Asia Society

An Asia Society Policy Institute Report

Avoiding the Blind Alley

China's Economic Overhaul and Its Global Implications

DANIEL H. ROSEN

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CONTENTS

FOREWORD

DURING THE PAST THREE DECADES, perhaps no country has turned in an economic performance as impressive and transformative as China's. China has emerged as the world's second largest economy and its greatest exporting nation, accumulating huge trade surpluses, vast foreign currency reserves, and enormous influence on the global economy. Despite all the attention that policymakers, business executives, and scholars have paid to China's economic rise, much debate surrounds China's future growth prospects.

For their part, President Xi Jinping and the new generation of Chinese leaders responded to the risk of a major economic slowdown by announcing a far-reaching reform campaign at the Chinese Communist Party's Third Plenum in November 2013. If Beijing shifts direction along the lines it has announced, the behavior of Chinese companies, government agencies, and individual members of society is likely to change in remarkable ways – and thereby create opportunities for the rest of the world. Should the reform program stall, the effects will be just as profound. Either way, China's new policy design, and its success or failure in achieving it, will have a major influence on the international economy and stability and security in Asia and beyond. With so much at stake, and an outcome that is far from certain, there is an evident need for greater clarity about what the reform program consists of, how it is progressing, and what it means for policy and business.

The Asia Society Policy Institute (ASPI) was established in early 2014 to address just such critical questions about Asia's future and its role in the world. To make effective decisions, leaders in government and business must comprehend how economic and political developments are transforming the settings in which they operate. ASPI not only commissions research that helps our stakeholders respond to uncertainty. We also convene senior figures in policy and business, from across Asia and the United States, to discuss complex issues and cooperate on formulating responses that will bring prosperity, security, and sustainability to all of Asia. We give particular attention to matters at the intersection of policy and business and central to intra-Asian relations.

This report is meant to give policymakers and business leaders outside China the insights they will need to understand, monitor, and adapt to China's economic reform program. It explains why China has set out to overhaul its economy and describes China's reform plans in terms of nine policy domains that will be familiar to Western observers. The report traces the progress that China has made to date in putting those reforms into effect and proposes quantitative and qualitative metrics that can be used to track the reforms going forward.

This project has been a collaboration between Asia Society Policy Institute (ASPI) and the Rhodium Group, following on a series of joint projects focused on Chinese foreign direct investment in the United States. The author of the report, Daniel H. Rosen, has produced a path-breaking guide to China's reform proposals and prospects by analyzing the economic reform announcements following the Third Plenum, assessing the likelihood of the reforms being carried through to completion, and estimating the impact of different outcomes on China's economic performance and the international economy. He has also offered recommendations for how policy makers outside China might formulate responses to the reforms as they take effect.

On behalf of Asia Society, we would like to thank Dan and his Rhodium Group colleagues for dedicating their expertise and an extraordinary level of insight and energy to this project. Our thanks also go to several members of the ASPI team for their commitment and effort over the course of this initiative: Debra Eisenman for supporting many practical aspects of this enterprise, Anubhav Gupta for coordinating the launch events around the world, and Josh Rosenfield for overseeing the editorial process. We are also indebted to Susan Shirk for contributing valuable feedback on early drafts of the material, and to Orville Schell for bringing his deep knowledge of China to bear.

In carrying out this project, we have benefited from the advice of the ASPI Honorary Council and Advisory Council. We are grateful for the continued support of the Asia Society's co-chairs, Henrietta H. Fore and Ronnie C. Chan. The directors of Asia Society's centers around the world have played valuable parts in helping this report to reach a broader audience. Finally, we owe our deepest gratitude to Jack Wadsworth, whose vision in urging ASPI to pursue this effort and generous assistance have allowed us to undertake and complete the study.

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EXECUTIVE SUMMARY

PRESIDENT XI JINPING ANNOUNCED a sweeping overhaul for China's economy in November 2013, with pledges to make market forces decisive, treat homegrown and foreign investors with the same laws and regulations, and change the mission statement of the government. The reform program, known as the *Decisions* plan and presented at the Communist Party leadership's Third Plenum meeting, is comprehensive and marks a turning point in China's modern history. The degree of boldness also indicates that after 35 years of world-beating economic performance, China's development model is obsolete and in need of urgent, not gradual, replacement. To justify the risks, President Xi quoted an impassioned plea for policy modernization by his predecessor Deng Xiaoping: the only way to avoid a dead end – a blind alley – is to deepen reform and opening both at home and with the world.

Despite this clarion call, observers in China and abroad have found several reasons to wonder what shape the reforms will take and whether they can be put into full effect. First, the announced program is idiosyncratic and difficult to benchmark against advanced-economy models. Second, as with earlier waves of Chinese reform, the 2013 program leaves room for experimentation, and the final design of regulations is not specified. Third, some of the same commitments have been promised before and not delivered, leaving analysts cynical. Fourth, and importantly, full implementation of the principles set out – such as a decisive role for market forces in allocating resources – portends a greater transfer of Party control over the economy than is thought to be palatable to China's leaders. Therefore, rather than bringing about a sea change in business and policy expectations about China's course, this new agenda has amplified debate.

China's leadership is moving ahead across all economic dimensions of reform with purpose and urgency.

To resolve uncertainties, this study assesses the content of China's economic reform program and indications of its progress during its first year. We find that the program's redefined mission statement for government and nine major clusters of regulatory overhaul are convergent with advanced-economy notions of economic governance. Moreover, we conclude that – on balance – China's leadership is moving ahead across all economic dimensions with purpose and urgency, though at varying speeds, and is simultaneously addressing the obstacles that have hampered systemic reform in the past and continue to complicate implementation today. That said, the consolidation of power, key to overcoming those impediments to reform today, creates its own problems for the future.

Based on available evidence, the success of this overhaul is not guaranteed. Leaders do not have the luxury of consensus among elites on many aspects of reform and have retained conflicting messages in their program because of custom and necessity. In many cases, new regulations and implementation guidelines are not well defined. While a decisive role for

All U.S. dollar and renminbi figures in this study are expressed in constant 2013 terms unless otherwise noted.

market forces in allocating resources is a central concept of Xi's *Decisions*, the meaning of this categorical imperative is understood differently in Tokyo, Washington, and Brussels, let alone in Beijing. The complete picture of what leaders intend is in flux, and it is uncertain whether the general thrust of marketization suggested by Beijing's current actions will remain on track and on pace to meet a self-imposed 2020 completion deadline. We examine actions to date and suggest metrics for distinguishing progress from derailment.

The Third Plenum program is a necessary but not sufficient step toward a new economic model. In the year since the program's release, hundreds of reform-branded policy documents have been handed down by the Party and government, the most important of which we analyze in this report. As evidence of follow-through has accumulated, doubts that China's leaders have the intention or ability to change the rules have subsided. Based on evidence of reform, interviews, and analysis of Chinese GDP growth, we conclude that leaders accept that old sources of growth are exhausted and bold steps to institute a new model are urgent if the nation is to avoid crisis. To substantiate this assessment, we identify the drivers of past growth and describe their diminishing capacity and catalogue the prescriptions set out in the *Decisions* and indications (and counter-indications) of implementation, as well as observable economic activity that will confirm whether commitments have been achieved.

