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# *Inclusive Development:*

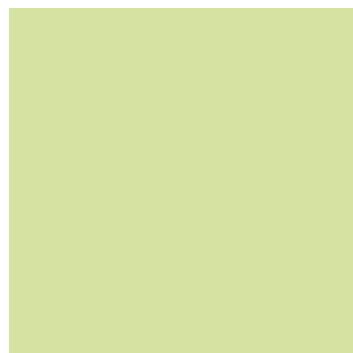
*Common Agenda, New Challenges*

包容性发展：共同议程与全新挑战

Boao Forum for Asia

## Annual Conference Report 2011

博鳌亚洲论坛2011年年会报告





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Photograph of the government leaders attending the Opening Ceremony, and some members of BFA Board.

# Preface



Zhou Wenzhong  
Secretary General  
Boao Forum for Asia

The Boao Forum for Asia Annual Conference 2011 (BFA AC) was an historical event. Not only was it the first Forum held since Asia's recovery from the global financial crisis has been firmly established, but it also marked the 10th anniversary of its Annual Conference. At this milestone in the post crisis era, inclusive development becomes a common agenda to remodel Asian economic growth. To explore policy thinking and business opportunities on inclusive development, the BFA AC 2011 brought together an unprecedented group of prominent government leaders from Asia and Brazil, Russia, India, China and South Africa (BRICS) political leaders, strong representation of business leaders from Chinese companies and multinational companies (MNCs) from around the world, as well as experts from universities and think tanks.

The BFA AC 2011 provided opportunities for exchanges of views and ideas as well as networking through a wide variety of activities over the three days from 14 to 16 April 2011, spanning panels, workshops, roundtables, private meetings and social events.

The opening keynote by President Hu Jintao established a clear focus on the common interests among Asian and BRICS countries, and indeed the whole world, in sustaining national and global recoveries from the global financial crisis, refining national development models according to each country's own national characteristics and needs and establishing more and more effective dialogue amongst them all. President Hu's keynote set the stage for intense, expert and detailed discussion of this year's Forum theme "Inclusive Development: Common Agenda & New Challenges".

This is not a chronicle of the various events at the 2011 Forum, the purpose of this report is to present key viewpoints and analyses distilled from the BFA AC's presentations and discussions.

That the BFA AC continues to grow in scope and influence is testament of the growing influence of Asian economies in the global arena. We wish to take this opportunity to thank many old friends for their continuing participation and support and to welcome many new friends who join and expand this valuable network each year.

### Understanding "Inclusive Development"

After two years of focusing on the global financial crisis and environmental challenges, the BFA AC 2011 looked ahead to the quality and sustainability of growth.

The seemingly diverse topics and events in the programme actually followed four major paths in analysing the opportunities and challenges of "Inclusive Development".

1. All opportunities created by the process of economic development should be open and fair.
2. The benefits and the wealth that are the outcome of economic development should be extended to everyone.
3. In the current tide towards globalisation, it is clear that no country can develop in isolation. This requires that economic relations between countries are characterised by mutual inclusiveness.
4. The other needs of inclusive development must be met in ways that balance human economic activity with preservation of the environment we live in.

The theme of Inclusive Development recognises both the opportunities and challenges of economic development and globalisation. Within the framework of the theme, the search is to find means for countries to identify their complementarities and not view development as a "win-lose" process. The gaps between rich and poor need to be addressed and, overall, development has to address that the global population continues to expand, while fossil fuel sources are increasingly limited and traditional models of food production are not up to the task of feeding the world in the future.

In short, there are domestic and international aspects of Inclusive Development and both were explored at the BFA AC 2011.

### The Forum's significance and setting

From its inception 10 years ago, the BFA has evolved into the perfect event to explore "Inclusive Development". Convened in the village of Boao on Hainan Island in mid-April, the 2011 Forum marked the 10th anniversary of the event.

Participants not only exceeded those of previous years in number, but they represented a wider range of regions and countries than in previous years.

In fact, the 2011 Forum marked a turning point in several respects. The first to be convened under the guidance of the new Secretary General, Zhou Wenzhong, former ambassador from China to the United States, the participation of many leaders from BRICS and other emerging economies not only celebrated the 10th anniversary of the BFA AC but heralded a new era of reaching beyond Asia toward global engagement. The day before, in the nearby city of Sanya, President Hu Jintao hosted the first ever summit of BRICS (recoined for the addition of South Africa), attended by the heads of state from Brazil, Russia, India, China and South Africa, almost all of whom went on to participate in a historic opening plenary of the BFA AC .

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No past BFA AC opening plenary has featured as many active heads of state as the 2011 Forum, and in no past BFA AC has there been such strong commitments expressed toward a, not just common, but harmonious agenda for development

Below we discuss how the focus shifted from a focus on various national economies and conditions, toward Asia as a developing region and emerging economies around the world as a *de facto* interest group. In the decade since China officially joined the World Trade Organisation (WTO), Asian leaders have engaged in deepening discussions on closer economic cooperation. Intra-regional trade and investment have risen sharply. Events and an increasing sense of interrelated economic fates have led to a series of agreements such as on free trade, which have oriented the economic development of most Asian nations toward a common direction and purpose.

There is additional significance in the changes in the BFA AC we witnessed, as the Forum enters its second decade. First and foremost, while the focus remains Asia to a certain extent, emerging economies from around the globe are also engaged in the discussion. The discussion acknowledged the evolving influence and role of the E11 (all major emerging economies that have a seat at the G20). Published in connection with and distributed at the BFA AC was an extensive economic report on emerging economies, by the newly established Research Institute of the Boao Forum for Asia.

Since the 2008 global financial crisis, a sense of common interests and a surge in cross-border trade and investment has been forming amongst emerging economies within and beyond Asia. This transformation was clear in what participants saw and heard at the Plenary.

### **The Opening Plenary of 2011 - Turning Point**

The Opening Plenary assembled on the podium a significant line-up of heads of state including President Hu Jintao, and the presidents or prime ministers of Brazil, Republic of Korea, Russia, South Africa, Spain, and Ukraine, as well as Former Prime Minister of Japan Fukuda Yasuo who is the current BFA Chairman.

Overall, the reports of the heads of state were rebalanced toward more attention to relations between and among economies. The attention to urgent short-term measures to stimulate growth shifted toward mid-term and long-term restructuring to achieve balanced and sustainable growth. To some extent, achieving balanced and sustainable growth was discussed in terms of the restructuring of individual economies.

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## **To greater extent, the discussions expanded on the theme of inclusiveness among nations, with clearly articulated commitments for closer cooperation among emerging economies in stabilising the global financial system and rebalancing growth**

Seen in conjunction with the summit held the previous day, this shift in plenary themes signaled a more coordinated and muscular presence of the BRICS and E11 in the global dialogue going forward. Shortly after the BFA AC, that sentiment, widely expressed by BRICS leaders, was manifest again in their collective impact on the selection of the new head of the International Monetary Fund (IMF).

In addition, the heads of state expressed a strong interest in development models, with considerable respect shown for what China has achieved in its reform process. On the one hand, every leader endorsed the critical importance of maintaining free and open trade and investment, and resisting political pressures to erect protectionist barriers. But in their visions of the future, a strong theme was domestic investment, especially investment in infrastructure, production assets, resource extraction, education and social welfare. China's remarkable achievement in becoming the world's second largest economy with consistent double-digit growth in the decade following WTO had proven the benefits of investment-led development, with emphasis on strengthening national competitiveness on the global playing field.

With all due deference to the success of the Chinese development model, President Hu and other speakers also acknowledged that this kind of growth model and this rate of growth unavoidably brought in its wake certain imbalances. Resolving these imbalances was the critical challenge in the future. Currently, serious imbalances are manifest in unequal access to opportunities, unequal distribution of the benefits of growth, negative environmental impact and elevated risk in financial sectors.



Yasuo Fukuda  
Chairman  
Boao Forum for Asia

The key drivers of the BFA AC's discussion of Inclusive Development were encapsulated by the leaders speaking at the Opening Plenary. President Hu restated the policy direction that underpins China's 12th Five-Year Plan which is for slower but higher quality growth, with a focus on improved access to resources and quality of life for all citizens. All speakers emphasised their commitment to green growth, their focus on policies and technologies to enable energy-smart growth, and their respect for the environmental and climate challenges the world faced. And all speakers acknowledged the need to keep national financial sectors in good order as a prerequisite for keeping regional and global financial systems in good order. This discussion often touched upon currency issues, trade settlement, and the current expansion of the use of Renminbi (RMB) abroad.

In many respects, the Plenary was also a celebration of the eminence China had achieved in the global economy, with a development model that marshaled national resources and consistently invested ahead of need, especially in infrastructure, fixed assets and education. While leaders acknowledged the need to improve the living standards and quality of life for their citizens, their focus extended beyond driving growth through domestic household consumption and even foreign direct investment.

#### **Focus on the future - national competitiveness and the role of governments**

The dynamics of globalisation tie together the fates of all major economies ever closer, while elevating the issue of competitiveness from the enterprise level to the national level. Even sector by sector - whether we look at alternative energy, outsource business services, or life sciences, for example - competitiveness of national economies as a whole has become a focus of development planning. At the same time the success of globalisation and sustaining the

benefits of free and open business activity across borders demand that countries balance pursuit of national competitive advantage with the search for complementarities and synergies with trade and investment partners that lead to "win-win" outcomes.

The kinds of domestic investment contemplated by the leaders focused on building and sustaining national competitiveness.

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**The heartfelt goal of Inclusive Development notwithstanding, that means driving the wealth of nations and improvement of every citizen's conditions is a direct result of national competitiveness, among other nations, on the global playing field**

To provide intellectual stimulus on the theme of "Inclusive Development", The Research Institute of Boao Forum for Asia launched a study on competitiveness. Institute researchers proposed a new analysis and ranking of the competitiveness of Asian nations, called the "Competitiveness Index of Asian Economies". Coming less than a month after China formally ratified and publicised the comprehensive 12th Five-Year Plan, this study highlights a key point of Michael Porter in his seminal works on competitiveness, which is that domestic prosperity is determined by governments, and it is achieved by making domestic markets competitive in international markets.



The focus on infrastructure and fixed asset investments by the BRICS leaders confirmed their acceptance of this viewpoint. Even though nations will follow development pathways suitable for their individual national situations, it is not an exaggeration to say we saw the embrace of a proven, China-inspired development model by this important group of emerging market leaders. Among the immediate implications is support for that idea.

Central governments should maintain control of a large fraction of national wealth generated, either directly or through state-owned enterprises, and they should channel that wealth as investment capital into production assets, transport and energy infrastructure, and even strategic stores of industrial resources, such as minerals and fossil fuels.

A second implication is that government investment in society should tilt toward education, especially at the secondary and higher levels, rather than healthcare, retirement social security, or employment security.

The Research Institute of Boao Forum for Asia's "Competitiveness Index of Asian Economies", while built on models maintained and serially refined by the World Economic Forum and International Institute for Management Development (IMD), begun in 1980 and 1985 respectively, also strives to combine the "stock" part of the economy and society, including hard, measurable issues like national wealth and infrastructure investment, with an "incremental" analysis of prospects, focusing on soft assets such as human capital and innovation ability.

It considers five major classes of factors:

1. Commercial and administrative efficiency
2. Infrastructure
3. Macro economy
4. Social development
5. Human capital and innovation

46 specific measures are categorised under these and weighted according to materiality, sensitivity, stability and accessibility.

### How the emerging Asian world looks through the Research Institute of Boao Forum for Asia Competitiveness Index

The Asian region, as defined by the Index, includes not only East, Southeast and South Asia, but stretches into Central Asia and the Middle East. 35 economies at various stages of development are listed, including India among the BRICS, but not Brazil, Russia or South Africa.

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**In overall competitiveness, based on 2010 data, Republic of Korea is #1, followed by the economies of Taiwan, Japan, Singapore and Hong Kong SAR. The subcategories are largely consistent with some interesting variations.**

1. In terms of commercial and administrative efficiency, the top five are Korea, Singapore, Israel, Japan and Bahrain.
2. In terms of infrastructure, Bahrain is #1, followed by Singapore, UAE, Hong Kong SAR and Japan.
3. In terms of macroeconomic strength, Hong Kong SAR is #1, followed by Singapore, Taiwan, UAE and Korea.
4. In terms of social development, the top five are Japan, Israel, Hong Kong SAR, Azerbaijan and Georgia.
5. Finally, in terms of human capital and innovation, Taiwan is in the lead, followed by Korea, Japan, Israel and Hong Kong SAR.

China region economies fare well in this index, although the two BRICS economies featured in this region rank lower - with the Chinese Mainland economy at #11 and the Indian economy at #29.

### Inspiration and implementation

The inspiring commitments articulated by the BRICS leaders at the 2011 BFA AC opening plenary opened a door to pursuit of a development model proven by China as the Chinese Mainland economy elevated itself in the span of one generation from being arguably the world's poorest to the world's second largest economy .

But at the same time, the Research Institute of Boao Forum for Asia Competitiveness Index gives measure to the challenges facing the BRICS and all emerging economies in realising the ultimate promise of development: stability and wealth for their people. The discussion confirmed an important role for government in achieving critical national competitiveness, fitting for the aftermath of ratification of China's 12th Five-Year Plan. At the same time, the index noted that in terms of commercial and administrative efficiency, where the role of government policy and regulation is primarily measured, China and India ranked #22 and #31 respectively in the field of 35. In social development, China was #31 and India was #35.

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## Asian and BRICS leaders repeated one after another the importance of communication, coordination and common purpose moving forward

As President Hu said, "The people of Asia have a shared mission to promote common development and build a harmonious Asia."

At the same time, also one by one, they made the point that among the Asian nations and the BRICS, circumstances differed markedly, in everything from social order, natural resources, cultural and linguistic backgrounds and diversity, to political models, levels of development, and even development goals. In this respect, they aligned with China's enduring statement on emerging economies and the theme of the BFA AC 2011 "Inclusive Development: Common Agenda & New Challenges".

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The very core is that emerging economies face a win-win opportunity through cooperation, coordination, and communication but, within those common grounds, each will develop according to its own unique situation and characteristics

In the next 2 years, we will see how the BRICS commitment to solidarity and the emerging economies as a group continues to develop. If they maintain a consistent level of cooperation and coherence they will be a strong force in shaping the new global order. If they move forward successfully with the development model venerated at the BFA AC 2011, there will be very significant implications for the global financial system, the world's most global multinational corporations, and the world's major financial markets and financial service providers.

It was also clear that while political and business leaders, academic experts, and leaders from international economic organisations referenced China's growth model for its obvious success over three decades of reform, and its relative resistance to the impact of major changes in the global economic environment, at the same time Chinese leaders and their counterparts from around the world expect the model to change considerably going forward. As such, much attention was paid to China's recent discussions of reforms and adjustments planned for the years ahead in the process of reforming China's national growth, including discussions of the role of the state, the role of social capital and the role of planning itself.

### A deeper exploration of Inclusive Development

The fundamentals of "Inclusive Development: sound and orderly growth" were considered by a senior panel moderated by Zhang Yansheng, Director of the Institute for International Economics at the National Development and Reform Commission (NDRC), and featuring government and business leaders from China, India, and Europe including Yasuo Fukuda, Chairman of the Boao Forum for Asia and Zeng Peiyan, Vice Chairman, Former Deputy Premier of China.

The panel identified the following key points.

- Stability of society encompasses personal, national and international perspectives.
- People around the world share aspirations to enjoy improved standards of living and quality of life.
- Governments around the world seek stability that depends on their people achieving their aspirations.
- Inclusive development also embodies the increasingly popular global respect for nature and the need to respect and preserve the planet Earth.
- The biggest challenge is to develop means to ensure that globalisation can benefit all countries and people around the world.
- Closer social, economic and political ties among Asian countries are vital to the development of "One Asia", drawing experiences from Europe.
- Asian leaders must develop a mechanism pertinent to the profiles of Asian countries, which are comparatively more diversified than European counterparts.



Zeng Peiyan  
Vice Chairman  
Boao Forum for Asia

With diminishing natural resources, innovation and technology are essential for a sustainable development. This is particularly true for the Asian countries because the rapid progress in their economic development is fuelled by a growing consumption of limited natural resources.

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## Effective deployment of technology and innovation has become a top priority for the region

The key points identified in this session were explored in more depth during the subsequent BFA AC sessions, demonstrating the core position of the "Inclusive Development" concept in economic, social, environmental, diplomatic and political developments going forward.



# Understanding "Inclusive Development"

## Modeling on China's national growth remodeling

In the discussions by political and business leaders at BFA AC about development models, it was clear that China is respected for pioneering an investment-led development model to a level never before seen in the world. China's high levels of investment in infrastructure and industrial modernisation and capacity created a competitive production base which has "paid for itself" over time with strong growth in meeting the merchandise pull from export and domestic demand.

The 12th Five-Year Plan is the most recent edition of a long series of five year plans, beginning in 1953. The 5th Five-Year Plan, covering 1976-1980, began the process of opening up, and subsequent plans have continued the opening process, the reform of State-Owned Enterprises (SOE), and the restructuring of strategic sectors. The 11th Five-Year Plan, began the focus on higher quality, balanced growth that is the main concern of the 12th Five-Year Plan.

