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The Great Migration

How China's 200 million new workers will change the economy forever

- **The gradual migration of 200m surplus rural workers to the industrial and service sectors has huge implications for the economy and markets**
- **Wages will stay low but exports and capital inflows will continue to rise**
- **China also needs to recycle its savings through the global financial markets to finance sustained growth**

To many investors, China is full of puzzles. Why does the country export capital when it attracts massive amounts of FDI? What can the authorities do about the renminbi's exchange rate? Will China change its export-led growth model? And how long can the country's construction spree and the surging demand for commodities last?

The answers to these questions, in our view, lie in the exodus of the 200m surplus rural workers to the industrial and service sectors in the cities over the next two decades. Our report focuses on the key issues involved in this great structural shift and the implications for the economy and financial markets.

Twenty-five years of economic reforms have led to the rapid development of the eastern coastal regions. But rural regions and industrial hinterland, home to nearly two-thirds of the population, have fallen far behind. Expanding the growth base to let more people share the wealth being created is the key to China's successful development in the coming years.

China's arable land per capita is less than 30% of the world average, so relocating the massive surplus labour force to the high productivity industrial and service sectors in the cities is a desirable and natural step towards economic development.

The expansion of labour-intensive manufacturing and exports will remain the key driver for this rural exodus. This requires keeping the renminbi's effective exchange rate competitive. To finance sustainable growth, China must also attract more FDI and, given the inefficiencies of its own financial system, recycle part of its massive domestic savings through the global financial markets.

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- Wages will stay low but both exports and capital inflows will continue to rise
- China also needs to recycle its savings through the global financial markets to finance sustained growth

The China puzzle

To many investors, China is full of puzzles. Why does the country export capital when it attracts massive amounts of FDI? What do the authorities want to do with the renminbi's exchange rate? Will China change its export-led growth model? And how long can China's construction spree and the surging demand for commodities last?

The answers to these questions, in our view, lie in the country's 200m rural surplus labour force and the ongoing movement of these new workers to the industrial and service sectors in the cities. Our report will focus on the key issues involved in this great shift in the labour force and the implications for the economy and financial markets.

China's extraordinary economic expansion masks the simple fact that the growth has been concentrated on its eastern coastal provinces. The interior and rural areas, home to nearly two thirds of its people, have fallen far behind, with average income in rural areas a third of that in cities. So expanding the growth base and letting more people share the wealth being created is the key to China's successful development in the coming years.

China's arable land per capita is only 30% of the world average. This makes it difficult for the 800m rural population, who represent around 60% of the total population, to increase their productivity and income.

Relocating surplus labour from the traditional agricultural sector to high productivity industry and service sectors in the cities is both a desirable and natural step towards economic development. In fact, Beijing's market-oriented economic reforms have already led to the 50-year artificial wall between rural and urban labour markets being torn down. As a result, some 80m members of the rural labour force have moved to cities over the last decade.

We estimate that there are still at least 200m surplus people in the rural labour force. Most are below 35, have completed nine years of basic education and are queuing for a city job. China, therefore, is in only a part of the way through the process of industrialisation and urbanisation.

New industrial towns in the eastern coast provinces are to China what Manchester was to England during the industrial revolution in Britain. As centres of labour-intensive

manufacturing, they have absorbed more than 70% of the rural migrants. Industrial expansion has been and will remain the key driver for this movement of rural labour to the cities, just as it was in Europe, Korea and the US.

Yet China is different in many respects. First, given the sheer size of its surplus labour force, the shift can occur only in the context of the global markets, implying that China must export some of its labour services one way or other. In our view, the labour services embodied in making manufactured goods for export represent the best option.

Second, foreign direct investment will continue to play a crucial role in further expansion of China's labour-intensive manufacturing. Not only will the abundant supply of cheap labour continue to lure more global manufacturers to China, but the weakness of the Chinese financial system means the economy needs strong FDI inflows to finance industrial expansion and job creation.

Despite a domestic national savings rate of 50%, there is plenty of evidence that the financial system has channelled most of these precious resources to ailing state-owned enterprises and government construction projects. This leaves FDI and informal credit markets the main source of finance for the fast-growing and more efficient private industrial sector.

By exporting a part of its domestic savings to industrialised countries and importing FDI, China is effectively using more sophisticated financial markets as a substitute for its dysfunctional financial system to use its savings more efficiently. China must continue to recycle its savings (running a current account surplus and build up FX reserves) to sustain its growth, at least until its financial system improves.

Apart from the supply side effect, such as productivity, wages, scale of manufacturing capacities, this great shift in labour will also boost China's urban population by 3% a year in the next 20 years, creating incremental demand for housing, energy, soft commodities and manufactured consumer goods.

We estimate that the inflows of migration are likely to support a 10-12% annual growth in construction investment in the coming decades. However, it doesn't means that current cyclical upsurge of nearly 30% in construction-centric investment is sustainable. It is important not to confuse structural trends with cyclical swings in Chinese demand.

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An uneven growth model is unsustainable

- China's high economic growth rate masks the fact that the wealth gap is growing fast
- While eastern coastal areas boom, interior and rural regions, home to two thirds of the population, fall further behind
- Balancing the growth will be a must to sustain the country's development

Deng Xiaoping said: "Let some people get rich first"

Now it's time to spread the wealth more evenly

China's record of economic growth over the last 25 years is impressive. While the question of whether the official GDP 9.4% average growth rate is an overstatement is still a matter of debate, you do not have to look beyond the following key facts to get a real sense of China's economic growth:

- Household sector bank deposits - the dominant assets of private wealth - increased from RMB40bn in 1980 to RMB12 trillion last year
- In 1980, only 15% of families in cities owned a colour TV and a refrigerator. By 2004, 70% of families in cities owned a home, a cellular phone and a DVD player.
- Urban households' Engle co-efficient ratio (food consumption as % of total living expenditure) has dropped from 57% to 38% in the period.

Market-oriented reforms, an open-door policy and capital accumulation have been the key drivers for growth over the last 25 years and will continue to support growth in the coming decade. Unlike other former socialist economies, China has taken a gradualist approach. Shenzhen and three other coastal cities in southern China pioneered the policy of opening the country to foreign investment in the early 1980s. The initial success encouraged the government to expand the policy to all coastal cities in the late 1980s.

The gradualist approach has worked, allowing China to avoid negative output shocks during the transformation to a market-oriented economy over the last two decades. It has also allowed China's policymakers to gain valuable hands-on experience of managing rapidly changing economic and social conditions.

That said, this approach has inevitably led to unbalanced growth, widening the development

gap between the interior and coastal regions as well as rural and urban areas.

Coastal boom

Given their natural advantages such as convenience for shipping, the coastal provinces were chosen as the laboratory for the open-door policy and the other reforms introduced in the early 1980s. The resulting flow of most of China's FDI into these provinces fuelled the boom in the production and export of manufactured consumer goods.

Foreign joint ventures created jobs, generated income and invigorated the local business sector as the knowledge base expanded. The presence of foreign companies also forced local governments to improve the business environment, which in turn lured more investment from other provinces and overseas.

FDI inflows and exports have boosted the annual GDP growth of the eastern coastal regions to 13% in the past 20 years compared with the 9% national average. The region has reinvested a substantial proportion of the wealth generated in improving the local infrastructure over the past decade. Investment growth in capital construction has remained above 20% pa since 1998. Over the last five years, investment in road, bridges and other capital construction projects in the 11 coastal provinces has accounted 65% of the national total.

The development of industrial clusters will be an important supporting factor for growth in the coastal regions over the next decade. For example, Dongguan, a mid-sized city in the Pearl River Delta, has attracted 2,000 electronics manufacturers over the past decade. More companies are likely to move there, attracted by the large pool of specialised suppliers and a skilled work force. Such localised advantages will create a virtuous circle that will lock similar industrial clusters into the coastal regions.

First-mover advantages, be they liberalisation, better infrastructure or industrial clusters, mean the already-rich coastal regions will continue to grow faster than the interior provinces over the next decade. WTO-induced trade and investment liberalisation will reinforce this trend.

As FDI inflows continue to rise and the coastal regions become further embedded in the global economy, productivity should increase even faster than the nearly 7% pa rate recorded in the past 10 years. This will boost the incomes and living standards of the 250m urban residents of the coastal provinces.

Interior regions lag behind

While the prosperous coastal regions will grow faster by capitalising on their deeper integration with the global economy over the next decade, the poor interior provinces are likely to lag even further behind. These provinces, which are home to two thirds of China's population but produce less than 10% of the nation's exports and receive only 12% of the FDI inflows, are unlikely to gain much from WTO-induced foreign trade and investment expansion.