We project that China's potential GDP growth in 2020 will be 6%. Half of this growth can be generated through continued investment in the country's capital stock, though only if that investment is focused on different assets than today. The other half can be achieved by more efficient and productive use of China's finite pool of human resources and capital: what economists refer to as total factor productivity, or TFP. Such growth through efficiency depends on new rules and institutions that let markets work to steer resources – people, money, and materials – to where they can generate the highest growth. Without this marketization – which depends on both the re-regulation described in this study and a new mind-set about the roles of the Party and the government – leaders could keep directing large investments to favored projects, but with diminishing effect, and the potential gains from productivity would all but evaporate. Growth driven only by investment would mean a hard landing in 2020: no better than 3% annual GDP growth. Falling productivity could easily pull private investment down with it, leaving GDP growth even lower at 1%, surely a crisis.

We use these three scenarios for growth potential in 2020, in combination with the analysis of nine clusters of regulatory reform, to explore the global implications of China's economic overhaul in terms of trade and financial flows. Building on that, we end with recommendations for foreign interests in light of the outlook for China.

WHY CHINA'S GROWTH MODEL IS NOT WORKING ANYMORE

Many of the drivers that contributed to China's rapid post-1978 growth are weakening, while new sources of growth require reforms yet to be delivered. Demographic dividends propelled China through the 1980s, 1990s, and 2000s, but the labor force is now at its largest and is poised to shrink. Over the past decade, capital formation powered investment-led growth, but finding productive uses for ever greater amounts of debt financing is increasingly difficult for financial incumbents. Existing investments are showing diminishing returns in many overcapacity sectors from steel to coal to property. New industries are hungry for investment, but they are less capital intensive than their predecessors and need an affirmative action program if they are to get the attention of state-owned banks. Total factor productivity gains are fading as the dividends from the last robust round of reforms from World Trade Organization (WTO) implementation dry up.

But China has not exhausted its growth potential. On the contrary, decades more high-quality growth are possible. Massive opportunities exist to upgrade manufacturing to make higher quality products with greater intangible value. Modernization of the agricultural sector holds tremendous potential to benefit the nation and the 100 million citizens likely to remain in farming rather than migrate to new cities. Service industries ranging from advertising to health care to engineering are ripe with potential. And hundreds of millions of middle-class Chinese are eager for investments in environmental clean-up. These growth opportunities depend on regulatory reforms that have been slow in coming but could be enacted more quickly than most people assume.

China has not exhausted its growth potential. On the contrary, decades more high-quality growth are possible – provided that reforms are made.

The external dimension of China's growth also requires an overhaul. Trade plays a critical role in the economy: China has tremendous comparative advantages to meet global demand and a vast internal appetite for imports of goods and services. Financial globalization has only just begun for China, with cross-border investment flows a tiny fraction of what they would be if Chinese and global savers could move money freely across China's borders. Foreign direct investment (FDI) in China holds future potential, if parochialism can be avoided. Outbound direct investment is essential if China's firms are to retain global market share and upgrade capabilities at home. And under any scenario, China will continue to be dependent on globally sourced natural resources even as the foreign policy environment becomes cloudy with geostrategic misgivings.

THE THIRD PLENUM ROADMAP

Analysts inside and outside China were skeptical that President Xi and his governing colleagues would move boldly on economic reform at the November 2013 Third Plenum of the Party Central Committee, the occasion at which new economic thinking is traditionally unveiled. They presumed that Xi, like his predecessors, harbored mixed feelings about reform and would shrink from the potential backlash against an attempted overhaul. They were mistaken: the Party issued a bold call for economic reform and attendant regulatory re-wiring that exceeded expectations. The core document, *Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening Reform*, or simply the *Decisions*, was accompanied by personal *Explanatory Notes* under President Xi's name alone. With this, the president was asserting his power and intention to drive economic change, rather than settle for a speed limit imposed by consensus. Xi's program set a hard date of 2020 for completing a broad slate of reforms.

At the highest level, the *Decisions* is a manifesto on modernizing governance. Typical Third Plenums stick to economic work, not political affairs. Yet like its 1978 predecessor, the November 2013 Plenum called for changes in all cones: political and security, as well as economic. The Third Plenum points to the need to fix the balance of power between levels of government (central and local), between state and Party, and between government and governed. The absence of political adaptation doomed economic reforms to failure over the past decade and is thus why the current program is more promising. A revised *mission statement* for government is the first important element of the *Decisions*, instructing that economic work be focused on eight tasks:

- Maintain macroeconomic stability
- Strengthen and improve public services
- Safeguard fair competition
- Strengthen oversight of the market
- Maintain market order
- Promote sustainable development
- Promote common prosperity
- Intervene in situations where market failure occurs

These objectives are echoed through the *Decisions*, as well as corresponding instructions to withdraw government from other activities that do not serve these purposes, such as running businesses in competitive industries, requiring unnecessary approvals, and preventing normal restructuring of markets. In short, the Third Plenum set out to make China more of a regulatory state, with regulators and regulatory institutions powerful enough – and well defined enough – to discipline the moneyed special interests that are a natural and even desirable result of economic modernization. China's new mission statement is generally consistent with advanced-economy concepts.

The *Decisions* presents well over 300 instructions in 16 idiosyncratic groupings that are hard to decode. We reorganize these instructions according to their principal purpose, and we find that in essence nine clusters of regulatory focus are at the heart of the program.

Center-Local Fiscal Reform

Center-local relations are at the core of China's fiscal affairs, tax policy debates, resource allocation concerns, and many other developmental matters and are, in fact, the true bellwether of China's direction. An imbalanced division of power and responsibility between central and local authorities has given rise to pressing misallocations of resources and provincial resistance to central reforms. The *Decisions* pledged to address this, but in general terms, not specifics, leaving readers uncertain following the Third Plenum. But in a pattern we identify in most other regulatory areas as well, evidence of follow-through was apparent in 2014, confirming that the *Decisions* was a starting point, not an empty text. Most importantly, in June 2014 Party leaders approved a top-level national plan for deepening fiscal and tax reforms; specifying reform priorities and tasks; and, to the surprise of some, setting an interim deadline of 2016 for "basically" finishing major tasks. Finance Minister Lou Jiwei elaborated on implementation plans at his Ministry, emphasizing measures to reform budget management, improve the taxation system, and rationalize the center-local fiscal system to align responsibilities with resources. Center-local reform was one of the first areas of work cleared for action by the Party leadership because it is foundational to many other areas of reform.

Competition Policy Reform

Robust competition policy enforcement is a hallmark of advanced market economies, which works to ensure that *competition* is maximized rather than the gains of certain privileged *competitors*. With China's *Decisions* pledging to withdraw government from much of its traditional intervention, it is natural that competition regimes will be strengthened as well. At each level of China's economy, special interests opposed to competition are common, and the Third Plenum calls to change that. But regulators have been told to act before the government has solidified institutions responsible for protecting due process and evenhandedness, leading to a difficult start in this area. In practice, competition authorities have used new tools in a manner that strikes many in China and abroad as discriminatory, especially to foreign firms. This could be the best of times or the worst of times for creating a pro-competitive environment: Beijing needs to demonstrate whether it is committed to extending due process to all market players.

Financial System Reform

Control over the financial system helped China manage growth for decades, but at the cost of slow progress toward domestic efficiency, and consumers are paying the bill today. Key financial variables remain government determined, including deposit rates, access to banks and lending, exchange rates, equity and debt issuance, cross-border portfolio capital flows, and countless decisions about insolvent assets. Officials speak at length about the importance of systemic reform, and much was already happening prior to the Third Plenum. The *Decisions* rounds up most of the work remaining: authorizing private small and medium banks, restarting the market for new equity listings, completing exchange rate and interest rate marketization, and much else. In terms of implementation, the exchange rate band has been widened, IPOs have restarted (but in an on and off manner), and shadow banking has been squeezed while new online banking businesses have been permitted. A plan for insurance sector rationalization with interim timetables has been issued. The governor of China's central bank, the People's Bank of China (PBOC), has expressed hopes of completing deposit rate liberalization by 2016; the Ministry of Commerce has withdrawn almost entirely from policing outbound direct investment flows; and by the end of 2014, regulators intend to implement a deposit insurance scheme. There has been pushback against many of these goals, and the PBOC softened somewhat its rhetoric about monetary discipline in light of pressure to provide some stimulus. Overall, few people doubt that financial system reforms are proceeding, but many worry that action might be too slow to stave off mounting liabilities.

