



CHAPTER 3  
PROSPECTS AND CHALLENGES:  
GLOBAL, U.S. AND CHINESE  
ECONOMIES IN THE NEXT DECADE

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## Executive Summary

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The advanced countries now account for about 50% of the global economy. All are struggling to restore sustainable patterns of growth and employment. Among them, the U.S. economy is further along in deleveraging and growth is returning, though not up to pre-crisis trend, and employment is lagging. Developing countries by contrast are growing, appear resilient and to some extent are able to sustain growth in the face of very low advanced country growth. China is the largest, highest growth and most important emerging economy. Well into the middle income transition, China's economy is changing rapidly on the supply side and is evolving

toward a growth pattern in which domestic consumption and high return investment along with higher value exports drives growth. Innovation, competition and marketization are key elements in this transition. The new leadership's principal economic challenge is to implement the numerous reforms that are required to support this shifting growth pattern. In summary, both countries have major, though different, structural shifts and challenges in the next decade. Establishing a cooperative, mutually beneficial relationship will make a material contribution to the success of each country, and provide benefits that spill over to the rest of the global economy.

## Prospects and Challenges: Global, U.S. and Chinese Economies in the Next Decade

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### Introduction

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The global economy in the next decade is going to be characterized by major structural adjustments and shifts in individual and international economies. The speed and effectiveness of these changes may not be easy to predict, creating uncertainty and some risk.

By way of background, the U.S. and a number of other developed economies prior to 2008 were growing in a pattern that included the accumulation of excess debt. In some cases the debt was in the private sector (household, corporate and financial) and in others the excess debt build up occurred in the public sector. This pattern included excess

consumption and levels of investment often below those required to sustain growth. This was enabled in some cases by misbehavior in the financial sector and deficient regulation. And it was a pattern that could not be sustained. In fact, the growth dynamics broke down in 2008.

We are now in a lengthy period of deleveraging – that is bringing debt levels down over time. During deleveraging, domestic aggregate demand drops, causing growth to slow or turn negative. Employment also declines. At this point, deleveraging is incomplete. Generally, debt has declined in the private sector and has risen on the public side.

Monetary policy in the U.S. and Europe has been accommodating the deleveraging process. This has



meant low or even negative real interest rates. The idea is to limit damage from excess indebtedness, to accelerate the recovery of asset prices (including housing), and hence to facilitate the recovery of balance sheets and mitigate the negative wealth effect on consumption. Returns to savers are clearly damaged and there is a known risk of reigniting the leveraged consumption model and returning in part to the prior growth pattern.

The prolonged negative demand shock means that growth will be subdued for an extended period. In an open global economy, a partial recovery can be aided by supplying to markets that continue to grow. But it is important to understand (and this is frequently overlooked) that this growth potential applies only to the tradable part of the economy. Generally, recent research indicates that in advanced economies, the tradable part of the economy accounts for about one third of total Gross Domestic Product (GDP) and somewhat less in terms of employment. The non-tradable part is large and completely dependent on domestic aggregate demand. It is therefore reasonable to believe that the demand-constrained growth pattern that we have lived with for the past four plus years will continue for some time – well into the next decade.

Europe, and in particular the euro zone, faces the factors described above, but with the complication of a defective structure (monetary union without fiscal and political union). This has created evident instability in euro zone sovereign debt markets and related systemic risk, the response to which inevitably creates further headwinds to growth and structural adjustment of the growth patterns, productivity levels and competitiveness. In fact, Europe-wide growth is presently negative. That is likely to persist, at least for the next few months.

At the moment, the systemic risk is in remission as a result of commitments by important countries (Italy and Spain) to fiscal stabilization and growth-oriented reform, and by the European Central Bank (ECB) with backing from Germany and the euro

zone core to stabilize the sovereign debt markets (i.e. prevent excess yield increases and destructive self-fulfilling upward shifts in credit risk). The euro zone has also committed to the stabilization and unified regulation of the banking system, with a goal of putting it in place this year (2013).

While this represents real progress, systemic risk could reappear. The uncertainty surrounding the incomplete stabilization process, and the inevitable focus on fiscal stabilization and related risk will further delay a full recovery in terms of growth and employment.

Developed countries are still a large part (roughly half) of the global economy. The patterns described above mean that growth in aggregate demand coming from advanced countries for the next five years is likely to be quite limited. The consequence is that for developing economies to sustain high growth, they will have to generate the demand that supports it. This is a sharp departure from the past when both relative large size and growth of developed economies meant that developing countries could focus primarily, in terms of growth strategy, on the supply side, productivity, competitiveness and structural transformation. These supply side strategies will remain important, but collectively generating enough of the right kind of demand will also be crucial.

