



Matthews Asia

China—Separating Fact from Fiction

Matthews Asia
PERSPECTIVES



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Introduction

China’s economy is slowing. More importantly, it is undertaking a rapid and strategic evolution from a model based on high levels of credit and investment to one based more on consumer spending and high-value services. As China watchers and global investors parse their data and monitor the news, this might be an opportune time to address some prominent themes and adjust a few misconceptions.

China’s growth has a profound impact on Asia and a significant effect on developed and emerging markets around the world. The economic slowdown that is underway is entirely appropriate as the world economy emerges from several years of crisis intervention, as the U.S. recovery gathers steam and as Europe steadies itself in the wake of its sovereign debt issues.

It is essential that we better understand the world’s second largest economy in order to accommodate the profound shifts taking place in this vital engine of growth. The China story—as remarkable as it has been over the past three decades—is still evolving.

China in Historical Context

A lot of ink has been spilled recently—most of it not very flattering—on China’s debts, flagging exports, housing bubble, dysfunctional financial system, lack of transparency and bureaucratic corruption. It sometimes seems like analysts have decided that China may fall victim to a third leg of a global financial crisis that began in U.S. credit and real estate in 2008, moved on to European sovereign debt in 2011 and finally made its way (to a lesser extent) to Asia in mid-2013.

Those who want to take a more nuanced view of China don’t have an easy time of it. At Matthews Asia, we believe that the country’s long-term prospects continue to be very positive and that most of the present difficulty can be ascribed to “growing pains” associated with a necessary rebalancing of the economy.

In considering where China is going, it’s worth taking a moment to recall the extraordinary road on which the country has thus far traveled. China today is enjoying the fruits of one of the most rapid and far-reaching transformations of a major economy that the world has ever seen.

China has reached a stage of development in which its per capita GDP is roughly equivalent to that of the U.S. in the 1950s. It lags in critical areas of institutional development—capital markets, monetary policy, governance and the welfare state. And its labor productivity is still a third of Turkey or Iran and only about one-sixth of the U.S. So, China is not a country without inadequacies and inefficiencies.

But in only 35 years of remarkable transformation, China has lifted itself out of political and economic chaos to become a middle-income nation and the world’s second-largest economy. Government economic policies have pulled hundreds of millions out of poverty, created a middle class (due in no small part to privatization of real estate) and dramatically improved the livelihood of Chinese citizens. GDP has increased from US\$200 billion in 1980 to US\$8.6 trillion today. From 1999 to 2008, state ownership of the industrial sector shrank from over 70% to approximately 42%. Meanwhile, life expectancy grew from about 66 to over 76 from 1980 to 2011.

Many criticisms of China suggest that this remarkable transformation happened either out of luck and circumstance or a government master plan. We believe the data shows that it was achieved through hard work, enlightened policies that responded well to changing circumstances and the power of free-market capitalism.

To accommodate a story as vast and historic as China today, we have divided this paper into two broad sections. Part One: China Now, seeks to clarify issues related to the profile and sustainability of China’s economy as it stands. Part Two: Challenges for China, addresses the engineered slowdown and rebalancing of China’s economy, as well as intriguing initiatives being undertaken to inject greater transparency and market forces into economic activity.

Phases of Chinese Development

1800	1900	2000		
1800s–1900s Forced opening to trade, imperialism		1911–1957 Nationalist revolution, closed to trade	1957–1978 Large scale industry, Stalinist model, depressed wages 1978 Market-based reforms, reopened to trade	1980s Increased agricultural productivity 1990s Industrial reform, increasing manufacturing productivity 2000s Rising wages, consumerism, urban redevelopment, services, (think U.S. circa 1950)

Part One—China Now

Is China Over-Investing?

Many China watchers today believe that the country is about to suffer an inevitable hangover following many years of debt-driven over-investment. In recent decades, China has built or completely retrofitted hundreds of cities and tied together a continental landmass with energy and telecommunications infrastructure, massive public works programs, highways, trains and airports. This build-out rivals that of Japan, Western Europe and the U.S. after the second World War. And while the costs are being tallied today, the economic benefits of this project will be harvested for decades into the future. However, it remains to be seen whether “over-investment” is actually taking place.

First, analysts looking for over-investment often cite particular industries, such as construction and transportation, particularly the under-populated “ghost cities” and under-utilized airports in the hinterlands (although there was a time when precisely the same might have been said when infrastructure was being laid out in the empty spaces that would become Orlando, Palm Springs, Phoenix and Las Vegas). But the larger question is whether China is experiencing over-investment in its economy as a whole. If this were the case, we would expect to see evidence of deflation.

But in China today, inflation is running at approximately 3% and when monetary policy has been more accommodative in recent years, its economy experienced even higher inflation—around 8% year-over-year in the period prior to the global financial crisis and for a short term, 6% post-crisis. This rapid expansion of

money growth, followed quickly by inflation, is evidence against widespread overcapacity or over-investment.

Furthermore, if we consider manufacturing investment to the exclusion of real estate, we find that Chinese investment in manufacturing capacity has actually been running fairly close to its 20-year average of just under 35% of GDP. Returns on capital (again, exclusive of real estate) have also been stable. And even if one considers all forms of investment, including real estate, we find scant evidence of investment above what is optimal given the economic stage of development—with the possible exception of the last few years, when China and other major economies were undertaking stabilization efforts in the wake of the global financial crisis.

Economic data, therefore, suggests that whatever over-investment might be taking place in China should be considered a cyclical phenomenon—an expansion of credit to underperforming parts of the economy and local governments in an effort to stimulate GDP growth, post-financial crisis.

Economic recovery in the U.S. and Europe would do much to relieve these pressures. But even if this recovery is less strong than hoped for, it might be considered a good thing that China has accepted the principle of mitigating its credit problems by moderating its growth. Much of the recent credit expansion, after all, can be ascribed to the decision to maintain GDP growth of 9.6% from 2008 to 2011.

Government Debt and the Developing Bond Market

Though it is a seemingly simple metric, estimating China’s official debt-to-GDP ratio has proven contentious. China’s public sector finances are notoriously opaque; the finances of China’s private sector even more so. Government-owned banks have idiosyncratic reporting practices; shadow banking networks defy scrutiny. And China’s government debt—broadly defined—is spread across the central government, local governments, policy banks, the Ministry of Railways and state-owned enterprises. With official debt fragmented into so many parts, it is no surprise that estimates of government debt vary widely—from 45% to 80% of GDP.

If we agree with the International Monetary Fund that China’s official debt-to-GDP ratio is 50%, China’s government would indeed be more highly indebted than the governments of other emerging Asian countries, such as Malaysia or the Philippines, but would compare favorably to Germany (82% of GDP), the U.S. (107% of GDP) or Japan (245% of GDP).