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Foreign Trade and Investment Reform

China is deeply connected to the world economy through goods trade; inward direct investment; and, increasingly, services trade, outward direct investment, and two-way portfolio investment flows (investments in stocks, bonds, and other securities). Early in the development process, China stood out for its embrace of foreign trade and investment, but as it has risen to middle-income status as the second-largest economy in the world, the goal posts have necessarily moved. Foreign partners expect more reciprocity today because China is a peer, and the *Decisions* sets out the goal of further trade and investment reform because it is in China's economic self-interest to do so. There are pledges to enforce the same laws and regulations on domestic and foreign investment, and to put market forces at the center of the economy except in exceptional cases. Rules are to be fair, open, transparent, and conducive to providing a level playing field for all firms. Progress so far has been mixed. The Company Law and its onerous registered capital requirements have been fixed, and reform to the three foreign invested firm laws is on the horizon. The Shanghai Free Trade Zone and other next-generation pilot free-trade zones have been rolled out, but poorly and with much disappointment. Opening for some cross-border investment flows has been completed. However, progress toward local negative lists that explain which industries are to be withheld from decisive marketization has been scant, and a national negative list is not yet in sight. More generally, dark clouds have thickened over the foreign invested business community, where even long-time China boosters believe that the pain of inevitable adjustment and re-regulation is being directed to non-Chinese business disproportionately and discriminatorily. So while there is forward progress, it is watered down with misgivings.

State-owned Enterprise Reform

State-owned enterprises (SOEs) and state shareholding are a smaller part of China's economy today than in the past, but these sectors still dominate the marketplace in many ways. State-owned firms permit Beijing to steer growth in terms of projects, industrial policy, and aggregate demand, and they generate needed revenues for the Party and the government. Observers outside China perceive little interest in drawing down the role of these SOEs, and prior to the Third Plenum, Chinese reformers feared that SOEs would scarcely be addressed. In the end, the *Decisions* called for meaningful SOE reform, though it is mixed with counter-indications that require clarification. The goals include dilution of state shareholding through the introduction of private shareholders; extracting more profit from SOEs to finance public expenditures; specifying which industries legitimately require state control; and making clear that when the state remains a non-controlling shareholder in a competitive industry, normal market competition should apply.

Readers of the *Decisions* were skeptical that these changes would be implemented – or *could* be implemented, given the power of these firms. Reviewing efforts to date, we note that Xi's team has successfully gone after recalcitrant management at many of the most powerful SOEs, raised SOE dividend payouts to the government, cut executive compensation, and sent auditors to smoke out corruption and special interest dealings. By late August 2014, the State

Asset Supervision and Administration Commission (SASAC) in Beijing was broadening implementation of governance reforms at central SOEs, and more than 20 provinces had published SOE reform plans that involved listing or selling off assets in up to 70% of provincial SOEs by 2017. While the end point of this process is not clear – at minimum Beijing surely intends to retain significant stakes in certain firms – change is underway that exceeds expectations and demands careful tracking. The Third Plenum deliverable we consider first in importance, a national negative list explaining where government control will endure, has not been produced; until it is, observers must reserve judgment in spite of other positive movements in this area.

Land Policy Rationalization

In advanced economies, the topic of land reform seldom rises to the attention of policy makers today. In China, it is as important a source of future growth potential as any other factor. Without land reform, it will be difficult for Beijing to realize its goal of bolstering the urban labor pool with as many as 300 million permanent new workers, 200 million of whom are already in towns and cities but are reluctant to relinquish their ties to rural land and commit to urban futures. In recent years, poorly governed local expropriation of land to finance budgets has fostered an unsustainable fiscal system, while displaced tenants are a source of constant social protest. While most foreign observers think little about these links, the *Decisions* addresses them at length. It pledges to discipline local government's stranglehold on villagers' ability to lease out and otherwise employ their land, not just keep small farmers at the till – although those wishing to do so will have their rights protected – but to offer them fair prices, creating an incentive to transfer their rights to more efficient farm operators and seize the opportunity to move to towns and cities. Land policy advocates, long accustomed to sluggish reform in this area, are not holding their breath for implementation. However, a comprehensive land registration system announced in August 2014 is encouraging, with interim deadlines for 2014, 2015, and 2016 along the way to a complete national database by 2017. This system would help improve the foundation for property rights and due process and get incentives to urbanize back on track. Ultimately, fast overall marketization that drives the growth of household income and hence farmers' wages for their products is the most important support for rural development, and there are limits to what land policies per se can accomplish.

Labor and Shared Welfare

China's demographics were positive for GDP growth through the Communist era: from 1982 to 2013 China's working-age population (15 to 64 years old) increased by 375 million people, to just over 1 billion – a *marginal* increase equivalent to two and a half times the entire U.S. labor force. Today, this demographic dividend has run its course, and China's labor force size is on the brink of long-term shrinkage. At the same time, 35 years of steady income gains and absorption of surplus rural workers into cities have brought China to a turning point with profound implications for competitiveness and social stability.

The *Decisions* addresses labor and shared welfare in many respects: education, health care, worker rights, minimum wage, and income inequality. Encouragingly, efforts focused on improving the dynamism of markets and private job creation are being emphasized, and the connection to the importance of safety nets including unemployment insurance is drawn. Reforms to the *hukou* system, which ties all Chinese citizens to their home addresses for access to public services and benefits, and has constrained internal migration by workers since the 1950s, will be implemented, and the One Child Policy will end for one-third of the population. Beijing also pledges to establish something so basic that it is remarkable that it still needs doing: real public statistics on unemployment rates to guide macroeconomic policy making.

We identify new steps on education and vocational training, insurance, and health care, but action to date remains meager compared to what is needed. Evidence of a real entrepreneurial takeoff is apparent – the number of new business starts, overwhelmingly private, more than doubled in the first half of 2014 to more than 2 million – but labor and shared welfare policies need to be ramped up just as steeply.

Environmental Policy Reform

After 1978, Beijing's permissive stance toward environmental pollution made it financially easier to build an industrial economy, attract firms that faced mounting environmental compliance costs overseas, and generate outsized profits for firms because of China's low operating costs. The negative impacts of that stance are now eating into GDP, let alone broader measures of economic well-being that reflect quality of life. The imperative to reform China's environmental management is stated in the first sentence of the first decision in the Third Plenum manifesto. Promoting sustainable development is one of the eight missions of government, and this necessity is cited to justify SOE reform, tax reform, judiciary reform, and numerous other overhauls. A full tenth of the Third Plenum program is dedicated to environmental concerns. The program promises to put environmental criteria ahead of GDP growth in scoring local officials for promotion and to make polluter emissions transparent to the public through reporting, a tried and true method used in advanced economies.

The Third Plenum manifesto includes promoting sustainable development among the eight missions of government and uses that mission to justify numerous reforms.

Though Chinese conditions are likely to get worse before they get better because of the lag between policy changes and environmental gains, we identify some important implementation moves. Populist steps to tear down polluting plants have been publicized, the environmental protection law was amended to allow non-government organizations to bring public interest lawsuits, and tens of thousands of industrial firms are seeing their emissions disclosed to the public on smartphone apps. On the energy front – the biggest source of emissions – meaningful steps to manage coal production more systematically are underway, again focused on public information registries. China's environmental problems are probably the worst the world has seen, and it is easy to be pessimistic about the prospects for change.