This brings us to one of the most important trends in the global economy: the rise in size of the developing economies. But that increase in size is caused by the rise in incomes and the rapidly changing patterns of demand. This phenomenon or trend is usually referred to as the explosive growth of the global middle class, and its purchasing patterns and power. It is crucial for the success of China's growth strategies and other major developing countries. It is a significant positive for smaller, earlier-stage developing countries because it creates large new potential markets. And it represents a significant growth opportunity for developed countries to grow in higher value-added

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components of global supply chains in the tradable parts of their economies.

Developing countries will continue to benefit from structural change and productivity growth in the tradable parts of their economies. But now, for major countries like China, growth will depend on demand growth on the non-tradable side, and in the longer term on growth in productivity and value added on the non-tradable side. Here, that is in the growing non-tradable part of the economy, external competition cannot be a stimulus. It therefore requires a focus on domestic competition, supportive regulatory regimes, human capital and infrastructure investment, and innovation.

## Employment, Distribution and Social Cohesion

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New technologies of various kinds, together with globalization, are powerfully affecting the range of employment options for individuals in advanced and developing countries alike – and at various levels of education. Technological innovations are not only reducing the number of routine jobs, but also causing changes in global supply chains and networks that result in the relocation of these jobs and, increasingly, non-routine jobs at multiple skill levels in the tradable part of many economies. This powerful trend seems set to continue. Thus far it has affected mainly developed economies, but in the relatively near future, it is likely to spread to developing economies.

The core of the technological tsunami is a set of information technologies driven by Moore's law (explained below) and a host of previously unavailable services delivered with standardized networks of computers and databases. Knowledgeable analysts suggest that far from being near the end of this cycle, we are rather at the point of accelerating structural change. It is important to understand the power of these trends and also the math.

Moore's law says that the number of transistors on a semi-conductor chip doubles every 18 months.

Translated into growth rates of the type we understand, that is a growth rate of close to 60%. China is the fastest growing economy ever recorded, going through periods of 10% growth during which GDP has doubled every seven years. And we know what that kind of change looks like. The technological growth rates are six times higher. These translate over three decades into enormous cost reductions and hence the expansion of affordable services.

We also know that even with very high growth rates, the initial impact is small. Thirty years ago China was growing at almost 10%, but the impact on the global economy was very small as was the size of the economy. But with 30 years of this level of growth, you have a US\$7.5tr economy. Now even 8% growth is a huge and growing contribution to the global economy. The same principles apply in technology (but with complex cascading innovations). A 60% annual cost reduction over 30 years to the present has produced a total cost reduction of 1.3 million times. That has enabled the automation of processes, the removal of routine jobs and the development of efficient but complex global supply chains that make human resources accessible. But the point here is that technologists tell us that this growth will continue and that the economic impacts will become even larger.

How, then, should policymakers confront the new and difficult challenges for employment – and, in turn, for the distribution of income and wealth – especially in developed economies? From recent research, we have learned a number of interesting developments about how the evolution of economic structure affects employment.

The tradable side of developed economies has not generated any real net increases in employment for at least two decades, while the jobs that it has created are concentrated in the upper income and upper education ranges, with employment declining in the middle and lower-income and education range. Growth in high-end service employment is matched by the contraction in the



high-employment components of manufacturing supply chains.

Until the crisis of 2008, middle and lower-income job growth occurred entirely in the non-tradable sector of the economy, which accounts for roughly two thirds of developed countries' output and employment. Here, incomes and value added per employee were largely flat, jobs could be eliminated by technology but not global competition, and unsustainable, debt-fueled domestic-demand growth helped delay the current employment deficits.

As a result, developed economies have been shedding routine jobs at a rapid rate, while adding non-routine jobs, for example, those that cannot yet be replaced or reduced by machines or networked computers. This has fueled a dramatic rise in the return on education and high-level skills, with the share of total income received by owners of capital and high-end employees increasing in developed countries for more than two decades.

Growth and employment thus are diverging in developed countries. The key force driving this trend – technology – is playing multiple roles. The replacement of routine manual jobs by machines and robots is a powerful, continuing and perhaps accelerating trend in manufacturing and logistics, while networks of computers are replacing routine white-collar jobs in information processing.

Part of this is pure automation. Another important part is disintermediation – the elimination of intermediaries such as banking, online retail and a host of government services.

But technology's impact does not stop there. The same class of information technologies that automate, disintermediate and reduce costs of remoteness are also enabling the construction of increasingly complex and geographically diverse global supply chains and networks.

Global supply chains – constantly in flux owing to rising developing countries' incomes and shifting comparative advantage – locate productive activities where human and other resources make those

activities competitive. Links in the chain include not only intermediate products and assembly, but also a growing range of services – such as research and development, design, maintenance and support, customer service and business processes – as transaction, coordination and communication costs fall.