The 12th Five-Year Plan has three major sections, one on general strategy, one on industries, and one on regions.

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BFA AC discussions of growth models accepted the premise that fast growth in emerging economies inevitably created imbalances, but temporary imbalances would over the long-run accelerate growth and accrue to the benefit of all citizens

For example, China's economy has grown to a substantial size, but diversification of financial services and the consistency and strength of financial regulation has developed more slowly. Accordingly, financial regulation and services are identified in the 12th Five-Year Plan as important development targets.

This next section of our Report therefore aggregates and summarises the key analysis of China's remodeled growth plan.

With the ratification of the 12th Five-Year Plan in March 2011, and the publication of associated industrial restructuring and foreign investment catalogues by the NDRC, China has provided abundant public information on the leadership view of a sustainable new growth pattern.

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The general strategy lays out the goals of the "Inclusive Growth" campaign, the intent to grow out of chronic imbalances with slower but higher quality, sustainable growth, consolidate industries, improve regulation and enforcement, and reduce energy intensity of future growth

These are core points of the "Inclusive Growth" theme.

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## The industry section points generally to China's goals of higher value manufacturing, and rationalisation or marketisation of supply chain costs, including basic inputs like commodities and energy

It also introduces seven strategic industries, focused on energy, biotech, IT and manufacturing that are to serve domestic needs and establish market dominating export platforms.

The regional plans highlight the different development stages and needs of China's major economic territories, consistently setting the goal of improved agricultural productivity for all, and emphasising the need to accelerated urbanisation, improve resource management, build logistic infrastructure, and mitigate income mal-distribution and large gaps in standards of living.

The 12th Five-Year Plan for the first time addresses issues related to Hong Kong SAR's development.

Slower growth among rural residents is addressed in two ways, an emphasis on accelerating increased agricultural productivity and a call for accelerated urbanisation. This is not disconnected from a decade-old policy of encouraging the growth of industrial and commercial centers all over the Chinese Mainland, but it is spelled out with more clarity in the Plan. The expectation is that the rate of urbanisation, already quite high in China, will double. That will drive more efficient use of agricultural land, sustain investment in urban infrastructure and contribute to China's overall competitiveness as a production base.

This plan is the first since the 3rd Five-Year Plan (1966-1970) to put strong emphasis on reforming agriculture and in doing so reflects some key shifting priorities. Although Deng's reforms actually began with the agricultural sector, from 2007, after a global spike in food commodity prices, leaders have emphasised the need to accelerate productivity improvements in agriculture.

Recent concerns over water management, soil degradation, overuse of chemical insecticides and herbicides, large-scale conversion of land use from agrarian to urban development and increasing imports of basic grain commodities have made the modernisation of agriculture a key development theme, closely linked to acceleration of urbanisation. The key measures include enabling freer and more commercial trading of land use rights, which will permit consolidation and larger scale farming. They also include an emphasis on more organic approaches to farming, intensified research in improved crop and animal genetics and more thorough testing and safety monitoring at all stages of the food supply chain.

### What the plan is and is not

The plan is not a commitment of investment or a budget in any sense, although it is ambitious in setting forth broad targets and provides a detailed menu of areas where the development results need improvement because China as a whole has not achieved the results it needs, whether in energy, water, social development, technology, regulation, capital efficiency or physical infrastructure.

As a list of areas, the plan is complemented by the two current catalogues published by the National Development and Reform Commission, the NDRC "2011 Catalogue for the Guidance of Structural Adjustments of Industries" and "Catalogue for the Guidance of Foreign Investment". Each has lists of specific projects that are encouraged, restricted, or prohibited, without reference to finance. These are assembled in close coordination with China's industry associations, agricultural organisations and research institutes. As such, they are technically specific and represent the highest development priorities set forth by key sectors of the economy.



The NDRC catalogue lists relate closely to the seven strategic industries identified in the 12th Five-Year Plan, and covers a vast area spanning everything from water conservation to goldmine trailing recovery to high precision machining. They are not about specific projects, budgets, scale or numeric targets but provide detail on what is needed. For example, the section on machinery considers the hardware and software elements of the high technology manufacturing, biotech and new material strategic industries.

Here is a partial list that provides some idea of the organisation of these catalogues.

- Extraction industries
- Non-metallic mining-related materials and manufacturing
- Primary chemicals and chemical products
- Pharmaceuticals
- Electricity, coal gasification, and water production
- Power generation, storage, distribution, and control equipment manufacturing
- Transportation equipment and infrastructure, including new energy vehicles, components, rail beds, etc
- Special-use machinery (including energy related)
- Non-ferrous metal smelting and forming industries
- Metal products
- Basic machinery related to all aspects of metal refining, forming, mineral and energy extraction, new energy products, etc

### **Balancing State investment, the State-owned sector, and the private sector**

Under the overall theme of "Inclusive Development", the plans commit to continuing reform and to increasing the role of domestic consumption in future growth. Current measures show that over 50 percent of China's Fixed Asset Investment (FAI) is invested in property development. In the current hard-landing or soft-landing discussion, the focus is on how and when the very high levels of fixed asset investment China mobilised in the wake of the global crisis may be curtailed.

There is clearly widespread concern about reliance on FAI, and data shows that the marginal product of capital is also declining. Along with the reliance on State-sponsored FAI, the data shows that the efficiency of capital invested tends to decline with such sustained levels of State-directed funds (By one measure, RMB4.3 of new credit was issued for every RMB1 of GDP growth, a high ratio of investment to growth). In the months following the BFA AC, we saw the Ministry of Finance and the People's Bank of China take numerous steps to reduce credit availability and constrain the growth of FAI, especially in infrastructure and real estate.

Still, the role of the State and basic infrastructure investment remains very strong and the aggregate FAI targets in China's plans for the next five years are significant by any measure.

At the top of the list is the Guaranteed Housing initiative, a commitment to build 36 million affordable housing units by the end of the plan, with 10 million underway by November 2011.

Among the most significant plan components in terms of large investment requirements:

#### **Housing**

- 36,000,000 Guaranteed Housing Units

#### **Transportation**

- 83,000 kms of new highway
- 42 national integrated traffic hubs
- New urban rail systems in at least 20 cities
- 28,000 kms of new high speed rail (connect all cities with pops over 500,000)
- 440 shipping berths over 10,000 tons
- 8 new large airports

#### **Energy**

- 200,000 kms of new high voltage power lines (>330Kv)
- 150,000 kms of oil and natural gas pipeline
- 120 GW of new hydro power
- 70 GW of new on-shore and off-shore wind power
- 40 GW of new nuclear power
- 5 GW of new solar power
- 10 massive coal power bases
- 5 massive oil and gas bases

Typically, all but the extremely large central projects would require a substantial contribution from local governments. For the Guaranteed Housing initiative, for example, the proposed RMB500 billion government contribution is to be split, RMB200 billion for central and RMB300 billion for locales. Given that expectation, the local government debt situation becomes relevant to a discussion of funding for these projects. Local debt at end of 2010 was estimated by China's National Audit Office at RMB10.7 trillion, 27 percent of GDP for 2010. 80 percent of this was from bank loans. More than 50 percent come due between 2011 and 2013, and the CBRC has estimated that 50 percent is invested in projects that do not produce sufficient return to service the loans.

Implicit in achieving all this is the need to rebalance the distribution of resources between local and central governments, as the trend in recent years has been toward a growing utilisation of local government revenue which currently accounts for approximately 25 percent.

The need for revenue at the local level was frequently linked in BFA AC discussions with non-market pressures on local development, high levels of land use conversion and rapid inflation of land use transfer costs.

Secondly, channels of capital will need to be established to redirect resources from areas of high liquidity in China, which would include quite a number of SOEs, into areas of critical need, which would include not only local governments but the private sector and SMEs. Finally, efficiency of capital invested must be enhanced and the ambitious goals of reducing energy intensity of growth will have to be met if the resources available to the State and private sectors are to be sufficient to sustain growth over the long term.

## The international perspective - acting and interacting

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Beginning with the Opening Plenary and throughout the forum, the nature of country to country growth was discussed, especially the issue of how to avoid a win-lose scenario where one country's prosperity was at the expense of another country

In a session entitled "China Embraces the World: A Decade of Shared Growth" a panel chaired by Yi Xiaozhun, Ambassador from China to the WTO, and including ministers from China, South Africa and India, as well as the President of the US-China Business Council, looked at China's role and attitude toward this goal.



Yi Xiaozhun  
Ambassador of China to WTO

Throughout China's reform, it has consistently fulfilled the role of final country of assembly for a significant value of supply chain components made all over East Asia and ASEAN so China's growing prosperity is positive for all of Asia. Since the global financial crisis, leaders around the world have further looked to China, which has shown strong underlying strength throughout the crisis, to play a major role in leading the world out of recession.

The panel focused on China's ascension to the WTO. The stable opening established through the WTO process has brought meaningful growth opportunities not only to China's own economy and enterprises but also to others around the world. In the 10 years since China joined WTO, export growth has increased by 4.9 times (China has become the world's largest manufacturer and largest exporter), and China's GDP has increased by over 300 percent. Additionally, in the most recent years, imports have been growing at a rate 5-6 percent faster than exports.

And, while the WTO is about trade, naturally investment is also encouraged. China-related aggregate international capital investment has exceeded US\$1 trillion; outbound investment is increasing rapidly (in 2010 it was over US\$59 billion); and China's outgoing foreign aid has been significantly bulked up, showing its ever-strengthening role as a major global trade and business force.

As the panel noted, that is the point of maintaining free trade around the world, and especially at present, it is the point of resisting political pressures to establish protectionism. With that idea in mind, the panel members from China said going forward, China will look to leverage WTO membership to increase regional trade cooperation, improve conditions for foreign enterprises investing in strategic sectors in the China market, enhance the positioning of Chinese enterprises expanding abroad, as well as solidify and diversify its own international trade networks.

These representations of China's current expectations for the years ahead are fully consistent with the perspective on trade and investment trends in the 12th Five-Year Plan.



Rob Davies  
Minister of Trade and Industry  
South Africa



Chen Deming  
Minister of Commerce and Industry  
China



John Frisbie  
President  
The US-China Business Council



Anand Sharma  
Minister  
Department of Commerce and Industry,  
India



# National growth models

An important aspect of the BFA AC 2011 was the assembly of both Asia and BRICS leaders that permitted clear comparison of their growth models. All have shown impressive growth in the last decade, and all show promise of continued strong growth. Still each of the emerging economies, Asian and BRICS, face challenges to sustain their high growth rates, and these challenges involve global and domestic forces.

## Quality of growth was a consistent focus of all leaders, and generally meant sustainability, from a financial, social, and environmental standpoint

On the latter, energy efficiency and environmental preservation were deemed a central requirement of growth models. This represents a significant change from earlier years and is part of a shift in focus from quantity to quality, and toward the goal of achieving high GDP targets that simultaneously improve the quality of life for the citizens of emerging economies.

It is difficult to summarise the diverse national conditions that have led to very different approaches to economic development among the BRICS and Asian emerging economies. Among the most important are their population and resource situations. China is the most populous nation but also the most challenged in terms of arable land and oil and gas resources. Brazil has ample agricultural land, and oil and gas resources, but a diverse population and cultural situation. Russia has vast energy resources but faces the need to develop investment resources that can meet the huge challenge of updating its industrial base. India has a population second only to that of China, growing more rapidly than China's, and extremely diverse culturally and linguistically. India faces the acute need to strengthen infrastructure investment to unlock the potential development of both its industrial and agricultural sectors.



# Growing enterprises

Among the BRIC nations the enterprise models are significantly different, but in all cases robust reform and growth of enterprises is recognised as a critical key in sustainable development. In China, two events have brought a new focus to the overall role in the economy of SOEs, private enterprises and foreign invested enterprises. These are the stimulus activity, which created massive amounts of credit directed to the SOEs, and the subsequent tightening of credit, which has brought on capital shortfalls for the private sector.

In recent years the topic of China's private sector has been a consistent constituent of the BFA AC programme which has considered the funding of private sector growth, the search for talent and the prospects for private companies expanding abroad. The 12th Five-Year Plan has expectations for all three forms of ownership in China, SOE, private, and foreign, and provides a clearer definition than its antecedents of the role of private sector companies and private capital, especially in the seven strategic high tech sectors identified for accelerated development, all related to energy, biotechnology, information technology and high tech manufacturing.

There is no debate that China's development model is unique in terms of the interaction of a large State-owned part of the economy, a large privately-owned part and a large foreign-owned part. The interaction of these three parts has been an ongoing discussion and has evolved for the past 20 years.



Bao Yujun  
Chairman  
All-China Private Enterprise Federation



Chen Feng  
Chairman  
HNA Group



Tak Wong Cho  
Chairman  
Fuyao Glass Industry Group



Jiang Xipei  
Chairman  
Far East Holding Group



Zhou Xiaoguang  
President  
China Neoglory Group



Zhu Yunlai  
President & CEO  
China International Capital Corporation

A panel at the Forum was dedicated to the importance and challenges of private enterprises expanding abroad. Moderated by Song Lixin, President of the Talents Magazine, the session "Private Enterprises Going Global: Strategies & Options" acknowledged that overseas expansion, for both SOEs and private enterprises would not happen overnight, and it would not happen without some steps forward and some steps backward. The panel discussed both the need for the government to work to remove some of the administrative obstacles to private enterprises going global and the need for government support to enable progress. One panelist argued that "the government must strengthen central support for private enterprise and facilitate their global strategies to the same degree that SOEs are supported". At the same time, the panel acknowledged private enterprises must reasonably assess their own capabilities and aim for a measured approach to expansion without the expectation that globalisation can be achieved overnight.

In a workshop at the Forum attended by Chinese private company entrepreneurs, challenges to growth generally and to going abroad were discussed in depth. Among the key sentiments expressed by the entrepreneurs was the challenge in getting capital for expansion, and then getting RMB capital converted through required administrative processes to use for overseas expansion. In addition, private enterprises shared with SOEs the sentiment that they needed more understanding and experience in overseas markets to speed the process up significantly.

Subsequent to the BFA AC 2011, developments in RMB markets outside the Chinese Mainland have greatly improved the opportunities for SOEs and private enterprises to make acquisitions abroad, as RMB in the Hong Kong SAR, for example, can be used for capital investment if accepted by the sellers. On a recent visit to Hong Kong, senior PRC officials announced the central government's strong support for taking advantage of RMB markets outside the Mainland to source capital and to make transactions of that sort, which should contribute to faster execution of potential acquisitions.

Chinese Mainland private businesses in 2010 numbered RMB8.45 trillion, with registered capital of RMB19 trillion (US\$2.9 trillion), of which 20,000 are limited companies. They are clearly critical to China's growth, especially employment growth, and especially in service industries. Chinese private enterprises were said to have an advantage in basic industries (e.g. low-end manufacturing due to low factory prices, large market size and economies of scale). In contrast, enterprises in developed countries have advantages in technology, as well as higher consumer demand and more valuable market opportunities.



James Chen  
Regional Managing Partner, Northern Region  
Deloitte China



Chris Lu  
Chief Executive Officer  
Deloitte China

China's private enterprises should recognise that despite the fact that they are relative new-comers to most global marketplaces, they can make valuable and unique contributions to these markets and thus should be confident in their expansion efforts

### Capital channels and equity markets

Financial evolution has always been a core topic at the BFA AC. This year, several panels dealt with capital markets, equity investment funds, financial regulation and risk identification related to investment.

China again featured large in the discussion.

