

## Research

Youguo Liang, PhD, CFA  
Managing Director  
U.S. Office  
Tel 973.683.1765  
youguo.liang@prudential.com

M. Shayne Arcilla  
Research Analyst  
U.S. Office  
Tel 973.683.1688  
shayne.arcilla@prudential.com

Prudential Real Estate Investors  
8 Campus Drive  
Parsippany, NJ 07054  
USA

Tel 973.683.1745  
Fax 973.734.1319  
Web [www.prudential.com/prei](http://www.prudential.com/prei)  
E-mail [prei.reports@prudential.com](mailto:prei.reports@prudential.com)

### Executive Summary

- Since China's adoption of its open-door policy in 1978, real GDP has grown 9.7% per year. Last year, China overtook the UK as the fourth-largest economy in the world.
- China is experiencing slow population growth, at about 0.6% per year. But massive urbanization will expand the urban population by more than one-third over the next 10 years, with annual increases projected to be more than 19 million.
- China's middle class and affluent households now compose less than one-quarter of all urban households, but their share will rise substantially over the next decade.
- Until now, foreign investors have been investing mainly in Beijing, Shanghai, Guangzhou and Shenzhen, the Tier I cities. Tier II cities and the advanced economic areas anchored by Tier I cities will provide attractive investment opportunities, especially in retail and residential, as urbanization occurs, incomes rise and the middle class expands.
- The downside risks to China's future growth should not be overlooked. Severe environmental issues, the increasing income gap between rich and poor, and external political tensions could slow or derail economic growth.
- Investors also face risks arising from China's deficient legal system, underdeveloped contract law, and cronyism and corruption in government. Foreign currency control, the government's monopoly on land supply and frequent rule changes are additional hurdles that investors need to overcome.

### Introduction

The rapid economic development of the People's Republic of China began in 1978 with the introduction of open-door reforms, which ultimately integrated China's economy into the world market via trade and foreign investment. Since then, China's economy has experienced explosive growth in exports and manufacturing, propelling the country's transition from a rigidly planned, primarily state-owned system to a market economy with the majority of economic output produced by a booming private sector.

Moreover, the abolition of the state-sponsored housing system in the '90s and the introduction of land-lease rights helped spur an investment market for real estate over the past 10 years. As continued high economic growth and massive urbanization push more households into the ranks of the middle class, the number of institutional-quality real estate and investment opportunities will rise across all sectors.

**Exhibit 1** shows a snapshot of China. With 1.3 billion people, China is the most populous nation, representing 20% of the world's residents. According to China's official statistics, the majority of its citizens live in rural areas, where life has not changed substantially since the first emperor united the country in 221 B.C. More relevant to real estate investing, however, are urban residents and their purchasing power. Although only 43% of the population lives in urban areas, the urban population still amounts to 562 million, forming 189 million urban households. China's overall

**Exhibit 1: Snapshot of China**

	Total	Urban
<b>Population (Millions)</b>	1,308	562
Growth Rate	0.6%	3.6%
Urbanization Rate	43%	
Median Age	32.7 years	
Life Expectancy at Birth	72.6 years	
Literacy Rate	90.9%	
<b>Households (Millions)</b>	389	189
Household Size (Persons)	3.36	2.98
Median HH Income (US\$)		4,200
<b>GDP (US\$ Trillion)</b>	2.2	2.0
GDP (PPP, US\$ Trillion)	8.9	
Agriculture Share	12.4%	
Industry and Construction	47.3%	
Services	40.3%	
<b>GDP Per Capita (US\$)</b>	1,740	3,550
GDP Per Capita (PPP, US\$)	6,800	13,900
<b>Inflation Rate</b>	1.8%	

Sources: Bureau of Statistics of China; Prudential Real Estate Investors

population growth has slowed to a current rate of 0.6% per year, less than the U.S. growth rate of 0.8%. But its urban population will continue to expand five to six times faster due to the intense urbanization of the rural population. Relative to other emerging countries, China has a small household size (2.98 people in urban areas). The median household income for urban residents, which has been growing at about 10% per year, was \$4,200 in 2005.

China's 2005 GDP reached \$2.2 trillion, after gaining 9.9% from the previous year, pushing it past the UK as the world's fourth-largest economy, after the U.S., Japan and Germany. Calculated in terms of purchasing power parity (PPP), China's GDP totaled \$8.9 trillion, making it the second-largest economy. Yet, despite the country's sizeable wealth, it is still the world's largest developing nation, with a per capita income of only \$1,740. However, the GDP per capita for urban residents is \$3,550, with 20% of urban areas already reaching \$5,000.

China's high literacy rate will continue to support the country's development. Thanks to a compulsory nine-year educational system, China's population stands well ahead of its developing peers in terms of education, with nearly 91% of its adult population (ages 15 and over) completing the government's education requirement.

## Strong Economic Growth

As shown in Exhibit 2, China managed to achieve a real GDP growth averaging 9.7% since 1978, the start of economic reform. A low economic base and a relatively well-educated and disciplined labor force powered its initial growth. Beginning in the early '90s, massive foreign direct investments (FDI) attracted to China's low-

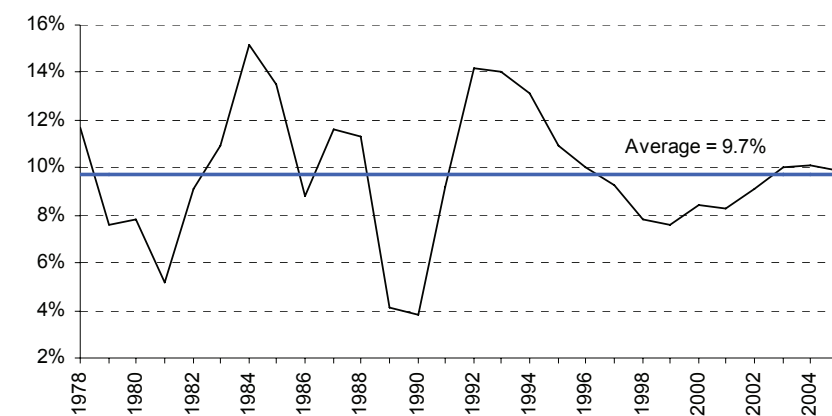
cost and productive work force further injected vitality into the expanding economy. In addition, a massive internal population shift into urban areas has been feeding the nation's burgeoning private enterprises, especially in coastal areas.