The result is what is sometimes called the 'atomization' of global supply chains: increasingly fine subdivisions are feasible and efficient, and can be located almost anywhere. Proximity still matters in terms of transport and logistics costs. But, with the developing world accounting for the largest new markets and most of the growth in global demand, the logic driving atomization should become even more compelling.

The efficient ongoing decomposition of global supply chains, networks and services has two related consequences. One is that the tradable part of the global economy – where competition for economic activity and jobs is direct – is becoming a larger share of the whole; the same is true of individual economies.

The second consequence is that parts of global supply chains that were not competitive but were sheltered by the costs of remoteness, are no longer protected by being adjacent to parts that were. Adjacency is no longer a requirement.

These dynamics and related challenges are not confined to developed countries. Over the next decade, for example, China will replace much of its labor-intensive assembly employment with higher-value-added employment in manufacturing and services not only in the tradable sector, but also – even more noticeably – in the rapidly growing non-tradable part of its economy. The expanding scope and diminishing costs of automation and additive manufacturing may affect labor-intensive functions globally, including in earlier-stage developing countries.

A key factor in adapting to these forces is investment. For individuals, businesses, educational in-

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stitutions and governments in developed countries, broad-based, elevated and efficient investment in education and skills is critical. Closing wide informational gaps in the market for skills would also increase the efficiency of these investments. However, the period of sluggish growth and high unemployment will be prolonged, as will structural adjustment by a continuation of a pattern of deficient public sector investment. It is not clear whether many of the developed countries have either the fiscal capacity or, more importantly, the will to reverse these trends in the short run. Income has already taken a hit in the crisis. Elevating investment would entail a further hit to short and medium-term consumption in pursuit of longer-term sustainable growth. It is possible, but at this stage it seems unlikely as a political outcome.

The differential effects of these underlying trends, interacting with the crisis and the negative demand shocks are striking. Unemployment is concentrated among the young to some extent. The distribution of income has deteriorated as a rising fraction of income goes to the owners of capital and those who possess ample amounts of human capital. Labor's share is declining. This sets off a vicious cycle in which the upper end of the income distribution range accumulates more physical and human capital, and then experiences further increases in income based on the rising capital share. Countries have variously resisted these trends through the tax system, public delivery of important services such as education and healthcare, and ownership of public capital (as in the case of China). A minority have successfully used skill development programs to maintain positions in high value-added niches in global supply chains.

Adverse trends in the distribution of the benefits of technology, growth and globalization threaten both social cohesion and political functionality. Trends that require decisive policy steps instead are being met with a blizzard of competing explanations, along with political polarization and grid-

lock. The result is considerable policy uncertainty in developed countries. The uncertainty itself adversely affects investment and recovery. Beyond that, important reforms and moves to address public-sector investment deficits are impeded or delayed, and certainly exacerbated by the widespread loss of fiscal flexibility of the past four to five years.

There is little question that the complexity and speed of change of the technological foundations of the global economy and of its structure are bewildering and relatively new. Comprehending and responding to these forces takes time and at least at this stage the responses appear to be falling behind the pace of change.

## **China and the Middle-Income Transition**

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China is well into what is normally called the middle-income transition, or sometimes, middle-income 'trap'. The latter term comes from the fact that many (though not all) countries that enter the middle-income phase, slow down dramatically. There is ample historical data to support this assertion.

The middle-income transition involves complex interacting changes in structure on both the demand and supply sides of the economy and in both the tradable and non-tradable components. These structural shifts are captured well in the details of the 12th Five Year Plan (FYP). Briefly, they include a shift in the share of national income toward the household sector and away from government and the corporate sector. This will supply rapid growth in consumption and drive growth in response to the demand of the household sector. Investment will remain high, but low return investment should be reduced by rationalizing policies in the public sector, by changes in the environment of state-owned enterprises (SOEs) – including competition and governance – and by financial sector development that will reduce imbalances in access to capital across the supply side of the economy. Urbaniza-



tion will expand and absorb labor from rural areas. Huge amounts of investment will be required to accommodate this flow, in infrastructure (transport, water, sewer systems, telecommunications and of course electricity), and in residential and commercial real estate.

A crucial aspect of this phase of development will be the productivity of the non-tradable sector of the economy, in part because it is becoming relatively larger and more important, and in part because the discipline of direct international competition is absent. Of course, by policy, foreign competitors can be given access via foreign direct investment to the non-tradable part of the economy (such as Nestlé and Carrefour in food). That is a policy choice.

Innovation is quite properly another focus of this set of transitions in China. It is a shared function internationally. Ideas, knowledge and technologies flow relatively freely across boundaries. China is at the stage that domestically generated innovation will make an important contribution to growth and to the global economy.