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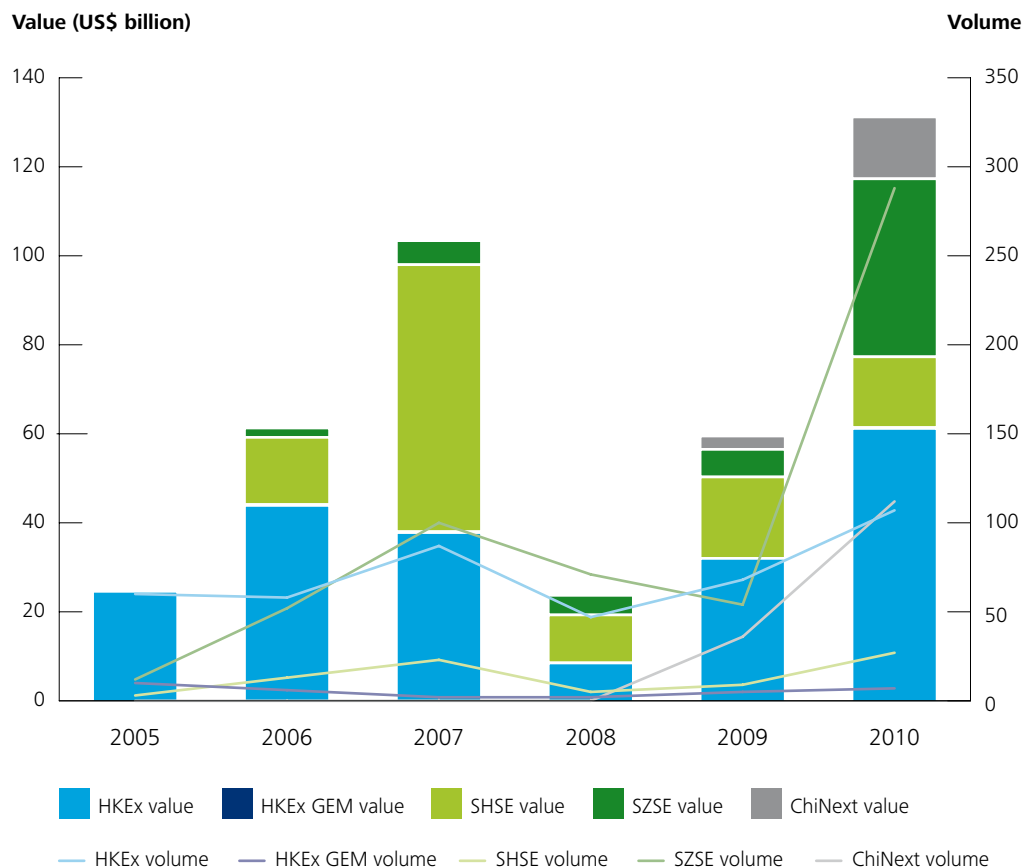
Among the most significant changes over the last three years in China has been the expansion of capital markets, the proliferation of equity investment funds and the appearance of trusts and other players in China's chains of capital

Greater China capital markets are experiencing a period of unprecedented growth and diversification. As recently as five years ago, Hong Kong remained the only viable stock exchange in the immediate region for companies seeking IPO or to raise growth capital. Despite the Shanghai Stock Exchange having been founded in 1990, a restrictive capital environment in the Chinese Mainland slowed its growth for the better part of two decades. Not until the mid-2000s did the capital channels diversify and investment opportunities expand sufficiently for the Shanghai (and subsequently Shenzhen), bourses to break out of their static confines. Then, with the opening of the ChiNext growth market, the overall coverage of Chinese Mainland RMB markets expanded significantly.

Originally Chinese companies looking to list (either domestically or overseas), were large, mostly state-owned "national champions", who were resource-rich enough to list in Hong Kong or elsewhere. However, with the proliferation of successful small and medium sized enterprises (SMEs), backed by a range of corporate, private and individual investors, there suddenly arose a significant need for more diverse and flexible exchanges whereby these companies could become publically listed and hunt for much-needed expansionary capital. As more sophisticated private equity (PE) investors, in particular, sought varied exit opportunities from their portfolio companies in the Chinese Mainland, they looked for choices beyond the Hong Kong exchange.

In 2011, China continued its leading position in global IPO markets with 277 in volume and US\$45 billion in value, even as total capital raised significantly dropped due to the continued global economic uncertainty and investor caution. Chinese stock markets have been volatile. The Shanghai Composite Index declining 21.68 percent, and the Shenzhen Composite Index dropping 32.86 percent in 2011. However, some recent developments - the increasing difficulty of listing abroad and the liberalisation of rules under the RQFII process that will permit qualified investors to raise RMB funds in Hong Kong to invest in the Chinese Mainland - may improve the level of investor support in A share financial markets.

**Chart 1: Growth of Greater China Mainboards and Growth Markets, 2005 - 2010**



Source: HKEX, SZSE, SHSE, ChiNext

Beyond the Mainboards, there is the increasing importance of the growth markets which are championed by the ChiNext, a NASDAQ-style exchange launched to provide SMEs in China an alternative avenue for raising capital with fewer listing requirements than the nation's two Mainboards in Shanghai and Shenzhen. From a national strategy perspective, the ChiNext exchange places heavy emphasis on developing and supporting companies in emerging and strategic industries - those that are high-growth, high-technology, or service-oriented, helping to reduce the country's reliance on foreign technology.



**Table 1: Comparison of key listing requirements for Shanghai, Shenzhen and ChiNext**

	Shanghai and Shenzhen Stock Exchanges	ChiNext
<b>Profit history</b>	>3 years	>2 years
<b>Assets</b>	>RMB 30M (US\$ 4.6 M)	>RMB 20M (US\$ 3.1M)
<b>Total share capital</b>	>RMB 50M (US\$ 7.7M)	>RMB 30M (US\$ 4.6M)

Source: ChiNext, Origo

At this time, the history of the ChiNext is too limited to truly assess with confidence the strength of its investor base or its longevity as a source of sustainable growth for ambitious Chinese companies. With a two year wait to gain approvals for a listing, what seems certain is that regulators are bearing in mind the case of Alternative Investment Market (AIM).

The backbone of growth in any developing economy is the small-to-medium size enterprises (SMEs). SMEs, however, are also limited in that they tend to have a difficult time entering the market and acquiring capital that can help them grow to their potential. Since they are usually relatively young and still growing, these enterprises tend to lack the capital that would make market entry, and constant competition and lack of a reporting history make it difficult to attract investors. It is notable the extent to which start-ups rely on internal capital, often raised through informal investment networks, and, in some cases, relying on extremely expensive capital available in "grey" banking channels. Panelists offered different opinions.

The best way that China can aid these enterprises in the future is to make sure that SMEs have sufficient access to capital and that investors have sufficient access to companies. This can be done through the diversification of chains of capital including development of the Growth Enterprise Market (GEM).

An innovative approach to easing access for SMEs is that of Taiwan, which created a new cabinet - similar to GEM - to relax the restrictions on listing. In this case, as long as two major firms recommend an SME or high-tech enterprise for listing, there are few to no restrictions on future transactions or profits.

Absolutely indispensable to the future of the GEM board in China is its relationship with the venture capital/private equity (VC/PE) industry, just as in the case with NASDAQ in the United States. Quality VC-invested enterprises are the gold standard, and as one panelist pointed out, there is no need to elaborate on this largely self-explanatory phenomenon - it sells itself. NASDAQ's effectiveness, for example, is in getting these companies listed, providing them with large tranches of development capital, and providing pre-IPO investors an exit. On the other hand, with this approach may also come some drawbacks, such as the internet bubble in the United States, with funds despite successful listings, running into a wall when they tried to grow their profitability.

Many issues are coming together to reshape the world's capital markets. There is presently a clear trend toward tighter regulation, as capital markets and many companies have come under scrutiny for the quality and reliability of reporting and information generally given to investors. This gives rise to the potential that SMEs around the world might return to more local sources of capital, or at least more regional, reversing a decade of globalisation of financial activity.

Given this possibility, it is important to ask over the longer term, what role will ChiNext play in supporting SME growth and China's economic development? What future developments will occur to merge capital account activity between the Chinese Mainland, Hong Kong, Taiwan, and national borders that separate the Asia zone where the RMB may be an increasingly influential currency?

Along with its ability to fund and capitalise on a company's business model, GEM's influence and ability to actively help these companies will inevitably result in a much more efficient allocation of resources. This is an undeniable necessity in a consumer market as large and broad as China's. There is an objective need for this kind of resource allocation, and ChiNext's role in driving it could have profound and far-reaching effects on the China economy and beyond. With its ability to increase capital efficiency and to boost so many enterprises, ChiNext is an important part of creating a truly sophisticated and multi-faceted technology market in China, the same feat that NASDAQ was so instrumental in achieving in the United States.

### Financial services - currency and financial products

A panel moderated by Neil Shen of Sequoia Capital, entitled "PE/VC: The Agony of Growth", explored the function, expansion and challenges of equity investment funds. The panelists including both Chinese and foreign executives, agreed that equity investment had strong growth prospects in China, as individuals hungrily sought new investment options and enterprises sought to diversify their portfolios.

Prior to the onset of the 2008 financial crisis, China had come under increasing pressure to liberalise its financial services industry. Foreign government and private players alike pressed for reform - faster, deeper, and more extensive than what the country had previously implemented. The pressure from private players was partially from potential foreign investors in the sector, but it also came from domestic pressures to improve the allocation of capital throughout the system and provide better investment options and returns for asset owners.

Reflecting on the starting point of the central government as the single owner and investor in all economic activity, the dramatic liberalisation of financial services and products becomes clear, with some even flourishing along fast and relatively unregulated development paths.



Martin Halusa  
Chief Executive Officer  
Apax Partners



Steve Howard  
Vice Chairman  
Global Private Equity Alliance



Fred Hu  
Chairman & Founder  
Primavera Capital Group



Lee Scott  
Former Chief Executive Officer  
Walmart



John Studzinski  
Senior Managing Director  
Blackstone



John Zhao  
Founder, CEO and Managing Director  
Hony Capital

The more controlled approach of China toward the loosening of its capital market and financial services sector restrictions, has garnered significant respect since the global financial crisis. China's choice of a path of gradual and cautious expansion had ensured that Chinese markets were not vulnerable to the impact fueled by the sophisticated - maybe overly sophisticated - financial instruments that had proliferated in - and ultimately shattered - Western markets. The major impact of the crisis in China was a rapid sag in exports, not a crisis in the banking system.

However, China, with a growing base of consumers in need of financial services, a hoard of investors hungry for diverse financial products in which to place their money, and a veritable army of companies seeking capital with which to grow, is continuing a process of liberalisation. The stimulus programme that directed the main flows of capital to the SOEs, which generally were not in need of capital for investment in their core businesses, probably made financial investment a bigger part of their mission. The same can be said for local governments. And so the market is experiencing a proliferation of equity investment funds, local investment platforms and other new financial service providers.

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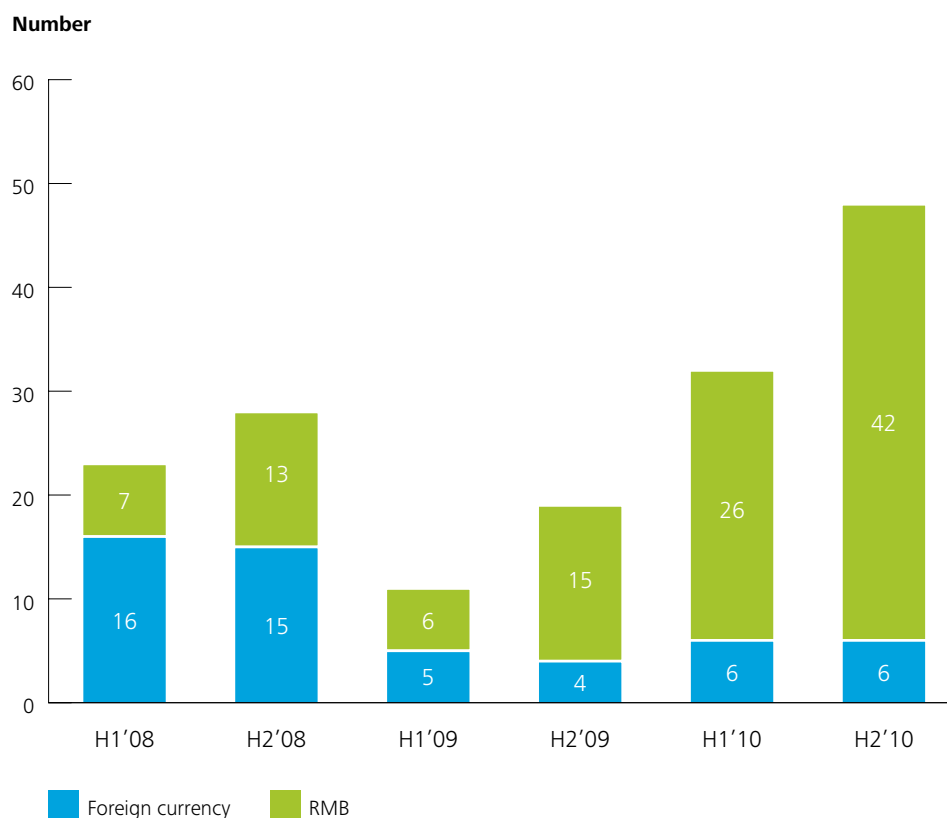
The proliferation of RMB funds is an apt proxy for the diversification of financial products and services in greater China. The RMB-based equity investment funds that have emerged in the past three years are both numerous and diverse.

For instance, 68 RMB-denominated PE funds were raised in 2010, compared to 21 in 2009, and also compared to the 12 foreign currency-denominated funds raised in 2010 (and 9 in 2009). There is a distinct difference from earlier years. In 2007, 31 foreign currency funds were raised, compared to just 20 RMB funds. The scales have tipped, and foreign investors are no longer the dominant players. A much larger number of equity investment pools has also emerged, numbering perhaps 3,000 in the last few years, funded by individual families, local governments or enterprises. This shift toward China's domestic players was mirrored in a sharp increase in domestic M&A activity, which in most weeks outnumbers both inbound and outbound M&A activity by a 10:1 ratio according to official data.





**Chart 2: Comparison of newly raised PE funds by currency**



Source: Thomson Reuters

But as the domestic funds become more numerous, their investments are trending towards smaller amounts and shorter holding periods. A larger number of funds with smaller wallets points, of course, toward a greater number of smaller investments, mostly dominated by RMB funding sources. This is in line with the growing importance of small and medium enterprises for China's economic growth and technological and operational innovation and domination. These SMEs have become major players on the national stage and have a real need for capital to grow. Are RMB equity investments funds then springing up to fund them, or are they expanding and proliferating in response to the greater availability of capital? The answer is probably both, and that this is a healthy symbiotic relationship that should be fostered.

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**The PE industry can be a critical part of transforming China's overall economic growth model, helping enterprises to go abroad and diminish the export-led model in China**

Several key points about equity investment in China were raised by the panel. The growing PE industry in China has many challenges to overcome. Among these challenges are constant concerns about growing the productivity of the funds and their holdings in order to produce the high and sustainable rate of return over a long period of time that limited partner investors expect. A related issue was finding the talent to staff qualified teams to manage properly the large number of transactions a major fund handles. The panels noted specifically how important it was that RMB funds take the lead in China, arguing that if PE is to grow in China, it must be backed by domestic funds.

PE can also add value to many different industries in China. It can help promote innovation in research and development, and act as a source of capital to many different service sectors.

#### **The RMB abroad**

Another extremely critical and influential part of the broadened financial service landscape is the rapid development of the international role of the RMB. The interest in the international role of China's currency has grown as well in connection with global concerns about the strength of the US dollar. For several years at the BFA AC, currency has been a key topic, including discussions of special drawing rights and other alternatives to the US dollar as a reserve currency and major trading currency and including discussions of whether the world is headed toward several distinct currency zones: a US\$ zone, a Euro zone, and potentially a RMB zone.

Available for little more than a year, corporate bonds denominated in RMB are growing very quickly in Hong Kong primarily. They are providing funds for trade settlement, for investment abroad, and for return to the Chinese Mainland to fund approved FDI projects. This bond market, informally called the Dim Sum market, has shown a high level of enthusiasm in past year plus since the first corporate bond was issued. Since 2007, RMB bonds have been sold in Hong Kong by the Ministry of Finance and by State banks, but a new phase was entered with the approval of corporate issues. By mid-2011, over RMB140 billion in bonds had been issued, and the RMB liquidity pool in Hong Kong was RMB550 billion, over 8 percent of all bank deposits in the Special Administrative Region (SAR). Expectations were that RMB in Hong Kong would top 1 trillion by the end of 2011.

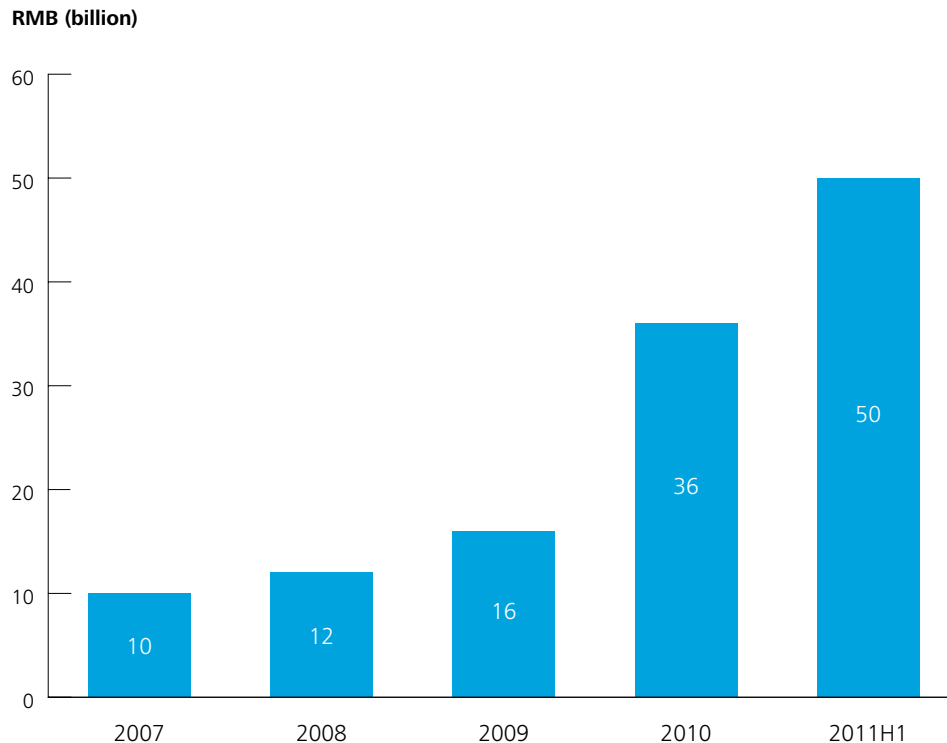
RMB activity in Hong Kong was originally focused on trade settlement, but earlier in the year encouragement and approval was also given to use the currency, sometimes called CNH in Hong Kong, for capital transactions. A visit by Li Keqiang and other senior officials in 2011Q3 resulted in a further emphasis on CNH as an investment currency in addition to a trade settlement currency. Along with this emphasis, rules have been clarified for moving RMB from Hong Kong to the Chinese Mainland to satisfy the capital requirements of approved foreign direct investment projects. The Ministry of Finance also announced the issuance of its own bond in Hong Kong for RMB20 billion.