In any case, China’s official debt levels don’t appear to be sounding any alarms. A recent Bank of International Settlements Working Paper, for example, estimated that government debt starts to be a drag on growth only when it reaches 85% of GDP. And many developing and developed market economies (notably, the U.S.) have breached the 85% debt level without triggering anything like a financial crisis.

Moreover, China is uniquely insulated from these kinds of impacts because it has negligible foreign-currency debt, low foreign ownership of its bonds and a closed capital account that protects it from sudden capital withdrawals. For all the recent concerns

over its economy, China still generates high single-digit or even double-digit nominal growth. China’s government is also very asset-rich, so it could choose to liquidate assets in the coming years to repay debt.

This isn’t to say that the government debt-to-GDP ratio doesn’t warrant scrutiny. One of the chief concerns in China is that local governments have issued high levels of short-term debt to finance long-term infrastructure projects. To avoid this kind of mismatch in capital structure and to better calibrate debt maturities and project timelines, China might further develop its approximately US\$4 trillion bond market, which today represents only 49% of GDP. By contrast, the US\$38 trillion U.S. bond market represents some 240% of GDP.

China’s government has been urging further development of the local bond market because Chinese companies are over-reliant on equity issuance and bank loans for their financing. And further development of the bond market would help diversify the credit risk that today is overwhelmingly concentrated in the banking sector.

The People’s Bank of China (PBOC) recently took a big step forward in developing China’s bond market by announcing that it will allow some 20 banks—including large state-owned banks—to issue some US\$49 billion (RMB 300 billion) worth of asset-backed securities by June 2014. This pilot securitization program, many believe, will help banks to clear balance sheets and issue new loans, while at the same time addressing investor demand for high-yield fixed income securities.

High Debts, but also High Savings

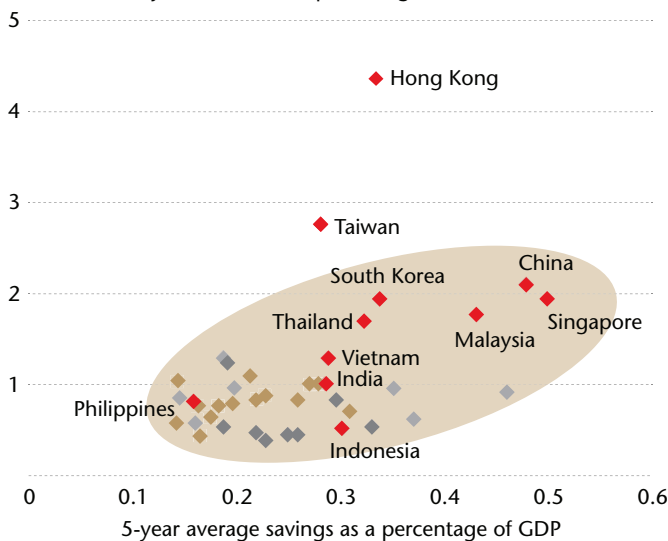
China does have a debt issue, although no one seems to know precisely its size and shape. The new administration of President Xi Jinping and Premier Li Keqiang have made a priority of quantifying this debt, and international credit ratings agencies have urged credit moderation, but infrastructure spending by local governments seems to be continuing apace and the shadow banking industry is still churning out credit. The question today is whether Chinese debt has grown to a level that might result in an abrupt deleveraging of the economy.

While it is still too early to tell for sure, what we can say is that high levels of debt are to be expected in a country with a high savings rate, and where resources are being transferred from those with high savings to those without. The fact that the household sector is saving and the corporate sector investing, and that China's state-owned enterprises (SOEs) are saving and the private sector investing, invariably means rising absolute levels of debt. But when one examines debt compared with savings (see chart below—the horizontal axis shows 5-year average savings as a percentage of GDP and the vertical axis shows total financial system assets as a percentage of GDP), China does not look out of place.

Nothing Out of the Ordinary

Assessment of debt levels requires a look at savings, too

Total financial system assets as a percentage of GDP



Source: FactSet; data as of September 30, 2013

Where debt has thrown up a red flag, however, is in the recent trend of local governments paying down current debt obligations with new debt. Although this process can be likened to pouring money down a black hole, it does not necessarily imply overcapacity. On the upside, it might be considered a form of fiscal stimulus.

China's economy has grown at an average of approximately 9% for the past three decades. Most of this growth has been driven by investment and improvement in labor skills associated with the rise of Chinese exports and the migration of tens of millions of Chinese from rural areas of China's interior to fast-growing cities on the coast.

But the sustainability of this growth has become an issue. Everyone—in China and around the world, in government and in markets—agrees that growth must slow, that economic gains should be consolidated, that unproductive debt must be cleared from the

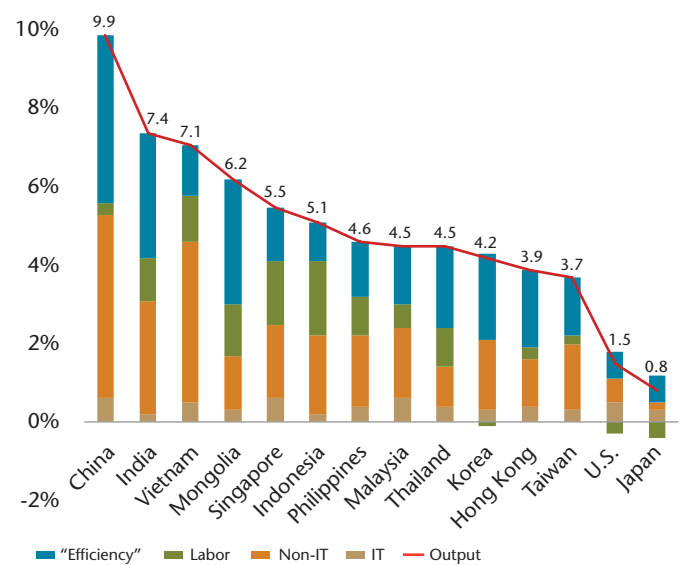
books, that the system of new credit issuance must be rationalized and that economic restructuring should expand consumption. But no one really knows how fast the Chinese economy could or should sustainably grow over the next 10 to 20 years.

Productivity and Growth

In a broadly held misconception, it is often assumed that China's remarkable economic success has been driven by a large and growing pool of cheap labor. In fact, labor force growth has been a very small contributor to productivity. Far more important has been what economists call total factor productivity (TFP)—the percentage increase in output that is not accounted for by changes in the volume of inputs of capital and labor.

Based on the numbers published by the Asian Productivity Organization, during the period from 2000 to 2010, China has had one of the fastest annual rates of TFP growth at 4.1%. China's vast and accumulative investment in research and development, attraction of large amounts of foreign direct investment and its deepening of industrialization are some of the reasons behind the outstanding TFP growth rate during the decade. Even more important, in the case of China, has been the creativity and efficiency with which capital and labor have been combined.