Chinese analysts and policy makers are skeptical (quite properly) of western models of macroeconomic financial management and regulation, and they view the mismatch between assets and liabilities on public sector balance sheets as a problem. It constrains governments in responding to shocks, engaging in countercyclical demand management, driving structural change and dealing with deepening distributional issues. As social services and insurance rise in China, we expect that the holding of public assets will not diminish. Hence among others, there is a challenge in managing public assets well and in a way that promotes growth and structural change rather than the opposite.

The justified skepticism of aspects of developed country macroeconomic management and public finances does not extend to the more microeconomic features of dynamic innovative economies. As noted above, innovation is an appropriate high priority in China at this stage of growth and devel-

opment. Innovative ecosystems have a number of common features. One important one is competition, the presence of actual and potential competition. This drives incumbents and newcomers to innovate in products, services and costs, with the return coming from the transitory market power that comes with successful innovation. This model is now quite well understood, and while there are variants in different regions, there really aren't any compelling examples of alternative approaches. Competition, access to markets and capital, regulatory even handedness and a level playing field are all requirements that will be the target of institutional and system reform.

A significant part of the plan will be addressing rising inequality of income and wealth and unequal access to essential basic services and social insurance. These measures are needed to address both efficiency and growth, but also social cohesion. Effective measures to reduce high level corruption and unequal access to investment and market opportunities is an important complementary initiative that directly deals with social cohesion and support for growth-oriented policies.

To accomplish these major structural shifts, widespread, deep system reforms will be needed. Notwithstanding the stellar economic performance of the past decade, the general consensus is that these results came from critical reforms at several points in the 1980s and the 1990s. Of course the economy matured, expanded and deepened in the past decade. But again there is a widespread and correct view that to support the future income growth and structural changes in the middle-income transition, reform momentum will need to increase again. Put another way, the growth model that has served the country well for the past 30 years is reaching the end of its useful life. It needs adjustment in the direction of relying on the right kind of domestic demand, including consumption and the marketization of a broader portion of the economy.

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To accomplish this, differences of opinion about the role of the state will need to be resolved internally as part of the preparation of a comprehensive package of reforms for fall 2013. As the economy has become richer, it has developed vested and sometimes powerful interests, as is the case in all economies. The political and policy-making processes need to be adapted to maintain a reasonable and fair balance among these various interests, some more powerful than others. The general interest, and in particular the welfare of those not already represented in an organized way, needs to be kept at the forefront, and the Chinese Communist Party (CCP) has a central role to play in that.

China is in the process of completing another successful leadership transition. The current leaders were participants in preparing the priorities embedded in the 12th FYP. It is a comprehensive roadmap that if implemented with reforms and policies appropriate to this stage of growth, has every reason to be successful. However, it needs to be said that the list of prior successful, high-speed middle-income transitions is rather short. None involve changes in the size and scale involved in the China case. And all were carried out in an easier and more benign global economic environment in which developed country shares of global GDP were larger and growing. Conditions now present more significant headwinds and risks.

In addition, China has become systemically important in multiple dimensions at a much lower level of per-capita income than its predecessors. China's growth, policies and growth patterns affect prices of raw materials and natural resources, manufactured goods, financial markets and financial stability, and the growth options for other developing countries. Thus unlike other cases, China will not only navigate a shift in the growth pattern and the role of government in the coming decade, but in doing so, it will need to balance the internal dynamics and external impacts of its policies. As time passes, the external impacts become ever

larger, once again, the result of the combination of sustained high growth and scale.

Most people believe that critical elements in the evolution of the global economy in the coming decade will be the policies adopted by the two most important economies – China and the U.S. – and the presence or absence of cooperation and leadership in creating global public goods and a stable and open global economic environment. Europe will recover at a slower pace, but one hopes and perhaps expects that it will be a unified economy with appropriate policies and a unified (rather than fragmented) approach to global issues. When that happens there will be a third large economy with reasonably unified governance as a partner to China and the U.S. in leading global change and adaptation. But that is not an imminent development.

## **Cooperation and Collaboration**

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There are many areas in which this cooperation will be needed. One surely is the management of natural resources and the environment. The growth of China and the developing world will lead to a doubling of the global economy on a 10 to 15-year time scale and probably a tripling in another 15 years. The growth model that has underpinned both developed and developing country growth in the past will not work at two or three times this scale. Climate, food, water, energy and livability will not withstand this level of growth. In fact, the adaptation of the growth models is already underway, driven by deep concerns and changing values, including those related to our responsibility to future generations. This process of adaptation, innovation and learning needs to be accelerated. China and the U.S. need to be active participants and leaders. The size of their economies means that their own growth models have to adapt. The level of engagement between the two countries will also either motivate, or reverse, international collaborative efforts. Global problems are hard to solve, but a good start-





ing point would be China-U.S. collaboration on energy efficiency and security, greener growth and the environment, including climate change.