The growth of the Hong Kong RMB financial products market accelerated significantly in 2011. In all of 2010, 11 foreign corporate bonds were issued, totaling some RMB5.4 billion (US\$0.83 billion). Notable examples include Caterpillar, which issued two bonds now, McDonalds and Volkswagen. Foreign corporate interest in this market has been rapidly escalating. The funds are available, the interest rates are considerably lower than borrowing from banks on the Chinese

Mainland, and there is a level of prestige as well associated with a RMB issue in Hong Kong. Singapore has also seen its first RMB bonds issued and plans to promote additional RMB products in the future. There are many aspects to this development. It represents the first large-scale RMB financial product development outside of the Chinese Mainland. The main banks involved in the issuance of RMB bonds in Hong Kong have been foreign banks.

Recent decisions and announcements by major Chinese banking officials make clear that the Hong Kong markets and Hong Kong investors will be given relatively liberal access to cross-border capital account movements to facilitate both inbound and outbound investment

**Chart 3: RMB bond issuance (total value in RMB billions)**

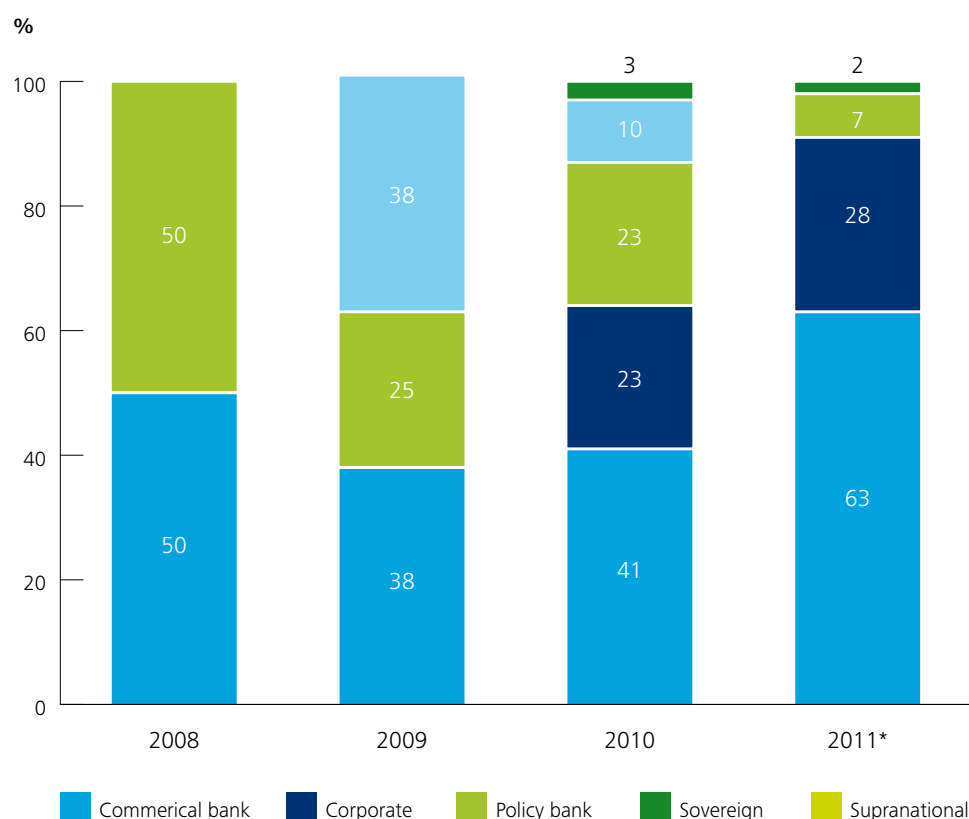


Source: Hong Kong Monetary Authority

Additionally, the mix of issuers has shifted noticeably. Commercial banks and policy banks dominated the playing field in 2008. By 2011, corporate, sovereigns and, to a lesser extent, supranationals played a significant role as well, although commercial banks remained the leading player.

Looking forward, in private equity, Goldman Sachs, 3i, China International Capital Corporation Limited (CICC) and Hony Capital are all rumored to be looking to raise RMB funds, and many others are likely to follow in their wake. On the corporate side, McDonalds, Manulife and others seem to be considering further debt issuances.

**Chart 4: RMB bond issuance by sector (volume)**



Source: Thomson Reuters, Press Search

Any discussion of China's liberalising capital markets must naturally include significant discussion of the internationalising role of the RMB and how it is set to reshape China's economy and role in international financial markets moving forward. RMB globalisation, if still somewhat controversial in its implementation and impacts, is essential to China's growth. China's currency should have an international influence consistent with the strength of China's economy, and there are numerous ways in which this can be accomplished.

So far, China has not emphasised the potential of the RMB as a reserve currency, probably because of the international obligations for currency management that move implies. Instead, China's focus has been on a strategy that will increase the RMB's use in offshore markets and large transactions. It has done especially well in promoting its use in Hong Kong SAR and Taiwan, with significant accumulations in these areas and a more gradual regional interest both in Southeast and Central Asia, and even Russia. Trade settlement was the first goal of projecting RMB into an international role, and according to the Hong Kong Monetary Authority (HKMA), RMB trade settlement handled by Hong Kong banks soared to RMB804 billion from January to June 2011, in contrast to a total of RMB369 billion for all of 2010.

Certainly with China's increasing global lending, foreign aid, and naturally with its historical reliance on exporting manufactured goods and importing raw materials, the expansion of the RMB beyond a national or even region role has distinct benefits for growth. At the same time, it is important to caveat China's international aims for its currency. Many of the goals that China seeks for the RMB will require certain changes on the part of the international monetary system. It is true that a more international and influential RMB will have a strong impact on both the world and China, and it could have a positive effect on both. In the short term for China, it will certainly reduce China's reliance on the US\$, of which China holds record-breaking reserves and continues to buy. In addition, many of China's qualified enterprises, private or public, will be able to invest overseas directly, using the RMB as their currency of choice, which, as mentioned above, should speed outbound investment.

Perhaps the most tangible benefit to China, however, is that internationalisation of the RMB is expected to accord China a level of influence in the international financial system that is commensurate with the size of its economy. Such a transition would further enable authorities to stimulate both foreign and domestic demand, and would herald an era-ending shift away from its current import-export led growth model.

The path to a truly international RMB will be neither simple nor linear. China's unique economic model heavy dependence on imports and exports, weak domestic demand, and resultant massive holdings of foreign exchange reserves - must shift significantly in order for the RMB to be more viable internationally. There is reason for optimism in the near term, however as China has made great and strategic progress to date. Clearly there has been mounting pressure to liberalise capital account regulations, and recent indications are this is already underway, initially within the separate currency regions of Greater China.

For a decade, China's reluctance to liberalise capital account movements and the currency trading band for the RMB has been linked to the devastating effects of the last two financial crises, especially the Asian financial crisis of 1997-1998.

The currencies of Thailand, Malaysia, Indonesia, and elsewhere were completely open to large currency transfers, permitting short runs on the currencies that crushed their exchange value. But China is now in a different and much stronger situation. Even if the RMB were more exposed to currency traders, and more actual channels were available to move large amounts of RMB in and out of China, China sits on a foreign exchange reserve of US\$3 trillion. There is no money speculator in the world who would doubt China's willingness and ability to defend its currency against short runs, so the risk of additional liberalisation at present is quite low.

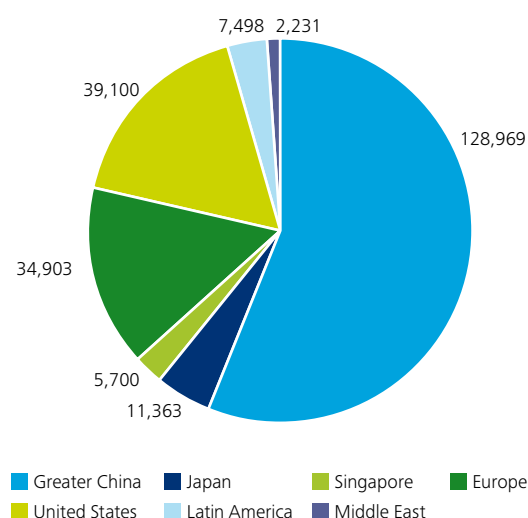
However, regulators are still expected to take a gradualist path forward, although at accelerated speed, taking such steps as issuing special bonds to foreign banks allowing them to hold RMB currency in reserve, or extending credit swap lines in RMB in Hong Kong and Singapore (or elsewhere), they might speed the process.

### **The roles of financial centers**

Certainly no diversification of financial products, nor internationalised role of the RMB, would be possible without the growing importance of Greater China financial centers, as discussed above.

Almost half of the world's IPOs in 2010 took place in Greater China (44 percent) - on the bourses of Hong Kong SAR, Shanghai, Shenzhen, and Taiwan. This can be compared to the roughly 33 percent that took place in Europe and the estimated 15 percent in the United States. By value, the trend is even more pronounced - companies listing on Greater China exchanges raised 56 percent of capital raised worldwide in 2010 (US\$129 trillion), versus 15 percent in Europe (US\$34 trillion) and 17 percent in the US (US\$39 trillion). It is clear that Chinese companies, in addition to having the financial and reputational might to list abroad, have growing market options domestically, allowing them unheard-of flexibility in capital access.

**Chart 5: Global IPOs,  
by value (US\$billion), 2010**



Source: Worldwide Stock Exchange

Moreover, the two largest IPOs of 2010 both took place in Greater China, which is telling of the growing significance of both the companies and the stock markets in the region. The US\$22.1 billion mega privatisation of the Agricultural Bank of China in Hong Kong made up 9 percent of total IPO value globally for the year (and broke previous IPO records set by its counterpart, Industrial and Commercial Bank of China (ICBC), which raised US\$21.9 billion in its IPO). Second was the US\$20.5 billion IPO of AIA Group (the Asian life insurance giant), also in Hong Kong. Together the top 3 IPOs (the third was General Motors in the United States) made up 25 percent of global funds raised in 2010.

Shanghai is a gem of an example, with plans having been announced in 2009 to transform the city. Having been an early hub of China's economic boom and a site of significant social development, Shanghai is poised for its next transition into an international financial center by 2020. The city has a historic precedent as a financial center in the Far East, and the municipal government is working to build a globally attractive financial system there,

encouraging commercial banks, securities and insurance players, fund management entities, as well as trust, future, and financial leasing companies all to locate and do business there. Additionally, its financial products on offer are being built up to rival any international financial hub. These products and services include stocks, bonds, currency and foreign exchange markets, commodity futures markets, over-the-counter (OTC) derivatives market, as well as gold and property rights markets. Shanghai has also been at the forefront of a number of key financial reforms in recent years, including those for Qualified Foreign Institutional Investors (QFII) and Qualified Domestic Institutional Investors (QDII), both pilot programmes to provide legal channels for cross-border capital transactions.

Shanghai conducts a number of events each year, including meetings of the Shanghai International Financial Advisory Committee and Lujiazui Forum to exchange views with experts from China and abroad on the needs of a global financial center. It is also learning from the experiences of Hong Kong, where the RMB is expanding vibrantly as described above. Some of the more recent experiments in Hong Kong, like the mini-QFII process for permitting Hong Kong residents to invest RMB directly across the border into Mainland exchanges, will serve as pilots for liberalisation steps that Shanghai might be expected to adopt soon.

Other provincial or sub-regional financial centers such as Tianjin, Chongqing and Nanjing are also beginning to spring up and helping to spur liberalisation. Provincial or municipal level support for reform-oriented pilot programmes may help to test the waters and lead the way for larger-scale reforms in national financial centers where major domestic and foreign financial institutions operate.

# Managing growth and managing risks

This year's forum featured a panel entitled "Risk Management: the Unknown Unknowns", in which a group of experienced regulators, corporate leaders, and investors compared notes on the risk profile enterprises faced.

## With an increasingly interconnected and complex world economic order, companies and executives are exposed to risks from increasingly diverse sources

Volatility in financial markets and commodity markets is high, and there is also great uncertainty at a country or regional level in consumer demand levels, political stability, regulatory environments, fiscal and monetary health, and even environmental factors, including weather, climate and natural disasters. Again, China featured large. Chinese companies have in many cases expanded abroad with their capital raising and financial activity far more quickly than their operational footprints, creating a gap between exposure and experience that embodies its own special risks.

The panel discussion focused on three key risk-related concepts:

1. Enhancing the core competitiveness of enterprises as the best way to protect against risk
2. Balancing the costs and benefits of growth and innovation on the one hand and risk management on the other
3. The need to develop risk assessment and management systems as well as a culture of risk management becoming paramount, particularly for Chinese enterprises at the forefront of emerging markets players expanding into diverse regulatory, economic, competitive and cultural environments overseas.



Joe Fuller  
Co-Founder & CEO  
Monitor Group



Huang Shuhe  
Vice Minister  
State-Owned Assets Supervision and  
Administration Commission, State Council



Lai Xiaomin  
President  
China Huarong Asset Management



Ren Hongbin  
Chairman  
China National Machinery Industry  
Corporation



While we have seen an unprecedented, fast pace of economic and social development in almost all countries around the world in recent decades, growth is not always stable, predictable, or sustainable, and because of this businesses are facing an increasing number of unexpected incidents and challenges. In 2011, the continuing debt crisis in Euro-zone countries, the political turmoil in Middle Eastern countries, oil spills in several off-shore locations, and the Japan earthquake, tsunami and ensuing nuclear disaster were relevant examples of the types of mostly unpredictable events that expose companies to unforeseen risks - and that illustrate the fact that the more globally connected, operationally is diverse, and technologically innovative a company is, the broader the array of risks to which it will be exposed.

The analysis provided an interesting taxonomy of risks faced by companies operating in a global environment, roughly dividing risks into five key categories. Enterprises operating in a global environment face with the following.

- Strategic risks: Enterprises need clear vision, but also need to be flexible and adaptive to their operating environment; thorough planning is important.
- Financial risks: CEOs need to prepare for unexpected problems. They must consider their company's true capacity to secure financing if urgently needed, especially when expanding aggressively.



Jerry Leamon  
Global Managing Director  
Deloitte Touche Tohmatsu



Phupinder Gill  
President  
Chicago Merchandise Exchange (CME)

- Legal or compliance risks: The significance of these risks becomes evident when one considers the substantial variance in the China business environment, and the diverse set of global regulatory frameworks across regions and countries.
- Risks associated with global expansion: The risks of operating in diverse international environments are still not well understood and need close assessment and measurement.
- Reputational risks: Managing image is a critical component to any business strategy, and includes social responsibility, improving core competencies, branding issues, and integrity concerns.

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The pressures stemming from the numerous upheavals in 2011 are forcing companies to re-evaluate their competitiveness models and reassess risks



In a post-financial crisis environment, many companies are risk averse and wary of expansion.

## However, growth and risk management are not mutually exclusive, but risk does expand in direct proportion to complexity

Expanding the scope and scale of business, (more lines of business, more geographies, more regulatory regimes, buying from more vendors, etc) exposes the enterprise to an increasing number of risks which it will be strained to understand, monitor, assess and deal with.

The higher profile of Chinese enterprises on the world stage as they blaze the trail for emerging markets players, has exposed them to increased risk from the expectations and requirements of vastly different legal, social and financial situations. In an unpredictable global environment, complex types of risks mean that participants in markets that are new to them - whether as players or investors - need to conduct studies of market differences in areas which include, but are not limited to, social responsibility, protectionism, political risks, policies on trade unions and labour disputes, cultural risks and market risks such as commodity pricing. Their risks and relevant management mechanisms are not always - and should not necessarily be - the same.



A very important component to risk identification and mitigation is developing a culture of risk awareness. There is nothing more important to building a sustainable enterprise than building a consistent risk management system. Ultimately, risk management is not about identifying specific risks, but rather about putting in place a culture to deal with risks in a measured way. This type of risk intelligence framework cannot predict nor prevent risk entirely, but rather strengthens risk control and efficiency. Rather than focusing risk management in a specific C-suite office, a strong culture of risk management implies that all senior management levels are schooled in risks, on the look-out for issues that raise risks and know what steps to take to report and manage risks.

A culture of risk awareness must be a fundamental component of any corporate development strategy. Risk management is embedded in sustainable value creation. As a company grows and innovates, it will as a natural part of this process encounter significant risk. Learning how to balance the benefits of growth with the costs of associated risks is the challenge that executives face.

They must learn how to identify and manage risks, including those associated with competitors, products, regional economic variances and regulations, etc. Monitoring and analysing these external factors is crucial. Additionally, however, an enterprise must also understand the risks that are contained within its own walls. Internal and, more importantly, external monitoring and audit of strategic and operational practices are critical in maintaining honesty and integrity, meeting standards and minimising mistakes - in short, in creating a culture of risk awareness and thereby managing risks properly and consistently.