China's performance hasn't always been stellar, with the country experiencing three periods of sub-par growth since 1978. Internal politics and economic weakness in major developing markets dragged down China's growth in the early '80s. Later, the Tiananmen Square incident in 1989 caused the deceleration in 1990. Finally, the Asian financial crisis led to a period of relatively slower growth (but still healthy in absolute terms) in the late '90s.

Recent data from China's National Bureau of Statistics shows that the nation's economy has yet to slow, as real GDP grew at an annualized rate of 11.3% in 2Q06. This exceeded China's long-term average of 9.7% and translates to an annualized real GDP growth rate of 10.9% for the first half of 2006. China's economic expansion will gradually slow to a more sustainable level, but China's growth is expected to remain in the high single digits for the next 10 years.

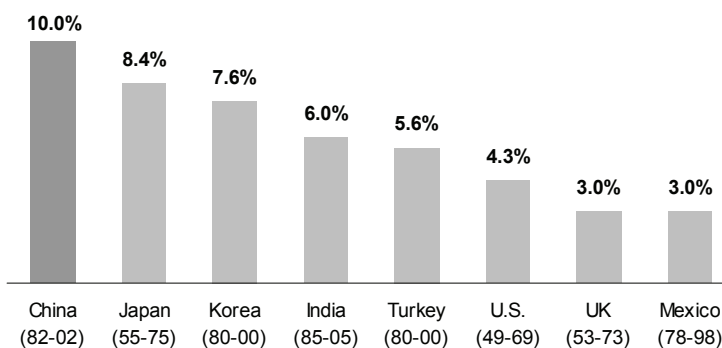
Exhibit 3 shows a ranking of a select group of countries according to their strongest 20-year period of real GDP growth. While emerging-market peers India and Turkey expanded at an annual pace of 6.0% and 5.6%, respectively, during their strongest 20-year periods, their growth rates are less than China's 10.0% annual growth rate between

**Exhibit 2: China's Real GDP Growth**



Source: International Institute of Finance

**Exhibit 3: Strongest 20-Year Growth of Real GDP for Select Economies**



Sources: IIF; EIU; UK Office for National Statistics; Japan Statistics Bureau  
Note: U.S., UK and Japanese economic data have longer histories.

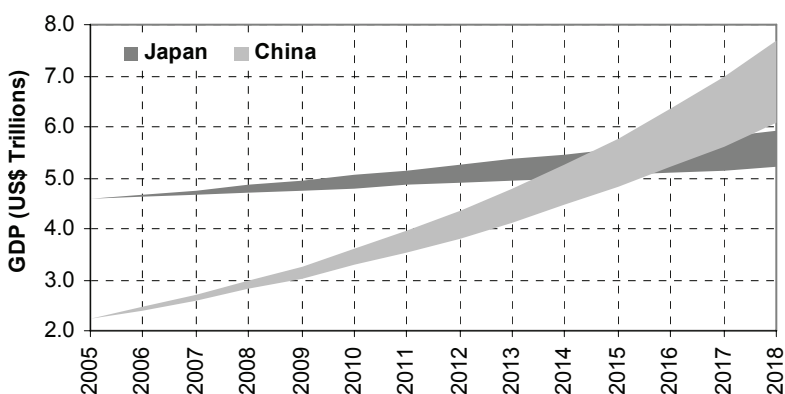
1982 and 2002. Even Japan’s annual growth rate of 8.4% between 1955 and 1975 is smaller than China’s recent 20-year track record.

The U.S. and UK are models of mature, developed economies, whose respective annual growth rates of 4.3% and 3.0% during their booming periods provide the benchmark for sustainable economic growth at which emerging markets should eventually converge.

Medium-term projections show that China could overtake Japan as the second-largest economy after the U.S. by 2015. The rationale for this baseline forecast is China’s expected annual growth rate of 7% over the next decade, plus a 2% Chinese yuan appreciation, while Japan expands at an annual pace of 1.3%. These growth assumptions are in line with the most recent forecasts from EIU. At these growth rates, China’s GDP will reach \$5.3 trillion in 2015, surpassing Japan’s \$5.2 trillion (all in 2005 dollars).

**Exhibit 4** displays a range of possibilities for the size of Japan and China’s economies. The assumed GDP growth rate for Japan is 1% to 2%, with the most likely forecast being 1.3%. China’s GDP growth rate in dollars is projected to be 8% to 10% (6% to 8% GDP growth, plus 2% currency appreciation), with a baseline forecast of 9%. China’s GDP will likely catch up with Japan’s between 2014 and 2016.

**Exhibit 4: Racing for the Title of “Second-Largest Economy”**



Source: Prudential Real Estate Investors

China’s projected growth over the next decade should compel investors to increase their portfolio allocations in Chinese investments. **Exhibit 5** shows projected GDP share by region in 2005 and 2015, relative to Prudential’s 50-country real estate investment universe. The 50 countries, located in North America, South America, Europe and Asia Pacific, together account for close to 97% of global GDP. China’s GDP share now amounts to about 5.3% and is expected to grow to 8% to 9% by 2015. The 8.3% share shown in **Exhibit 5** is based on EIU’s most recent forecast for all 50 countries. Therefore, model portfolio allocations should rise to similar proportions to remain consistent with current allocation percentages.