However, the advanced-economy world offers many promising examples of livable, appealing places where conditions were noxious not long ago.

Innovation Policy Reform

Land, labor, and capital are finite. Innovative capacity is infinite and constitutes the real difference between high-potential and low-potential economies. China has a storied history of innovation over the millennia, and Chinese people make great contributions worldwide. Yet modern China has emulated more than invented, and recent decades have been fraught with tensions between China and foreign governments over lax intellectual property rights (IPR) protection. As with environmental protection, loose IPR regulation may have added to China's GDP growth in earlier years but is likely subtracting from growth today. The *Decisions* emphasizes greater empowerment of market mechanisms to improve innovative capacity in China. It also stresses improvements to the culture of education and the importance of making publicly supported R&D results more widely available. The document goes further and notes that defense sector integration with civilian innovation is important, and that China's public sector must be attractive to global talent. As for implementation, greater legal support for innovators, including due process and regulatory attention to protecting IPR, is being pushed, though after years of assurances in this area more demonstrative results are needed. Steps to modernize the outmoded reliance on a single national college admissions test – the dreaded *gaokao* – have been rolled out for 2017 implementation, but habits of rote teaching will take time to alter. The chilling effect of recent pronouncements about national security is palpable, especially in the information technology sector and on the way people communicate online. China, like many nations, is clearly challenged in finding the right balance between security and innovative potential.

IS IMPLEMENTATION EVIDENT?

In each of these nine regulatory clusters, the commitments in the *Decisions* are important, and there are at least initial signs of follow-through. While we concentrate on implementation, we also consider counter-indications. All clusters show signs of resistance, ambiguities about intentions, and ongoing internal debates about the end point of regulatory reform. We recognize these patterns from previous periods of reform in China: rather than use political capital to *excise* long-standing verbiage from policy documents, leaders add new terms while reinterpreting old ones to suit their needs. For instance, China is hardly communist any longer, yet the Party retains that label rather than stir up ideological disputes by trying to change it. Therefore, we put more weight on what is new than what is old.

Movement has been relatively strong in center-local fiscal reform and financial system reform. Serious initial steps have been taken on SOE reform and environmental policy, although it remains to be seen whether Beijing will pursue these programs comprehensively. On competition policy, action has been dramatically stepped up but not evenhandedly. Foreign trade and investment reform have gotten some attention, and some elements have been liberalized (such as outbound FDI regulation), but there is a lack of clarity about directions given a host of conflicting signals about the attitude toward foreign businesses. Land, labor, and innovation policies are more difficult to describe as having broken with business as usual, although each case shows at least some indication of new directions.

President Xi is setting timetables for change, so we will not have to wait indefinitely to see what the *Decisions* means and whether optimism is justified. In important cases, Beijing has moved ahead and established near-term interim deadlines to get on track to 2020, such as a 2016 deadline for center-local fiscal reform, a 2015 start to permitting NGOs to file public interest environment lawsuits, and an immediate increase in central SOE dividend payment rates.

China's economic reforms will be real if they have desired effects on economic flows. We therefore explore observable metrics that should reflect reform implementation for each regulatory cluster. For instance, center-local fiscal reform will show up as an increase in central transfers to local governments as a share of centrally mandated local expenditures. Competition policy modernization should result in a transparent reduction in the number of industries exempted from normal market disciplines, including state-related enterprises. Interest rate liberalization will be reflected in convergence between formal bank lending rates and informal curb market rates for borrowers.

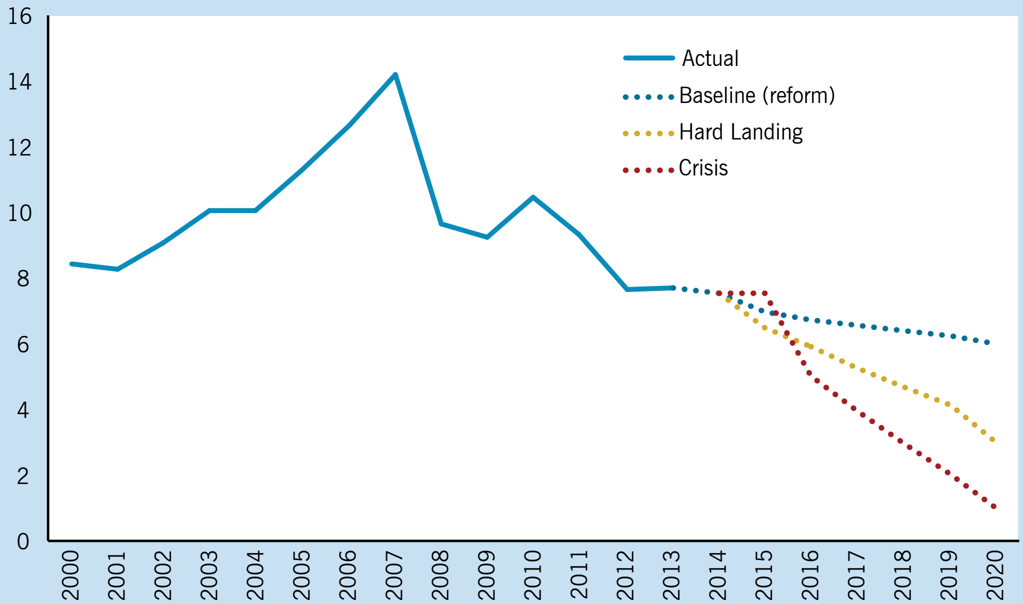
IMPACTS AT HOME AND ABROAD

Building on our assessment of the scope, pace, and prospects for economic overhaul in China, we explore the impacts both domestically and internationally. China has made many policy breakthroughs over the past 35 years, and these have been felt abroad in various ways. But when China set out to reform and open up in 1978, only 2% of world GDP was at stake; today, China accounts for a hefty 15.4% of global GDP. China's marginal contribution to global growth was near zero in 1978 and was inaccessible to other countries. By 1989, China's share in global growth was 4%, and by the Asian Financial Crisis in 1997, it was 11%. For the past three years, this share has averaged 28%. China is more interdependent with world markets than nations going through a middle-income policy shock have been in the past. China's announced timetable to make the proposed changes is short. All this means China's current reforms will shock the world economy.

To explore China's long-term potential growth in light of the promised regulatory adaptations, we use a growth accounting framework that combines assumptions about inputs and efficiency gains. This is a stocktaking of labor, capital, and total factor productivity, or additional gains in GDP that come from technological change or a better policy environment. We conclude that in the best-case scenario – a soft landing through 2020 – reforms permit the redeployment of capital from wasteful uses to high-return sectors, so capital stock growth and TFP improvements deliver a combined GDP growth rate of 6%. That is something to be proud of, though lower than past and current rates. If reforms stall, the productivity gains from adjustment will be lost, and increasingly private capital may or may not continue to invest, leaving China with at most 3% growth in a hard landing scenario or 1% at best in a crisis. Figure 1 illustrates these three conjectures.