Each country brings much to the table. China has ambitious goals in this area in the 12th FYP. Progress is somewhat more decentralized in the U.S., though there are new national policies including Corporate Average Fuel Economy (CAFE) fuel standards for automobiles. In addition, the U.S. is expected to become energy independent with shale oil and gas, which will have the side benefit of making the economy somewhat greener through the use of gas as an energy source. In fact, the per-capita carbon emissions are already coming down.

The fundamental complementarity between the two economies is shifting but does not make their relationship less significant. In the past, to a first approximation the U.S. brought a large open market, foreign direct investment and technology. In return it got a vast and growing labor pool supplying high quality, low cost, labor-intensive manufactured goods. In more modern terminology, China supplied low-cost labor-intensive components of key manufacturing global supply chains. This pattern is in the process of changing. China is now providing a large and equally important rapidly growing market for a wider array of goods that were formerly largely unaffordable. It will also contribute as well as absorb technology. It will shed lower value-added jobs in the tradable part of its economy and these jobs will move to earlier-stage developing countries. Some of these jobs as noted above may become vulnerable to labor-saving technology, even at relatively low wage rates. China may also become (depending on policies on both sides) an outbound foreign direct investor in the U.S. economy in a wide range of areas – including infrastructure. The U.S. will continue to provide a large open market, even as China's role in serving it will shift upward in the value-added spectrum and in global supply chains. The U.S. will also provide, share and absorb technology and human talent. It will continue to be

an open center of excellence at the top end of the education spectrum and in basic research.

Of course, there is also a healthy element of competition. The sharp differences in comparative advantage that were apparent two decades ago are diminishing. They are not gone, and the full journey to high income status will not be completed by China in the next decade. But the differences between the two economies are narrowing, in terms of income, capital depth including human capital, and capabilities. Chinese multinationals with recognized brands will begin to appear just as they did in Japan and Korea. They will compete with multinationals from a wide range of countries, and become architects of global supply chains. But we need to remember that they will compete with firms from Europe, the U.S. and Japan in a vastly larger global economy. Healthy competition in a fair, rules-based environment in a rapidly expanding global economy is far from a zero sum game. There will be plenty of room for everyone who is on top of his or her game.

A direct corollary of these trends is that global supply chains and the network structure of the global economy are shifting. The older and at one time approximately accurate notion that global supply chains ran from east to west, or slightly more precisely, ran through the east on the way to final demand in the west is out of date. Demand will no longer be concentrated in the west and growth certainly won't, even in absolute increments.

There are, in addition, underlying forces pushing in the direction of a partial reversal of the trend toward delocalization. These include rising energy costs and declining shares of labor in total costs, increasing amounts of customization, and a move away from periodic large batch orders to continuous updating of orders and supply chain scheduling in response to real-time data on customer-buying behavior. This reduces demand-supply mismatches and increases efficiency. And it pushes firms to innovate in the direction of localization. In the old

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model, that would bring supply chain elements back toward the developed countries. Now and in the future, it will push them toward their respective markets including those in the developing countries.

## **Demographics and Aging**

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The U.S., China, Europe and Japan are all in the process of aging, a demographic shift to the upper end of the age distribution. The extent of this shift varies, with Japan at one extreme, followed by many European countries, China and the U.S. The U.S. immigration and immigration policy are a question mark at this point. If past trends continue, immigration will reduce the speed of the aging process in the US.

Aging in combination with public debt and large non-debt liabilities (entitlements in the U.S. parlance) in the social security systems (including health) has created serious challenges in the west and questions in China about calculating accurately the liabilities associated with expanded social security systems, and limiting these. The examples in the developed countries serve as a cautionary note.

In general, pension and social security systems were based on assumptions and parameters related to longevity and working lives that no longer hold. These systems will therefore require difficult adjustments – difficult in part because older cohorts have made life decisions based on the older models. Sudden shifts are neither politically feasible nor fair. But that then exacerbates the longer-term fiscal imbalances associated with outsized long-term liabilities. On the other hand, experts note that relatively small changes in these systems now can have dramatic beneficial effects on long-dated liabilities.

Undoubtedly, individual saving behavior will need to adjust also to the new realities. Changing these social security systems to create the appropriate incentives for saving and retirement will be an important part of the adaptation. In addition, it seems clear that working lives may be extended,

raising questions about institutions that support multiple transitions during a working career.

These issues are related to the technologically driven employment issues discussed earlier. It seems fair to say that we are at the early stages of adjusting to a radically different technological and demographic environment compared with that in the past. It is possible that a fundamental shift in models of work will be part of the adjustment process.

## **Resilience in Developing Countries**

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Growth in developing countries has demonstrated resilience in the post-crisis period. As noted earlier, this is the result of increasing scale, rising incomes, trade among developing countries especially in Asia, and a better match between demand and comparative advantage. Because of these factors, a declining fraction of trade flows pass through the filter of developed country final demand.