**Exhibit 5: China’s GDP Share: 2005 vs. 2015**

	2005	2015
Asia Pacific ex. China	20.0%	29.2%
China	5.3%	8.3%
Europe	36.8%	33.7%
Latin America	5.3%	5.0%
U.S./Canada	32.6%	32.1%

Source: EIU

## **Downside Risks**

While most economists believe that China can continue its high growth path for the foreseeable future, there are real constraints or downside risks for the expanding economy. China's high growth comes with a high environmental price. Air pollution in many Chinese cities is so severe today that children no longer know that sky's natural color is blue. Pollution to ground water and soil is equally severe but even more expensive to mitigate. It is unclear as to whether China's environmental condition has permanently impaired its ability to grow, but we do know that as a society grows in wealth, it also values its natural environment more. China may decide that slower but more sustainable growth is indeed a better path to prosperity.

China's strong growth has increased the living standards of the vast majority of its people, transforming a society with shared poverty to uneven wealth for many. But the income gaps between urban and rural residents, and between the urban rich and poor, have reached unhealthy and even alarming levels. These tensions, if not managed properly, could erupt any time, disrupting growth-friendly economic policies and delaying further economic and political reforms. In the most extreme scenario, the widening gap between rich and poor, coupled with a deteriorating social safety net, could cause large upheavals.

Both Japan and South Korea had serious trade friction with their major exporting countries when they were expanding quickly. China will encounter far more challenges in managing both trade and political relationships with the U.S. and the EU. From the perspective of the West, China poses more problems because of its size, its authoritarian government led by a nominally communist political party and an inherited unification issue with Taiwan. China's economy highly depends on exports to the U.S. and other developed nations. Mishaps on major, sensitive external matters would surely trim China's growth. A military confrontation with Taiwan, while extremely unlikely in an era of global economic integration, would devastate China's economy.

As China climbs the economic ladder, its growth will depend more and more on the softer side of its economy, such as human resources, the efficient allocation of capital and transparent government. China has always valued education, but with its intense focus on short-term economic growth, the government has not been emphasizing basic education as much as in the past, especially in the countryside. While access to higher education has vastly expanded, the quality of college education needs equally vast improvement to meet the needs of an advanced economy. China's banking and capital markets lag behind its own economic development and are far from being globally competitive. The government, while well known for efficiency in orchestrating large-scale projects, has serious corruption problems and is opaque in policy deliberations. China's future growth critically depends on the improvement of these softer factors.

## **Massive Urbanization**

Rapid urbanization is the hallmark of developing economies, with fully industrialized nations having urbanization rates of at least 75%. From the current urbanization rate of 43%, it will take China 25 years or more before most of its citizens become urban dwellers. The massive urbanization that occurred over the past 20 years will surely continue and even accelerate as long as the economy continues to expand.

**Exhibit 6** shows China's population growth and urbanization trends over the past 10 years. China is experiencing slow population growth, resulting from the one-child policy enacted in the '70s. The policy almost immediately reduced the birth rate from more than four to 1.7 per woman. Population growth averaged only 0.8% per year over the past 10 years and now stands at only 0.6%. But the sheer size of the population still ensured 9.6 million more Chinese every year for the past 10 years. Demographers believe that the current low population growth rate of 0.6% will persist for the next 10 to 15 years.

**Exhibit 6: High Growth in Urban Population**

	Population (millions)	Growth (millions)	Growth Rate	Urban Population (millions)	Growth (millions)	Growth Rate	Urbanization Rate	Yearly Change
1995	1,211			352			29.0%	
1996	1,224	12.7	1.0%	373	21.3	6.1%	30.5%	1.4%
1997	1,236	12.4	1.0%	394	21.5	5.8%	31.9%	1.4%
1998	1,248	11.3	0.9%	416	21.6	5.5%	33.4%	1.4%
1999	1,258	10.3	0.8%	437	21.4	5.1%	34.8%	1.4%
2000	1,267	9.6	0.8%	459	21.6	4.9%	36.2%	1.4%
2001	1,276	8.8	0.7%	481	21.6	4.7%	37.7%	1.4%
2002	1,285	8.3	0.6%	502	21.5	4.5%	39.1%	1.4%
2003	1,292	7.7	0.6%	524	21.6	4.3%	40.5%	1.4%
2004	1,300	7.6	0.6%	543	19.1	3.6%	41.8%	1.2%
2005	1,308	7.7	0.6%	562	19.3	3.6%	43.0%	1.2%
10-Year Avg.		9.6	0.8%		21.0	4.8%		1.4%

Source: China Statistical Yearbook

The growth of China's urban population is both a driving force behind and a consequence of rapid economic development. As the nation gradually shifted from a centrally planned regime to one resembling market-based economies, improving economic conditions prompted the government to relax laws restricting internal migration, which were prevalent during the early stages of urbanization (1950-1982). The increased leniency of migration controls dramatically expanded the pace of urban population growth, as young farmers flowed into the cities, especially along the eastern and southern seaboard, in search of employment opportunities and a better life. Over the past 10 years, the urban population grew by 21 million per year, at an average annual rate of 4.8%. By 2005, urban residents totaled 562 million, accounting for 43% of the population.

China's urban population is projected to grow at an average of about 3%, or 19.3 million, per year over the next decade (see **Exhibit 7**). By 2015, urban residents will number 755 million, accounting for 54.4% of the total population. The urbanization rate is expected to rise by 1.1% per year. Also, the annual increase of nearly 20 million people should translate into demand for 12 million new jobs per year.