The underlying premise of risk management is that companies (indeed all of us) face an unknown future. There are too many unpredictable events to be able to completely protect against all risks; at the same time, however, a company can (and must) take reasonable "umbrella precautions" to insulate itself against possible risks.

In fact, the likelihood of a complete "black swan" occurrence seems to be less than in previous eras; perhaps crises may instead be better characterised as "grey swan" events. Companies or countries may know disaster is imminent, but may have no way to prevent against it, or may not be able to predict the specific impacts and damages that will stem from the event (and thus be unable to protect themselves properly). For instance, in the 2008 financial crisis, many warning signs began to trickle through the financial system in the twelve to six months leading up to the US subprime crash, failure and bail-out of key financial institutions and stock market turmoil. Despite sensing for a good period of time that the worst was yet to come, many companies had no way to properly defend themselves.

In the case of the Deepwater Horizon oil spill, blamed was generally placed directly on the companies involved in the technology, construction and maintenance of the platform. In the case of the Japanese nuclear power disaster, the tsunami obviously caused the disaster, yet the electric company and the government itself accepted blamed for a failure to manage the disaster as well as the public thought they could have. In other words, the adverse consequences of a failure to identify and mitigate risk can be grave, even if disproportionate to actual responsibility.

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## Improving its core competencies and strategic competitive edge is the best way for a company to develop essential protection for itself

Core competence measures how strong a business is and limits its likelihood of becoming "sick" in a renewed downturn or in the face of calamity. Moreover, it gives the business an opportunity to even benefit from black/grey swan-type events. For instance, the financial crisis gave some Chinese businesses the opportunity to expand overseas as valuations of target companies fell, as businesses overseas desperately sought capital infusions, and as Chinese government financing for such expansion remained high relative to capital availability in other markets.

In all businesses across industries and geographies, there is a conscious acceptance of a certain level of risk, (those a company knows will occur as part of its strategy). But there are also risks that cannot be anticipated, and the only measures that can be taken in advance are to ensure solid business fundamentals and competence, and broad awareness of markets and operating environments.

# Social investment and social development

Nobody would disagree that people are the foundation of a country. If the foundation is solid, the country is in peace. People's livelihood is a long-term issue that concerns social harmony and stability. Therefore, the basic principle of government is to satisfy the needs of its people and improve the quality of life. It's not just related to social stability but also the rise and decline of a country and contains the wisdom of governing a country.

Several sessions at the BFA AC 2011 addressed aspects of social development, relating closely to this core notion that social stability is necessary for economic development, and in turn, economic development and providing steady improvements in standards of living and quality of life are keys to social stability.

Premier Wen stated the ideals of a nation's social development as "to let everyone lead a happy life with dignity, to let everyone feel safe and secure, to let the society be one with equity and justice and to let everyone have confidence in the future". China's reform and the rapid economic development have brought 400 million people out of poverty in the past 30 years. Meanwhile, China's GDP per capita surpassed US\$4,000 in 2010, rendering China an official middle income nation. However, there are still about 100 million people in poverty, especially in the rural areas and the western part of China. China is making efforts in improving people's livelihood through securing food and housing, reforming the healthcare system, diversifying education resources and addressing social imbalance issues. Of course, the change will not happen overnight and it requires a strong determination, huge amount of investment and system innovation to bring the ideal to the reality.



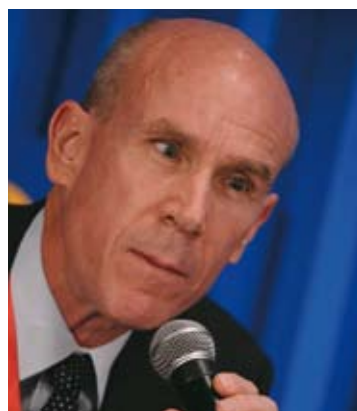
Tun Abdullah bin Haji Ahmad Badawi  
5th Prime Minister  
Malaysia



Octavio de Barros  
Chief Economist  
Banco Bradesco, Brazil



Chiu Cheng-Hsiung  
Chairman  
SinoPac Bank



C. Lawrence Greenwood, Jr  
Vice President  
Asian Development Bank



Li Ruogu  
Chairman & President  
Export & Import Bank of China



Harsh Mariwala  
Chairman of Marico  
President of The Federation of Indian  
Chambers of Commerce and Industry



Another panel chaired by C. Lawrence Greenwood, Jr. Vice President of the Asian Development Bank, entitled "Avoiding the 'Middle Income Trap': Asian Options", focused on the inclusive development needs for countries at a similar stage as China in their economic development. That discussion was predicated on the idea that China became a middle class society in 2010, by accepted measures of family income, but large numbers of people in China are yet to achieve middle class status, and the overall sustainability of middle class life styles remains open to doubt.

Of course, the most basic achievement in this regard is securing the basics of life - food and housing. Feeding 1.3 billion people is not an easy task. The concern about food security is growing throughout the country. China's food supply is tightening. In November 2010, the food price index was up 12 percent over a year earlier. Now after 15 years of near self-sufficiency in grain, China has become increasingly dependent on

world markets for massive grain imports. China imports already 80 percent of its soybeans, a key staple in Chinese food for thousands of years. This makes China vulnerable to the drifting balance of demand and supply and vulnerable to price volatility, as was made clear during price spikes in 2007. Bad weather and poor supply chain efficiency also cause seasonal food shortages and the spikes in food prices.

In a special BFA AC session entitled "New Zealand-China Free Trade Agreement- Springboard for Growth" the means of enhancing access to expanding food supplies, (such as through free trade agreements), was discussed. The 12th Five-Year Plan prescribes advances in agricultural productivity for every region of China, and it emphasises bio-ag technology in the promoted strategic sector of biotechnology. Seed and animal genetics are being advanced by state research organisations, universities, and private companies, and previously non-arable land is being considered for hardier plants and grasslands to support livestock. China is taking a close look at diverse methods to increase domestic production and ways and means to improve farmers' income and quality of life. Enterprises are also considering additions to domestic food production capacity, acquiring access to agriculture and stocking resources overseas.

Food safety is another issue of concern. The media has disclosed several devastating food scandals, including the melamine contamination of milk that sickened tens of thousands of people. The root cause of food safety issues resides in the structure of government regulatory bodies, the level of technology and accountability in enterprises, weaknesses in the supply chain, and intense competitive pressures on prices.



There are many government authorities looking after the sector, but there is a lack of communication and an overlapping of responsibilities that has left room for potential violations of laws and regulations governing food safety. To address the regulatory shortcomings, government should focus on four strategic areas: availability, affordability, safety and health value. Balancing an intensification of supervision, the government must also take steps to ensure the nation's food supply chain is strong and flexible enough to adjust during natural disasters. In fact, the NDRC catalogues mentioned above, laying out specific encouraged project areas, has a strong focus on agricultural issues, including water management and soil management, which are widely thought to be potential risks to an adequate domestic food supply.

Similar to food, housing is also among mankind's most basic needs. Now finding affordable housing in urban China is increasingly difficult, as the property market has seen steady and extreme escalation of housing prices in cities of all tiers. A special BFA AC session on real estate development, headed by Southern Weekend Editor Xiang Xi, and including distinguished panelists such as Chen Huai of the Ministry of Housing and Urban-Rural Construction, reviewed the complex situation the real estate sector in the Chinese Mainland now faces. Generally, the panelists agreed that recent regulatory moves have had impact in reducing the extreme inflation rates of housing, but they also concluded that regulation can only do so much in the face of burgeoning demand for real estate, high liquidity levels and other economic forces. The panel called for innovation on the part of developers and regulators, in building design, financing and marketing to solve the problem on a long-term basis.



Xiang Xi  
Head of the Editor Division  
Southern Weekend

In fact, local government revenue needs and involvement of local interests have combined to push up prices. There are no simple solutions, and experiments are underway to supplement local government income, largely derived from land transfer fees, with property taxes and other revenue streams. As it is, high land and development cost have kept people from their dreams of owning their own houses. China's average housing price experienced 500 percent increase over the past 10 years, while the average salary increase was about 14 percent.

Salary increases have been substantial, but they are nowhere near the increase in housing prices.

The government imposed some curbs this year including higher minimum down payments for second homes and residential property taxes in Shanghai and Chongqing. The central government introduced the Guaranteed Housing Programme, (Baozhangfang), under which some 36 million units of affordable houses are to be built before 2015 for low income households, generally specified as families earning under RMB5,000 per month.



An estimated RMB1.4 trillion investment will be needed to build the 10 million units of affordable homes slated for 2011-2012 completion. This represents a huge new intervention by the government in the housing market, which has been largely private. The biggest challenge is the ability to tap the funding and draw developers to work on the projects, since developers have seen very profitable years building high-end and middle high-end units. The central government is scheduled to provide RMB300 billion of the total and local governments RMB200 billion. The

remaining RMB900 billion must be financed and ultimately recovered, along with modest margins, from buyers. To make this work, reducing local government's dependence on land sales is crucial. Also, although increasing the supply of affordable houses is unlikely to impact pricing, in the wider property market, this level of government intervention and subsidy needs to be considered carefully in that light. A programme of this size needs well-crafted regulations and supervision to assure that it meets its goals and does not have unintended side effects on the broader market.



Chen Huai  
Director General, Policy Research Center  
Ministry of Housing and Urban-Rural Construction



Lili Huang  
Editor in Chief  
China Entrepreneur Magazine



Pan Shiyi  
Chairman  
SOHO China Ltd.



Linda Wong  
Chairman  
Yihai Real Estate Holdings



Liu Xiaoguang  
Vice Chairman & General Manager  
China Capital Group



Lee Kim Yew  
Founder  
Country Heights Venture

## Healthcare

An extensive dismantling of China's healthcare system occurred with the reduction throughout the 1980s of the social burden of SOEs. As the central and local governments worked to put enterprises on a sustainable commercial financial footing, several approaches to providing healthcare were explored to replace the support enterprises once provided.

The developments of healthcare and economy are thus profoundly interconnected. They are also profoundly related to the happiness of the people. China's healthcare reform, a focus of much attention since the beginning of reforms is still a work in progress, and, like education, it is an area where central government investment has been relatively low compared to other large economies. At present, as China's leaders watch the massive social burdens of faltering European countries, they continue to explore options for funding healthcare that are adequate yet affordable on a sustained basis.

The Chinese healthcare industry has demonstrated impressive growth since the mid-1980s, at a rate far exceeding that of the nation's annual GDP. The drivers for the industry's expansion are increasing health concerns among the Chinese population, an aging population, the bifurcation of the system into an expensive privately funded sector and the weakly funded public sector, and a rise in associated medical needs driven by a number of significant public health risk factors. Under these mounting pressures, China's recently proposed healthcare reform plan is generating spirited discussions about the industry's future. When implemented, the various plans under discussion are expected to transform China's healthcare system, significantly impacting all stakeholders.

China's total healthcare expenditures in 2009 totaled RMB1.61 trillion up 10.9 percent from 2008. In 2008, government, society, and individuals contributed 24.7 percent, 34.9 percent, and 40.4 percent respectively, of the total. The Chinese government has been consistently increasing its investment in healthcare, spending RMB293 billion on the basic medical insurance programmes in 2009, up 17.6 percent from 2008. In 2008, the central government increased its healthcare expenditures by another 25 percent, to RMB83.2 billion. In 2009, government expenditures on healthcare as a percentage of total government expenditures were 9.9 percent. Moreover, in 2009, China's fixed asset investment for health facilities in the first quarter rose 28.8 percent year-on-year to RMB2.81 trillion. The growth rate in the healthcare sector was 4.2 percentage points higher than the previous year.

Nonetheless, when compared to other nations' healthcare expenditures as a percentage of total government expenditures or GDP, China lags far behind. However, recent trends in Hong Kong and Taiwan demonstrate how economic development drives healthcare expenditures and portend similar growth for the Chinese Mainland.

**Table 2: International comparison of healthcare expenditure, 2010**

	Consumer expenditure: health (US\$M)	Healthcare spending (US\$ per head)	Healthcare spending (% of GDP)
France	56,384	4,755	11.4%
U.K.	23,653	3,257	9.0%
Brazil	162,469	1,080	8.6%
Japan	137,653	3,101	7.2%
HKSAR	5,802	1,977	6.2%
South Korea	35,395	1,250	6.1%
Russia	26,193	548	5.3%
India	63,516	70	5.0%
China	185,775	211	4.7%

Source: Economist Intelligence Unit

One striking result of China's dramatically rapid economic growth is that the country manifests a public health profile similar to more developed countries. Chronic diseases are rising, and infectious diseases are more or less under control. As China's population ages, chronic disease will increase significantly, according to various research projects and surveys carried out in recent years. Yet, China's healthcare system has not caught up with its population's changing needs. In fact, in the opinion of many, imbalances in the system, for example, the dependence of hospitals on western prescription medical sales for revenue, has led to a resurgence of antibiotic resistant infectious diseases that were once under control.

There is a wide misunderstanding that healthcare means expenditure for the government. If we take a closer look at the situation at the international level, it is observed that life science actually represents one of the largest markets in Europe and thus a high proportion of GDP growth.

corresponding proportion of never-married men in their late 30s may be more than 25 percent nationwide. Then the question that needs to be addressed is how will this surplus of males be managed. Generally, in China as elsewhere the world, an excessive male population leads to internal unrest, crime, and societal violence.

- **Rapidly aging population:** In 2010, about 115 million Chinese were 65 or older. The United Nations projects that by 2050, nearly 24 percent of China's population will be 65 years of age or older, far above the world's projected average of about 15 percent. China's manpower will be shrinking in the next two decades to a dependency ratio very much like Germany today, while the investment needs for pension system and healthcare services will increase significantly. Till now, Japan is the only country that has undergone such a rapid tempo of graying. But Japan was rich before it grew old. When Japan had the same percentage of 65+ citizens that China does today, its per capita income level was twice as high as China's is now. China will have to address the aging population issue urgently and innovatively.
- **Regional disparities:** China is a nation with great regional disparities. Roughly speaking, income in the Chinese countryside is only a third as high as in China's cities. The poorest rural areas are experiencing an even faster graying as the younger people have been moving to urban areas for better-paid jobs. Also, the ratio of never-married men is even higher in rural areas (and expected to be about 30 percent by 2030), because the poor, uneducated and the rural will be more likely to lose the competition for brides. In the years ahead, China is set to experience an ever-growing divergence in demographic profile between the city and the countryside.
- **4-2-1 family pattern:** China's "one child" policy has resulted in huge pressure on the younger generation, because all the hopes and dreams and support needs of four grandparents and two parents rest with this one "child". This child might have difficulties in supporting and taking care of the parents when they reach old age. The financial burden from (usually) retired parents resting on their one child will be quite heavy, especially given China's woefully insufficient pension system and rising costs for food and housing. There have been some discussions about the change of the "one child" policy, but the government is quite careful about these new suggestions, allowing only limited exceptions to the policy to date.

## One approach to ease the burden on public investment is by stimulating private-sector investments through the reform of sector legislation, institutions, infrastructure, and research and development

### Demographic shifts: gender balance and other balances

Most well-informed world decision-makers express confidence about China's future, but they also believe that China's leadership is challenged by the demographic fundamentals to maintain relatively rapid economic growth and at the same time build a "harmonised society", i.e. one that reduces the gap between wealthy and poor. The profound shift in China's population profile has four major economic and social implications for the coming year.

- **Gender imbalance:** the gender imbalance among newborns is the one of the most serious demographic problems for the country's population of 1.3 billion. The latest figures show that for every 100 girls born in China, 119 boys are born. In 2000, all but 5 percent of Chinese men in their late 30s were never-married; by 2030, the projections suggest the



China has impressed the world with its economic accomplishments over the past generation, but this admiration is not unqualified, given the stubborn societal issues we have been discussing. The new demographic reality is challenging. Suffice it to say the demographic shift will almost certainly place economic and social pressures on China that no country of a comparable income level has ever before faced. China will have to learn from the experience of other countries with similar issues but also develop innovative solutions to the problems China somewhat uniquely faces with healthcare.

## Education

A session at the BFA AC entitled "Rethinking Education: University Presidents vs Corporate CEOs", moderated by Lee Kaifu, Chairman and CEO of Innovation Works, considered the role of education in inclusive development.

Emerging economies have invested heavily in education, recognising the importance of growing talent to achieving sustainable growth. To realise the so-called "demographic dividend" of large groups of new workers entering the workforce, both China and India have increased their capacities to train science, technology, and social science graduates many times over. Having the scientists, engineers, economists, and others to drive knowledge-based growth is a key to national competitiveness. But all over Asia, the relationship between education and pedagogical methods and creating a society of innovation remains a hot topic of debate.



Richard Brodhead  
President  
Duke University



Tony Chan  
President  
Hong Kong University of Science and Technology



Kim Fausing  
COO  
Danfoss



Jason Li  
Executive Chairman  
US-China Partnership Committee



Liu Chuansheng  
Chairperson, University Council  
Beijing Normal University



Zhang Xinsheng  
Former Vice Minister of Education  
China

The world has witnessed China coming to the end of an era of domination in providing cheap labour to support highly competitive low-end exports, and has seen China's growing focus on fostering a knowledge driven economy that would drive towards higher quality products, more innovation and more valuable service offerings. In other words, the Chinese government has made serious attempts to transform the country from a world factory into a hub of human capital.