Asian Wages are Rising Because Workers are More Productive



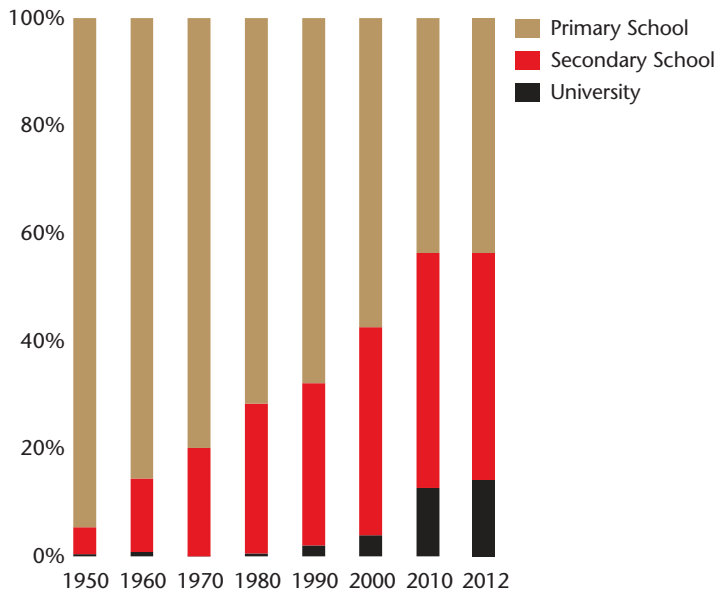
Source: Asian Productivity Organization; Productivity Data for 2000–2010

Industrialization—For decades, China's industrialization process has been shifting its labor force from rural areas to urban areas. With urbanization, labor has shifted away from agriculture and toward services and the industrial sector, where productivity is greater by an order of magnitude. China's urbanization rate is approximately 51% and the speed of urbanization is accelerating, with the government targeting a 60% level by 2020.

Recent analysis by the McKinsey Global Institute suggests that over the next 20 years, China's urban population will expand by 350 million—more than the entire population of the U.S.—to top 1 billion. The Institute further estimates that by 2025, China will have over 200 cities with a population in excess of 1 million inhabitants. Accelerating urbanization in China might well drive a parallel acceleration of labor productivity.

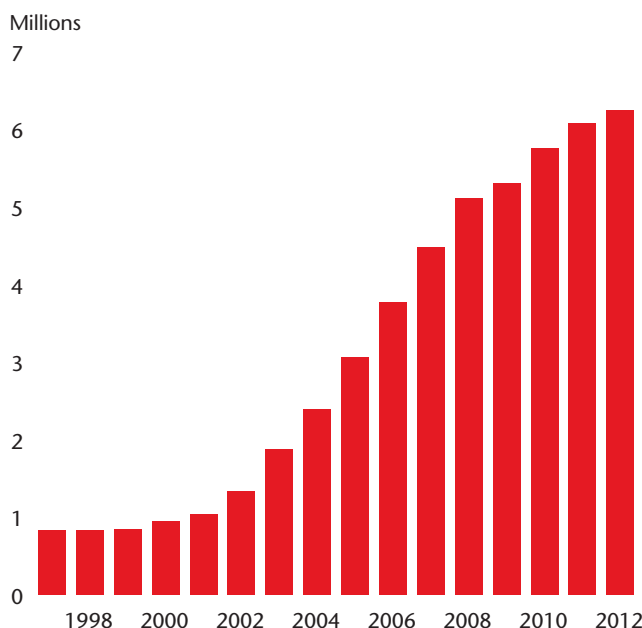
Education—The overall education level of the Chinese population has steadily improved for four decades. In 1980, the average adult had only 3.7 years of education; today, this has doubled to 7.5 years. Only 30% of Chinese had an education level of high school or above in 1990. This rose to 40% by 2000 and is approaching 60% today. In 2000, China turned out only 1 million college graduates annually; in recent years, this has soared to some 6 million. These dramatic improvements in labor force education are expected to lay a solid foundation for further productivity gains.

Education Statistics in China



Source: CEIC

Number of Undergraduates



Source: CEIC

Banking and Shadow Banking

China's economy today might be characterized as a robust system of private enterprise, intermediated by an inefficient government-run financial system. Many of China's banks, as mammoth, state-owned enterprises, are perceived to be instruments of state policy, with lending decisions driven more by political expedience than by market forces.

Capital is poorly priced. Banks clutter their already problematic balance sheets with yet more nonperforming loans (NPLs). In the past, China has dealt with this problem by creating asset management companies to take these loans off the hands of banks and work them through as part of economic restructuring. This strategy appears to have been largely successful, and many of these firms have been preparing to undertake IPOs of their equity.

But while state-owned financial institutions are notoriously inefficient at pricing day-to-day risk, they sometimes shine in times of market volatility. It's worth remembering that during the depths of the global financial crisis, there was much talk about nationalizing U.S. banks—as Sweden had successfully done during its financial crisis in 1992—in order to better absorb market shock.

In China today, banks are already under state ownership. Poorly managed banks making bad loans might be risky for equity holders during normal business (which certainly makes the case for active management for those who invest in China's financial industry). But state ownership might be less risky for the system as a whole and for the flow of credit during times of financial dislocation and systemic distress.

Shadow banking is a normal part of every financial system. A system of non-bank financial intermediaries that mimic many of the lending functions of commercial banks, shadow banking can include hedge funds, money market funds, broker-dealers, credit insurance providers and others. Most critically for China and other emerging markets, shadow banking also includes many informal family, village and even social networks that provide capital for individuals and businesses that—for one reason or another—have limited access to formal channels of credit.

In China, shadow financing provides credit to many healthy private enterprises that don't have access to the major banks. Competition from shadow banking is having the positive effect of pushing China's government-run banks into modernizing and offering competitive services. And this, in turn serves the long-term goal of optimizing financial intermediation across the economy.

While much has been made of the role of non-banks in China's remarkable rise, shadow banking in China is actually underdeveloped in comparison to many other countries. Shadow banking in China accounts for 57% of GDP, a smaller percentage than in Hong Kong, Netherlands, UK (370%), Singapore, Switzerland, U.S. (152%), South Korea, France, Spain, South Africa, Japan, Germany, Brazil, Italy, Australia, Canada, India, Chile, Europe (168%), Mexico and the world as a whole (111%).

In addition, China has recently drafted new rules aimed at containing risks in its burgeoning shadow banking sector and appears to be attempting to coordinate regulation of shadow banks. The move suggests that China is recognizing the potential positive impacts of the non-bank sector in serving the economy.