In the meantime, the combined effects of a growing urban population and smaller household size will fuel the growth of China's urban households by 8.3 million, or 3.7%, per year over the next decade. Sheer population growth will add 6.7 million new households and a projected reduction of household size from 2.98 to 2.78 over 10 years will add another 1.6 million per year. By 2015, the number of China's urban households will reach 272 million, 2.2 times the projected U.S. household number.

(For reference, the average U.S. household size was 2.98 in 1976, 2.78 in 1983 and 2.67 in 2005. The U.S. now has 110 million households, almost all urban, which will rise to 126 million by 2015, according to Moody's Economy.com.)

**Exhibit 7: Projected Urban Population in 10 Years**

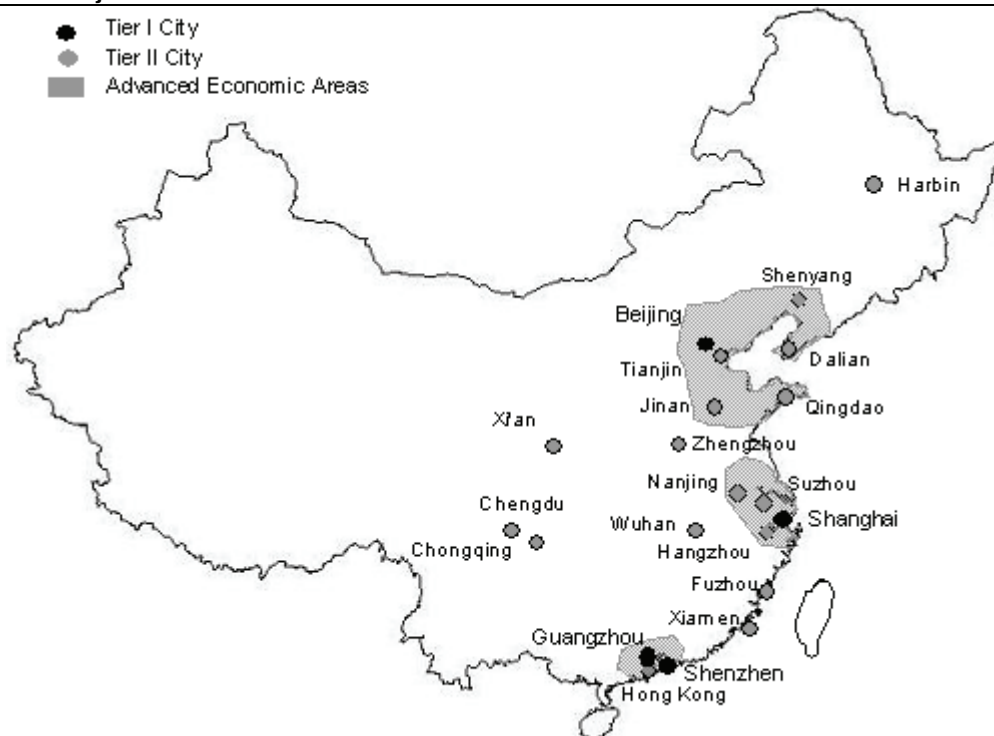
	2005	2015	Annual Increase	Annualized Rate
Total Population (mil.)	1,308	1,388	8.1	0.6%
Urban Population (mil.)	562	755	19.3	3.0%
Urbanization Rate	43.0%	54.4%	1.1%	
Urban Households (mil.)	189	272	8.3	3.7%
Household Size	2.98	2.78	2 bps decline	

Sources: EIU; National Bureau of Statistics of China; Prudential Real Estate Investors

The implications of rising numbers of urban households are most apparent for residential development. Applying a very conservative obsolescence rate of 2.5% to existing housing stock, demand for residential homes will be 13 million units per year – 8.3 million new households plus 4.7 million replacement homes. (U.S. demand for homes is likely to be 1.5 to two million units per year for the next decade.) China needs to develop eight times as many homes as the U.S. per year to meet its demand.

While China's urbanization is widespread, real estate investment opportunities will mainly concentrate in large cities and more developed regions, where relative income is high and the growth potential is above average. One way to analyze China's real estate market is the "3+Xs" framework: three advanced economic regions and 10 to 15 Tier II cities (see Exhibit 8).

**Exhibit 8: Major Urban Centers and Advanced Economic Areas**



Source: Prudential Real Estate Investors

China has four Tier I cities – Beijing, Shanghai, Guangzhou and Shenzhen. They have advanced infrastructure, the highest incomes and the largest stock of institutional-quality real estate. As a result, they have received most of the foreign investments in real estate over the past five years.

As income grows, residential and retail developments are spreading into large economic areas spearheaded by the Tier I cities. The three advanced economic areas shown in **Exhibit 8** are large in economic scale, well connected through highways and rail, have high per-capita GDP and are leading China into the era of the middle class.

The Bohai Pan area, in the north, has become the third driver of China’s economic development after the Yangtze and Pearl River deltas. Anchored by the nation’s capital, Beijing, the region comprises Tianjin and the Shandong, Hebei and Liaoning provinces. Its economic development has benefited mainly from Shandong and Liaoning’s traditional advantages in heavy industry, while Tianjin profits from its large, busy port and the inflow of high-tech industries and foreign capital. The area’s other key cities are Dalian, Shenyang, Jinan and Qingdao.

