristics drive the model. For example, if there is an accumulation of domestic capital, it will raise the returns to labor and foreign capital, increasing migration, employment, and foreign investment. Because there is no limit to the availability of foreign capital and there is a large reserve of rural labor, domestic capital is *the* scarce factor; it earns large returns and elicits high rates of saving.

We ran the model through various experiments—shocks to productivity, foreign demand, and interest rates—to illustrate its mechanics. The results are informative. To the extent that labor is mobile, the substantial excess of workers from the rural sector reduces the variance of both wages and the real exchange rate. Any increase in foreign demand is more likely to elicit increased employment, greater foreign investment, and higher saving (in response to an increase in the return to scarce domestic capital) than a rise in wages and the real exchange rate. The model thus seems to pick up critical characteristics of China's recent history—high saving coupled with substantial foreign direct investment and wages that seem to be maintained at very competitive low levels. Moreover, these characteristics emerge from a model that is “real”—that is, one where there is no scope for influencing the nominal exchange rate. The model, however, is limited: it does not explain other developments—for example, the massive accumulation of foreign reserves—that may be indicative of disequilibrium.

The model also provides a perspective on the impact of the current global turmoil on the Chinese economy. A critical consideration here is the numerical characterization of the

China: key points

Growth, saving, investment, and foreign investment are high.

- Growth averaged 9.6 percent in the decade through 2007, but will continue at a lower rate in the current crisis.
- The national saving rate was 54 percent in 2007, compared with an average of 33 percent for a sample of other emerging market economies (still well above the rate in advanced economies).
- The investment ratio in 2007 was 43 percent, compared with 29 percent on average in other emerging market economies; it is much lower in advanced economies.
- Net foreign direct investment in China has increased from less than \$3 billion in 1990 to more than \$120 billion in 2007.

Manufacturing wages are very low by international standards but very high relative to those in the rural economy.

- There is a lack of reliable current data, but data for 2002 show Chinese wages in manufacturing at 3 percent of U.S. levels—compared with 33 percent in the other Asian emerging economies.
- In 2007, per capita incomes in rural households were 30 percent of those in urban households, and the ratio had been on a declining trend since the late 1990s.

China's large army of rural labor drives internal migration.

- China's agricultural sector has a reserve army of surplus labor estimated to be perhaps as large as 200 million (see Banister, 2005).
- Internal migration is driven by the large labor surplus in the rural economy and the sizable wage differentials between urban and rural workers.

labor market as highly elastic; this, together with the economy's reliance on industrial production for export, imposes the brunt of the adjustment to an external demand shock on industrial employment. A drop in foreign demand for Chinese goods puts downward pressure on the terms of trade, forces Chinese firms to reduce prices, cuts profits, and lowers industrial wages. More important, however, in an economy with such a marked trend movement of labor into the industrial sector in recent years, it also reduces manufacturing employment sharply, sending workers back to the agrarian economy. For the government, resisting this deindustrialization of labor may well be *the* policy imperative.

Because the model is neoclassical and not Keynesian, it is not set up for short-run policy analysis. In particular, any assessment of the appropriate policy response to a Keynesian drop in demand—that is, one that is impervious to price competitiveness—is, to an extent, speculative. However, the results suggest that if there were ever a time for the Chinese authorities to stimulate domestic demand and reduce the economy's reliance on foreign demand, this is it. Policies to boost domestic demand—fiscal stimulus, among others—may be the only way to stanch job losses in the manufacturing economy.

Policy conclusions and caveats

The model experiments show that it may be possible for a country with structural characteristics like those of China to sustain, for a considerable period, a situation of very low wages in industry, high domestic capital returns, and rapid export-led growth. But dangers emerge when the underlying characteristics change, and the authorities—either through simple inertia or encouraged by domestic interest groups—resist adapting to this change. Trying to hold on to a low-wage strategy (in which the real exchange rate is inappropriately valued) in the face of emerging disequilibrium—for example, price and wage pressures—is a dangerous strategy. It risks raising inflation and inflation expectations in a way that may become entrenched

and thus prove costly to reverse. It also risks excessive vulnerability to adverse developments in foreign demand.

In the current circumstances of a substantial drop in external demand, policies to stimulate domestic demand in China may be the only way to sustain growth and employment—certainly China is one of the few emerging market economies without

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an external financing constraint that would preclude such policies. Aggressive demand stimulus in China would, moreover, be a “good-neighbor” strategy, contributing to global demand and a resolution of the current global crisis. ■

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