However, a lack of regulation in this informal financial sector, thus far, has allowed for issues such as mis-selling to the public and even instances of fraud. But both official banks and shadow banking systems have their issues. Because of official restrictions on deposit interest paid and loan interest collected, government-run banks are not incentivized to lend. In the shadow banking system, it's "your own money on the line," so due diligence is taken seriously.

Collateral requirements are also generally higher than in official banks, and shadow lenders have every incentive to maintain proper risk management systems. Because the cost of credit is

higher than in the banking sector, the shadow banking system tends to price risk more realistically. And shadow banking is not a monolithic structure: some products are akin to money market funds; others carry substantially more risk.

Even wealth management products come in two varieties. Short-term products invested in the interbank market are generally guaranteed by the banks and may be thought of as money market funds. Other instruments, of longer maturity and not guaranteed by the banks, contain government or corporate bonds or loans alongside interbank assets. These products can be thought of as fixed income instruments. Some of these wealth management

Chinese Banking: Issues and Solutions

China's banking system operates under the burden of several issues that must be addressed before the system can deliver global-standard services:

Supervision and Standards—Despite having undergone a credit crisis during the Asian Financial Crisis of the late 1990s, Chinese banks appear to have learned few lessons. Instead of taking a proactive approach to bringing in foreign expertise to help to improve underwriting standards and loan pricing, the China Banking Regulatory Commission (CBRC) essentially instigated a guaranteed margin to ensure bank profitability.

Chinese banks have a maximum deposit rate that they can pay out to individuals and corporates for their deposits; they also have a minimum lending rate. This is a very different approach to that undertaken by other Asian banking systems during the post-crisis period. In those countries, supervision and standards are better today than ever before. Interestingly, China didn't even adopt Basel standards (which establish minimum standards for capital, liquidity and leverage) until the late 2000s.

Poor Risk Pricing—In addition to a regulator-determined guaranteed spread, Chinese banks have had little control over the direction of their lending, with the major state-owned banks routinely being nudged into certain asset classes. This combination of a guaranteed spread and exogenous factors directing lending leads to what most would consider to be sub-optimal risk pricing.

Growing Corporate Debt—Despite this suboptimal pricing, China has undertaken very aggressive loan growth for the last decade, with loans expanding much faster than has GDP. According to estimates from Bloomberg, corporate debt in China is 113% of GDP—a ratio higher than that seen in nine other countries that experienced financial crises over the past 20 years.

High Leverage—Capital, liquidity and underwriting standards are the three most important metrics for any banking system. China's banking system has some RMB 126 trillion (US\$21 trillion) of assets on its balance sheets, backed by only RMB 8.2 trillion (US\$1.37 trillion) of equity, implying a very high gearing ratio of 15x. Most people tend to look at only Tier 1 capital ratios; while these are also weak in China, the ratios don't reveal how dire the situation is regarding capital, as core Tier 1 capital ratios are approximately 9.9%. This means that even with no further credit issues destroying capital, Chinese banks will likely need to come to market for growth capital.

Problematic Loans—Nonperforming loan ratios for China's banks likely understate current risks in the system. While there

is little evidence to suggest that banks are posting fraudulent numbers, NPL ratios of 96 basis points (0.96%) do not seem feasible, given outstanding debt levels, suboptimal pricing and the aggressive pace of bank lending. The rolling over of loans and potentially some restructuring is likely driving these figures. While it is impossible to determine "real" NPL levels, the provisions of 2.8% of loan books do appear to acknowledge these risks.

Contingent Liabilities—Wealth management products derived from bank loans could become contingent liabilities for banks, should they be defaulted on. Given the asset liability mismatch that exists in many of these products, this may be likely at some point. Indeed, one former Bank of China official termed them a "Ponzi" scheme. Should this take place, banks might be left to explain to customers why they lost their money, necessitating a further cash call.

Avoiding Major Issues—Even though Chinese banks are beset by a lack of capital, high debt levels and weak underwriting standards, it should be recalled that Chinese banking is a self-funding system, with reasonable liquidity and substantial government firepower for recapitalization, should that become necessary. This is precisely what took place in the late 1990s, and citizen-taxpayers have few alternatives.

Were the Chinese capital account to be suddenly opened (lifting restrictions on capital inflows/outflows for foreign direct investment, portfolio and other investments), the resulting liquidity event would likely spark uncontrolled financial consequences. But if the previous history of Chinese liberalization is any guide, the opening of China's capital account will be carefully planned and undertaken in stages.

A preview of more open Chinese financial infrastructure might be seen in the new Shanghai Free Trade Zone (FTZ). (See an overview in Part Two of this paper.)

Four Essential Steps for Improving Chinese Banking

- ✿ Liberalize deposit rates to improve competition and improve risk pricing
- ✿ Initiate deposit insurance to impede capital flight should markets deteriorate
- ✿ Raise equity to boost reserves
- ✿ Continue to grow the bond market and encourage asset securitization to provide capital relief for banks and to reduce balance sheets

products are being inappropriately sold as having money market-like risk characteristics when this is not the case. Should some of these riskier products run into problems, banks may be held liable for investor losses.

Trust products, which are often confused with wealth management products, constitute a very different set of products—for different clients. Trust products managed by trust companies invest principally in local government bonds or corporate bonds and loans (many of which are issued by local government entities). And they demand high collateral levels—often 200% of the value of the loan. This requirement has led to accusations that trust companies often enforce their covenants too strictly or cause borrowers to default so that they can seize collateral.

These products also invest in property projects as lender or equity owners, which may be a cause for concern, given that many property developers seem to be financially stretched. When these products do default, it is unclear to whom clients have legal recourse. For example, would investors have claims on banks that sell the products? The government has made it clear that in the event of losses, trust companies cannot make the holders of these products whole. For example, when two trust products run by the high-profile CITIC group went into default recently, CITIC announced that it would seek redress from the courts backing an attempt to claw back as much of the assets as possible but would not make investors whole.

Had there been more claims of mis-selling or mass defaults, the government might have demanded that banks offer compensation. But for the time being, regulators have simply tightened the disclosure rules around the selling of these products in the belief that this would limit claims of mis-selling to funds sold in 2012 or before.

China's shadow banking system is still underdeveloped and, many believe, too small relative to China's massive banking sector—underscoring the idea that the Chinese economy is still too reliant on banking.

But for shadow banking to play a more prominent role, two central issues must be addressed. The rapid growth rate in shadow banking has led to irrational credit approval decision-making. And cases of the mis-selling of shadow banking products through the formal banking channel might lead to chartered banks being held liable for investor losses. Regulators would do well to address this issue of risk being transmitted between the formal and informal systems, in order that the national system of credit be rationalized.