The Yangtze River delta, anchored by Shanghai, continues to enjoy its status as China’s financial, trade and industrial center. This region comprises Shanghai, Zhejiang province and Jiangsu province and contains 74 cities, 15 of which have populations of more than one million. The key cities include Nanjing, China’s capital between 1910 and 1949; Hangzhou, capital of Zhejiang province; and Suzhou, an industrial city west of Shanghai. Shanghai hosts one of China’s two stock exchanges (Shenzhen has the other, much smaller, one). The American Association of Port Authorities ranked Shanghai as the world’s second-busiest port in 2004, with more than 378 million tons of cargo passing through annually. With the opening of the new Yangshan deepwater port in 2006, Shanghai probably has become the global leader in shipping volume.

Further south is the Pearl River delta, anchored by Hong Kong, Guangzhou and Shenzhen. This region has become the global hub for manufacturing, thanks to China’s low-cost labor and Hong Kong’s management experience. Port traffic is also among the highest in the world, with three of the world’s largest ports (in Hong Kong, Guangzhou and Shenzhen) relaying imports and exports to and from every part of the globe.

Beyond these three advanced economic areas are Tier II cities such as Wuhan and Zhengzhou in central China; Fuzhou and Xiamen across the strait from Taiwan; Chongqing, Chengdu and Xi’an in the west; and Harbin in the northeast. Xiamen and Fuzhou benefit from inflows of Taiwanese investments. Wuhan has historically been central China’s commercial hub and center of higher education. Chongqing, Chengdu and Xi’an have all benefited from the government’s “Go West” policy, which encouraged a greater inflow of foreign investment to western China as part of an effort to develop the hinterland.

### **Rising Middle Class**

Concomitant with the urbanization of China’s people is the creation of a new middle class. Strong economic growth in the recent past transformed the economy from an impoverished, but largely egalitarian, society into one with distinct income classes. By global standards, China’s

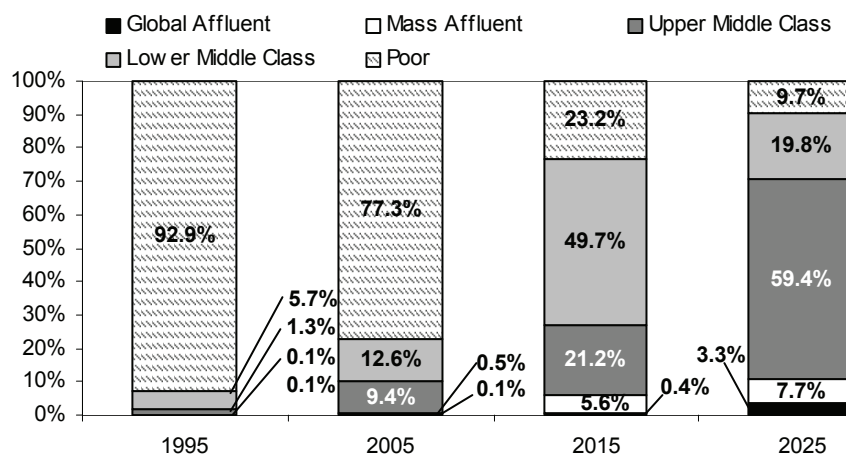
middle class is still small relative to its population. But the country's income level has reached an inflection point, which marks the start of the middle class's 10- to 20-year rise toward social and economic dominance.

The McKinsey Global Institute classifies China's urban households into five income classes: global affluent, with an annual income of at least 200,000 yuan (\$40,000); mass affluent, with 100,000 to 200,000 yuan (\$12,500 to \$40,000); upper middle class, with 40,000 to 100,000 yuan (\$5,000 to \$12,500); lower middle class, with 25,000 to 40,000 yuan (\$3,125 to \$5,000); and poor, with less than 25,000 yuan (\$3,125). These numbers seem low compared with incomes in developed countries such as the U.S. or Japan, but a \$5,000 income in China would ensure a lifestyle of at least \$20,000 on a purchasing power parity basis.

Chinese global affluent and mass affluent households have the purchasing power for luxury homes and cars, and Western high-end consumer goods. The upper middle class can afford a professionally built home and a car. The lower middle class can afford a quality home or a car, but not both. The urban poor probably can only live in a subsidized and often substandard home.

Exhibit 9 shows the distribution of China's urban households by income, as projected by the McKinsey Global Institute at the start of 2006. In 1995, the vast majority of China's urban households were poor, and the lower middle class and above formed only 7.1% of total urban households. In 2005, poor urban households fell to 77.3%, and the share of the lower middle class and above rose to 22.7%. By 2015, the urban poor will shrink to only 23.2% of all urban households; the lower middle class will have a share of 49.7%, and the upper middle class and above a share of 27.1%. By 2025, the upper middle class will be the dominant income group, with a share of 59.4%, with the poor having a share of only 9.7% and the global affluent and mass affluent an 11% share.

**Exhibit 9: Urban Households by Income**



Source: McKinsey Global Institute 1Q06

The forecasts assume a GDP growth rate of about 7% and a GDP per capita growth of 6.5% per year. But the forecast does not consider the possibility of a rising yuan – China has a large trade surplus, and its currency reserve is near \$1 trillion. Any appreciation of the currency is likely to speed China's transformation into a middle-class society.

**Exhibit 10** translates the percentage distribution into numbers of households. Affluent and upper middle class households are projected to grow from 19 million in 2005 to 74 million in 2015, a yearly rise of 5.5 million, at an annual rate of 14.6%. Total middle class (lower middle class and above) households are projected to increase by 166 million households, or 16.6 million, at 17.1% per year, reaching 209 million households by 2015. China's urban middle class and above are projected to grow to account for 76.9% of total urban households in 10 years, pulling millions out of substandard living. In the following decade, middle class and above households are projected to reach 327 million, of which 255 million will be upper middle class and above.