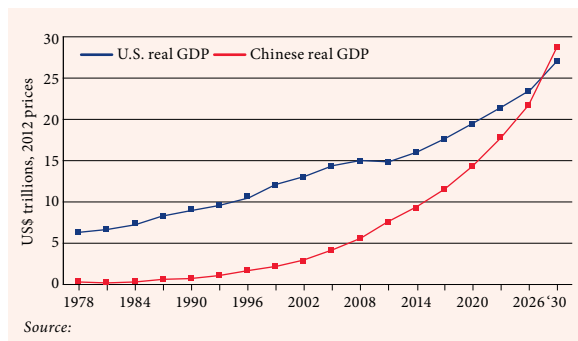
The pattern of rising resilience will continue, though the decoupling is not at all complete. Developed country demand is still a large fraction of the global total and a significant dip, as we are seeing in Europe, has the effect of slowing growth in the short and medium term in emerging economies.

## **Forecast Summaries for the U.S., China and the Global Economy**

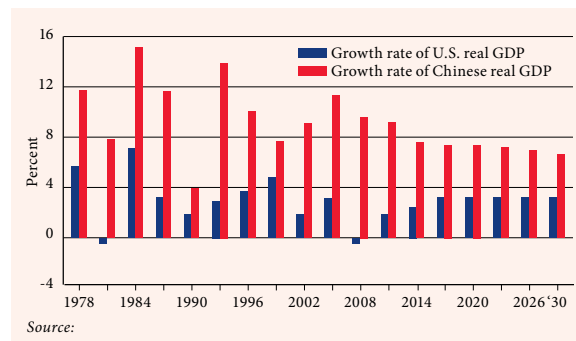
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The coming decade will be characterized by substantial structural and policy change toward a more healthy and sustainable growth pattern, in individual countries and the global economy. The outlines of the structural changes in China are relatively clear. The remaining questions have to do with implementation of the policy and institutional development. These will be clarified in the course of 2013 as the new leaders take on their roles and then formalize and communicate reform priorities and direction.

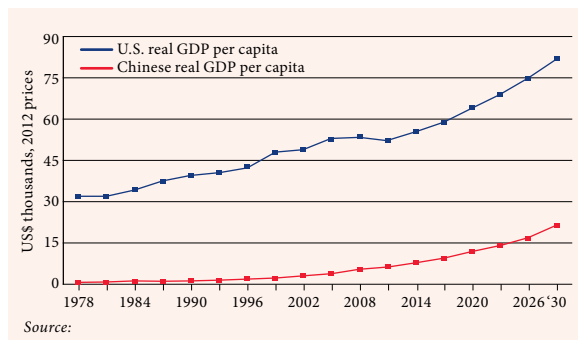
**Figure 1: Actual and Projected Real GDP of China and the U.S.**



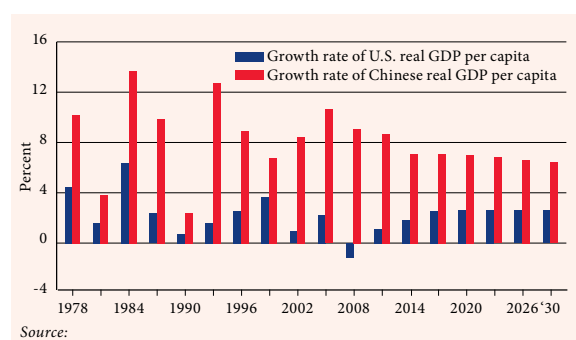
**Figure 2: The Actual and Projected Rates of Growth of Chinese and U.S. Real GDP**



**Figure 3: Actual and Projected Real GDP per Capita of China and the U.S.**



**Figure 4: The Rates of Growth of Actual and Projected Real GDP per Capita of China and the U.S.**



The U.S. economy has many elements of dynamism and flexibility. It is recovering in terms of growth and that seems likely to continue. There are positive accelerators, including the progression of deleveraging, expanded energy resources, and delayed but real improvements in productivity and competitiveness. However, deficient aggregate demand will continue to be a drag for some time, especially in the large non-tradable part of the economy. Fiscal countermeasures to bridge the gap have been more limited than some advocate. Certainly the amount of fiscal flexibility to engage in countercyclical activities on both the demand and investment sides of the economy is more limited than anyone would like.

The U.S. Federal Reserve, as noted earlier, has used monetary policy to limit the impact of balance sheet damage, and possibly stimulate demand via

asset prices and the wealth effect, but it has limited ability to restore demand in the short run. Polarization in the political process has created rather than reduced uncertainty. Many centrists agree that a credible policy of stimulus in the short run with a multi-year medium-term deficit reduction plan combined with measures to reduce long-term liabilities would be optimal, especially if the deficit reduction protected growth-oriented public-sector investments. But that is hard to achieve in the present political climate.