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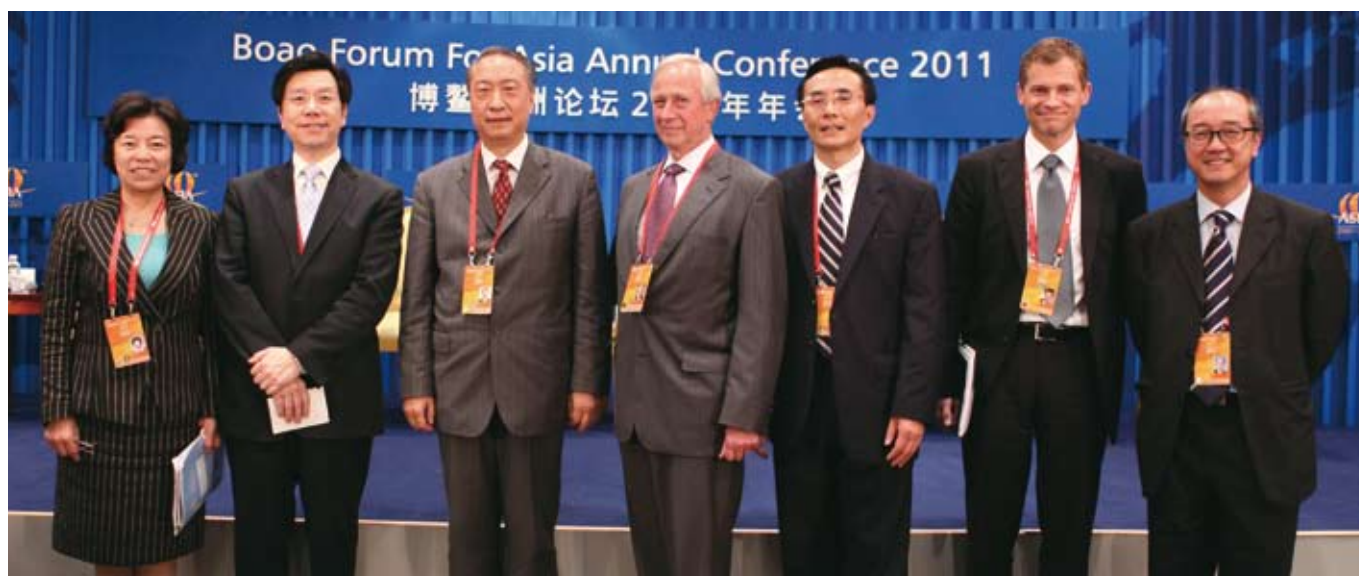
## Education is not only a part of social and economic development; it is also the key to building China's "soft power" on a global scale

The panel discussion made the following key points.

- Higher education is about cultivating a flexibility of ideas, a capacity for analysis, and a ready ability to solve problems, rather than a specific skill set.
- University education is evolving rapidly in many markets, and as it does so, there should be an increasing focus on globalisation issues, entrepreneurship education, and fostering innovation, especially in socially or environmentally-oriented fields.
- China has a growing present and future need for highly skilled and internationally-oriented talent.
- The major difference between American and Chinese education systems lies in the fact that American institutions emphasise creativity and innovation, while Chinese institutions are currently more focused on technical skills and concrete fact acquisition.

In 2009, the average government expenditure on education was about 7 percent of GDP, and 9 percent for some developed countries. China's newly published Outline for National Education Development Plan by 2020 proposes to increase the education spending from 3.6 percent of GDP in 2009 to 4 percent in 2010. While the spending is increasing, China lags other countries in education investment, as in other areas of social infrastructure, by a big margin. Investment levels are related to education quality and pedagogical methods, and another significant core issue is the quality of education and the process of modernisation. The education system is struggling to keep pace with China's burgeoning economic success and the demand for education at a higher level and of better quality is greater than ever. It is likewise struggling to achieve the transformation necessary to stimulate more innovative thinking. A large number of private higher education institutions have arisen, and some of these are not at the quality level required for success. Looking more deeply into the development and reform of China's education system that has been achieved, we see trends shaping the gradual transformation of the system.

- Embracing the diversity: from the perspective of content, China's education is no longer constrained to the traditional academic range of topics. Diversifying societal and individual career demands have motivated the development of new fields, especially those relevant to business. As mentioned above, new stakeholders are emerging, especially private educators. The rapid development of China's private education sector has eased the investment constraint and provided a wide range of education services including primary and secondary school, after-school tutorials, language training, and vocational training etc., even as it has raised new challenges to maintain quality.

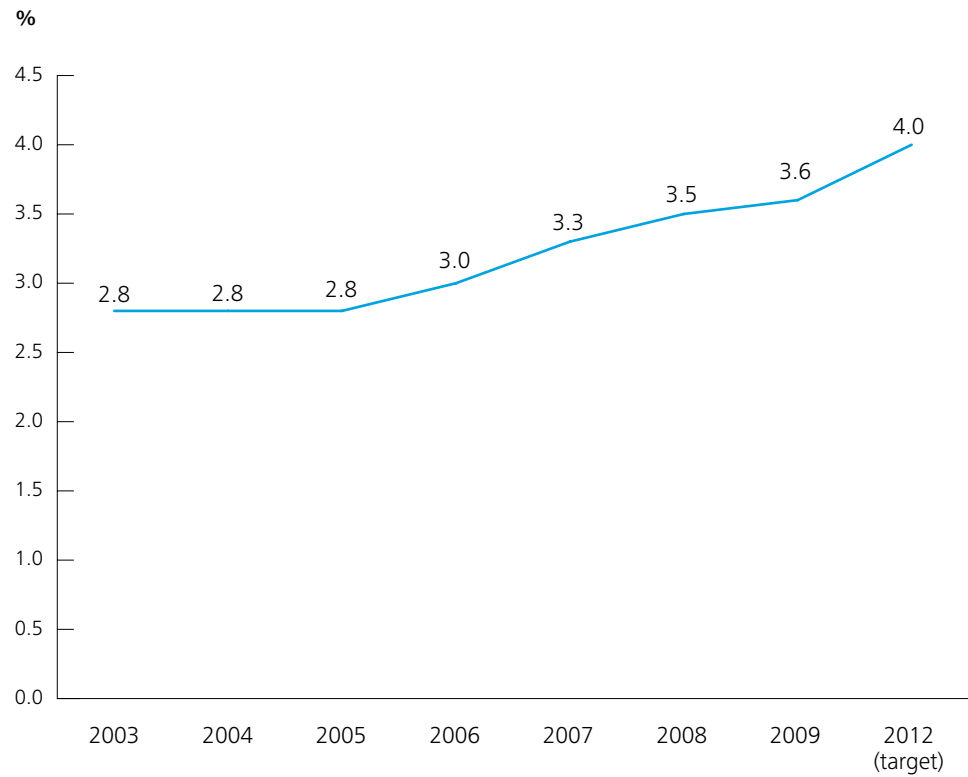


- Attracting social investment: education and training are anti-cyclical, which means they usually can provide a return on investment even under bearish economic conditions. The sector has attracted considerable levels of private capital. According to Zero2ipo, there were 50 venture capital and private equity investment deals disclosed during 2003-2010, with a total reported investment of US\$648 million. By the end of 2010, a total of 10 educational and training institutions have been listed on overseas stock markets. Among other things, the success of those listings indicates confidence around the world in the prospects of China's education and training industry.
- Changing the single elitist model: getting a higher education degree from a recognised university used to be the only path to a successful career. Even in modern times, there remained the legacy of old China, where the national testing system, known as the imperial exam system, was the only gateway to a professional career. The education model had historically been designed to develop elitist or social/business leaders. That remains the case today, but now there is the ironic situation where graduate unemployment has kept rising. On the other hand, the demand for talent with specific vocational skills has been growing in line with the industrialisation and modernisation of the society. China is in a moment of transition, while the higher education curriculum readjusts to the realities of marketplace demand.

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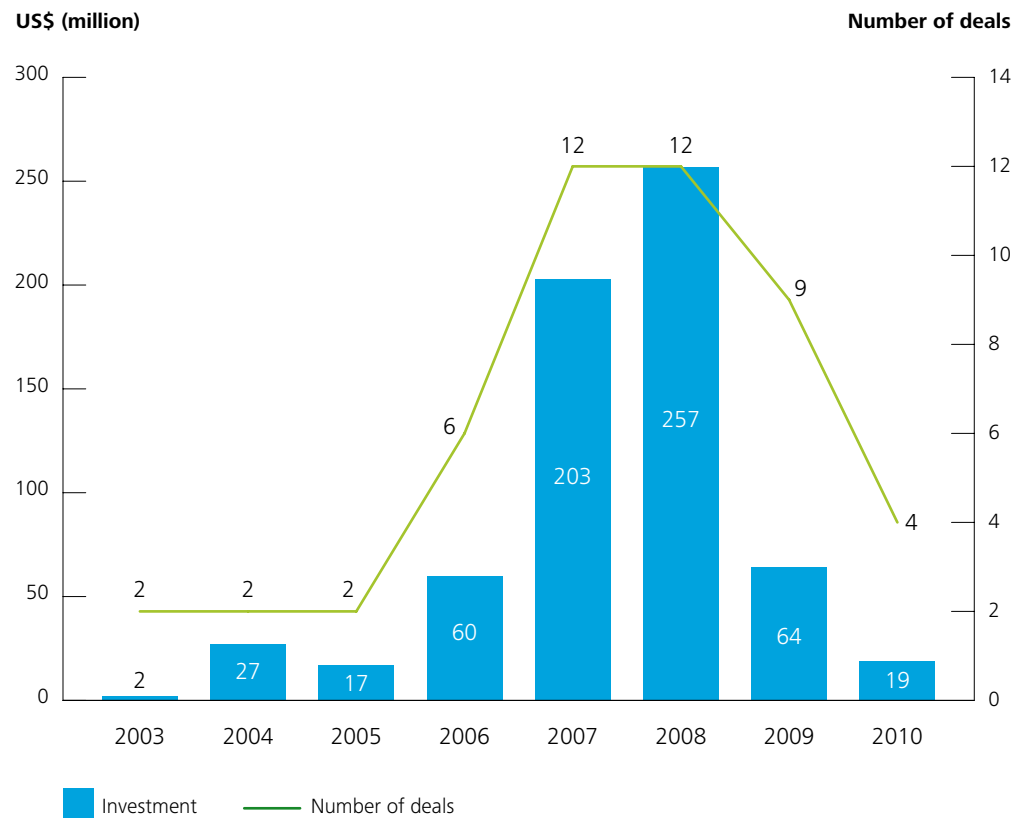
The signs are there will be a transformation of China's education model to a more inclusive one, with both the co-existence of academic-oriented and employment-oriented systems

**Chart 6: Chinese government investment in education as percentage of GDP**



Source: National Statistics Bureau, government report

**Chart 7: VC/PE investment in education**



Source: Zero2ipo



The Young Leaders Roundtable is a special closed door event organises each year by the BFA AC to gather together a diverse and international group of young business leaders to consider, commit to and collaborate on making a positive difference in the area of focus of that year's Forum. Moderated by Rui Chenggang of China Central Television, this year's theme for the Young Leaders Roundtable was "Include the Excluded". But the session was not about poverty and distribution of wealth. It was about China's youth generally, and focused on these key themes.

- Present day society is characterised by diversification, explosion of information, and significant economic progress in China.
- The cyber world should never be a substitute for the real world.
- There are drastic changes in the values of the young generation related to the balance of responsibility versus individualism.
- Wealth is not an indicator of success nor of happiness.
- Young leaders should listen to the young generation and provide them with the means and tools to explore their potentials, overcome individual limitations and realise their dreams in life.

The education offered to youth in the future will need to reflect the pressures and forces in modern society, preparing students for real world situations. This includes a learning focus on previously under-emphasised issues like globalisation, entrepreneurship, climate change and low-carbon technologies, plus social equity issues like wealth gaps, development gaps between urban and rural areas, and gaps in access to social services like healthcare. Education is converging. For example, the US education system places more weight on creativity, independent thinking, and innovation, in contrast to China's emphasis on concrete knowledge and skills. As globalisation occurs, and the two countries begin to understand the strengths (and weaknesses) of each other's educational models, it will be natural for convergence to occur as both seek to adopt their best practices of the other to improve the competitiveness of their own students and the depth of their human capital pools.

Young leaders advocated that the young generation develop an attitude towards success and money, in which money-making is not the ultimate goal of life but is a means towards or the result of realising a dream whose benefits extend beyond self interest. Echoing the views of Yang Yang, one of the speakers at the Young Leaders Roundtable, "...youth should clarify the responsibilities they must bear in the pursuit of their own self development. Sometimes the result may be hard to predict but only if you try can you know that it's worth the effort to try".



# Transforming technologies

Many of the participants in the Young Leaders Roundtable who have succeeded in business have done so in technology businesses like information technology and the Internet. Their thoughts reported above are an excellent introduction to the key role of transforming technologies in the region's future development.

Technology underpinned much of the discussion of emerging economy development that this report featured at the beginning. Whether it is energy, environmental remediation, food security, quality of life, healthcare, or transportation, technology is at the heart of the potential solutions. This is not new. Each milestone of civilisation and economic evolution in human history was accompanied by the development of appropriate technology. We have already experienced three technology revolutions, and under the pressure of rising global demand for energy and resources, and the stubborn contradictions between economic growth and the limited capacity of the Earth to shoulder more burdens, the world is welcoming the 4th industrial revolution.

The major economies in the world have already made new energy, new materials, information networks, biopharmaceuticals, energy saving, low-carbon technology and green economy, the focus of a new round of industrial development. These new industries will drive all major economies into a new "green" stage. In recent years, the BFA AC has featured a workshop on green growth.

As for China, the second largest economy in the world, the challenges it is facing - economic growth model restructuring, as well as dealing with the energy dilemma, controlling hiking inflation, improving welfare and inequality, and the like, compel the government to find ways to utilise transforming technologies in ways which, if and when realised, will be groundbreaking. In this spirit, Chinese planners have crafted a clear plan for developing strategic sectors, already mentioned earlier in connection with the 12th Five-Year Plan. These seven sectors, all focused on technology and all relevant both to domestic needs and export growth, reveal the unmet needs of China and most other emerging economies.

The stimulus package, focusing on strong monetary and investment policies deployed since the global financial crisis, has helped the country avoid economic decline and achieve steady GDP growth. However, the negative effects of the stimulus plan are also emerging along with the economic recovery - a property bubble, redundant construction, excessive capacity, high inflation, increasing social inequality, and declining efficiency of capital, have raised nagging concerns about sustainability, achieving a soft landing and enduring new model of growth. First and foremost, it is necessary to remodel the country's production function, shifting from a heavy reliance on input of labour and resources to technology and production efficiency enhancements. Learning from the industry evolution in the US and the rise of India's IT industry, emerging industries are naturally linked with technology, efficiency, and new Models of Growth, which promises to drive the Chinese economy to another level.

On 8 September 2010, the State Council adopted a plan called the "Decision on speeding up the cultivation and development of emerging strategic industries". These were later included as the seven strategic sectors in the 12th Five-Year Plan we mentioned above. They include energy efficiency and environmental remediation, next generation information technology, biotechnology, high-end manufacturing, new energy, new materials and clean-energy vehicles. In addition to setting out these sectors themselves, an ambitious goal was set for them in financial terms. The value added by them should account for 8 percent of GDP in 2015, up from 3 percent in 2010 and by 2020, it should reach 15 percent.

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We have witnessed an evolution of the thinking of business leaders, from considering that compliance with green growth needs was a cost to thinking that it was a cost savings opportunity and finally to realising that it was a potentially profitable opportunity for strong revenue growth



The "decision" also set forth a series of policies to support these seven industries, including market cultivation, favourable business environment building, international cooperation, deepening tax incentives and financial investment.

**Table 3: Strategic emerging industries in China's 12th Five-Year Plan**

Seven strategic emerging industries	Sub-sectors	Expected investment
<b>Energy efficiency and environmental protection</b>	Energy efficient buildings, transport, and industrial processes; standardised treatment of discharged pollutants; water and wastewater treatment; waste management; environment protection; smart grid.	<ul style="list-style-type: none"> <li>• Energy efficiency and environmental protection: RMB3 trillion by 2015</li> <li>• New energy: RMB5 trillion in total by 2020 (RMB3 trillion for hydropower, wind power, nuclear power, solar energy; RMB1 trillion for smart grid; RMB1 trillion for new energy vehicles, clean coal, etc.</li> </ul>
<b>Next-generation Information Technology</b>	Integrating telecom, cable, and internet networks; internet of things/sensor networks; next-generation communications networks; high-performance integrated circuits; cloud computing.	<ul style="list-style-type: none"> <li>• Railway: RMB3.5 trillion by 2015</li> <li>• Subway: RMB1 trillion by 2015</li> </ul>
<b>Biotechnology</b>	Innovative drugs; bio-pharmaceuticals; advanced medical equipment; genetic engineering; stem cell research.	<ul style="list-style-type: none"> <li>• Pharmaceuticals: between 2009 and 2011, the government has planned RMB850 billion in investments to the reform of healthcare system</li> </ul>
<b>High-end manufacturing</b>	"Smart" equipment/informatisation of equipment; high-end electronics; aerospace; marine engineering; advanced transportation equipment.	
<b>New energy</b>	Nuclear power, wind energy, solar energy, clean coal, biomass, smart grid, energy storage; power distribution; new energy technologies for transportation.	
<b>New materials</b>	High-performance composite materials; energy-efficient materials and insulation; metals, ceramics, and glass; biomaterials & new chemical materials; nanotechnology; electric materials & batteries; electronic materials, semi-conductors, & optics; plastics.	
<b>New energy vehicle</b>	Pure electric vehicles; hybrid vehicles; hydrogen powered vehicles; charging technologies; lithium (and other) batteries; new energy auto components.	