**Exhibit 10: Projected Middle Class Households (millions)**

	2005	2015	2025
Urban Households	189	272	362
Upper Middle Class and Above	19	74	255
Lower Middle Class	24	135	72
Total Middle Class and Above	43	209	327
Share of Urban Households	22.6%	76.9%	90.2%

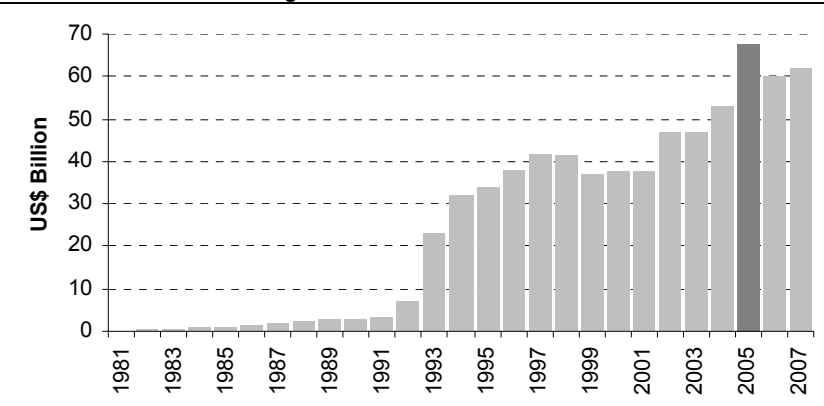
Sources: Prudential Real Estate Investors; McKinsey Global Institute

### Global Economic Integration

Political instability and underdeveloped markets are among the many risks that foreign investors face in developing nations such as China. Yet as these developing economies enter an era of increased international participation through trade and investment, which then fuels rapid economic development, the need to comply with global standards and policies provides a strong force for socio-political stabilization.

**Exhibit 11** shows the dramatic rise in China's net FDI since the early '80s. By 2005, FDI reached \$67.8 billion. With a large labor pool, increasing skill levels and an agglomeration of related suppliers, China has become the global manufacturing hub for textiles, furniture, electronics, computers and machine tools. Since the early '90s, China has been the preferred destination for multinationals to outsource production. The influx of foreign capital brought with it related technologies and management expertise, and deepened the links between China and the global economy.

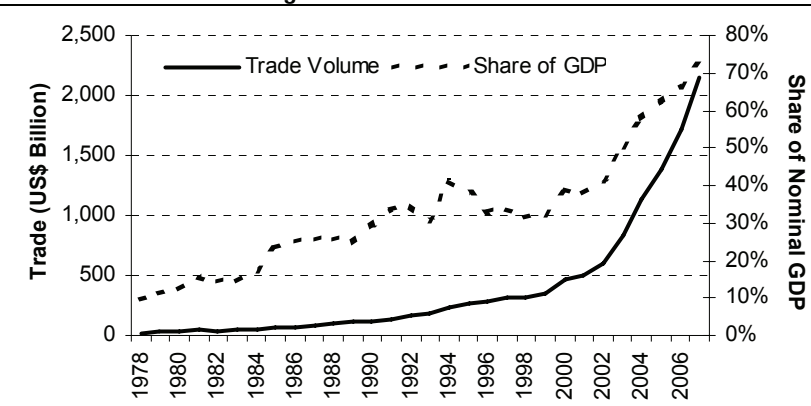
**Exhibit 11: China's Foreign Direct Investment**



Source: International Institute of Finance

Besides foreign investment in China's markets, exports have also been one of the main reasons for China's rapid economic growth (see Exhibit 12). China's foreign trade rose from \$474.3 billion in 2000 to \$1,422 billion in 2005 – an annual growth rate of 25%. By 2005, China's total trade volume rose to 63.9% of its national GDP and is projected to grow to 75% by 2008.

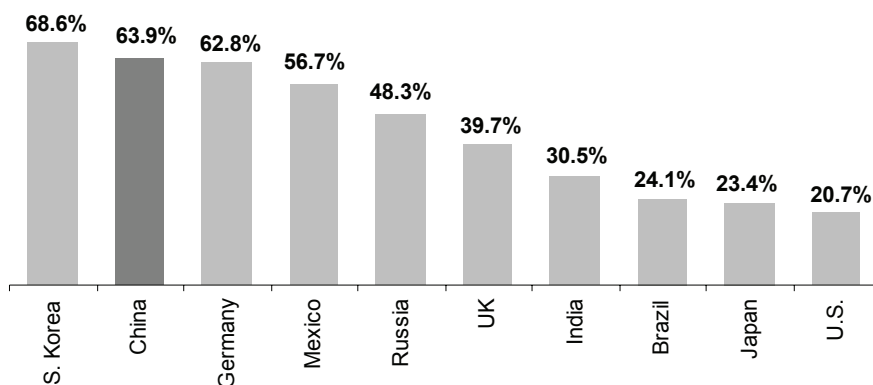
**Exhibit 12: China's Foreign Trade as Share of GDP**



Source: International Institute of Finance

As Exhibit 13 illustrates, China has emerged as one of the top-tier nations ranked by trade relative to GDP. Among select industrialized nations, China ranked behind South Korea, slightly ahead of Germany, and far ahead of the UK, Japan and the U.S. Relative to developing countries, China is ahead of Mexico, Russia, India and Brazil.

**Exhibit 13: Foreign Trade as Share of GDP for Select Economies**



Source: EIU, 2005 data

Besides fueling the Chinese economy, foreign trade and investment have led to a growing interdependence between China and its trading partners. In 2005, China's largest trading partners were the EU, the U.S. and Japan (see Exhibit 14). The U.S. was the biggest importer of Chinese goods, with a total volume of \$162.9 billion. Japan continued to be China's biggest source of imports, with a total import volume of \$100.5 billion. China has also maintained a large and fast-growing trade relationship with its Asian neighbors. The Association of Southeast Asian Nations (ASEAN) exchanged a total volume of \$130.4 billion with China in 2005, while South Korea's total trade with China reached \$111.9 billion.