While growth seems to be in a process of slow return to potential, the recovery of employment and the residual secular shifts in the income distribution are more problematic. And the shift of income from those who save less to those who save more creates further uncertainty about the restoration of aggregate demand. While long-term

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growth potential is believed to be driven by the supply side, in particular by increases in total factor productivity, very few disagree with the proposition that in the short run, growth is mainly constrained by demand.

Europe's recovery will be slower with greater downside risk. Deleveraging is less far along. The structure requires coordinated and complementary policies by multiple players, in individual countries and at the center, with the result that outcomes will be difficult to achieve. Underlying the challenge of coordinated policy action is the ever present issue of burden sharing – who will pay what fraction of the cost of rebalancing.

If current trends continue, with the U.S. economy recovering slowly but steadily, the pattern of convergence will continue. East Asia as a whole will surpass the U.S. in terms of aggregate GDP with China contributing the highest proportion of the total by 2015. Chinese real GDP is projected to catch up to U.S. real GDP in approximately 16 years' time – around 2028 – at which time both Chinese and U.S. real GDP will exceed US\$25tr (at 2012 prices), more than three times China's current GDP. In fact, this could happen sooner. (Bear in mind that in the meantime, the U.S. economy will also continue to grow, albeit at rates lower than those of China's economy.) By that time, China and the U.S. will each account for approximately 15% of world GDP.

China's population is projected to plateau by around 2045 and then become more or less stable. Some population projections suggest that it will reach a peak in 2035; however, this scenario does not appear likely as China's population policy is likely to be modified long before 2035.

By 2030, China's real GDP per capita is projected to be US\$19,960, which will still only be slightly more than a quarter of the projected U.S. per-capita real GDP of US\$76,750.

## **The Importance of U.S.-China Economic Cooperation in the Face of Global Uncertainties and Growth Challenges**

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At a time of substantial global economic challenges and uncertainties, U.S.-China economic cooperation is more important than ever. The two economies not only need to achieve bilateral economic benefits, but also disputes and frictions need to be resolved through cooperation. Beyond the bilateral benefits, the rest of the global economy is dependent on leadership from China and the U.S. in matters of global economic structure and cooperation, such as free trade, financial stability and regulation, energy security, environment, climate change and many other global issues. It is difficult to imagine successful global rebalancing and progress with either China or the U.S. missing from the process.



# Appendix 1

## Congressional Budget Office of the United States: Economic Forecasts

CBO's Economic Projections for Calendar Years 2012-23					
	Estimated	Forecast		Projected Annual Average	
	2012	2013	2014	2015-2018	2019-2023
Fourth Quarter to Fourth Quarter (Percentage change)					
<b>Gross Domestic Product</b>					
Real	1.9	1.4	3.4	3.6	2.2
Nominal	3.7	2.9	5.3	5.7	4.3
<b>Inflation</b>					
PCE Price Index	1.5	1.3	1.8	1.9	2.0
Core PCE price index <sup>a</sup>	1.5	1.5	1.9	2.0	2.0
Consumer price index <sup>b</sup>	1.9 <sup>c</sup>	1.5	2.0	2.2	2.3
Core consumer price index <sup>a</sup>	1.9 <sup>c</sup>	1.8	2.0	2.2	2.3
GDP price index	1.8	1.5	1.9	2.1	2.0
Employment Cost Index <sup>d</sup>	1.9	2.2	3.3	4.0	3.6
Fourth Quarter Level (Percent)					
Unemployment Rate	7.8 <sup>e</sup>	8.0	7.6	5.5 <sup>e</sup>	5.2 <sup>f</sup>
Year to Year (Percentage change)					
<b>Gross Domestic Product</b>					
Real	2.3	1.4	2.6	3.7	2.3
Nominal	4.1	2.9	4.4	5.9	4.3
<b>Inflation</b>					
PCE price index	1.7	1.3	1.7	1.9	2.0
Core PCE price index <sup>a</sup>	1.7	1.3	1.8	2.0	2.0
Consumer price index <sup>b</sup>	2.1 <sup>c</sup>	1.6	1.9	2.2	2.3
Core consumer price index <sup>a</sup>	2.1 <sup>c</sup>	1.7	2.0	2.2	2.3
GDP price index	1.8	1.5	1.8	2.1	2.0
Employment Cost Index <sup>d</sup>	1.8	2.1	2.9	4.0	3.6
Calendar Year Average					
Unemployment Rate (Percent)	8.1 <sup>c</sup>	7.9	7.8	6.1	5.4
Payroll Employment (Monthly change, in thousands)	157 <sup>c</sup>	105	182	171	75
<b>Interest Rates (Percent)</b>					
Three-month Treasury bills	0.1 <sup>c</sup>	0.1	0.2	2.2	4.0
Ten-year Treasury notes	1.8 <sup>c</sup>	2.1	2.7	4.5	5.2
<b>Tax Bases (Percentage of GDP)</b>					
Wages and salaries	44.1	43.5	43.9	44.2	44.9
Domestic economic profits	9.6	9.3	9.7	9.7	7.7