Figure 1: China's GDP Outlook with and without Reform

GDP growth (% change year-on-year)



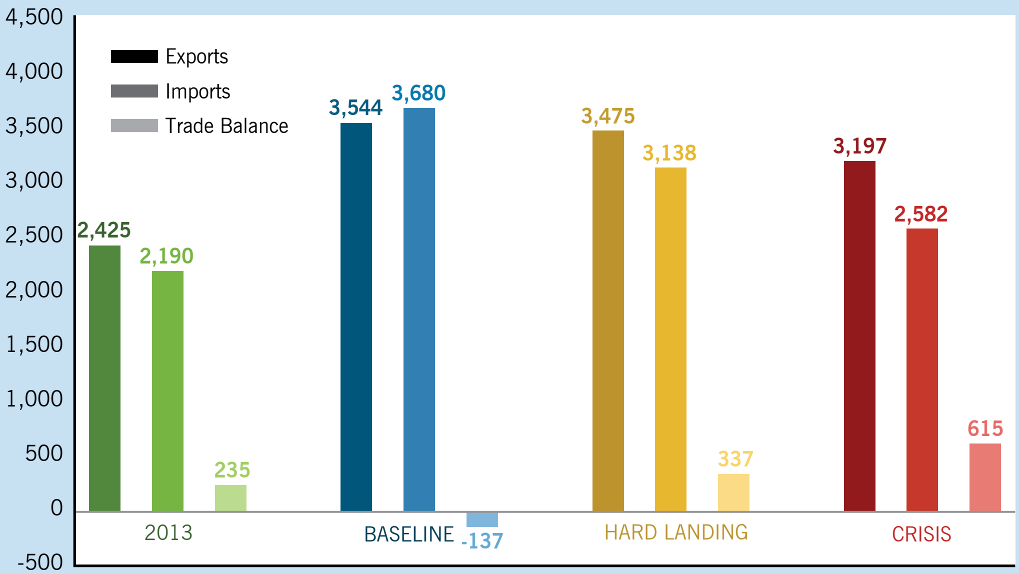
Sources: Chinese National Bureau of Statistics, Rhodium Group estimates. Projections begin after 2013.

Those differential growth rates add up, and the stakes are high. China's 2020 economy will be more than $2 trillion larger with reform than without – a difference the size of the *entire* Russian economy today.

We combine these scenarios – baseline (reform), hard landing, and crisis – with the picture of regulatory reform to help us think about China's trade and financial interaction with the world in 2020. These projections are rough approximations of potential outcomes, but are valuable for exploring how today's reforms impact tomorrow's growth in China and abroad. Substantial implementation of regulatory reform is our baseline scenario: reform is difficult, but not as difficult as dealing with growth collapsing to 1–3% levels. Under reform, China adjusts to a roughly balanced current account position by 2020, from the 2% of GDP surplus it runs today. This results from a trade *deficit* of $137 billion (in 2013 dollars) and a net investment income *surplus* of $145 billion because of a better external asset portfolio: both of these are reversals of current conditions. Imports rise faster than exports, helping alleviate trade policy pressures, and China earns higher returns on external assets as a result of more *direct* investment by firms rather than low-interest government debt bought with foreign reserves. By the end of the period, China's official foreign exchange reserves will be decreasing modestly, which is consistent with Beijing's stated intentions.

The hard landing and crisis scenarios illustrate the erosion of benefits that foreign economies and firms would encounter if reform derails. Figure 2 summarizes the trade

Figure 2: China's Trade Profile in 2020 under Baseline, Hard Landing, and Crisis Scenarios
Constant 2013 $US (billions)



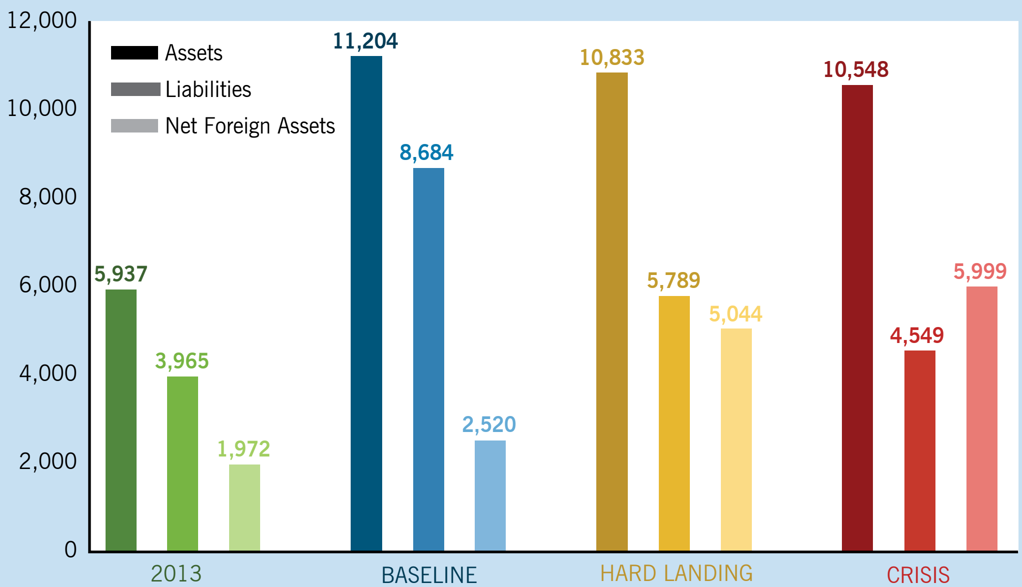
Sources: People's Bank of China, State Administration of Foreign Exchange, Rhodium Group estimates.

scenarios compared with the 2013 starting point. Imports and exports fall in both downside scenarios; the growth of China's imports of foreign goods and services is hit particularly hard. Instead of the good news trade *deficit* under reform, in the crisis scenario China reverts to big trade *surpluses* that reach more than 5% of GDP, a level last seen in 2005–2008.

On the financial side, still greater adjustment lies ahead because cross-border financial flows have been more heavily restricted to date. Under a reform scenario, China continues to attract a growing level of FDI, while outbound FDI continues to boom, roughly doubling by 2020 to an annual level of $160 billion. (These are conservative estimates.) Investments in securities (portfolio investment) in both directions increase dramatically as a result of financial account and capital market liberalization, so that by 2020 more than $1.1 trillion in *annual* two-way flows takes place. Under these assumptions, roughly $3.5 trillion in capital flows from China into foreign stocks, bonds, and other assets, while $2.4 trillion in foreign savings pours into improving Chinese capital markets over the next seven years. That $3.5 trillion of outbound investment is almost 20% of the entire U.S. stock market capitalization today, or roughly the entire value of the NYSE Europe's stock market capitalization. This presents a tremendous opportunity for financial intermediaries, and for savers both inside and outside China to diversify their portfolios to healthy effect.

The outlook for China's financial interaction with the world is even more sharply affected

Figure 3: China's Global Assets and Liabilities in 2020 under Baseline, Hard Landing, and Crisis Scenarios
Constant 2013 $US (billions)



Sources: People's Bank of China, State Administration of Foreign Exchange, Rhodium Group estimates.

by a failure to stay the reform course. Figure 3 illustrates the differences. In a hard landing, China's 2020 external assets grow to $10.8 trillion instead of $11.2 trillion, and liabilities hit just $5.8 trillion instead of $8.6 trillion. These changes result from lower GDP, a slowdown in inbound FDI as foreign investors are scared away and market opening is delayed, substantially lower two-way portfolio flows, and renewed capital controls and other measures to soak up foreign reserves because of the current account surpluses. In the crisis scenario, asset growth is smaller still. In addition to a lower GDP, a crisis triggers restrictions impeding flows in all categories, but especially short-term portfolio investment, and leads to substantial capital flight through grey channels. Typically in such crises, this would deplete foreign reserves, but we assume that outflows are not large enough to offset the ballooning trade surplus as a result of crashing demand at home and a drop in commodity prices globally; thus, we see reserves increase further to $5.9 trillion by 2020.