**Exhibit 14: China's Major Trading Partners (US\$ Billion)**

	Total	Exports	Imports
European Union	217.3	143.7	73.6
U.S.	211.6	162.9	48.7
Japan	184.5	84.0	100.5
Hong Kong	136.7	124.5	12.2
Assoc. of Southeast Asian Nations	130.4	55.4	75.0
South Korea	111.9	35.1	76.8
Taiwan	91.2	16.5	74.7
Russia	29.1	13.2	15.9

Source: Bureau of Statistics of China, 2005 data

For investors, the close links between China and its major trade and investment partners are an imbedded insurance against any irrational political and economic changes. While it is difficult to measure political risks in an emerging economy, China's overwhelming economic integration into the global economy is a strong force for future economic stability and political moderation.

### Emergence of Institutional Players

For foreign real estate investors going to China, a reliable and reputable partner is one of the critical factors for success. Most foreign investors demand value-added to opportunistic returns when investing in China. Development, therefore, is often critical to achieve the required rates of return. For those with lower return hurdles, development may be an effective way of acquiring high-quality assets, given the limited stock available for sale in the market.

Fortunately, after 20 years of growth, the Chinese domestic real estate development community has matured in skill and increased in size. Today many Chinese developers have established reputable brands and critical mass. A recent report, released in March 2006, identified China's top 100 real estate developers (the majority also have asset-management capabilities) in terms of size, growth potential, profitability and comprehensive strength.

These 100 firms had total combined assets of 608 billion yuan (\$76 billion) in 2005, amounting to about 3.3% of the nation's GDP. Seven companies controlled about 33.4% of these assets, with a combined asset total of 203 billion yuan (\$25 billion). Of the top 100 firms, China Vanke, China Overseas Land & Investment (COLI) and Hopson Development stood at the top, with the highest comprehensive strength. **Exhibit 15** shows information on these three companies.

**Exhibit 15: China's Top Three Real Estate Developers**

	China Vanke	COLI	Hopson Devel.
Stock Exchange	Shenzhen	Hong Kong	Hong Kong
Market Capitalization (US\$ Billion)	2.97	4.10	2.40
ROE	16.3%	13.9%	14.8%
Credit Rating	Investment Grade	BBB-/Baa3	BB+/Ba1
Sales Volume (US\$ Billion)	1.74	1.23	0.81
Floor Space Sold (mil. sq. m.)	2.32	1.21	1.01
Land Reserve (mil. sq. m.)	12.09	10.75	12.95

Notes: Overall market strength ranking per "China Real Estate Top 10 Research 2005" for Chinese developers. Market capitalization as of July 27, 2006. China Vanke's credit rating estimated by Prudential Real Estate Investors. Other information is based on respective 2005 annual reports.

## Hurdle Rates of Return

China's overall development cannot hide the fact that, from an investor's perspective, it is still an emerging market. But China is taking the steps needed to mitigate its issues. The government's economic and financial reform measures continue to support strong growth, while the country's inefficient capital markets are expected to improve as China allows increased foreign ownership of its financial institutions. Thus, China's overall risk profile has been steadily improving. In July 2006, Standard & Poor's upgraded China's credit rating to A from A-. This places China in the same rank as South Korea, Saudi Arabia and Chile, reflecting more confidence in the country's finances. Also, China's large foreign-exchange reserves and ongoing reform, along with the economic liberalization of its industries, will consolidate its position as a leader in emerging markets.

Exhibit 16 shows the most recent country-risk rankings from Institutional Investor and Euromoney. Per Institutional Investor, China's country risk is below that of industrialized countries but ahead of major developing economies, including Poland, Mexico, Russia, India and Brazil. Euromoney ranked China below Poland and Mexico but ahead of the other three BRIC countries (Brazil, Russia and India).

Given China's emerging-market risk profile, investors often consider what return is needed to compensate them for the risks. Exhibit 17 shows Prudential's risk-return matrix by country risk and investment risk. The average emerging-market risk premium relative to developed countries is about 4.5%, estimated from historical stock market returns for investable emerging markets. Thus, as an emerging market, China should be expected to return somewhere between 12% on core investments and 19.5% on opportunistic investments to compensate for its inherent risks.

**Exhibit 16: Country Risk Rankings, March 2006**

Country	Instit. Investor	Euromoney
UK	94.1	92.2
U.S.	93.5	96.7
Canada	93.2	92.2
Germany	92.8	90.1
Singapore	88.9	87.9
Japan	85.3	90.1
Taiwan	79.1	81.4
Hong Kong	78.7	82.7
S. Korea	76.7	69.9
<b>China</b>	<b>69.8</b>	<b>61.7</b>
Poland	68.2	66.3
Mexico	65.7	63.2
Russia	62.1	54.7
India	57.1	56.5
Brazil	52.1	50.5
Turkey	48.4	50.2

Notes: Institutional Investor ranks countries' credit risk. Euromoney ranks overall country risk. Scores out of 100 (100 = least risk).