Recently, regulators approved banks launching asset management products, which are similar to mutual funds in terms of disclosure and NAV calculation. This seems a step toward reducing the risk of banks guaranteeing wealth management products and providing much needed transparency in shadow banking products.

Real Estate and Property

In analyzing China, we often disaggregate numbers for real estate/property and investment. We do this because this reveals that whereas income in China—measured as a percentage of GDP—is keeping pace, consumption appears to be falling when measured by that metric. Another reason to differentiate this analysis is that when most Chinese purchase a residence, they either pay cash or take out a mortgage for less than 50% of the property value. Contrast this with the U.S., where private individuals typically take out mortgages for over 80% of property value.

Unlike in the U.S., where—in the robust pre-crisis real estate market—individuals could secure stated-income, no-doc loans, in China it is not at all easy to obtain a mortgage. Because of this, rising real estate investment usually engenders markedly decreased consumption. So the market movement of house prices has a different economic impact in each country.

When house prices fall in China, the economic impact is felt more through a “negative wealth effect,” whereas in the U.S., the primary impact is usually a credit crunch in which consumers struggle to pay down debt. And Chinese consumers seem able to withstand negative wealth effects well. For example, in recent years, the value of China's A-share market (A-shares are Shanghai- and Shenzhen-listed equities denominated in renminbi) fell by about 70% from peak to trough as China absorbed the impact of the global financial crisis, thereby “wiping out” some US\$2.5 trillion of nominal wealth—in a country with a US\$8 trillion GDP.

But this negative wealth effect appears to have had only a minimal effect on consumption. China's GDP growth has slowed from 10% – 11% to 7% – 8% primarily as a consequence of weak demand in China's primary export markets in the U.S. and Europe. Today, loans in the banking system are collateralized by land prices, but to get a significant fall in land prices in such a fast-growing economy would seem to require a huge shock to productivity.

Part Two—Challenges For China

As China contemplates the next phase of its economic growth, several issues arise as challenges and potential profit opportunities for investors. For a modern urban economy, China's social welfare systems—public education, health insurance, pensions and the like—are woefully underdeveloped. Environmental/quality-of-life issues range from air pollution and coal-fired electricity to lax regulation of toxic waste, contaminated water and an economically dubious program of damming China's great rivers.

And China is becoming a new kind of global citizen. As might be expected for the world's second-largest economy, China's every action comes under the scrutiny of the international community. The Chinese leadership is learning that it will be held to account for everything from human rights to territorial claims in the South China Sea, persistent trade imbalances, treatment of international investors in China and local sensitivities regarding the billions that China has allocated around the world in foreign direct investments and in listed securities (notably, its US\$1.3 trillion position in U.S. Treasuries).

A middle-income China—soon to have 1 billion urban dwellers with rising expectations of social, economic and even political opportunity—will be taking a hard look at everything from educational access to governance, competitive market forces, institutional transparency and “level playing fields” for regulation, markets and courts.

Several substantial issues—and opportunities—are looming quite close on the horizon.

Taming the Credit Dragon

Yes, China has a credit issue. Over the past half decade, private sector credit has risen by about 42% of GDP. This is a steep rise, but by no means unprecedented, particularly in developing Asia where other nations in the region have experienced similar increases. Credit expansion seems particularly noteworthy when measured by Total Social Financing (TSF), a broad liquidity measure that includes loans, debt associated with trust company products, bank acceptance bills, corporate bonds and even share issuance. In addition, many Chinese companies take out bridging loans to cover accounts receivables, further boosting credit numbers ahead of GDP.

Total credit in China's economy today—including bank loans, non-bank loans, overseas trade financing and financing from Hong Kong banks—tops over 200% of GDP. And credit growth does not appear to be slowing. According to Fitch Ratings, new credit in China rose to US\$3.4 trillion (RMB 21 trillion) in August 2013, up from about US\$3 trillion (RMB 19 trillion) in August 2012. The credit agency projected that China's credit-to-GDP ratio could, by 2017, rise to 250% of GDP—twice the 2008 pre-crisis level.

In addition to debt volumes, there is broad concern that many of these loans—particularly those taken out by local governments—have been spent unwisely and unproductively. Local government debt amounts to some 35% of GDP. But central government debt is even lower, so official debt is not particularly stretched. And the government has plenty of assets to cover these debts, including approximately US\$3.6 trillion in foreign exchange reserves (up from about US\$400 billion in 2003).

The explosion in China's credit had two principal drivers. First, government calls for banks to lend aggressively in response to the global financial crisis. Over the past five years, credit grew by 25%

to 30% annually at a time when nominal GDP growth was closer to 10%. Second, many companies previously unable to access credit took out loans through the shadow banking system at rates well above those of mainstream bank loans.

China's credit boom can, therefore, be accounted for by both stimulus and liberalization. Most of this credit found its way to infrastructure projects and property development. Crucially, it does not seem to have resulted in overinvestment in manufacturing capacity.

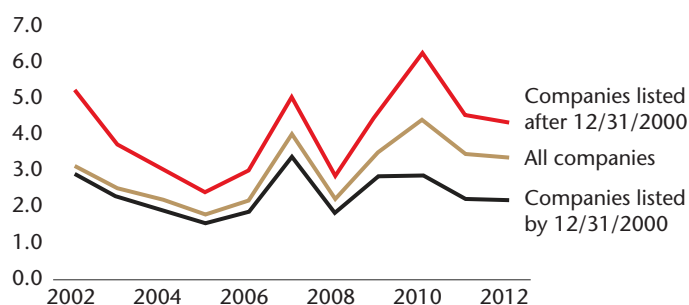
Consideration of this growing debt invariably raises questions about soft and hard landings. Past evidence suggests that this determination has historically turned not so much on the size of credit expansion, but on how credit growth was funded. In this regard, prospects for China seem positive.

Unlike many developing economies that have experienced credit events in the past (notably during the Asian Financial Crisis of 1997), China has a substantial current account surplus and a self-funded banking system. In addition, the expansion of credit has been accompanied by a substantial rise in bank deposits; the elevation of China's credit-to-deposit ratio has been moderate, even when taking into account off-balance sheet instruments.

Each individual investor must decide whether these perspectives negate low valuations or the fact that many Chinese companies continue to enjoy robust earnings growth despite the macro picture. It's worth remembering that the recent credit boom has been focused on local governments, property and infrastructure—not on companies. As a result, the balance sheet health of Chinese companies (as defined by the FactSet aggregate country designation) has remained well within historic ranges.