CONCLUSIONS

We finish our exploration of China's reforms with reactions to two questions. First, what broad conclusions can be drawn from the matrix of facts and inferences we amass? Second, what recommendations can be offered to foreign readers contemplating what these conclusions mean for them and their economies? China's awakening over the past 35 years has already affected global workers, consumers, investors, and the environment in profound ways, and the shock that current reforms portend will greatly amplify this connection. It is incumbent upon business and policy leaders abroad to understand the economic overhaul underway in China.

We draw five conclusions.

1. A Game-Changing Reform Program

The program of economic reform President Xi and the Communist Party leadership issued in November 2013 is game changing – far more than a minor adjustment of business as usual or an attempt to stall for time. Foreign reaction to these developments so far has been fragmented, fractious, and divisive, with a good deal of the China-watching community still maintaining a wait-and-see attitude. This is not hard to understand: past reform commitments have often not come to fruition or have been implemented in a manner less consistent with advanced market economy norms than hoped. Ambiguous terms or counter-indications to market-oriented reform remain in the new *Decisions* on comprehensive reform. However, based on our analysis of the drivers behind China's new approach, new imperatives laid out in the program, and initial indications of implementation following the Third Plenum announcement, we conclude that a decisive break in policy formation and the Chinese economic model is underway.

This new policy trajectory will have profound implications for the international economic system, and foreign officials and business leaders will need to adjust their expectations and responses accordingly. A firmer consensus in understanding these developments will be helpful, and it is hoped that this study contributes to the formation of such a consensus.

2. A Convergent Economic Picture – with Idiosyncrasies

Clearly, Beijing does not believe that different principles of market economics apply in China, any more than gravity applies differently in the Middle Kingdom. The governmental mission and regulatory priorities being pursued in China today are largely consistent with the prescriptions set out by the advanced-economy establishment. There is no Beijing consensus or other alternative economic theory at work here.

But this characterization must be qualified. Wide policy differences on market-oriented precepts exist *among* advanced economies, and China may be all the more idiosyncratic given its extreme population size, social and developmental challenges, low per capita income level, and political challenges. China's reforms will make it both convergent with advanced economies and unique, and that contradiction will be discomforting, considering that China will likely be the largest economy in the world in a decade or so. If China hews to the more interventionist end of the advanced-economy policy spectrum, difficult questions will arise for other economies.

3. Plenty of Exceptions and Counter-indications

A related point is that with such a broad reform agenda, and so many conflicting pressures to be managed, China may require time to work through adjustments at different speeds in different areas, even without attempting to argue that certain exceptions to the overall reform effort are market friendly in the long term. Most nations reserve some sectors from the normal logic of regulation because of internal politics, despite their general principles to the contrary and the welfare losses entailed with taking such exceptions. The United States diverts from free trade when it comes to Mexican sugar because of politics, not economics. China will have its own sacred cows; we can only hope that the herd will be small. The most promising early sign of reform would be the release of a negative list explaining which industries are meant to be protected from competition; this would help show that Beijing is serious about ensuring that the market becomes the dominant, overriding factor governing economic activity.

4. A Notably Fast Start, and a Move to Transparency

The pace of reform and structural adjustment in China today is far faster than was expected a year ago, or than most people believe today. However, the evidence for this – less than one year after the kickoff – is necessarily partial, anecdotal, and contestable. The target of 2020 for completion is ambitious, and shorter timetables of one-to-two years in the cases of foundational elements such as interest rate liberalization and center-local fiscal reform are bold. Reform includes opening to the outside – in terms of foreign trade and investment – not just opening on the inside, and in some cases external liberalization is quickening compared to recent years. However, if the pace of internal adjustment is substantially faster than external opening over a prolonged period of time, then severe international economic tensions are likely to ensue. Foreign investors, for instance, have $2.35 trillion in operations running in China, much of it in the form of joint ventures they might like to restructure and buy out, just as Beijing and the provinces are proposing to permit changes to SOE ownership structures. It is important that they be allowed to do so and not be asked to sit by and wait for the second round. Similarly, reform means the advent of stepped-up competition policy enforcement, but the due process and evenhanded treatment promised to private Chinese firms in the *Decisions* are owed to foreign investors as well. Other than designated special cases, there should be no reason why "private" should not include "foreign private" firms today, as reflected in the national treatment principle Beijing embraced for policy going forward.

The most promising early sign of reform would be the release of a negative list explaining which industries are meant to be protected from competition.

5. A Real Prospect for Political Adjustment?

Many analysts assume that China's economic overhaul is simply designed to sustain the Communist Party's authority. If the Party is to endure, then indeed achieving potential economic growth is necessary – China's leaders state this unambiguously. But Xi's economic program entails significant devolution of regulatory authority to lower officials with pro-competitive missions. We see four drivers of political evolution in this. First, as the ongoing anti-corruption campaign makes plain, abuse of political power to use state assets and state regulatory authorities for private gains was endemic in the old model of vested interest economics. Xi has disrupted that on a scale great enough to change politics. Second, reform will require a different – though not necessarily Western – approach to separation of powers and checks and balances: these are in the policy mix, and they too change the political equation. Third, public information disclosure registries are proliferating for government fees, administrative powers, real estate property, financial securities, land title and use rights, environmental impacts and pollution emissions, employment levels, and other domains. While the upper echelons of the Party have no interest in using sunshine as a disinfectant, the political implications of this transparency campaign will be hard to reverse, as the public availability of air pollution data has proven. Finally, reform is bolstering GDP growth and thus building the ranks of the middle class. While the small pool of bourgeois Chinese in the past was apt to be conservative and apolitical, the relationship between per capita wealth and political expectations is strong, even in China. So, ironically, accelerating growth also speeds expectations of individual protection from arbitrary political behavior.

But finally, despite signs of economic liberalism driven by necessity, the Party clearly does not intend for China's political system to converge with Western norms. President Xi has demonstrably tightened the reins on civil society, embraced opportunities to show China's teeth abroad, and doused expectations that due process would play a significant part in his administration. These moves might be seen as necessary to suppress resistance to economic reform during this critical early period, but there are no guarantees that the Party will reverse course and reestablish a modicum of civil liberties once adjustment has passed. One is hard pressed to find historical examples of single-party, uncontestable political systems that were able to build market-oriented economic systems. It is reasonable to worry that implementation of the Third Plenum economic reforms could fall short or diverge from expectations, including Beijing's own expectations.

POLICY RECOMMENDATIONS FOR FOREIGN CONSIDERATION

We have taken care to avoid normative prescriptions in this assessment, preferring to stick with describing – as objectively as possible – the economic challenges arising from 35 years of rapid growth, the program of reform to government's mission and specific regulatory clusters, and the indications that China is moving ahead on that program. Uncertainty about the Third Plenum program, and different interpretations of Xi's muscular leadership to date, led to a wait-and-see attitude. In year 1 of Xi's economic program, a strong down payment of new economic thinking was made. Our conclusion, stated earlier, is that China's reforms are game changing, market oriented, destined to be fraught with compromises temporary or enduring, and connected to geopolitical strategy beyond the economic realm. In light of these considerations, we offer five recommendations for foreign observers.

1. Gauge Incremental Progress

Discordant views on the pace and direction of reform in China and confusion about the implications if reform does play out as fully as we expect undermine policy formation and implementation abroad and distract from the urgency of a response. This is true within firms and governments. An effort to assess reform may leave decision makers unconvinced or in disagreement, but it still holds value even if certainty remains elusive. A promising strategy for overcoming this hesitancy is to define and track economic metrics that respond to reform. President Xi's *Decisions* and subsequent implementation orders have called for a wealth of new economic data to be collected and made public in a timely manner, supplementing a rich foundation of real and financial economy indicators that are already observable. Foreign officials should encourage and applaud this trend, for it facilitates a shared understanding of China's economic directions. With solid enough consensus around metrics indicating Chinese reform – for instance, on the number of industries listed for exceptional treatment by Beijing – it becomes much easier to build a positive bilateral or multilateral economic agenda with China based not on where conditions stand today but on mutual expectations about where China will be in three or five or seven years.