China's further integration into the global economy will have a net positive impact on both

1. Eastern vs central vs western regions

2001	Land area		Population		GDP			Retail sales		Exports		Imports	
Region	1000² km	%	million	%	RMBbn	%	Per capita (RMB)	RMBbn	%	USDbn	%	USDbn	%
East	1303.3	13.5	527.1	41.6	6362.4	59.6	12070.6	2348.8	59.9	242.6	91.15	222.7	91.42
Central	2848.2	29.6	379.1	29.9	2446.2	22.9	6452.0	901.4	23.0	15.84	5.95	13.2	5.41
West	5425.6	56.9	361.6	28.5	1868.0	17.5	5166.0	670.4	17.1	7.72	2.90	7.7	3.17

Source: CEIC

GDP growth and employment in the long run. Averages, however, can contain widely differing numbers. The agricultural and SOE-dominated industrial sectors will be the biggest losers in terms of production and employment. The Development Research Centre under the State Council estimates that WTO accession will cost 18m jobs over the next five years. The brunt of these losses will be in the interior regions given their reliance on the SOE-dominated industrial and agriculture sectors.

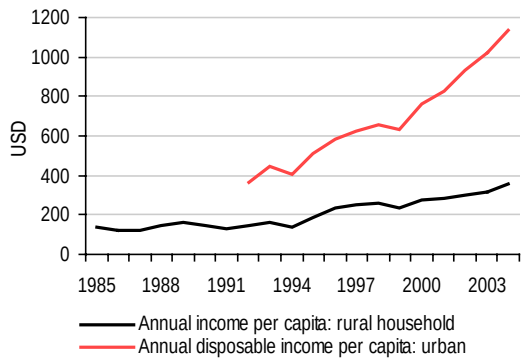
The northeastern provinces of Heilongjiang, Jilin and Liaoning, for instance, were the industrial heartland of China in 1940s and pioneered centrally–planned industrialisation. The traditional state-controlled heavy industries remain the core of their economies. Since 1997, these industries have already shed six million jobs, lifting the real unemployment rate to over 15%.

Despite these losses, the SOEs, half of which are losing money, still employ over 60% of workers in the urban areas of these provinces. WTO-induced trade and industrial liberalisation will inevitably force them to reduce their capacities, leading to increased layoffs in these regions over the next five years.

Rural economy: going from bad to worse

China does not have a comparative advantage in agricultural production, especially for grain, cotton and other land-intensive crops. Arable land is an increasingly scarce commodity in China, as the ongoing economic expansion exacerbates 5,000 years of overuse of the land's capacity for crop growing. Despite this, nearly 60% of China's 1.3bn people still live in rural areas. While the headline GDP growth rate has averaged 9% in the past decade, average growth in agricultural value-added output was 3.7% (compared with 5.5% in the 1980s). During the past three years growth slowed to 2.6%, implying stagnation in the rural economy.

2. Rural-urban income gap is widening

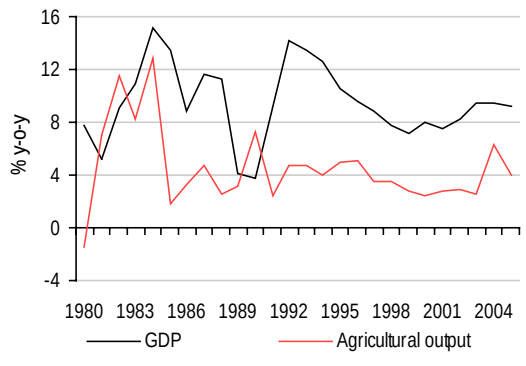


Source: HSBC

Official figures suggest that growth in cash income of rural households slowed to less than 2% between 1998-2003. To prevent this situation from deteriorating, the government boosted the subsidy on grain procurement prices. This worked, as the growth rate rose to 4% in the past two years. In 2004, average monthly income for rural residents was USD25, only one-third that of urban residents nationally and one fifth of those in the booming coastal cities.

China's Gini co-efficient ratio - a standard measurement of income disparity - has increased from 0.25 in 1980 to 0.43 last year. This ratio puts China in par Brazil in terms of income disparity.

3. Agricultural vs. GDP growth



Source: CEIC

The attempts to raise rural incomes need to overcome structural obstacles. Firstly, China's labour-arable land ratio is already so high that output per worker can only fall given the expected 1.2% growth in the rural labour force over the next decade. China's crop yield is already one of the highest in the world and will be hard to raise further unless there is a major breakthrough in agricultural knowledge or technology.

Moreover, WTO terms require China to lower average tariffs on agricultural products from 22% to 17% by 2006. A study by economists from the Chinese Academy of Social Science in Beijing suggests the resulting 27% increase in grain imports would cost about 10m jobs in the agricultural sector. This would increase the rural unemployment and underemployment rate from the current 40% if the migration to the cities were not accelerated.

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200m rural labour surplus

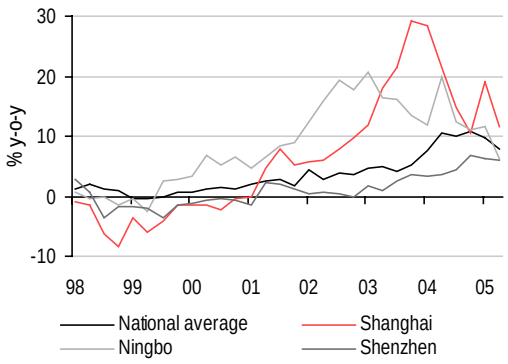
- China's arable land per capita is only a third of global average …
- … causing severe problems for the 60% of people who still live in rural areas
- Shifting 200m surplus people out of the agricultural sector is both inevitable and desirable

It's the rural population, stupid

After 25 years of reforms, the per capita GDP of the eastern coastal provinces exceeds Thailand's and is even starting to catch up South Korea and other Newly Industrialised Countries in Asia. While this is a major milestone in the country's economic development, people living in coastal cities account for only 15% of China's total population. No matter how fast the income of this minority grows, it won't be sufficient to lift the whole economy to the next level of development. In other words, China can not become a properly developed country unless the majority of the population sees their income and living standards improve significantly. The growth must be spread more evenly.

Urban dwellers in the interior regions haven't benefited from economic and trade growth as much as those in the coastal cities. But their situation will start to improve when rising land prices and wages in the coastal cities prompt more firms to move into the interior regions to lower their costs. Property prices in the Greater Shanghai area have surged 20-20% y-o-y since 2002 and rising rental costs are becoming a burden to many small enterprises.

4. Property prices in coastal regions



Source: CEIC

New investment in transportation networks and other urban infrastructure in the interior regions over the last five years will also encourage some business to move. Since 2000, the central government's Western Development and Reviving Northeastern Industrial Belt programmes have boosted infrastructure investment in those regions. Combined with local governments' efforts to cut red tape, this should spur more business investment and generate income for people living in cities and towns in interior regions.

Land constraints

The average income level of the population living in rural areas is only a third of that of city

dwellers. How to let the rural population (60% of the total) share the benefits of growth will be the key to China's development in the coming decades.

Just lifting the rural population's income to the current level of urban dwellers would boost the country's average income per capita by more than 70%. In principle, this goal can be achieved either through boosting labour productivity in farming or reallocating the farmers to other sectors with a higher productivity.

In reality, the potential for increasing labour productivity in the Chinese farming sector is very limited because of the scarcity of arable land, which accounts for less than 7% of the world's total, much less than China's share of the global population. Given the land constraints and an expanding rural labour force through population growth, labour productivity in the farming sector is very low. Until the early 1990s, the government stopped people moving to the cities through a household registration system but around 60% of the population still live in rural areas.

However, agricultural output accounted for just 14% of the country's GDP last year (Fig 7), implying labour productivity in the agricultural sector is only 12% of non-agriculture sectors. In other words, there is massive labour surplus in the rural areas.

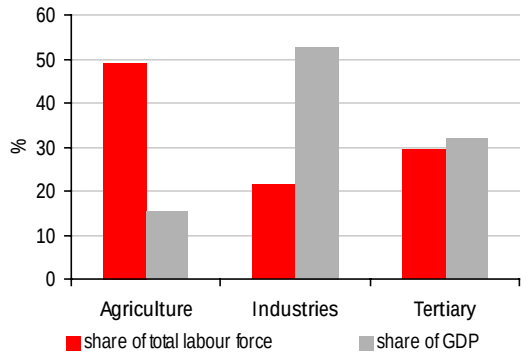
China's extremely high labour-land ratio is also reflected by the fact that although the crop yield per hectare is above the global average, the farmers' productivity is one of lowest in the world.