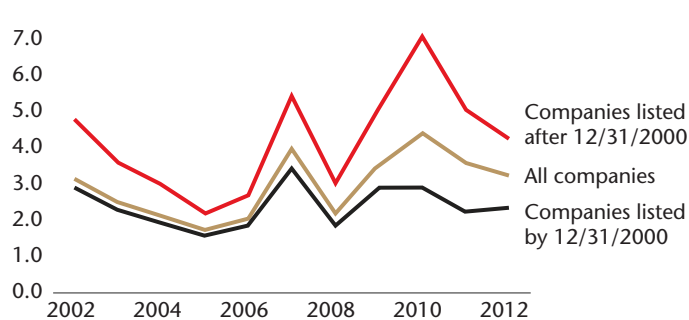
One way to look at this is through the Altman Z Scores, which are quantitative assessment of a company's financial strength (higher the score, the lower the risk of bankruptcy).

Median Altman Z Scores for Different Listed Company Universes



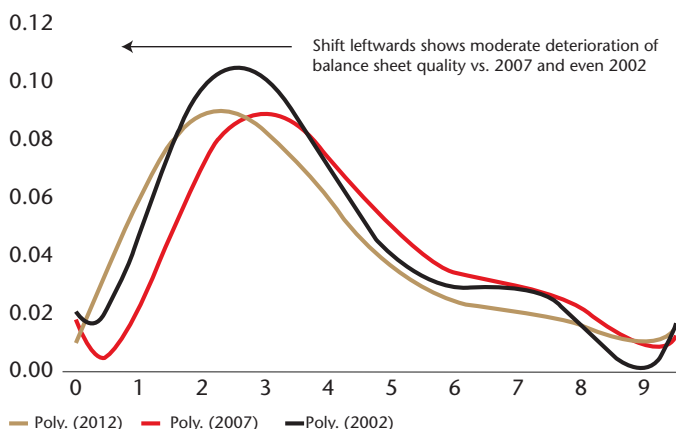
Source: FactSet

Here is the Same Graph Using A Share-listed Companies Only



Source: FactSet

Outside of the Median, We Can Look at the Distribution, Which Tells a Similar Story



Source: FactSet

While China may have experienced a moderate deterioration of financial health as a consequence of debt and rising accounts receivable, active bottom-up investors have many healthy Chinese companies from which to choose. What's more, China's new leadership has undertaken tightening in order to bring liquidity/credit under control, implying an "engineered slowdown" of GDP that tends to reduce tailwinds for asset prices in the near term.

Transparency: Can We Trust the Numbers?

No country perfectly represents financial and economic data. Government ministries, central banks and national statistics agencies—even in Europe and the U.S.—do their best to model economic performance from limited data samples, but only rarely come up with identical numbers. As China has grown progressively more important to the world economy, factual data has become critical for analysts, business planners, economists and governments. Where Chinese data may once have been critical to Asian specialists, it is now of global significance. Where China's data on investment and economic expansion has been uniformly robust, a slower-growing and more diverse economy presents a more complex target for analysts.

The development of accurate, timely and granular data on China has proven challenging. For many years, the suspicion has been that Chinese economic and financial data has been manipulated in a way that maximized GDP and minimized volatility. But the story is more complicated than that.

Like many developing countries, China's institutional capacity to generate accurate data is underdeveloped. China's National Bureau of Statistics (NBS) has suboptimal mechanisms for collecting data, imperfect systems for modeling it and datasets that are spread across national agencies and regional and city governments. Consumption measures typically rely too heavily on retail sales.

Government methods for measuring inflation are opaque, and the consumer price index (CPI) is thought to underweight services and private industry, reflecting the influence of state-owned enterprises. Invariably, aggregate national numbers for unemployment and GDP compound smaller distortions gathered along the way.

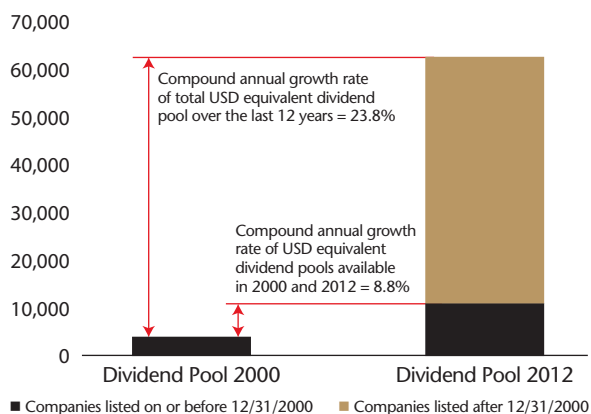
While outright falsification has taken place in years past, at this stage, "manipulation" is more likely the norm. Private and state-

owned enterprises have tax and regulatory motivations for fudging statistics. Statisticians from the national government consider local governments—engaged in intramural competition for the favors of bankers, investors and the national government—unreliable.

China watchers working in academia, government, industry and markets have long used "alternative" methods of cross-checking official Chinese data, including auto production, consumption of gasoline, electricity generation and even variants of the Baltic Dry Index, which reflects the price and volume of raw materials shipped by sea.

Investors in China who don't want to deal with the whole "data question" might find an acceptable option in hard cash. For example, one hard measure of China's growth is the growth rate of China's dividend pool since 2000. According to FactSet, Chinese companies (mostly made up of A and H shares) listed on or before 2000 grew their dividend pool by nearly 9% annually through 2012, measured in U.S. dollars on a like-for-like basis. And the size of the total dividend pool, including dividends from companies formed after 2000, grew at an annual rate of nearly 24% for the same period.

Dividend Growth in China, USD



Source: FactSet; data as of December 31, 2012

It's difficult to know what the "truth" is in any economy. But China's GDP figures and other economic data, while not perfect nor as well-collected as those in the U.S. and other developed economies, do reflect the magnitude and vector of changes that have taken place in the country since it began its reforms. For international investors considering China, perhaps the best way to address the "soft" quality of China macro-data is to use bottom-up stock picking strategies. Whatever the "real" numbers for China growth might be, there is at least one data point that directly affects shareholders that is non-fungible: cash dividends.

Transition, Rebalancing and Evolution

Many China watchers presume that those with an entrenched interest in the status quo will resist the next phase of China's transformation, leading to a revolution rather than an orderly evolution of the national economy. But this is not necessarily the case. Two major challenges often put forward as potential obstacles to growth may prove to be less significant than they at first appear.

The Middle Income Trap

The World Bank defines middle income countries (MICs) as the 86 countries found in the middle range of its World Development Indicators. MICs account for about half of the world's population and cover a wide income range, with the highest income MIC having a per capita income 10 times that of the lowest.

Economists have long posited that poor developing countries ought to grow rapidly through the initial “takeoff” phase of their development, but slow down as they become wealthier. This may be why policymakers in developed economies are happy with GDP growth of 3%, while those in emerging markets (such as China) get nervous when their economies “slow” to the high single digits.