**Exhibit 17: Risk-Return Matrix**

		Investment Risk		
		Core	Value-Added	Opportunistic
Country Risk	Emerging	12.0%	14.5%	19.5%
	Maturing	9.0%	11.5%	16.5%
	Developed	7.5%	10.0%	15.0%

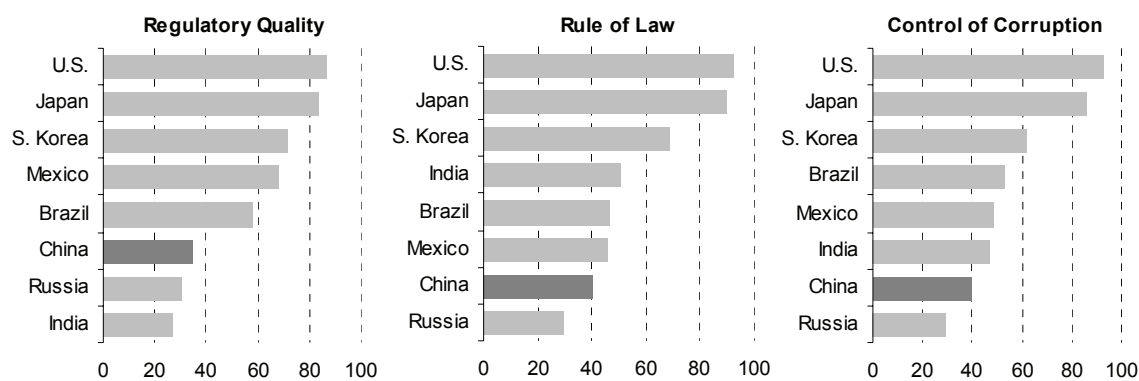
Source: Prudential Real Estate Investors

## Investor Challenges

As an emerging economy, China holds many risks for real estate investors, including the lack of a reputable legal system, underdeveloped contract law, cronyism and government corruption, underdeveloped banking and capital markets, currency control and an opaque market. These risks are not necessarily unique to China, but China's lack of legal tradition and judicial independence indeed stands out even among developing countries. Another example is China's rigid foreign currency control, which makes money flows in and out of the country more difficult and less predictable, and the deployment of money less efficient.

While the World Bank ranks China ahead of other developing markets such as Brazil, India, Mexico and Russia in terms of political stability and government effectiveness, China is behind Brazil, India and Mexico in terms of rule of law and corruption. **Exhibit 18** shows the rankings of a select group of countries by regulatory quality, rule of law and control of corruption, according to a recent World Bank governance study of 209 countries and economic entities.

**Exhibit 18: Percentile Ranking of Governance Indicators (0-100)**



Source: The World Bank, 2004

China is in the 35<sup>th</sup> percentile in terms of regulatory quality, indicating a high probability of policies deterring market development. It ranks behind Mexico and Brazil but ahead of Russia and India. In terms of rule of law, China's score is higher at 41, but China is still behind India, Brazil and Mexico. China is weak in managing government corruption as well, as it ranks only ahead of Russia, with a score of 39.

In addition to major governance issues, China also has unique risks arising from land ownership. All land in China is state-owned; users can only obtain leasing rights. Ownership of leasehold properties in itself is not a risk, as leasehold is common in the U.S. and other developed countries. A state monopoly on land supply, however, gives disproportional power to the government in regulating the industry.

China's economy is growing fast, which creates high demand for institutional-quality real estate. But rules and regulations are evolving quickly as well, creating high uncertainty for investors, especially long-term ones. Most past rule changes, however, were in favor of investors, as China improves its capital markets and raises efficiency in the real estate industry. But occasionally

rule changes may be detrimental. For example, Chinese academic circles and think tanks have been discussing the introduction of property tax for residential and commercial real estate. The imposition of property taxation is not a problem for investors in itself. The problem comes with the uncertainty – when, how much and on what properties. Recently there have been discussions on restricting foreign investment in real estate as a means of cooling the economy. If serious restrictions were to be imposed, foreign investors would have difficulty accessing this fast-growing market.

### **Closing Thoughts**

China is in the midst of a rapid economic expansion expected to persist over the next two decades. From an investor's perspective, China presents enormous opportunities as many urban areas are reaching a GDP per capita of \$5,000, at which level mass demand for institutional-quality real estate emerges.

Three fundamental forces will ensure significant growth of institutional-quality real estate in China for the next decade. First, strong economic growth and massive urbanization are projected to add 20 million urban residents and form more than eight million urban households per year. Second, China has reached an inflection point on income, where further growth will drastically increase the size of the middle class – by 2015, the number of middle class households and above is projected to expand fivefold to 209 million. Third, the market share of institutional-quality developers will likely continue to rise as an increasing amount of higher-quality space is developed.

As China continues to progress, foreign investors will likely continue to expand their geographic interests in order to participate in China's growth. In recent years, four Tier I cities – Beijing, Shanghai, Guangzhou and Shenzhen – have been the main focus of foreign investors. Other major urban centers and secondary cities in advanced economic areas – most notably the Pearl River delta anchored by Hong Kong, the Yangtze River delta anchored by Shanghai and the Bohai Pan area anchored by Beijing – are emerging as promising venues for future investment, especially in the retail and residential sectors.

The Investment Research Department of Prudential Real Estate Investors publishes reports on a range of topics of interest to institutional real estate investors. Individual reports are available free of charge in hard copy or via the Web at [www.prudential.com/prei](http://www.prudential.com/prei). Reports may also be purchased in quantity for conferences and classes. To either receive reports, update contact information or to be removed from our distribution list, please e-mail us at [prei.reports@prudential.com](mailto:prei.reports@prudential.com), or telephone our New Jersey office at 973.683.1745.

Prudential Real Estate Investors  
8 Campus Drive  
Parsippany, NJ 07054  
USA

Tel 973.683.1745  
Fax 973.734.1319  
Web [www.prudential.com/prei](http://www.prudential.com/prei)  
E-mail [prei.reports@prudential.com](mailto:prei.reports@prudential.com)

© Copyright 2006, Prudential Real Estate Investors

Prudential Real Estate Investors is a business unit of Prudential Investment Management, Inc., a registered Investment Adviser and indirect wholly owned subsidiary of Prudential Financial, Inc., Newark, New Jersey.