To be sure, export-led growth has fueled China's economic rise so far, with its current-account surplus growing to 10% of GDP in 2008. But such high surpluses are ultimately impossible to sustain. There simply is not enough import demand in the world to absorb ever-growing Chinese exports.

The global financial crisis exposed that reality. Before 2008, China's massive surpluses were matched by unsustainable credit-fueled deficits in developed economies. When boom turned to bust, falling global demand hit China's export sector, and threatened to increase unemployment.

In response, China turned to the domestic growth engine of credit-financed investment in infrastructure and real estate. Since 2008, credit has surged from 125% of GDP to more than 210% of GDP, enabling investment to increase from 42% of GDP to nearly 48% last year.

Across China, concrete was poured into apartment blocks, multilane highways, convention centers, railway stations, and airports. Real-estate investment now accounts for 15% of China's GDP, compared to less than 5% in 2000; when related industries like steel and cement are taken into account, that figure rises to one-third of China's GDP. Almost 60 million Chinese workers are employed in construction today, up from just below 20 million in 2007.

China's current growth path stands in stark contrast to that followed by Japan, South Korea, and Taiwan. When those countries' per capita GDP stood at current Chinese levels, real estate played only a minor role in their economies; indeed, the sector was often deliberately starved of credit.

The investment boom has kept China's urban employment growing strongly. But a country needs only so much housing. True, total capital stock per capita in China still lags far behind that of developed countries. But a recent International Monetary Fund report reveals the startling fact that China has now surpassed Japan and South Korea in square meters of housing per capita, having reached a level near – or, in some smaller cities, well above – the European average.

As China's construction frenzy ends, the economy is experiencing a major slowdown. By some estimates, China's growth stalled almost completely in the first quarter of this year. Even official figures indicate that several provinces outside the more dynamic coastal regions are in outright recession.

This leaves China facing two major challenges. One is financial: how to deal with the unsustainable debts of many local governments and state-owned enterprises (SOEs). Fortunately, the solutions here are obvious. Local-government debts can be shifted to the central government, or bank loans can be written off and banks recapitalized.

The second, more profound challenge relates to the real economy: how to redeploy workers and capital from the industrial sectors facing overcapacity and the most overbuilt cities.

This imperative is sometimes denied. Hundreds of millions of people, it is said, have yet to migrate to cities, where they will demand housing. But, given that almost half of China's rural workers are already over 50 years old, many may never migrate. And China's total population will begin to decline within 15 years. Far from being on the cusp of a wave of urbanization, China is within 10-15 years of its completion.

Even if urbanization did continue at a high rate, many workers would not migrate to the second- and third-tier cities where overcapacity is most extreme, but to the major coastal cities. Though the government can use its hukou (household registration) system to slow that migration, even it cannot direct people to the specific cities with the most excess capacity.

So what can be done? One option would be to export construction expertise and workers. Indeed, this is one rationale for China's "one belt, one road" initiative, which aims to recreate the ancient overland and maritime Silk Roads connecting China to Europe. But, as with any export-based strategy, the impact of this approach would be limited by the size of potential external markets, relative to China's economy. No feasible level of construction exports can fully compensate for faltering domestic investment.

Domestic consumption, supported by strong wage growth, must instead be the dominant driver of growth. The good news is that wages are already growing faster than GDP – a trend that is likely to continue, as demographic change restricts the supply of new labor. Over the next decade, the number of Chinese aged 15-30 will fall by almost 25%.

But major policy reforms are also needed. China must take action to curb overinvestment by SOEs, cutting off such firms' access to subsidized credit and forcing them to pay much higher dividends to the government. Those revenues could then be used to improve health services and strengthen the social safety net, thereby removing the need for Chinese households to maintain high precautionary savings.

Such reforms would challenge powerful vested interests. It is far easier to build consensus around efforts, say, to add the renminbi to the basket of currencies that determines the value of the IMF's reserve asset, the Special Drawing Right – a move that, while appropriate, would do little for medium-term growth. But, if China is to replicate the success of Japan, Korea, and Taiwan, there is no alternative to tough reform.