Source: The State Council

Some observers raise questions about the ability of a government to provide a useful technology development roadmap. In fact, China's government designated a number of pillar industries and pursued a strategy of picking and nurturing winners since the inception of economic reform in the late 1970's. The basket of selected industries has also evolved from time to time, as the government would like to hold dominating stakes in the enterprises of industries deemed to be critical for national security and overall public interests.

This top-down decision making structure has privileged the enterprises in those pillar industries with a range of favourable policies, including protective tariffs, preferential loans, privileged access to capital market, tax relief, and direct support for R&D from the central budget. Consequently, they have quickly built up scale, charting a path to become strong global competitors someday. Up till now, these initiatives, along with the consolidation of key sector players, have boosted several enterprises to the top tier of the Fortune 500 leader board. However, the overall lag in innovation, efficiency, and the competition has not changed in China, and the dominant players in nearly every high technology sector are still outside of China.

Identifying and incentivising the new strategic industries are the latest efforts by the government to ramp up China's profile in global high-tech sectors. Since low carbon and green business have become a growth industry worldwide, China does not want to be excluded from the playing field. The criteria behind the pick of the seven strategic emerging industries include technology value, foreseeable market potential at home and abroad, sustainable growth, and, last but not least, the ability to entrain the development of other related industries.

China has been eager to transform its image from "manufacturing warehouse" to "innovation hub", although the result to date is mixed. However, the seven industries, if successful, might allow China to catch up and even achieve leadership in some areas. At present, for instance, we can cite some achievements: Membrane bioreactors (MBR) in sewage purification, flue gas desulfurisation, dust filtration, genetically modified seeds, PV silicon, Ti-Zr alloys, high-performance fibers, lithium batteries and large scale wind turbines are areas in which Chinese enterprises operate in line with the most advanced levels in the world.

A distinctive change from precious technology in the current discussion is a new openness to imported technology and closer cooperation with global technology owners. This was evident, for example, in a number of strategic cooperation agreements concluded between Chinese auto makers and global leaders in new energy vehicles during 2010. Whereas previously China appeared to believe it could develop indigenous technology for new energy vehicles, both the demands of the technology and the speed of global competitors made clear that if China were to become a major exporter of cars or components, it had to tap into the best technology available now. Thus China may opt to parallel several ways - independent innovation, cooperation with foreign partners, and direct acquisition to speed up the deployment of critical technology in the next decade.

Table 4 shows sizeable market potential for those seven strategic sectors, and makes the point that they promise economic benefits that can spread across many other sectors of the economy. It is this breadth of potential benefit that explains a total of US\$64 billion invested in these sectors and the leading 4,000 enterprises by private equity and venture capitalists since 2001.

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Confidence globally in these sectors is so high, that the government reasonably anticipates that much of the development funding required by the seven strategic sectors will come from private sources, social capital as it is often called in China

**Table 4: Strategic emerging industries and expected markets size**

	Market size estimation
Energy efficiency and environmental protection	RMB1.9 trillion in 2009, RMB4.5 trillion in 2015
Next-generation information technology	Internet of things - RMB750 billion; Cloud computing - RMB750 billion to RMB1 trillion
Biotechnology	RMB6 trillion in 2020
High-end manufacturing	RMB6 trillion in 2015
New energy	RMB1 trillion in 2020
New materials	RMB130 billion in 2012, and RMB200 billion in 2015
New energy vehicle	RMB20 billion in 2020

Source: "Development and relating fiscal policies of China's emerging industries of strategic importance"

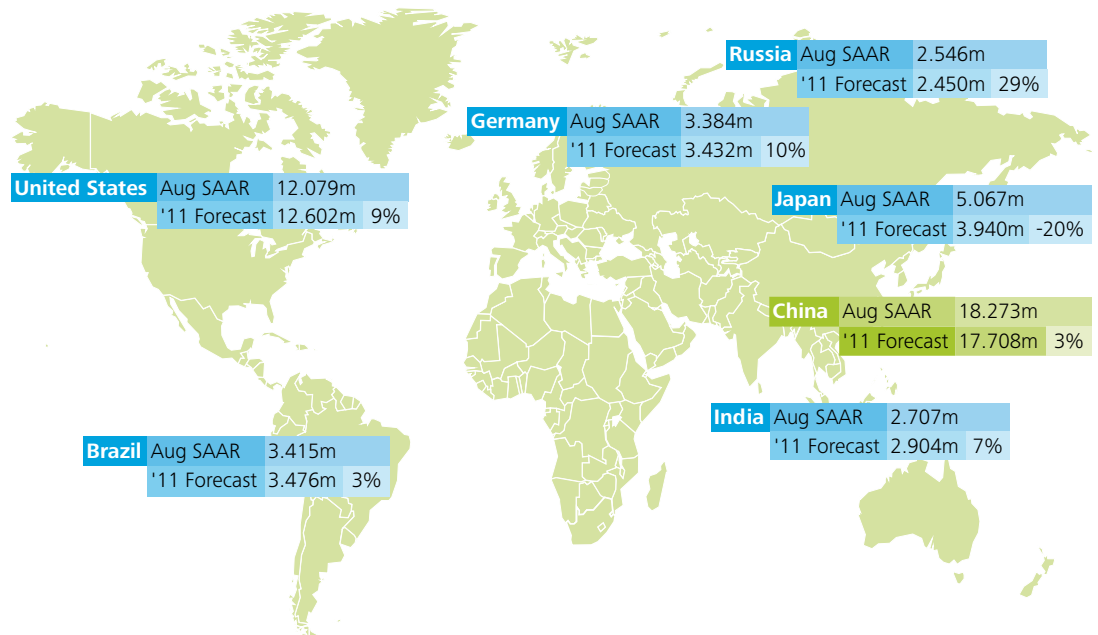
The planned investment is enormous, and the government is expected to provide part of the funds needed through dedicated industrial funds and R&D grants, as well as conventional fiscal, tax and credit policy support and large government tenders for infrastructure investment. The government is likely to give private capital wider access to these industries and incentives for funding them, either through VC/PE channels or capital markets.

It is important to point out the emerging disequilibrium between the central planning trends and somewhat divergent implementation measures at the provincial level. Ninety percent of China's provinces have developed their own strategic plans to foster and encourage those industries and others, all with ambitious goals. While generally aligned with the central plan, this eagerness at the provincial level will potentially result in some heavy imbalances, overinvestment and some misdirected capital.

### Fueling the future

Energy lies at the heart of the seven sectors, and four are explicitly about energy. This is, of course, not an issue for China alone. For example, all BRIC countries are seeing a significant growth in automobile ownership and use, as well as other travel dependent on fossil fuels, like air travel. This map gives an indication of the number of vehicles that will be added to fleets in major markets around the world.

**Figure 1: Number of newly added vehicles in fleets**



Source: J. D. Power Global Forecasting  
 \*SAAR = Seasonally Adjusted Annual Rate

In the BRIC, strong growth is anticipated, but China outpaces the others by a large margin, having now become the world's largest vehicle market. The following chart shows new car registrations in the BRIC.

**Table 5: New passenger car registrations in BRIC (unit: '000)**

Country	2006a	2007a	2008a	2009b	2010b	2011c	2012c	2013c	2014c	2015c
Brazil	1,556	1,976	2,193	2,445	2,645	2,806	2,978	3,233	3,513	3,729
Russia	2,052	2,754	3,256	1,466	1,905	2,324	2,632	2,957	3,311	3,710
India	1,380	1,548	1,553	1,950	2,297	2,641	3,037	3,478	3,942	4,516
China	4,946	6,171	6,636	10,171	13,911	15,856	18,375	21,159	24,028	26,896

Note: a=Actual; b=Economist Intelligence Unit estimates; c=Economist Intelligence Unit forecasts  
 Source: Economist Intelligence Unit

Considering energy consumption, vehicles consume a major portion of petroleum products. China, India, and Brazil are all net crude oil importers. Only Russia is a net exporter. Again, China's underlying vehicle growth drives a very high demand of petroleum products.

**Table 6: Petroleum products consumed by transportation (million)**

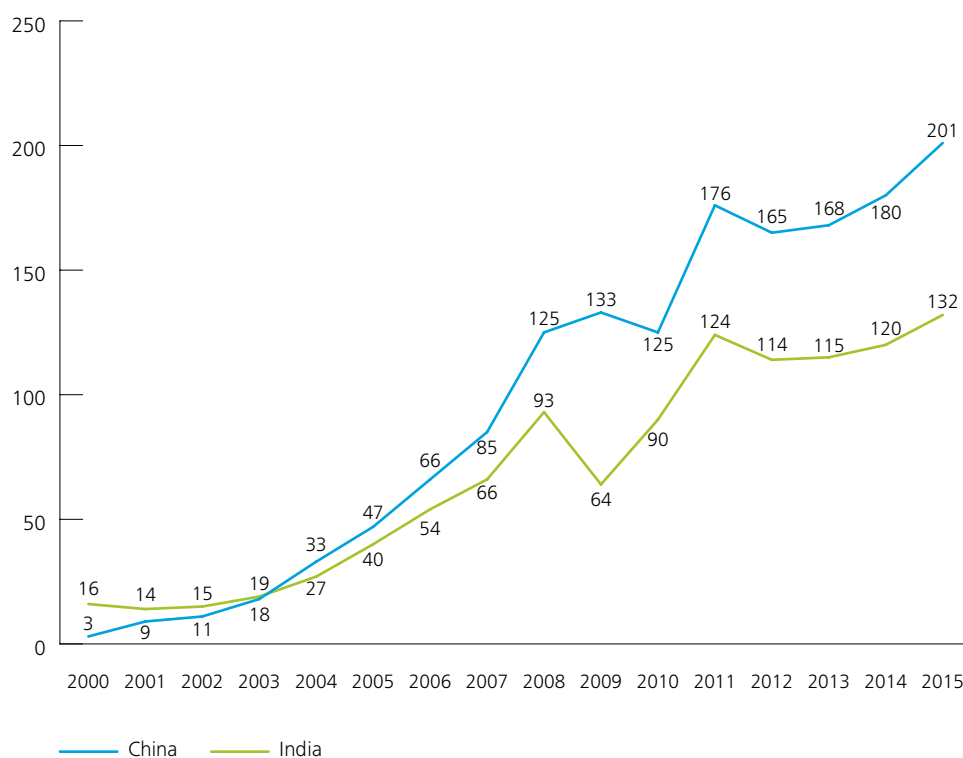
Country	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Brazil	20	23.1	32.2	21.4	28.4	36.1	30.5	28.2	26.8	26.9
Russia	22.7	25	36.6	22	29.1	37.9	32.9	31.4	31.4	32.8
India	5.7	19	28.2	19.1	26.1	35	31.4	30.8	31.5	33.7
China	53	65.8	98.7	69.4	98.3	136.7	126	126	131.2	141.9

Source: Economist Intelligence Unit

The final part of this picture is the import requirements to meet energy needs. Both China and India import more than 50 percent of their energy needs, which present both a challenge to maintaining healthy trade balances and even a challenge to national security.

**Chart 8: Crude oil & Liquefied Natural Gas (LNG) net imports**

US\$ (billion)

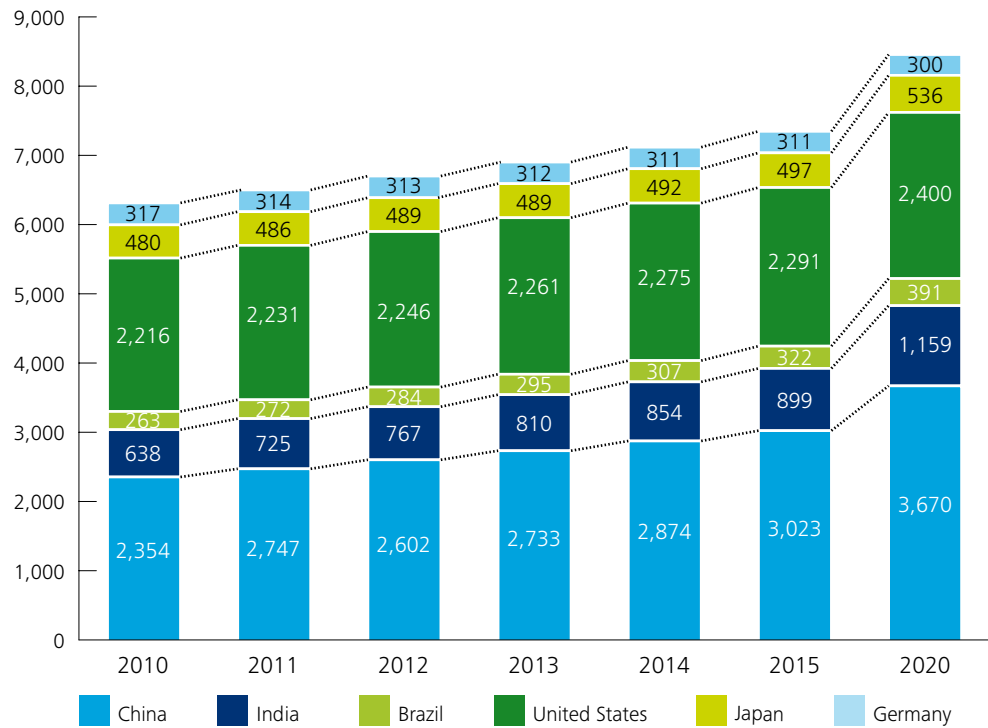


Source: Economist Intelligence Unit

If we look more broadly at overall energy consumption, emerging economies now account for over half the world's energy consumers and China surpassed the US and became the largest energy consuming country in the world in 2010. China's high energy consumption growth rate is likely to continue in the next decade. Moreover, as one of the two major traditional energy sources, nearly 60 percent of the oil the country consumed is imported. China did not meet its energy intensity reduction goals in the 11th Five-Year Plan, which was a 20 percent reduction in the units of energy needed to produce a unit of output. For the current plan, the target of 16 percent will also not be easy to achieve. That is a huge reduction to reach on a national level in just a five-year span of time.