Notes: Economic projections for each year from 2012 to 2023 appear in Appendix 2. The numbers shown here do not reflect the values for GDP and related series released by the Commerce Department's Bureau of Economic Analysis on January 30 and the values released by the Labor Department's Bureau of Labor Statistics for the employment cost index on January 31 and for payroll employment on February 1.

PCE = personal consumption expenditures; GDP = gross domestic product.

a. Excludes prices for food and energy

b. The consumer prices for food and energy

c. Actual value for 2012

d. The employment cost index for wages and salaries of workers in private industry

e. Value for 2018

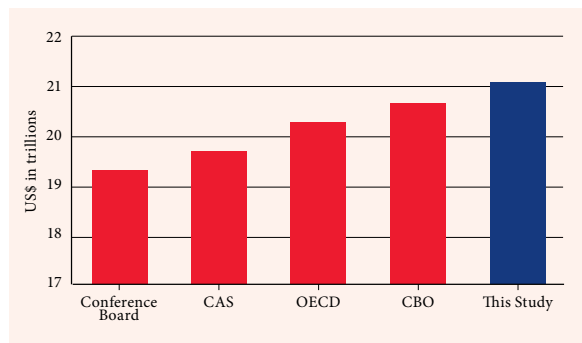
f. Value for 2023

Source: US Congressional Budget Office, Feb 2013 (Actual values for 2012 are from Department of Labor, Bureau of Labor Statistics; Federal Reserve.)

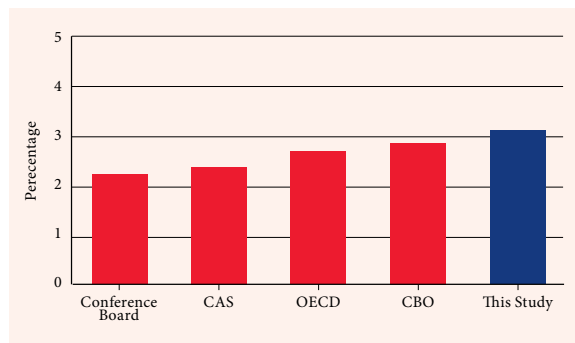
## Appendix 2

### Comparison of alternative GDP forecasts for the U.S. and China

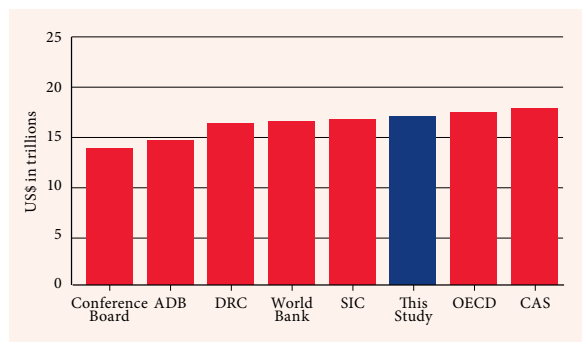
**Chart 1: Alternative Projections of U.S. GDP Level in 2022 (2012 US\$ trillion)**



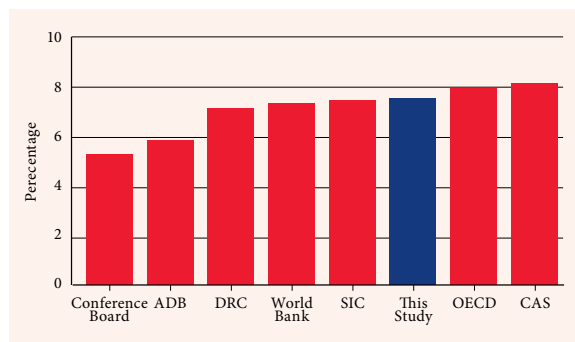
**Chart 2: Alternative Projections of U.S. Annual Compound Real Growth Rate, 2012-2022 (%)**



**Chart 3: Alternative Projections of China's GDP Level in 2022 (2012 USD trillion)**



**Chart 4: Alternative Projections of China's Annual Compound Real Growth Rate, 2012-2022 (%)**



**Notes:**

ADB: Asian Development Bank  
 CAS: Chinese Academy of Sciences  
 CBO: U.S. Congressional Budget Office  
 DRC: Development Research Center of the State Council of the PRC  
 SIC: State Information Center, National Development and Reform Commission  
 OECD: Organisation for Economic Cooperation and Development

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