2. Demonstrate Support for Reform

Acknowledging the existential stakes of reform for China supports the reform process by strengthening confidence that goals are shared. Governments and firms in advanced economies have wrestled with many of the adjustment challenges China is encountering, including rising operating costs, calls for protectionism, opposition to environmental policy enforcement and other aspects of regulatory reform, and myriad other obstacles in the political economy. Many bilateral and multilateral programs of capacity building are in place, but some have lost momentum because China's reform had stalled over the past decade; these should be reinvigorated, or in some cases replaced. There is no shortage of disagreement among advanced economies about the details of reform: more liberal and statist OECD nations have bickered about proper economic policy since the organization's founding 53 years ago. Supporting reform in China will require patience and self-confidence. In China, as in the United States and Europe, some oppose marketization out of fear or insecurity or have legitimate concerns about the limits of materialism as the measure of social welfare. These voices should not all be lumped together as anti-reform: it is a challenge of our era to encourage traditional marketization at the same time our advanced conception of the goals of public policy is evolving.

If China's reform program is to be taken seriously, and it should be, then advanced and emerging nations alike need to strive to remain competitive.

3. Focus on a Domestic Response

Given China's mixed political and international security signals, there will be a powerful temptation to view China's reform-driven economic strength as a threat, and to respond by focusing on external power and influence. Foreign policy must certainly evolve in light of China's domestic reforms, but if China's reform program is to be taken seriously, and it should be, then advanced and emerging nations alike need to strive to remain competitive. After adjustment, a more competitive China will emerge. Reforms will include policy changes that respond to long-standing requests from China's business and trading partners: financial account liberalization, two-way investment opening, a more level playing field for internal competition, and the withdrawal of government from much intervention in the economy. Nations have often defined their past China policies in terms of what China needs to do differently, or what they will do at their borders to manage integration with China. Looking ahead, the policies of other nations toward China must include better enabling environments to keep pace with China's productivity gains. This will require top-led national conversations about competing effectively in a global environment.

4. Include a Multilateral Element

While competitiveness begins at home, it often ends abroad in today's global economy. In many areas, including international direct investment and competition policy, no robust international organizations and norms guide behavior, and the need to build new regimes is likely to be enhanced by expanding Chinese weight in the system. Economies, especially incumbent leaders, should prepare to help facilitate such undertakings. And as they do so, they should welcome Chinese participation without either excluding Beijing or conceding to Chinese views and seek to maintain confidence in the market-economy principles that have worked in the past.

5. Stop Negotiating for What Beijing Is Already Doing

A typical bilateral or plurilateral negotiation with China has become a set piece in recent years, with China's partners asking for market access, intellectual property rights protection, and a litany of other policy reforms. The broad slate of domestic reforms in the *Decisions* tells us Beijing knows these reforms are *in its own national interest* and must be achieved regardless of foreign pleading. It makes sense from China's perspective to negotiate concessions from abroad for reforms that must be taken in any case. Those concessions may in turn be good for China's partners as well, such as reductions in their barriers to Chinese trade and investment; also, the logic of an international negotiation may be mutually valuable for reformers on both sides to make the case for reform to their less change-friendly compatriots. However, it is important to recognize that China is pursuing market-oriented economic reforms for the simple, self-interested reason that it is the smart thing to do.

INTRODUCTION

IN 1992, DENG XIAOPING, 88 years old and technically retired but in reality still China's paramount leader, went south on a tour of manufacturing zones in an effort to settle debates over the nation's economic future, which had divided China since the crackdown on demonstrations three years earlier. Economic reforms, poorly managed, had contributed to high inflation and social tensions in the 1980s with disastrous consequences. Some politicians and economists blamed the market and urged a return to command and control economics. Deng prescribed a different path, one that borrowed lines from the hymnbooks of both communism and capitalism and in each case gave them new meanings:

> If we do not adhere to socialism, do not implement the policies of reform and opening up to the outside world, do not develop the economy and raise the people's living standards, we will find ourselves in a blind alley.*

Socialism, instructed Deng, did not mean shared poverty under command and control economics, but shared prosperity under whatever model worked to produce growth. Reform and opening did not mean surrender to the whims of the market, but rather the utilization of market forces within a framework (he used the metaphor of a bird in a cage) of Party influence and planning. Black cat, white cat, it did not matter as long as it caught mice, he would say.

In the decade that followed Deng's reassertion of reform and opening, China met those objectives. The rising tide of high economic growth lifted all boats: prosperity was broadly shared (though not perfectly); reform and opening to the outside world were implemented, culminating in World Trade Organization accession in December 2001; and the economy developed rapidly in sophistication and living standards rose. By 2002, it seemed there were no blind alleys left to turn into.

However, since the mid-2000s, it has been increasingly evident that China's economic development model – so successful at delivering gross domestic product (GDP) growth since 1978 – needs overhauling to sustain domestic welfare gains and better mesh with the interests of other nations and the stability of the international system. Beijing attempted economic adjustments, but it is generally acknowledged – not least in China – that those efforts fell short. At home, it became progressively more challenging for Beijing to achieve desired growth rates, and the future cost of adjustment increased each year it was deferred. Externally, China's partners had grown concerned with the pace of reform. Some thought their interests were compromised and their enthusiasm for China's future development soured; others maintained high expectations but feared disruption should that optimism prove misplaced. Geopolitical conditions linked to China's economic outlook were showing

* The Chinese – *si lu yi tiao* – literally a "dead street," can be translated as dead end, cul-de-sac, or, as in the official English translation of Xi's Third Plenum *Explanatory Notes*, blind alley.

strains, and major economies were left to consider alternative futures in case China was unable to realize reform.

In light of these realities, the new generation of Chinese leadership led by Xi Jinping, which assumed power in 2013 and is expected to manage China for a decade, announced economic reforms and political adaptations needed to implement them. A program was laid out at the Third Plenum of the Central Committee of the Communist Party of China in November 2013. Despite this clarion call, observers in China and abroad have found several reasons to wonder what shape the reforms will take and whether they can be put into full effect. First, the Plenum program – referred to as the *Decisions* – is organized in an idiosyncratic manner that makes it difficult to benchmark against advanced-economy models. Second, as with earlier waves of reform under Deng Xiaoping, the November 2013 program leaves room for experimentation, and the final design of regulations is not specified. Third, some of the same commitments have been promised before and not delivered, leaving analysts understandably cynical. Fourth, and most important, full implementation of the principles set out in the *Decisions* – such as a decisive role for market forces in allocating resources – portends a greater transfer of control over the economy from the Party than is thought to be palatable to China's leaders. Therefore, rather than bringing about a sea change in business and policy expectations about China's course, the new economic program has led to further uncertainty. As a result, few observers abroad in government or business have made it a priority to consider how Chinese economic reform would affect them and their organizations.

Another factor clouds the outlook as well. While the Third Plenum designs for the economy emphasize reform and opening, President Xi's stance toward civil society and international relations appears to have gone in the opposite direction. Those questioning the authorities, along with scholars associated with rights and protections for ethnic minorities, have been silenced or in many cases arrested. Long-simmering territorial claims by neighbors have become a trigger for expanded and often aggressive military tactics to assert China's prerogatives. This asymmetry between economic rhetoric and political action has left economists and others perplexed.