5. Population density

	Per sq km	Per sq km of arable land
Japan	349	993
Korea	483	562
China	137	560
India	353	460
UK	246	115
Germany	236	86
France	108	77
Brazil	21	53
US	31	34
Russia	9	31

Source: HSBC

6. GDP and employment breakdown



Source: HSBC, CEIC

Can China improve farming productivity by using modern machinery? It is possible in theory but the reality is that the average amount of farmland per family - the unit of farming - is very small, less than a hectare. Given that so many earn a living by working on the land, it is hard to see farmers being willing to invest in modern machinery.

7. China: Output per farmer vs output per hectare

	Per capita output (ton)			Per hectare output (ton)	
Nation	Cereal	Beans	Meat	Cereal	Beans
China	1.35	56.55	0.18	4.94	1.69
US	98.37	21,056.79	10.88	5.74	2.45
Japan	3.67	55.82	1.40	6.00	1.73
France	61.79	N/A	6.16	7.25	N/A
Germany	43.21	N/A	6.18	6.68	N/A
Brazil	2.92	1,891.30	0.80	2.73	2.37
Austria	N/A	257.68	8.52	N/A	2.27

Source: Hu Angang, Job Creation

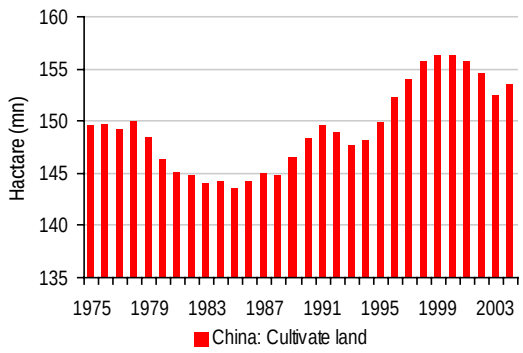
8. Chinese labour in a global context (millions)

	China		Europe		North America		Developed markets		World	
	Total	Working age	Total	Working age	Total	Working age	Total	Working age	Total	Working age
2000	1,275	871	728	494	316	209	1,194	803	6,071	3,824
2005	1,322	935	725	496	332	222	1,209	818	6,454	4,156
2010	1,365	979	720	496	348	233	1,221	828	6,830	4,467
2015	1,402	1,000	713	484	364	239	1,230	821	7,197	4,721
2020	1,429	992	705	468	380	244	1,237	804	7,540	4,931

Source: World Population Prospects, 2002 Revision

Unless China manages to increase its arable land significantly rural labour productivity will stay low. Given poor soil, drought and floods this is all but impossible, especially as the country is losing a million hectares of cultivated land each year to desertification, degradation and rapid urbanisation. There is no sign of this trend changing.

9. China's arable land: falling



Source: CEIC

The 200m labour surplus

The low level of productivity in the agricultural sector suggests that the number of people who are unemployed and underemployed is huge. Based on the method used by OECD and World Bank, we estimate that the size of the rural labour surplus is between 218-285m:

- If output per farmer was raised to the level of the non-farming sector, then today's agricultural output could be produced by 285m less farmers. These 285m farmers can be considered surplus labour
- If the benchmark were only half of the productivity of non-agricultural labour, the rural labour surplus would be around 218m (our estimate of what it is now).

Since collective farming was replaced by the far more efficient family-based system in the mid-1980s, the workload and income has been shared by family members. This income sharing means that a family farm may employ labour beyond the point where the marginal product equals the wage. This is because the wage is not seen as a cost of production, but the average output of the farm. In other words, the family farm can hire more labour than needed and the margin product of some family members is close to zero. So most surplus labour is in the form of underemployment rather than explicit unemployment. As a result, the country's crop output would be little affected should the 200m labour surplus move out of the farming sector.

Young, hungry and literate

China's census data shows that out of the country's 1.3bn population, 757m (58%) still live in rural areas. Those of working age (15-64) account for 71% of the total, reaching 537m at the end of last year. This rural workforce accounts for 13% of the world's total labour force and 65% of the total labour force in all developed countries.

The Chinese rural labour force is also quite young, with 46% (245m) being under the age of 35. This favourable demographic pattern presents a window of opportunity for China over the next two decades. To seize this opportunity, China

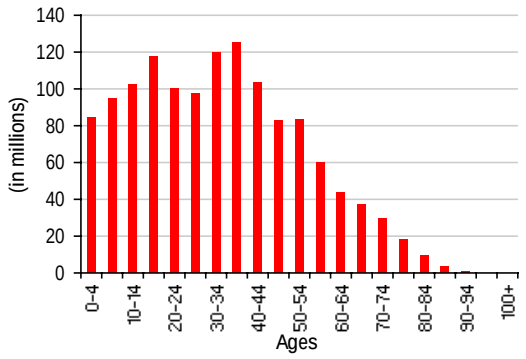
12. Population (2005-2050): China, Russia, India and Brazil

	2000	2005	2010	2015	2020	2025	2030	2035	2040	2050
China	1275	1322	1365	1402	1429	1445	1451	1448	1439	1395
Russia	146	142	138	133	129	124	120	115	110	101
India	1017	1097	1174	1246	1312	1369	1417	1455	1486	1531
Brazil	172	183	193	202	210	216	222	227	230	233

Source: World Population Prospects, 2002 Revision

must find ways to deploy its labour resources productively.

10. Age structure of the population (China)



Source: World Population Prospects: The 2004 Revision and World Urbanization Prospects: The 2003 Revision

The Chinese authorities have long emphasised the importance of education (although the Cultural Revolution in 1960s and 1970s caused serious disruption). China's literacy ratio is around 83% for all adults and 98% for those under the age of 45. Both are well above the ratios for India and the average ratio (73% and 84% respectively) for all developing countries.

11. Human development index: China vs. other Bric countries

	Adult literacy rate (% ages 15 and above) 2003	Youth literacy rate (% ages 15-24) 2003	Tertiary students in science math and engineering (% of all tertiary students) 1998-2003
Developing countries	76.6	85.2	---
Singapore	92.5	99.5	---
Mexico	90.3	97.6	31
Brazil	88.4	96.6	---
China	90.9	98.9	---
Vietnam	90.3	---	20
Indonesia	87.9	98	---
India	61	76.4	20

Source: Human Development Report 2005

That said, the education level of the Chinese labour force is much lower than that of South Korea and other newly industrialised countries in Asia. While they may never read Shakespeare, millions of rural migrant workers employed in export-oriented industries have already demonstrated that most of them can make good-quality T-shirts and assemble cellular phones and cars after some training.

65m additional workers

Despite the government's family planning programme that was introduced in the early 1980s, China remains the world's most populous country and its population is likely to continue to grow until 2030. The average annual growth rate, should, however, decelerate from 0.9 % pa in the 1990s to around 0.5% pa over the next two decades, only half of the forecast world average and well below India's current 1.5% pa growth rate. As a result, India is likely to surpass China in terms of population by 2035.

Benefiting from a baby boom in the 1960s and the early 1970s, China's population of working age people will continue to grow at an average annual rate of 1.5% pa over the next decade, triple the rate of population growth. As a result, there will be an additional 65m people of working-age people in China in the next decade, boosting the country's total working-age population to nearly one billion by 2015, a staggering 20% more than the total of all developed countries combined.

Combined with rapid urbanisation, this 65m increase in the labour force will not only support economic growth in China it will also have a

profound impact on the global economy. After two decades of economic reform and trade liberalisation, China is already the world's largest centre for labour-intensive production. Additional expansion in its labour pool is likely to further deflate wages in the global tradable sector, especially wages for lower skilled workers in other emerging markets.

On the other hand, cheap labour and economies of scale in Chinese production should enable global manufacturers to lower prices of consumer goods, benefiting consumers globally. An increase in the proportion of Chinese labour engaged in the tradable sector should also have the effect of increasing the labour-capital ratio and improving the rate of return on capital.

China's ageing challenge after 2015

Although China's working population will continue to grow over the next 10 years, the country will need to confront the challenge of an ageing population after 2015 when its baby boom generation starts to retire.

According to the United Nation's latest estimates, the percentage of retirees in the population is likely to rise from the current 11% to 15% in 2015, 24% in 2030 and 28% by 2040. Meanwhile, the country's median age will increase from 33 to 44 in the same period.

In comparison, the median age in both Japan and Germany is already around 42 and is forecast to reach 54 by 2040. Still, China is likely to have an older population structure than the United States by 2040.

All this implies that authorities need to have an effective pension and retirement policy in order to sustain economic and social prospects in the long-term. This explains why the authorities are pushing forward a plan to establish a funded pension system to provide a basic protection policy for old age.