**Chart 9: International comparison of energy consumption**

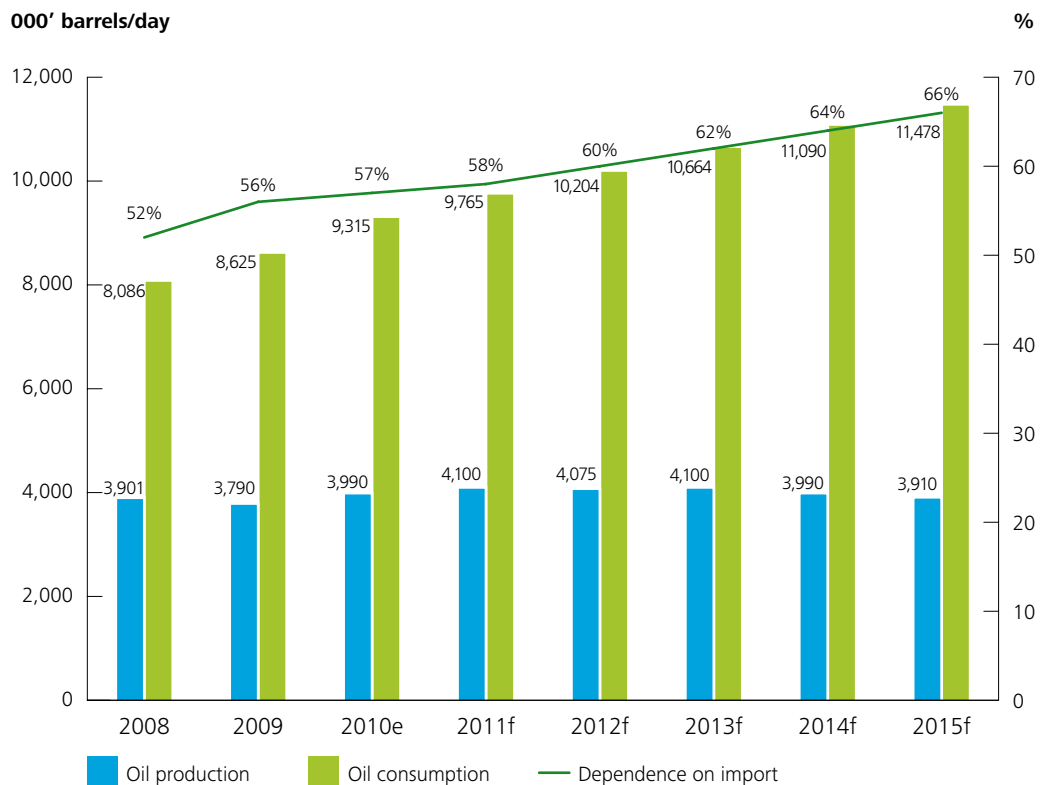
Tonnes (million)



Source: Economist Intelligence Unit

**Chart 10: Chinese oil production, consumption and imports**

'000' barrels/day



Note: f=forecast

Source: Historical data - BP Statistical Review of World Energy, June 2010/BMI; All forecasts - BMI



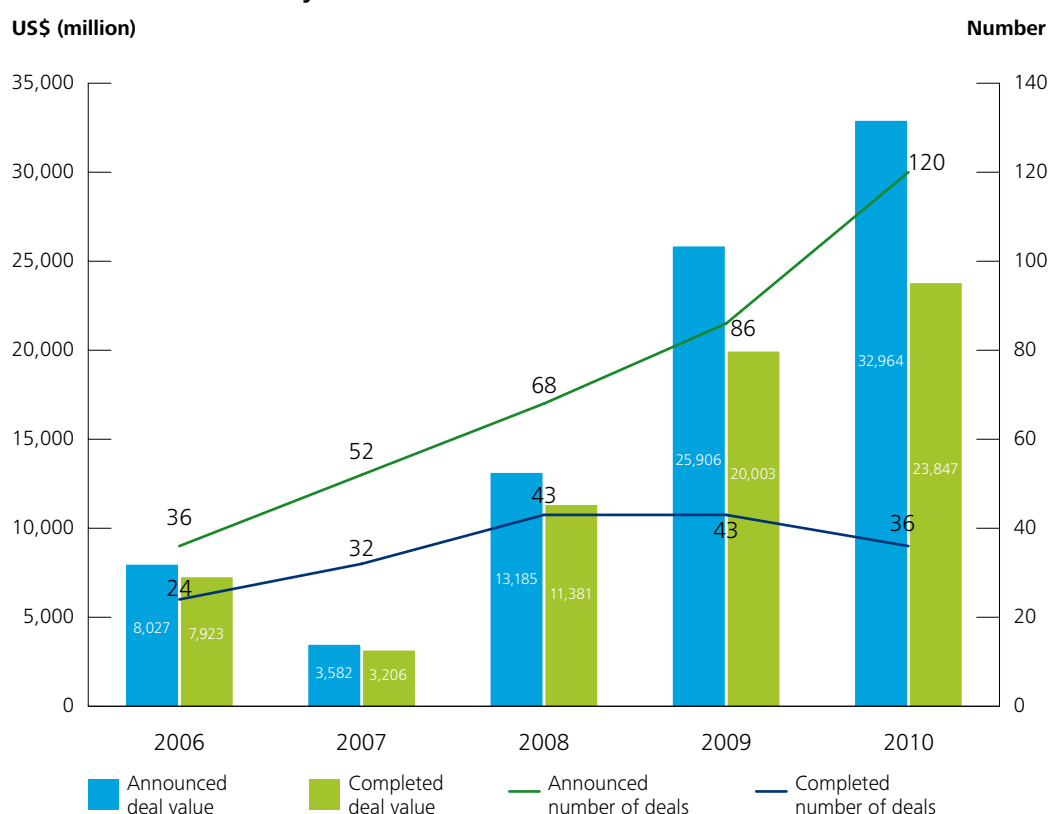
Energy is a major security issue for China, as it faces an increasing dependence on imported oil. Oil exploration over the last two decades has produced only modest results, and China is investing heavily in better ways to use coal, to electrify as much transportation as possible, and otherwise reduce the growth rate of oil consumption. But solving the energy puzzle is certainly not a problem that only China faces. It is, of course, a worldwide issue, shaping or mis-shaping foreign policy and creating friction between major producers and major consumers. In general, there are three approaches adopted by China and many other countries - efficiency, expansion and alternative.

A top priority is to reduce energy consumption through improved efficiency and clean technologies. For instance, the Integrated Gasification Combined Cycle (IGCC), the latest development of Clean Coal Technology (CCT), if it is utilised in power generation, can improve the net efficiency to 45 percent currently, and reduce the pollutant emission to 10 percent of that from a conventional coal-fired power station. China's leaders have repeatedly said that a basic reduction of energy intensity and energy waste, through technology to improve everything from building systems to thermal power efficiency and power transmission, offer opportunities for huge energy savings that eclipse anything alternative forms of generation can contribute to China's growth.

Actively seeking energy and mineral resources abroad to increase traditional supply is a short-term solution, but it has led to mega M&A deals in recent years. One of those active energy seekers is China which has completed approximately US\$66 billion in energy and resources acquisition in the past five years, and whose targets are widely spread in North America, Latin America, Australia, Africa and South East Asia, etc. However, the acquisition activities, mostly conducted by SOEs, are facing more and more opposition from the host country, and competition from other bidding rivals.

The Chinese government has worked for years to change China's energy consumption mix, although it will continue to use coal and oil at similar levels to feed economic growth. The government's plan is to increase renewable energy's percentage contribution to 15 percent of all energy consumed in China by the year 2020, so that the absolute amount of energy generated can continue to rise to meet demand.

**Chart 11: China E&R industry outbound M&A**



Note: Acquisitions with ultimate parent company located in Mainland China  
Deal values are to the nearest digit

Source: Thomson Financial

**Table 7: China's energy saving and emission reduction targets**

	11th FYP (2006-2010) (Target)	11th FYP (2006-2010) (Actual)	12th FYP (2011-2015) (Target)	13th FYP (2016-2020) (Actual)
GDP annual growth	7.5%	10.8%	7%	-
Primary energy consumption annual growth	4%	6.3%	3.75%-5%	5.5%
Energy consumption (billion tce)	2.7	3.3	4.2-4.5	<4.9
Non-fossil as total primary energy consumption	10%	8.3%	11.4%	15%
Energy intensity (% reduction in 5 years)	20%	19.1%*	16%	-
Carbon intensity (% reduction in 5 years)	-	-	17%	40%-45% vs. 2005

Clearly, exploring alternative energy sources is not a luxury based on environmental concerns, but an absolute necessity to provide enough energy for China. Currently the alternative energy sources are mainly focused on hydro, solar, wind, nuclear and biomass. Of course, every country's nuclear programmes are under review as a result of the Japanese disaster, but nuclear will be part of China's mix going forward. The distinct feature of China's alternative energy strategy is that no alternative is off the table.

China's hydro energy represents 23 percent of the nation's growing electricity consumption, second only to coal-generated electricity. More than 43,000 small hydro plants are scattered across the country, providing power generation and transmission to rural countryside village. Meanwhile, large hydro plants are small in numbers but provide 68 percent of the country's hydroelectricity. The country's bountiful landscape of rivers and streams once was believed to present a yet untapped resource for hydro power, but the increasingly severe drought in recent years has reduced actual generation.

Other forms of non-fossil fuel generation provide similar choices and balancing challenges. Solar energy stands out as the fastest growing clean-energy sector, with expected 40 percent annual growth over the next four years. Despite optimistic growth prospects, the biggest obstacle for solar energy within China is the cost per watt, ranging between US\$3 and US\$4, while the approximate cost of traditional coal energy is as low as US\$1. China has succeeded in massively bringing down the cost of solar power equipment, but at the same time, solar panel makers are not necessarily factoring in the total energy cost of cell production, nor the cost of managing environmental consequences of the manufacturing itself. Other challenges include limits in the global supply of silicon - a key ingredient in module manufacturing, and the huge amount of investment needed for continued technological innovation.

China has been aggressive in exploiting its vast wind recourse, which is seen as the most commercially viable clean energy, and the current installed wind capacity ranks second largest in Asia and 5th largest in the world. By 2020, the country is estimated to have an installed base of wind power totaling 100 GW. On the investment side, wind power is a hot spot for renewable energy investors, and is currently dominated by the "big five" state-owned power companies and the private players connected with them. These groups will need to face several challenges, including those regarding technical transmission and unpredictable pricing policies. Current thinking on wind is to focus on offshore wind farms, closer to the large coastal cities, away from valuable farm lands and famous tourist sites. But offshore wind production has an installation cost nearly double that of onshore, and the service life of offshore units remains untested.

As for nuclear power, it is set as a priority in the 12th Five-Year Plan, and China will have 40 GW of installed nuclear capacity by 2015.

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## The benefits of nuclear power plants not only include strong power generating capacity with relatively low consumption of resources, but also a notable contribution to GDP growth

China is believed to possess the key technology to develop nuclear power, however, the explosion and leakage of the Fukushima nuclear power plant Japan in 2011 has made the government more cautious about its large scale accelerated plans for nuclear.

In terms of funding and investments, the public and private sectors will both play a role. Because of profitability challenges, private investment is currently more focused on specific areas within renewable energy technology, i.e., equipment manufacturing rather than energy production. Nevertheless, the Chinese government has a massive reserve of cash to fund renewable energy initiatives. And given that these are key national security needs, the investment need does not necessarily fit a normal commercial calculus. This could make China the world's leading nation powered by alternative forms of power production in just a few years.

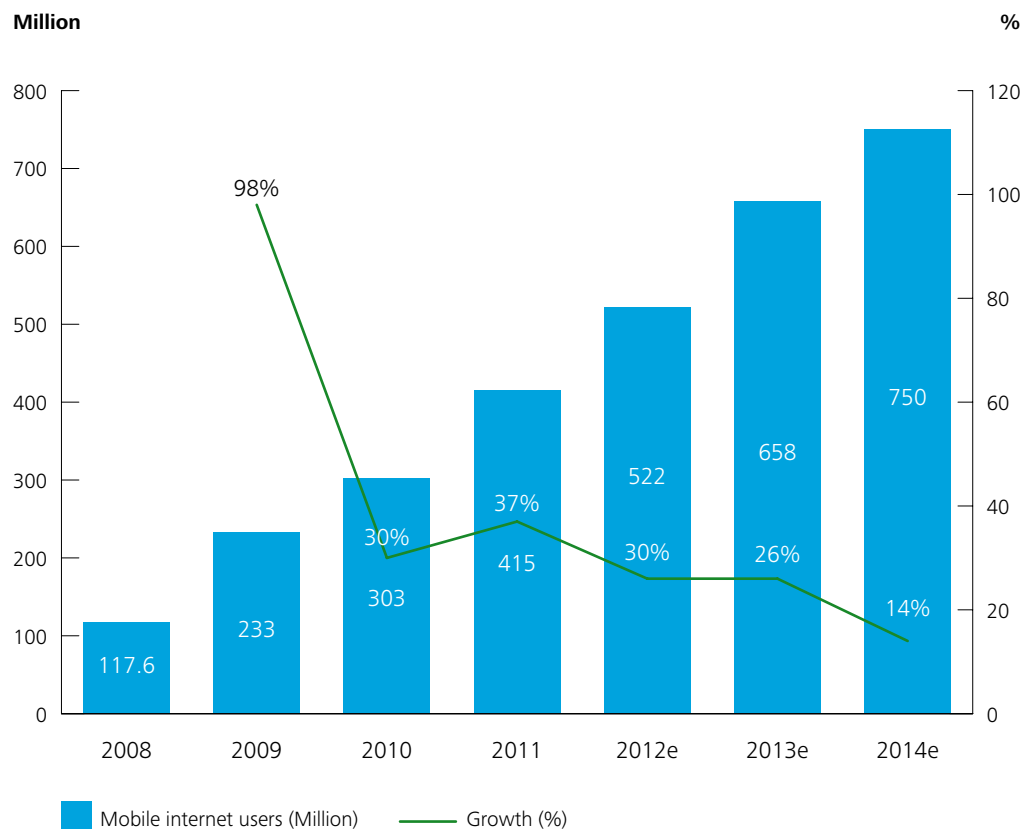
Among the non-energy strategic sectors, IT, mobile IT and other transforming technologies are intended to support the society China envisions for its future. China is already the largest internet nation in the world, with 450 million internet users in total, and this figure could double in the next 10 years to nearly one billion. In a country that is flocking online by the millions, the social, economic and even political force of the internet is formidable, and it's likely to stay that way for some time. It is also the largest mobile device market in the world, and urban Chinese have demonstrated a big passion for cutting edge IT electronics and services.

With the increased availability and affordability of smart phones and other 3G devices, the mobile internet is increasingly in the hands of ordinary consumers. At the end of 2010, there were 303 million mobile internet users in China, positioning China to become the world's largest mobile internet application market.

For users, the mobile internet makes internet connection accessible and ubiquitous, while adding value to consumers' lives in line with the ever more mobile lifestyles of modern society. Applications are also becoming more diversified, i.e., news, games, music, animation, micro-blogging and location services, almost everything you can think of. Among China's most valuable companies are massive online gaming companies, micro-blogging companies, eCommerce companies providing key supply chain links, and similar new economy businesses that rely on mobile IT.

For business communities, the mobile internet not only extends their consumer reach, but also opens up new business goods and services using mobile capabilities, such as mobile gaming, mobile commerce, and mobile marketing.

**Chart 12: The growth of China's mobile internet users**



Source: iResearch, CNNIC

In addition to a rich proliferation of mobile activities and a rapidly expanding user base, China envisions great market interest in other emergent Internet technologies including Cloud Computing and the Internet of Things. Cloud Computing aims to provide better and quicker services to users, by applying the concept of distributed, grid computing and utility computing on the internet, providing commercial and consumer users with more efficiency and flexibility in meeting their IT needs. Many IT companies have participated in the development of interlinked devices and networks, but in general, The Internet of Things is still in a concept promotion phase. It has, nonetheless, the potential to be used in every single industry, and the more coordination among the value chain, the better the results. Once again, it is at an early stage in China, in terms of technology and infrastructure.

Finally, we add a word about life sciences and biotechnology as a strategic sector. This is actually inclusive of a range of commercial sectors, from pharmacy to genetic seeds and husbandry. Biotechnology is a key to progress in so many important sectors for China, especially given the food problems we have discussed and the demographic changes, increasing income, aging population, quick urbanisation, and growing health consciousness. Just for health alone, experts predict that China is to become the third largest pharmaceutical market in the world by 2013, and the second largest in 2020.

In the next four years, the world pharmaceutical market is welcoming a tidal wave of drug patent expirations. This will stimulate huge gains in generic drug production and exports for the country. However, China's plan makes clear that it is no longer satisfied to become a price competitor in the global generic drug fray, but it intends to drive biotechnology forward to become an innovator of new drugs and owner of valuable biotechnology IP.

In fact, a large pool of highly skilled and relatively low cost researchers, coupled with a huge population of clinical patients for testing and a history of good epidemiological record-keeping, enables China to take a leadership role in the development and testing of new drugs. That explains why nine of the 10 global pharmaceutical companies have set up R&D centers in China. It also explains why more than 20 biotechnology parks have been established locally, scattered in Beijing, Shanghai, Tianjin, Guangzhou and Shenzhen.

Focal areas we expect include genetic testing and therapies, protein drugs, monoclonal antibody clone drugs, therapeutic vaccines, small molecule drugs and modernised traditional Chinese medicines. These are all highlighted in the 12th Five-Year Plan as part of China's path to achieve sustainable competitive advantage.



# Conclusion

2011 marked the 10th anniversary of the Boao Forum for Asia. For China, Asia, and the emerging economies around the world that participated, the BFA AC was a unique event, coming at a significant time and reflecting a more global reach than in any previous year.

While concerns remain around the world about the state of the global economy, fragility of the recovery, and the potential even for another dip into recession, the BFA AC 2011 was overall a very optimistic event. How can this optimism be explained? This is not a hard question. The emerging economies, including China, the other BRICS, and the E11, have come through the most dangerous years of the crisis with relatively stable economies and actual or potential high rates of growth.

In many respects, the global financial crisis was a watershed event in history that revealed the deep competitive potential of emerging economies and uncovered roadmaps for their future growth. Put another way, for emerging economies, even the size of China, the stubborn problems facing developed nations trying to recover from the crisis provided valuable lessons for directing and adjusting their own developing models.

A sense of accomplishment and pride was evident at the BFA AC 2011 in what emerging economies individually and as a group had accomplished. Along with that, there was a clear willingness to accept the responsibilities that have gravitated toward them, and that call on them to work together to build a more stable, fair, and sustainable global order. This will be a global order that not only believes in but truly achieves the aspirations and goals of "Inclusive Development".



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As a non-government, non-profit international organisation, Boao Forum For Asia (BFA) is the premier forum for leaders in government, business and academia in Asia and other continents to share visions on the most pressing issues in this dynamic region and the world at large. The forum is committed to promoting regional economic integration and bringing Asian countries even closer to their development goals. Initiated in 1998 by Fidel V. Ramos, former President of the Philippines, Bob Hawke, former Prime Minister of Australia, and Morihiro Hosokawa, former Prime Minister of Japan, Boao Forum for Asia was formally inaugurated in February 2001. Countries across the region have responded with strong support and great enthusiasm, and the world has listened attentively to the voice coming from Boao, the permanent site of the Annual Conference of the forum since 2002.

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