Some have contended that countries can “hit a wall” when they reach middle income, but an argument can be made that by the time a country has reached middle income, the really hard work has been done and market demands for continuing high growth are unrealistic. As China's economy alters its focus from investment to consumption, as more Chinese move to cities, spend more and save less, as the cost of labor rises, and as China shifts to more capital intensive, higher-value production, a slowdown is inevitable.

The “trap” that awaits China is that after decades of improvement in virtually every measure of economic growth and living standards, China might fall short of attaining the elevated living standards and high-tech industries that thrive in the U.S., Europe and elsewhere in developed markets. In Asia, Japan, Taiwan, South Korea and Singapore have successfully navigated this transition. Malaysia and Thailand are in the middle of the process; and India, Indonesia, Philippines, Vietnam and Pakistan have yet to begin the transition.

As part of this evolution, China will have to double down on education, technology, sustainable energy and transportation and shift production up the value chain from assembly to design—and this is exactly what it is attempting to do. But it will also have to throttle back on investment and instill more market forces into the economy, notably among state-owned enterprises and the financial services sector.

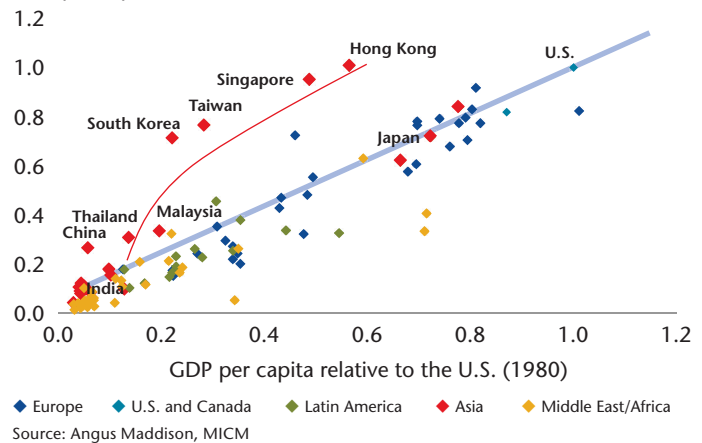
But when we consider the dilemma of the “middle income trap,” it may not be a trap at all. According to economic theory, poor countries ought to be able to grow faster than rich countries because they offer greater opportunities for development. However, when one looks at the data, many countries in both the low and middle income groups fail to outpace, say, the U.S.

The following chart shows GDP per capita, relative to the U.S., for a variety of countries in 1980 and in 2010. The U.S. can be seen at point 1.0, 1.0. If a given country merely grows in line with the U.S., it will lie on the 45° line, for example, 0.5, 0.5. What we find is that countries that enjoyed half of the U.S. GDP per capita in 1980, still account for that proportion today.

The chart makes clear that highly developed countries tend to grow at about the same rates and that middle income countries—and even poor countries—have struggled to grow any faster. So, it is not the level of income that determines the rate of growth. Clearly, most countries struggle to grow any faster than the global leader.

Asian Economies Can be on a Path Toward Greater Prosperity South Korea and Taiwan are particular standouts

GDP per capita relative to the U.S. (2010)



But there is one group of countries—both rich and poor—that lies above the line and thus has been outpacing the U.S. They are almost exclusively in Asia. So, Asia has managed to achieve the take-off and catch-up that has eluded most of Africa, Eastern Europe and Latin America. Why? We believe it is a consequence of productivity—savings, education, institutions and the emancipation of the entrepreneur.

The Lewis Turning Point

The Lewis Turning Point, named for St. Lucian development economist and Nobel Prize winner Sir William Arthur Lewis, describes an inflection point at which an economy fueled by a large population of low-cost workers is suddenly beset by labor shortages. Economists are today focused on China, where a large pool of “surplus” agrarian labor, migrating to cities, is thought to have held down manufacturing costs for decades. As the country urbanizes and shifts to an older demographic profile, the fear is that this pool of labor is drying up and that rising wages might choke off profits and growth.

A recent IMF paper foretells a Lewis Turning Point for China between 2020 and 2025. It suggests that higher fertility, greater labor participation rates, financial reform and rising productivity might delay the onset, but notes that demographic forces trump all other economic factors.

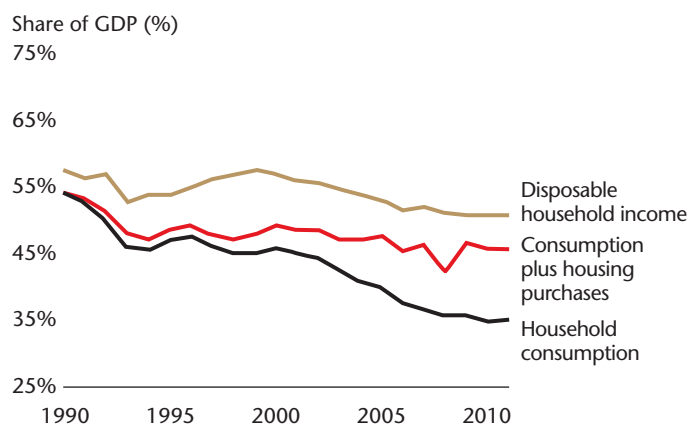
It may be tempting to presume that China is on this path, but once again, there are other factors to consider. First, there is the notable example of another continental-scale country with a largely agrarian, uneducated workforce that shifted to cities, industrialized and rose to the status of a global economic superpower while transcending the Lewis Turning Point just fine: the United States of America. The Lewis Turning Point has many valuable applications, but China is well known for learning from the example of the U.S.

Second, the data does not suggest that China neatly fits the Lewis theory. China bears—pointing to the fact that private consumption has fallen in China from 50% to 35% of GDP over the past 20 years—often conclude that this resulted from wages being chronically depressed by surplus labor.

But private consumption is only one of several economic measures. Household disposable income in China—another vital measure—has kept pace with GDP. Capital share of income has also kept fairly stable. So what accounts for China's falling levels of private consumption? The answer seems to be that if one adds household spending on real estate to this figure—effectively treating it as consumption—private consumption has remained fairly steady over recent decades.

Is this fair? Many may balk at the idea of treating housing purchases as a form of consumption rather than investment. However, if one takes into account real estate purchased with only minimal leverage (as is the case in China) many “anomalies” of China's growth suddenly disappear.

Household Income/Consumption/Consumption+Housing Purchase



Source: Emerging Advisors Group, 2011

Liberalization and Financial Reform

China's leadership understands that the country is somewhat behind the curve of history, in that it is one of the few large single-party states left in an increasingly democratic, transparent and free-market world. On the other hand, China's single-party system masterfully navigated its multi-decade evolution into an economic superpower, steadily increasing the life expectancy, education levels and standard of living of its people—the central goals of any economic development strategy.