The great migration has already begun

Given the huge income gap between rural and urban areas - a factor of three on average - it is only natural for the young rural generation to dream about better-paid jobs in the cities. But it is the following major institutional changes that kick-started the migration of rural labour to cities:

- De-collectivisation of agriculture in the 1980s gave farmers and their families the freedom to work their own land.
- Economic reforms have led to a gradual loosening of the government's control over population movement. The introduction of identity cards in 1989 and the abolition of the grain rationing coupons in the early 1990s enabled individuals, for the first time since the late 1950s, to travel around the country without showing an official letter from their local authority.
- In 1998, the government decided to reform the *Hukou* system of household registration, the main instrument for restricting citizen mobility. Some cities started to grant *Hukou* to all residents with jobs, regardless of where they originally came from.

The first batch of migrant workers was mainly engaged in catering and other informal sectors. Although compensation and job security were much lower than in formal sectors, migrant workers were earning far more than they could on the family farm.

In the late 1980s, foreign direct investment and private domestic manufacturing business started to boom, creating millions of job opportunities for rural migrants.

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The new industrial towns

- Manufacturing expansion creates most formal jobs…
- … and spurs a new service sector
- China's low-end service sector is already overstaffed

Rushing into new industrial towns

Labour migration from rural to urban areas started as early as the mid-1980s and gained momentum when the government loosened its control over labour mobility in the early 1990s. There has been an annual inflow of 5-6m from the countryside over the last decade, boosting the total number of migrant workers to around 80m by the end of last year.

Where did those rural workers go? According to various surveys, more than 80%, largely from the interior, have gone to eastern coastal provinces (Fig 13). This is no surprise given that those areas are the engines of growth.

13. Over 80% of rural workers go to eastern coastal regions

	Origins:			
	Eastern	Central	Western	Total
Destination:				
Eastern	6.7	48.9	25.9	81.5
Central	2.5	4.6	2.1	9.2
Western	1.1	1.4	6.8	9.3
Total	10.3	54.9	34.8	100

Source: HSBC, State Statistic Bureau

Given their natural advantages, such as convenience for shipping, the coastal provinces were chosen as the laboratory for the open-door policy and other reforms introduced in the early 1980s. The resulting flow of FDI into these provinces fuelled the boom in the production and export of manufactured consumer goods. Foreign joint ventures created jobs, generated income and increased the knowledge base, invigorating the local business sector. The presence of foreign companies also forced local governments to improve the business environment, which, in turn, lured more investment from both other provinces and overseas.

Within the coastal provinces, new industrial towns have been attracting more migrant workers than old ones. Rapid growth in foreign trade and the industrial base has led to the emergence of nearly 400 new industrial cities and towns cross the country over the last two decades, with 80% of them locating in coastal provinces.

The new towns in Pearl River Delta (Guangdong province), for instance, have already emerged as the world's biggest manufacturing hub for consumer electronics and textiles, absorbing nearly 50m migrant workers.

Another major cluster of new industrial towns is in the Yangtse River Delta, which includes Shanghai, Jiangsu and Zhejiang provinces. A pioneer of industrial deregulation and privatisation, the region has become a major production base of consumer goods for both export and domestic sales. Last year the region produced 25% of China's total exports.

Manufacturing the key engine of job creation

Recent survey data suggests that more than half of migrant workers found a job in the manufacturing sector, 10% in construction, and the rest in the service sector. While the service sector includes well-paid jobs in department stores and logistics, it also includes low-paid temporary jobs in small restaurants, self-employment and other type of informal jobs.

Wages in these types of job are normally better than farming but much lower than in both the industrial and formal service sector. Many rural migrants often take a job in the informal sector when they first arrive while they wait for the opportunity to get a better-paid position. Workers in the informal sector in cities provide a reserve pool of labour for the industrial and formal service sector.

Labourers continue to flow to coastal provinces

Already the production base for over 80% of China's exports and the recipients of 70% of the FDI inflows, the new industrial towns in the coastal provinces are also likely to grab most of the gains from globalisation-induced foreign trade and investment expansion over the next decade. Not only do they have better infrastructure facilities and investment climates but the industrial cluster effect also gives them another advantage.

The economic analysis of the industrial cluster effect (or external economies) goes back a 100 years to the British economist Alfred Marshall, who tried to explain the concentration of cutlery manufacturing in Sheffield and the hosiery firms in Northampton. Marshall gave three reasons why a cluster of firms is more efficient than a few in isolation:

- The ability of a cluster to support specialised suppliers;
- A geographically concentrated industry allows labour market pooling;
- A geographically concentrated industry helps enhance knowledge spillovers.

These same factors continue to be valid today, especially when the production of electronics and many other goods requires the use of specialised suppliers. So even though land prices in the coastal cities are likely to increase faster than interior provinces, many firms may still be reluctant to move because they won't want to give up the advantage of established networks of specialised suppliers. The coastal cities will continue to attract cheap labour from other provinces and FDI, grabbing more share of global labour-intensive production.

Greater scope for growth in labour-intensive manufacturing

China's share of global production and exports of textile and footwear is reaching 30%. How far can China go in expanding its labour-intensive manufacturing? We believe the potential is much greater than many thought, for two main reasons.

First, both wages and capital-to-labour ratio in China will stay relatively low in the foreseeable future, prompting more global manufacturers to shift to China. Wages in China may grow to reflect productivity growth in the industrial sector but the pace of wage growth will remain slow until the 200m surplus rural labour pool is exhausted. Since this pool is as big as 75% of total existing employment in cities, wage inflation is likely to remain muted in industries and services sectors for the foreseeable future.

14. Hourly compensation costs for manufacturing workers in U.S. dollars

	2003
China	*0.62
US	21.11
EU-15	19.80
Japan	18.49
UK	17.89
France	17.12
Australia	15.50
Spain	11.93
Korea	9.00
Singapore	6.90
Taiwan	5.73
Hong Kong	5.66
Portugal	5.07
Czech Republic	3.83
Mexico	2.60
Brazil	2.53

Source: US Department of Labor
Note: * China uses 2002 as the latest

Meanwhile, continuing rural labour flows also keep capital-labour ratios in the Chinese industrial sector at a relatively low level. In other words, capital can earn higher returns in China than in other capital abundant countries. Combined with improving infrastructure facilities and the sheer size of the domestic market, this will encourage global manufacturers to continue to shift labour-intensive production to China.

Other factors, such as industrial clusters, rising capital mobility and WTO-induced deregulation, including the abolishing of import quotas for Chinese textiles, will only accelerate this trend.

Moreover, recent IT developments and standardisation of production technology make it possible for manufacturers to slice up their production process, giving the region even more scope to expand its labour intensive manufacturing base.

Apart from textiles, footwear and other traditional sectors, China also has a comparative advantage in assembly and other labour-intensive stages of production for many other industries, including technology. The best example is the shifting of assembly plants into China by the international laptop makers over the last few years.

Apart from the massive surplus rural labour force, China also has a significant pool of well-educated graduates, even if it represents only a small proportion of the total labour force. College/university enrolment has increased more than 10 times in the last 20 years.

This year, there will be about 3.5m fresh university graduates (compared with 1.3m in the US), with more than half of them majoring in science, maths and engineering technology. This contrasts with other developing countries like Brazil and developed markets like the UK where the ratio is below 30%. This gives China a comparative advantage in the high-end of labour-intensive production. The latest UN report on world FDI suggests that multinational companies now rank China and India as the top future locations for research and development activities.

Service sector's role in absorbing surplus labour

A popular view of China's labour relocation goes like this: China's manufacturing and exports are already very big but the service sector is still underdeveloped. So labour-intensive services should take a leading role in absorping surplus rural labour in the future.

The problem with this argument is twofold. First, at this stage of development, it will hard for China to push forward its labour relocation or urbanisation process without further industrialisation (i.e. expanding the manufacturing base).

My uncle's family is a case in point. My uncle, who is a farmer in Shaanxi province, has two sons and a daughter (the one child policy never works in rural China). But the two hectares of farmland the government has leased to the family is too small to keep everybody busy. Two years ago, his daughter and younger son went to Guangdong to seek better-paid jobs.

The son found a job in a shoe factory and the daughter works in a hotel in Dongguan, a new industrial town near Shenzhen. Both earn around USD80 a month, have a better lifestyle and also send some money back home. If there were no factories then there would be no need for a hotel and other service facilities in Dongguan. If that was the case, it is hard to image that my cousins could make a living in Dongguan by cutting hair or making tea.

The low-end, labour-intensive service sector is already fully (if not overly) developed in Chinese cities. Go to any restaurant and you will probably see more waitresses than customers and there are barbershops, foot massage establishments and bars everywhere. High-end service is indeed still underdeveloped, but this is not relevant when it comes to absorbing rural surplus labour.

HSBC

Exporting labour services

- For China, export manufacturing is not just a means to earn foreign exchange…
- …but also the best channel for exporting its labour services
- ,…which holds the key to absorbing the rural labour surplus

The myth of China's high exports-GDP ratio

A common misconception about China's exports is that the Chinese economy has already become too dependent on exports and needs to shift to the domestic sector to drive growth.

China's 36% exports-to-GDP ratio is often cited as evidence to support this claim and if the statistic is taken at face value, China's is much higher than most other big economies (fig.1).

15. Export-GDP ratio

%	2004
Advanced economies	24.7
Newly industrialised Asian economies	86.3
World (all WEO countries)	28.3
China	36.0
Germany	33.7
Mexico	27.9
France	18.6
Italy	17.8
UK	16.5
Japan	12.1
India	11.4
United States	7.0

Source: IMF, CEIC, HSBC

However, China's exports-GDP ratio is largely a statistical illusion. The total value of Chinese exports is huge, topping USD590bn last year, yet up to 50% of this is actually the value of intermediate and semi-finished products imported from other countries. If the "double accounting" of the import content is stripped out, China's export-GDP ratio is around 18% - slightly below the average level for countries that can be compared with China.

Since the most conventional method of compiling trade statistics is based on gross rather than value-added terms, many other countries also have the same problem of "double accounting". But where a country stands in the global value-added chain makes a huge difference to the extent of the problem.

The US, Japan and some European industrialised countries, for instance, are at the top end of the chain. They are engaged in designing, producing and then exporting key components (eg Intel chips and Rolls-Royce jet engines) that account for the bulk of the total value of the finished products.

China is the opposite, mainly participating in the final stage of global production chains - the assembly and processing of imported components and other intermediate inputs into finished products (eg cellular phones, notebook PCs and Nike shoes) before distributing them to end users around the world. The value being added in China is low and the finished products coming out of China have an exceptionally high import content.

Production disintegration and trade integration

Globalisation, the IT revolution and economic deregulation in developing countries in the 1990s led to a major shift in production, trade and investment flows. The new patterns of global production and trade are no longer as simple as the Richardo and Hecksher-Ohlin models - countries specialise in producing and then export certain products where they have a comparative advantage and import those they don't. The revolution in technology and IT makes it possible for manufacturers to break up the production process into separate stages and locate them in the countries where they can be completed most efficiently.

New strategic thinking by the multinationals has created global supply chains. What used to be made in different workshops inside one factory in one country is now produced by subsidiaries or subcontractors around the world. The multinationals are taking full advantage of each country's resources and comparative advantages.

This trend has had a profound impact on trade patterns. A country can now specialise not just in making the products that match its resources but also in individual stages of the production chain previously seen as having no comparative advantage. This has boosted productivity and income growth in many countries. It also means a specialisation-driven reduction in product costs and therefore lower rates of inflation, especially at the consumer end.

International fragmentation of production processes has also boosted cross-country flows of intermediate goods. Economists at the Australian National University recently estimated that parts, components and other intermediate inputs account for more than 45% of Asia's overall trade. The ratio is as high as 70% in IT, electronics and other office machinery.

Key role in global production chain

With its massive labour pool, open-door policy and improving infrastructure, China has emerged as an ideal place for assembly, processing and other labour-intensive stages of global production networks over the last decade. WTO-derived deregulation has increased the confidence the multinationals have in China and encouraged them to relocate labour-intensive production there. By the end of 2004, foreign manufacturers had set up more than 300,000 factories in China, most of them engaging in assembly and processing of imported components and intermediate inputs for export.

16. Relocating into China (FDI inflows)

(% of total)	1991	1995	2000	2003	2004
Total	100	100	100	100	100
Hong Kong	55.3	53.4	39.8	33.1	31.3
Japan	13.1	8.5	7.3	9.4	9.0
Taiwan	10.1	8.4	6.0	6.3	5.1
US	7.1	8.2	10.4	7.8	6.5
EU	5.7	5.7	11.0	7.3	6.5
Singapore	1.2	4.9	5.2	3.8	3.3
Korea	0.0	2.8	3.6	8.4	10.3
Others	7.5	8.2	16.7	23.7	27.9

Source: IMF, CEIC, HSBC
Note: EU uses 2003 number as the latest

The total value of processed exports has risen rapidly over the last decade, reaching USD350bn, or about 60% of China's total exports last year. However, official figures suggest that the value of imported components is as much as 80% of the total value of the processed exports.

A Japanese notebook factory operating in China, for instance, will bring in Intel chips from the US, LCD screens from Korea and other components from its parent companies in Japan for final assembly and processing. The finished product has a total value of say USD1,000 which is recorded as an export from China to the US. However, the imported parts and components may represent up to USD800 of the value. This type of statistic grossly exaggerates China's export value and if China's exports-GDP ratio were measured

on a value-added basis it would not be at all exceptional.

17. Foreign invested enterprises' exports and imports

	FIE exports		FIE Imports		FIE net exports	China net exports
	USDbn	% of total exports	USDbn	% of total imports	USDbn	USDbn
1996	61.5	40.7	75.6	54.5	-14.1	12.2
1997	74.9	41.0	77.6	54.5	-2.7	40.4
1998	81.0	44.1	77.0	54.9	4.0	43.5
1999	88.7	45.5	85.9	51.9	2.8	29.2
2000	119.5	47.9	117.3	52.1	2.2	24.1
2001	133.3	50.0	125.8	51.6	7.6	23.1
2002	170.0	52.2	160.4	54.3	9.6	30.3
2003	240.5	54.8	232.0	56.2	8.4	25.4
2004	338.9	57.1	324.3	57.8	14.6	32.8

Source: CEIC

Triangular trade flows

Manufacturers in Asia were the first to shift the labour-intensive stages of their production networks to China to capitalise on its low labour and infrastructure costs. Over the last decade they have set up more than 300,000 plants and factories in the coastal areas. Most of these foreign-invested enterprises (FIEs) are involved in the assembly and processing of imported components for re-export, particularly to industrialised markets.

This process has helped Asian FIEs in China play an important role in boosting triangular trade flows between the rest of Asia, China and the industrialised countries. In recent years more than 60% of China's component imports have originated from Korea, Taiwan and other countries in the region and a further 20% from Japan. However, only 20% of the finished products have been exported to Asia, 18% to Japan and the remaining 60%+ to the rest of the world. China has become the final stage for Asian production networks that supply a wide range of products to the world.

The formation of Asian production networks has had the following consequences:

- China's share of global exports, especially in the US and European markets, has been surging at the expense of other Asian countries. While the increase in China's market share is partially due to "double accounting" of imported components, it has put China in the spotlight of global trade;
- Asian exports to China have surged. Last year China accounted for nearly 30% of the total exports of its neighbouring countries in North Asia and around 10% for Asean countries. In terms of contribution to export growth in Asia, China's share is over 60%. It is worth noting here that about 40% of Asian exports to China are intermediate inputs and equipment for processing and assembly for export rather than domestic use.
- This relocation of the assembly and processing stages of production networks has given a huge boost to China's gross trade. China's total trade value had tripled from USD166bn in 1992 to USD509bn last year, with FIEs accounting for more than 60% of this growth.

18. Exports to China

Source: CEIC
Note: Asia includes HK, KR, MY, PH, SG, TA, TH

HSBC

Assembly and processing are China's strengths

Processing and assembly are the keys to China's export miracle. Apart from giving a massive boost to total exports it has also significantly changed the country's export structure.

The export surge has been driven mainly by strong growth in electronics and machinery. Indeed, electronics and machinery's share of China's total exports has doubled in the last four years, topping 47% in 2004. FIEs from Taiwan, Singapore, Korea and Japan are playing a key role, with official figures suggesting that more than 70% of the country's electronics and IT exports are produced by FIEs. A large proportion of these exports has a higher-than-average import content, implying that the FIEs concentrate on the assembly of semi-finished products.

A popular view is that these exports are low value-added and should no longer be encouraged. Instead, the argument goes, the government should selectively promote hi-tech value-added exports.

This view is fundamentally flawed because how China trades with the rest of the world can only be determined by its key comparative advantage - abundant labour supply. With at least 200m surplus rural workers needing to be absorbed by non-farming sectors, China should continue to engage in labour-intensive production and trade. While it dominates the textile and footwear export markets, China is also well positioned to participate in the labour-intensive stage of the production networks for almost all industries.

China is effectively exporting its labour services. So the goods processed with imported materials are only the vehicles carrying the services of the Chinese labour to the world markets. The value-added in China - around 20% once the "double accounting" has been stripped out - represents the cost of labour.