But if China needed a firm—some might say authoritarian—hand to bring the nation this far, the leadership also understands that to guide economic development in an urban China with a more balanced economy, a very different philosophy must be applied. To thrive, a complex, consumer-driven economy needs transparent governance, market forces, regulatory clarity, legal surety, recourse to courts and the free expression of creative ideas.

And China's population, led by an increasingly prosperous elite class that has been internationally educated, is expressing rising expectations in all of these areas. China's new leaders, President Xi Jinping and Premier Li Keqiang, seem to understand that a next-generation Chinese economy will need these attributes. And they also seem to believe that this phase of reform will begin with the liberalization of capital markets.

A generation ago, Japan and South Korea evolved from agrarian economies to export superpowers by focusing on developing markets for goods rather than for capital. As a result, capital

markets in both countries are underdeveloped and both are chronically bank-dependant. Bearing this in mind, China's recent Third Plenary Session of the 18th Central Committee targeted financial reforms that are expected to have a catalytic effect on the economy as a whole, encouraging the kind of de-materialized economic forces (services, IT, digital commerce, intellectual property and innovation) that define the 21st century.

In the coming years, China's program of economic liberalization can be expected to dispense with floor lending rates, liberalize deposit interest rates, allow for the introduction of bond futures for improved interest rate risk management and allow local governments to issue bonds to replace the so-called local government financing vehicles (LGFVs), thereby reducing the role (and debt-driven) expenditures of local governments in favor of the national government. China is also expected to enhance financial regulatory functions and move further toward a free-trading national currency. Notably missing from this agenda seems to be an outright privatization of inefficient state-owned enterprises.

Shanghai Free Trade Zone

A preview of these reforms may be seen in the recently announced Shanghai “Pilot” Free Trade Zone (FTZ), which seems to be more oriented toward free trade in financial services than toward the trade of goods. The 11-square mile FTZ will allow for a broader range of international banking services, a more liberal foreign exchange regime and market-oriented interest rate reforms. But while the Chinese leadership has drawn parallels to the paradigm-shifting creation of the Shenzhen Special Economic Zone 30 years ago, international banks have thus far failed to beat a path to the door; investment banking and leasing, two of its most profitable business lines, will not likely be permitted in to the FTZ.

The exciting prospect is that the Shanghai FTZ might become a sort of laboratory of reforms that, in the manner of Shenzhen decades ago, might cascade across to transform the entire economy. Upon the announcement of the FTZ, it was rumored that all manner of financial services, shipping, legal services and others might be opened to foreign investment and—perhaps more significantly—that broad Internet access might be allowed, including social media such as Facebook and Twitter.

It is perhaps too early to make too much of the FTZ, but there is one aspect of its organization that stands as an interesting experiment. Much of the legal system in China and in other parts of Asia has traditionally focused on telling people only what they may do. This practice is appropriate to an economy establishing a manufacturing base. But when it comes to developing a service economy with a growing financial sector, flexibility of thought is far more critical than is consistency of product.

In the Shanghai FTZ, the rules set out to define not what people may do but only what they may *not* do, leaving to the market most decisions on what to produce. While this notion is liberating in the context of China, it is in fact the traditional practice of Anglo-Saxon countries such as the U.K. and U.S. And it is the bedrock of Hong Kong's legal system.

But the Shanghai FTZ thus far remains a work in progress, with far more questions than answers. The international response has thus far been a wait-and-see attitude; the influential magazine *The Economist* has termed the initiative a “damp squib.”

China's Third Plenum

China's recent Third Plenum called for 60 reforms in 15 major areas, covering many aspects of the country's social, economic and political policies. In past plenums, China's Central Committee limited itself to announcing general directions and guidance. This time, the detail and breadth covered by the session suggests meaningful reforms that will play a key role in China's drive toward economic restructuring and market efficiency. The key elements include:

- ✿ Measures aimed at reducing the power of the central and local governments and supporting the private sector
- ✿ Improving the efficiency of the SOEs through private investment and the encouragement of hybrid public-private enterprises
- ✿ The establishment of state-asset holding companies along the lines of Singapore's Temasek
- ✿ The confirmation of rural land rights and promotion of collateralization, guarantee and transfer of rural properties
- ✿ Reducing the scope of local government expropriation of farmers' lands
- ✿ New rate flexibility for trading the RMB
- ✿ Acceleration of interest rate-liberalization and allowing for market supply and demand to inform the government-bond yield curve
- ✿ Implementation of more standardized and transparent systems for government budgeting
- ✿ Exploring the separation of judicial and administrative systems

- ✿ Reform of the household registration (Hukou) system, which has disadvantaged rural migrants and their families in growing cities
- ✿ Relaxation of the one-child policy

Significantly, the document also set specific targets for achieving these reforms by 2020.

The Plenum reforms aim to efficiently allocate resources across an economy that is more balanced, market-oriented and sustainable. This implies reduced government intervention in a business environment defined by greater competition.

Because the reform announcements are generally supportive of market forces, they create opportunity for investors whose approach is to identify competitive companies with long-term sustainable growth prospects predicated on efficient business models. A business environment supportive of these kinds of companies creates opportunities for long-term investors.

The reforms of the Third Plenum are not only prescriptive. In many ways, they seem an imminently pragmatic endorsement of an evolution that is already well underway in China's economy and in the society at large. The same might be said of the new Shanghai Free Trade Zone, which tends to leave decisions to markets and companies over what can and should be done.

China's Third Plenum reforms and the Shanghai Free Trade Zone both embrace changes supportive of a service economy, particularly financial services. These thoughtful and self-aware reforms acknowledge the power and wisdom of market forces in determining the composition and direction of Chinese economic growth.

When it comes to reform in China, the prevailing methodology of the past 30 years has been to move very carefully—step-by-step at a sometimes glacially measured pace. While this has long frustrated some, these one-at-a-time initiatives have steadily massed to drive fundamental transformations.

Conclusion

China may be somewhat out of step with the economic, social and political standards that have come to prevail in most of the world today. And there is a certain disordered quality to a vast nation composed of numerous ethnic groups, varying rates of economic development and a substantial gap between an opaque and rigid central government and local authorities that each pull in their own direction.

But to presume that China is losing control or that the present downshift in GDP growth is unplanned would be wide of the mark. However one may feel about China's reforms, they cannot

be described as haphazard. China's experimentation with market forces in financial services, with new approaches to law and governance, are of a piece with other reforms going on in the social realm—notably in education, where China is orienting its focus away from rote learning (useful in mass production) and toward originality of thought (critical for service industries, technology and finance).

As China embarks on its next phase of economic development, we should perhaps be patient. We should recall how far it has come, note the deliberate but transformational nature of its policy shifts and remember that China always takes the long view—looking backward to history and forward well into the future, when it will resemble slower-growing economic blocs such as North America and Europe more than the developing markets from which it emerged. Contemporary China seems nothing less than a civilization in transformation.

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