Having a channel to expand the export of labour services is crucial to sustaining China's development, which centres on shifting rural surplus labour into industrial and service sectors. Given the sheer size of its surplus labour force, China has no choice but to expand the export of its labour services to create jobs.

For the global economy, the alternative would be controversial

Theoretically, the only other way this could be achieved is through massive emigration of the Chinese labour force to the rest of the world, especially to industrialised countries with high wages. This option is unlikely to be welcomed by developed countries.

Expanding labour-intensive production and exports is the best way for China to absorb its rural surplus labour and improve the living standards of the majority of the population that is still living in countryside. This is also a less painful way for the rest of the world to cope with China's emergence on the world economic stage.

Keeping the RMB's effective exchange rate competitive

China's market-oriented reforms have led to a breakdown in the artificial wall between rural areas and cities. It is both desirable and necessary for China to find a way to absorb surplus rural labour. Given the sheer size of the surplus, China must address this issue in a global context. In other words, China will have to further expand its share of labour-intensive global production networks to sell more of its labour services to the world markets. To do so, China should and is likely to keep the renminbi's effective exchange rate competitive in the foreseeable future.

This intention is reflected in China's recent currency reforms. The announcement by the People's Bank of China (PBoC) on 21 July effectively changed the renminbi's de facto peg to the US dollar into "a managed float system based on market supply and demand with reference to a basket of currencies." The changes include:

- Widening the daily trade band for RMB/USD from de facto 0.01% to +/-0.3%. The band for non-dollar currencies also increased to +/-1.5%;
- The PBoC will announce the closing price of a foreign currency, such as the US dollar, against the renminbi in the inter-bank foreign exchange market after the market closes each working day. It will make this price the central parity for trading against the renminbi on the following working day.
- De-pegging the renminbi against US dollar, but the PBoC will manage the central parity rate with a reference to a basket of currencies.
- A 2.1% one-off revaluation of the renminbi to RMB8.11:USD1.

Trade-weighted currency basket

The new regime is NOT a basket peg but it has some elements of basket, band and crawl (BBC rule). The basket will only be a reference for the PBoC to form its view on where the renminbi's parity rate should or shouldn't be. In fact, there is no indication that the renminbi's movement has been tracking its trade-weighted index since the de-pegging.

PBoC Governor Zhou Xiaochuan said that the US dollar, euro, yen and Korean won were the main components of the currency basket. Other currencies in the basket include the Singapore dollar, sterling, the Malaysian ringgit, the Russian rouble, the Australian dollar, the Thai baht and the Canadian dollar. While this makes it clear that the exchange rate will be set via a trade-weighted basket - those mentioned are all among China's top 15 trade partners - the actual weightings of the currencies were not disclosed. This implies that keeping the renminbi's effective exchange rate stable will be one of the key policy objectives of the new regime.

HSBC

Surplus labour and two-way capital flows

- China has plenty of savings but banks fail to allocate them to productive investment…
- …leaving FDI as the key alternative source of funds for output and employment growth
- By exporting its savings and attracting FDI, China is deploying the global capital markets to use its savings efficiently

China's industrial base has been expanding by 12% pa since the early 1980s and still shows no sign of a meaningful slowdown. In fact, the country is still in its early stage of industrialisation and the process is likely to last for another two decades.

With a 50% domestic saving rate, the highest in the world, the country should have sufficient capital resources to finance the industrialisation process. China actually exports some of its domestic savings but also attracted huge amounts of foreign direct investment over the last two decades.

With FDI inflows topping USD60bn this year, China will become the largest FDI recipient in the developing world. Why does China lure foreign savings when it seems to have more than enough domestic savings? The main reason, we believe, lies in the weakness of its domestic financial system.

The weakest link

China has taken a series of aggressive measures to reform its banking system over the last two years, some of them quite successful. Yet more needs to be done to improve the allocation of savings. Being the dominant player in the whole financial system, state controlled banks have pooled massive amounts of private savings and lent them mainly to big state companies or government-supported construction projects. But the non-state business sector, which accounts for 70% of growth in GDP, exports and employment, still has little access to bank credit.

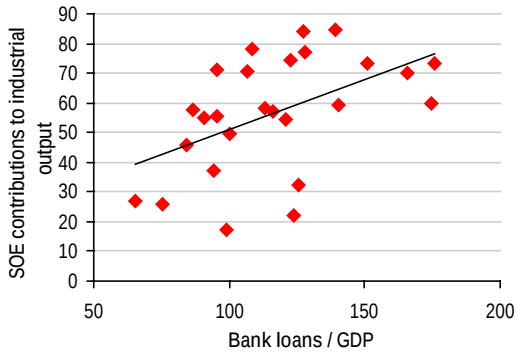
A survey covering 600 domestic private enterprises conducted by the International Finance Corporation shows that bank loans account for less than 4% of total financing for private firms in both the start-up and growth stages, while 90% of their funds comes from informal channels, principal owners and retained earnings (Fig 22). The situation seems to have improved slightly over the last few years but the private sector still receives only a small friction of bank credit. Liu

Mingkang, Chairman of the China Banking Regulatory Commission, recently stated that non-state businesses, most of them are small and medium-sized enterprises (SMEs), accounted for only 16% of the total loans outstanding at the end of last year.

The problem is partly due to the opaque nature and small size of these private companies. China's constitution did not begin to recognise the property rights of Chinese private entrepreneurs until 1999, so they kept a low profile to reduce political risks.

But the issue also reflects the problem of the relationship between government, SOEs and state banks. Although recent reforms have reduced state banks' policy lending, local governments still encourage banks to lend to state-owned enterprises by giving implicit guarantees and through other means. There is also plenty evidence that local government-supported construction projects are heavily leveraged on bank credit. In addition, the government's effort to rescue SOEs in the past makes many bank managers believe that a bad loan to a SOE will not be regarded as serious as a bad loan to a private firm.

19 Credit vs. SOE'' output share



Source: HSBC

20. China: Credit, FDI and growth (Average over 1997-2004)

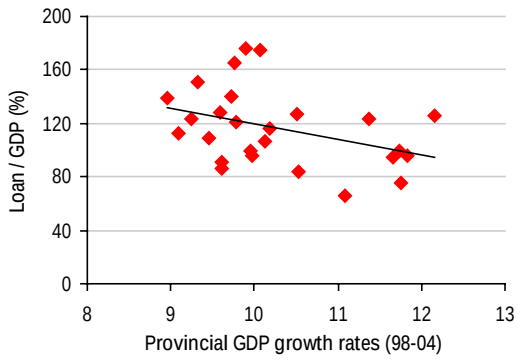
	GDP growth	Bank loans/ GDP*	SOE contribution to Industrial output **	FDI/GDP
China	8.3	115.6	20.1	4.2
Fujian	11.1	65.3	27.2	7.5
Guangdong	11.4	123.8	22.0	10.2
Zhejiang	11.7	99.1	17.2	3.0
Jiangsu	11.8	75.5	25.7	6.6
Shandong	11.7	94.3	37.1	3.5
Hebei	10.5	84.2	46.1	1.5
Shanghai	11.3	182.8	45.7	7.3
Guangxi	9.1	113.0	58.3	2.2
Jiangxi	10.1	106.6	70.5	2.7
Anhui	9.6	90.8	55.2	0.9
Henan	10.0	100.0	49.3	0.8
Hubei	10.0	95.5	55.6	2.3
Beijing	10.8	237.2	63.0	6.1
Tianjin	12.2	125.7	32.3	9.0
Yunnan	8.3	104.3	75.9	0.5
Sichuan	9.8	121.1	54.5	0.8
Jilin	9.6	127.9	76.8	1.4
Hunan	9.6	86.8	57.6	1.9
Inner Mongolia	11.8	95.5	71.3	0.6
Gansu	9.3	151.0	73.5	0.4
Xinjiang	9.0	139.2	84.5	0.1
Shanxi	10.1	174.9	60.1	1.1
Shaanxi	9.9	175.7	73.2	1.6
Liaoning	9.7	140.6	59.4	4.5
Heilongjiang	9.5	108.5	78.2	1.0
Ningxia	9.8	165.9	70.0	0.7
Guizhou	9.2	122.9	74.2	0.3
Qinghai	10.5	127.5	84.1	0.4

Source: HSBC
* Bank loan/GDP is average between 1999-2003, except China, Fujian, Guangdong, Zhejiang, Jiangsu, Shanghai, Beijing, Tianjin and Yunnan are average between 1997-2004
** SOE contribution to industrial output is the average between 1997-2003, national average is between 1999-2003
Qinghai - FDI/GDP average of 1997-2003

An IMF study concludes that from 1988-1997 China's banks channelled savings into provinces with below-average growth but more SOEs, rather than the faster growing provinces.

Our analysis of the latest provincial data on loans, regional GDP, SOE's share of industrial production and FDI, suggests that little has changed. Provinces with above-average GDP growth rates have a bank loan-to-GDP ratio that is much lower than provinces with average growth. We also found that those provinces with above average loan to GDP ratios are the ones with high concentrations of SOEs. In other words, the banking system hasn't allocated much of the savings into higher-growth areas.

21. Bank credit vs. growth



Source: HSBC

Informal credit markets

With little access to official bank credit, private enterprises have turned to informal channels for raising funds. Informal financing includes loans between friends and relatives, credit unions and other more sophisticated arrangements between firms.

22. Private firm's financing pattern

Years in operation	Self-financed	Bank loans	Non-financial institutions	Other
< 3 years	92.4	2.7	2.2	2.7
3-5 years	92.1	3.5	0	4.4
6-10 years	89	6.3	1.5	3.2
> 10 years	83.1	5.7	9.9	1.3
All	90.5	4	2.6	2.9

Source: Neil Gregory, Stoyan Tenev and Dileep M Wagle, 2000 China's Emerging Private Enterprises

The results of various surveys show that founder's capital and interest-free loans from family members and relatives are the main source of funds for start-ups. Although venture capital has been emerging quickly over the last few years, they mainly target new ventures in IT sectors rather than labour-intensive manufacturing industries.

As firms grow, internal financing tends to play an increasingly important role, accounting for up to 60% of total financing. Apart from the accumulation of retained profits, employee equity schemes and high interest borrowing from employees are also common tools for raising funds internally.

When external financing for working capital is needed, high interest loans from local credit unions or other firms owned by friends or linked through business are the main channels. A PBoC survey suggests that this personal trust-based borrowing accounted for up to 80% of total informal finance in Zhejiang and three other provinces last year.

Responding to the private sector's growing demand for large-scale borrowing, some investment companies and other informal financial institutions have emerged to provide bank-like services. In its recent report, the PBoC estimated that informal channels provided as much as 25% of total new loans made by the banking system last year. But judging from anecdotal evidence and the non-state sector's contribution to total economic growth, informal credit markets are more efficient than the official financial system and much bigger than the central bank's estimate.

The importance of FDI

Foreign direct investment has been instrumental in making China one of the most competitive manufacturing powerhouses in the world. As soon as China opened up its coastal cities in the early 1980s, foreign manufacturers, led by overseas Chinese industrialists from neighbouring territories and countries, begun to relocate labour-intensive productions to mainland China to tap cheap labour resources and domestic markets.

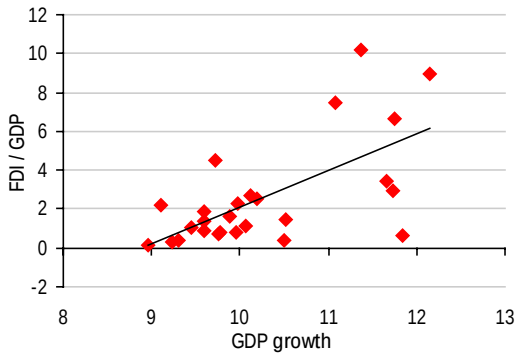
By 2004, there were around 300,000 foreign joint ventures operating in China, bringing in up to USD500bn in accumulated capital investment. Those FDI inflows on average accounted for less than 10% of China's total annual fixed-asset investment. However, FDI has been the major source of capital investment in China's export-

oriented manufacturing sector in China over the last two decades. We estimate that foreign joint ventures have made a contribution of around 40% to China's total manufacturing capital investment, but they account for over 60% of growth in China's total exports.

Exposed to international competition, the export sector is not only the most competitive and efficient part of the overall economy, but it has significantly lifted the overall productivity of the industrial sectors through the spill over effects of technology, management and competition.

There is evidence that wherever there is a concentration of foreign joint ventures local domestic enterprises tend to grow faster, benefiting the local economy. Fig 23 illustrates the strong positive relationship between provincial FDI and economic growth across China over the past seven years.

23.FDI vs. growth

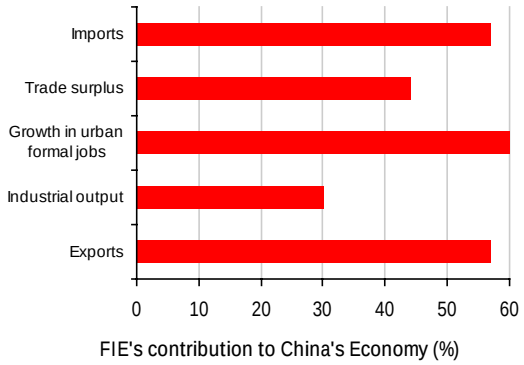


Source: HSBC

FDI flowing into China is likely to top USD60bn this year, making the country the world's largest FDI recipient second only to the US. But unlike the US, China has the highest domestic savings rate in the world, so much so that the central bank is investing nearly USD200bn a year into USD financial assets.

So why is China investing some of its vast pool of domestic savings abroad while it has no problem attracting foreign savings in the form of FDI?

24. FDI plays a key role in financing China growth



Source: HSBC, CEIC

There are two main reasons. First, multinational companies are better than domestic SOEs at identifying high-return investment opportunities in China. They have poured capital into the labour-intensive manufacturing sector where China's comparative advantage lies. Domestic private enterprises have also successfully invested in profitable projects but they have been handicapped by financing constraints. Without FDI, it would have been very difficult for China to evolve from a backward agrarian economy into an internationally competitive manufacturing hub within two decades.

Secondly, the high level of FDI is a reflection of the inefficiency of domestic financial intermediation. China has the highest national savings rate in the world but its financial system is incapable of channelling these precious resources to domestic private entrepreneurs. This prevents them from tapping into the abundant labour supply to earn high returns from labour-intensive production and trade.

SOEs receive domestic capital but due to institutional deficiencies many simply cannot put it to productive use. This has created room for foreign investors to fill the gap and China's open-

door policies and market reforms speeded up the FDI inflows. In other words, FDI is a substitute for properly-functioning financial intermediation in China. As a result, the country will have to maintain strong FDI inflows to sustain industrialisation and urbanisation until an efficient financial system is built.

FDI-driven growth and foreign reserves

China must take a series of measures to reform its economic, legal and administrative systems to improve the investment climate for FDI. Chief among the necessary financial measures is maintaining enough foreign reserves and keeping the RMB exchange rate fairly stable.

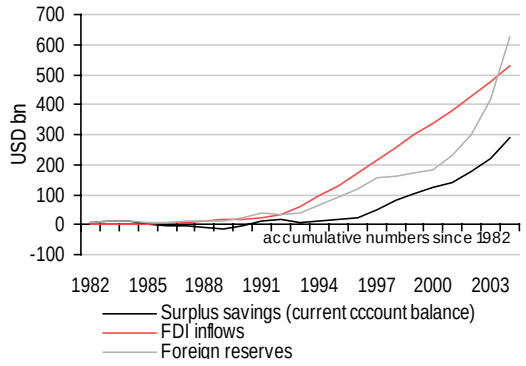
The links between FDI and foreign reserves are twofold. With a stable exchange rate as a policy objective, more FDI inflows are likely to lead to an increase in foreign reserves. Meanwhile, a high level of foreign reserves tends to reduce the recipient country's sovereign risk and help lure FDI and other capital inflows.

In China's case, the current level of foreign reserves is arguably more than enough to boost foreign investors' confidence. A rise in foreign reserves can be seen as a by-product of transferring abroad some of its domestic savings that are then re-invested in higher-return projects through FDI by multinationals.

On the surface, this looks as if Chinese capital is making a roundtrip. In fact, China is using the more efficient global financial markets to finance growth in its export-oriented industries - the key driver for economic growth and urban employment.

China earns a lower return from its foreign reserves than the multinationals receive from their investments in China. But this represents more than a transaction cost for intermediating capital into its dynamic manufacturing sector. And whether this cost is high or not needs to be examined relative to the opportunity cost of not having a fast growing manufacturing business in China.

25. China's two-way capital flows



Source: HSBC, CEIC

Conclusions

Despite a high domestic saving rate, China's inefficient financial system has channelled the bulk of those resources to SOEs rather than the non-state sector which has been the key driver for growth and job creation. This makes FDI and informal credit markets vital sources for financing the expansion of export-oriented manufacturing sector.

China must promote informal financing and maintain strong FDI inflows in order to sustain industrial expansion and employment growth. The accumulation of foreign reserves is only a by-product of this FDI-driven industrialisation model.

The ultimate solution, however, is to build a properly functioning financial system that can channel domestic savings into productive investments. China, as a big economy, cannot rely on informal financing and FDI to complete its industrialisation and urbanisation process.

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200m new consumers

- Rural-urban migration is likely to support a 10-12% pa growth in construction investment
- The current rate of over 25% is unlikely to be sustained
- Each year 10m additional consumers in cities will boost demand for everything from shampoo to cellular phones

Population shift

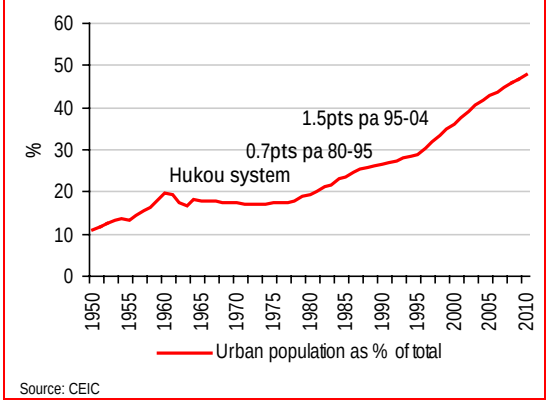
Relocating rural labour to the industrial and service sectors will continue to be the key engine of productivity growth in China in the coming decades. Economists at the World Bank estimate that this labour relocation contributed about 25% of China's GDP growth in the 1990s. This growth contribution is expected to increase in the coming years when urbanisation speeds up, particularly as population growth slows and the government scales down capital investment by the state sector.

Apart from this contribution to growth on the supply side, rural-urban labour flows will also have a significant impact on growth on the demand side. Each year there will be 10m people migrating from their villages to cities, creating additional demand for housing and urban infrastructure facilities. Those migrant workers will probably spend at least 70% of their incremental income on consumer durables, daily necessities and services, representing a key structural factor to support consumer spending in China.

Sustaining rural-urban labour flows is the best way for China to stimulate domestic consumption. The major structural constraint on consumption growth is that due to low productivity in farming, about 60% of the total labour force (consumers) still live in rural areas but earn only 30% of what urban workers are paid. The only sustainable way to lift overall consumption is to shift more workers to the industrial and service sectors in cities.

Urbanisation implies 10-12% investment growth

26. China's urbanisation ratio



Source: CEIC

This massive migration will boost the annual growth of the urban population about 3% over the next 10 years, five times the 0.6% projected for the national total. As the urban population swells, demand for housing and infrastructure will increase. The absence of reliable data on urban infrastructure facilities makes it hard to make an accurate forecast about future demand for urban

construction. Yet based on available information on demographic trends, housing stocks and people's effective demand (the needs that are supported by their income) for upgrading facilities, we estimate that the urbanisation process will support a 10-12% pa growth rate in the demand for property-related investment over the next decade.

27. Urbanisation and construction demand

	2004	2008	CAGR forecast (2005-08)
Urban population (m)	530	607	3
--Rural migrants (m)	146	221	9
Urbanisation ratio (%)	40	45	N/A
Total housing stock(apartment), m sq m	6,851	11,414	11
Housing per capita, sqm	12.9	18.8	7.8
Annual growth in property construction	30	12	12

Source: HSBC

The main downside risk to such projections is the fact that most rural migrants can not afford to buy or rent the kind of accommodation that would be considered average by urban residents. For example, 80% of factory workers in the Pearl River Delta stay in dormitories provided by their employers, typically with 5-6 workers in a room of less than 15 sq m. The recent history of rural-to-urban migration in other countries also shows that the effective demand from rural migrants is constrained by their low incomes.

The desire for better living standards in the cities will always be there. But what people want will not necessarily be the same as demand, as demand only represents what can be supported by people's income, which we expect to rise by 7-8% pa in the coming decade.

Housing demand growth may start to ease as both the home-ownership rate and housing-to-income ratio is already high. The housing reform programme launched by former premier Zhu Rongji in 1998 – while primarily designed to abolish the free-housing system and stimulate housing investment – has resulted in:

- Over RMB2.8 trillion in housing equity being transferred from the state to the urban population, with public housing selling at steep discounts
- The more than doubling of the home-ownership rate in five years, surpassing 70% in most cities, higher than the average of 65% in the US

From 1997 to 2004, the aggressive sale of state housing raised the average urban home-ownership rate from 30% to 70%. This compares to 65% in US, 50% in Hong Kong and around 60% in developed European countries. In the 1960s, roughly half of America's families owned their homes, so the US home-ownership rate has risen by only 15ppts over the past 40 years.

As privatisation drives up the home-ownership rate in China's cities, we feel inclined to ask how much further can it go? While privatised homes are not always in good condition (and the occupants often seek to upgrade), newly built commercial homes tend to be too expensive for ordinary households. We believe the current double-digit property price-to-income ratio will continue to limit upgrade demand over the next three years.

Don't confuse cyclical swings with structural trends

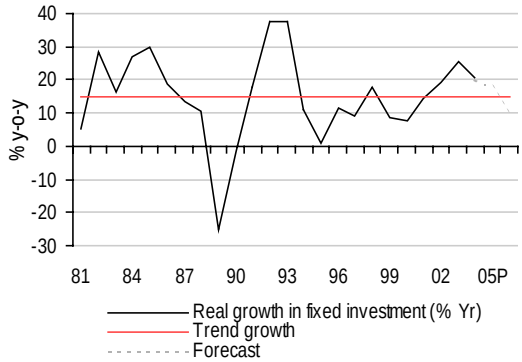
China's urbanisation and industrialisation will support growth of 10-12% pa over the next decade in the property and construction sectors. But a construction boom since 2002 has pushed the growth rate to over 30% before slowing to around 20% this year. This cyclical upsurge in construction investment is clearly unsustainable. To avert a disastrous investment bubble, the pace of growth must moderate.

The main problem with the current investment boom is sliding efficiency. In China Economic Insight, Vol. 6, we provided evidence that

investment efficiency is deteriorating rapidly. Not only has incremental capital-to-output ratio reached a historical high of 6x, but it is also well above the level for other countries when undergoing a similar urbanisation process.

Moreover, much of the investment is being directed by local governments and financed by state banks, sowing the seeds for waste and duplication. There is plenty of evidence that local governments have been indulging in excessive construction in order to boost their political imagines and, on occasions, for personal financial gain.

28. China's investment cycle



Source: HSBC

Changing spending pattern

For workers from rural areas, moving to cities is not just about making more money, it also brings about a major change in lifestyle and spending patterns. These young people quickly discover that city life has much more to offer than simply farming, eating and sleeping. The unleashing of this pent-up demand for consumer goods and services will have a substantial economic impact given the huge income gap between rural and urban areas.

A comparison of household expenditure between countryside and cities sheds light on the areas where new migrant workers want to catch up:

Grains and other soft commodities: Rural consumers on average eat much more rice but their consumption of meat and diary is only 40% of that of urban consumers. Urban migration will increase demand for meat and diary products at the expense of rice.

29. 2004 Per capita annual purchases of major commodities

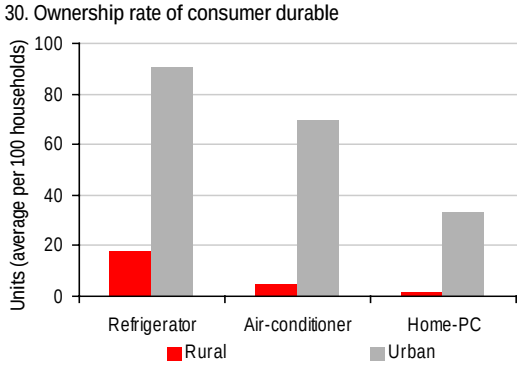
(in kilograms)	Urban household	Rural household
Grain	78.2	219.3
Fresh vegetable	122.3	106.6
Edible oil	9.3	5.3
Pork, Beef and Mutton	22.9	14.8
Poultry	8.4	3.1
Fresh eggs and products	10.4	4.6
Aquatic products	12.5	4.5
Sugar	Na	1.1
Liquor	8.9	7.8
Coal	92	na

Source: State Statistics Bureau of China

Consumer durable: Partly owing to poorer infrastructure, the penetration rate of white goods in the countryside is only 25% of that in cities. Urbanisation should create new demand for those consumer durables.

Demand for electronics goods will also get a boost, especially when falling production costs (in part due to their hard work) make cellular phones and other electronic products affordable for migrant workers. Even assuming a third of the new workers can afford to buy a cellular phone, it implies an incremental demand of three million each year.

30. Ownership rate of consumer durable



Source: State Statistics Bureau of China

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