To clarify what China is doing and what it means to the world, we assess the pledged reform program systematically to foster consensus on interpreting it and promote an effective response. The study seeks to make three contributions to public debate. First, we reorganize the commitments China's leaders have laid out along lines more comprehensible to Western readers. With this, we hope to dispel the view that China's economic program is incoherent. Second, we take on skeptics who say that, coherent or not, there is little chance of reform implementation, by aggregating and analyzing evidence of action (and counter-indications) over the brief period since the Third Plenum. In each reform cluster, we conclude that implementation is in fact beginning, although the extent and pace vary greatly. Third, we connect the reforms underway in China to their likely implications for the rest of the world by tracing how they will impact economic flows through trade and financial channels.

Through this deconstruction and reorganization of China's *Decisions* and the review of action in the intervening months, we conclude that the Xi leadership is indeed pursuing a comprehensive overhaul of China's development model, along with some political changes to address the obstacles that plagued policy makers and stymied reform over the past decade. While we conclude that China's plan is coherent and – critically – convergent with notions of the regulatory state in advanced economies, we note that this guarantees neither that reform can overpower the negative effects of mounting developmental challenges – including rising production costs, severe environmental degradation, and massive debt liabilities – nor that well-drafted intentions will be implemented successfully. That said, the prospects for good potential growth are improved in light of the design of this overhaul and indications of implementation in year 1.

For the past several decades, most scenarios for China's economic future forecast strong growth; compared to other developing nations, China's model delivered consistency. China's policies were not always welcomed by foreign officials or firms, but they were generally predictable and changed only gradually. The scope and timing of China's new economic program – the range is comprehensive and leadership intends the overhaul to be complete by 2020 – present something new at a time when China is poised to become the world's largest economy. Whether reform succeeds or fails, the profile of the Chinese economy will evolve tremendously over the coming half decade and shock the international economy. To translate that nebulous assertion into something more concrete, we formulate a projection of China's GDP growth to 2020 rooted in our analysis of reform, then use that picture of GDP to derive trade and financial flow consequences for the rest of the world.

Our assessment of China's regulatory outlook and projections of implications are far from definitive. The evidence of reform and counter-indications is not exhaustive: every week new indications are added, and a multiple of the observations included in the text were left out for the sake of brevity and readability. There is a painful trade-off between the value to be garnered by a longer process of consultation with area specialists on each facet of reform and the imperative to provide this initial report at a time when officials and business leaders are still eager for answers. It is hoped that this study will reduce the uncertainty readers struggle with in making sense of the most dynamic – and soon to be largest – economy on earth.

The question of China's new political and security attitude toward civil society and foreign affairs will not be resolved by this study. We observe that President Xi has demonstrably tightened the reins on civil society, to the point of choking off public discussion about public policy to a considerable extent; externally, China evinces a new enthusiasm for opportunities to show its teeth – in stark contrast to a past doctrine of stepping lightly abroad to avoid provoking anxieties. Optimistically, one could read this illiberal domestic political tightening and tough external stance as proof that Xi is determined not to let the inevitable disagreements about economic adjustment pains sabotage his economic overhaul, as it did his predecessors', or risk strategic rivals taking advantage of China's economic distractions to impinge its security interests. That is a viable hypothesis, but there are few historical examples of authoritarian regimes suppressing civil liberties only long enough to complete reforms, then restoring them. As economists understand, political reform is not just a luxury made available through economic growth; it has generally been necessary to sustain growth in a more advanced economy. All we can conclude here is that President Xi's political and security campaigns are not impossible to square with the notion that economic reform is for real, although they bring unanswered questions that demand further consideration.

Alongside his *Decisions*, President Xi offered *Explanatory Notes* under his personal signature to help his Party comrades, the Chinese people, and the broader world understand the meaning of the Third Plenum. In it, 22 years after Deng Xiaoping's trip to the south, Xi quotes his predecessor's advice about staying out of blind alleys through reform; opening; and attention to shared prosperity, economic development, and rising living standards. Xi recognized that imperatives *had* stalled in recent years – just as Deng feared they might – and that serious consequences lie ahead. His explanations are clear that with the economic overhaul, he intends to avoid that fate.

1. GROWTH AS WE KNEW IT

WHY WOULD CHINA – the nation that has shaken the world with unprecedented growth for a third of a century – overhaul its economic model? After all, China's post-1978 economic performance surpassed all expectations and endured for longer than most observers thought possible. Average annual GDP growth over the 35 years through 2013 was nearly 10%. By comparison, during their takeoff growth periods Japan averaged 10% per year for 9 years, South Korea peaked at around 6.5% per year for 13 years, and Taiwan turned in three decades of 9% annual growth.[1] These were all high achievers, but none matched the impact of China: more than 330 million people were "lifted" over the poverty line through reform.[2] To assess the changes to its economic model that China intends today, the impediments and prospects for its success, and the implications of such a program for the rest of the world, one must first make sense of China's past growth and why it is petering out.

There is not a uniform understanding of why China achieved its reform-era performance. Chroniclers of China's economic rise – Chinese and foreign – offer divergent accounts of China's 1978–2013 growth.[3] This study takes the view that much of China's growth over the past 35 years resulted from preexisting conditions: a deeply impoverished starting point, favorable demographic trends, and pent-up foreign enthusiasm for trade and investment with China. But many other nations with such conditions did not enjoy China's subsequent rise, and Beijing deserves credit for a novel mix of liberalization and resistance to relinquishing the control that sustained growth.

This study take view that much of China's growth over the past 35 years resulted from preexisting conditions.

It is clear that Deng Xiaoping and his colleagues did not have the details figured out at the start: even the signature slogan of China's development – reform and opening, or *gaigekaifang* – was not introduced into official parlance until six years after 1978.[4] But the principles behind the new model were evident early on, including a low degree of *political* liberalization; a combination of market – including foreign – forces and state intervention; and tolerance for negative economic side effects common among less developed economies such as corruption, pollution, and labor abuses.

Observers give China's post-1978 leaders much of the credit for the economic boom. In the early phase, however, China's growth resulted not so much from what government did, but from what it stopped doing. At per capita GDP of $366,[5] China's economy did not depend on sophisticated economic policy the way it does today. Unlike the Soviet Union, where no one working in pre-collectivization Russia (before 1922) was still in the labor force when reform was introduced in the 1980s, China's village production brigades were little more than 20 years old when Deng softened agricultural micromanagement after 1978. People *still remembered* how to be productive: once given the right to keep above-quota production for their own profit through the household responsibility system starting in 1980, their output and incomes boomed. Such incentives were expanded to manufacturing as the 1980s progressed, earning Communist Party endorsement and full support only once they had succeeded.

With the state's ability to assign land to new investors and the largest pool of underemployed labor on the planet, Beijing's most important early-phase initiative was simply to reduce tariffs, quotas, impossible licensing requirements, and foreign investment prohibitions to stoke growth. Exhaustion with counterproductive ideas was palpable, and an abiding pragmatism and adaptability prevailed that allowed leaders to set aside dogma in favor of policies that worked. For the first decades of reform, these changes enabled steps toward economic norms prevalent in advanced market countries. And as crisis swept through U.S. and European market institutions in the 2000s, the same Chinese pragmatism without concern for ideology spurred movement toward less liberal approaches that some have labelled state capitalism. In this chapter, we explore the combination of favorable conditions, centrally directed reforms, and local adaptation that allowed China to unlock its potential and reach second place in world GDP rankings over 35 years – and why those engines of growth are generating less torque today.

PREEXISTING CONDITIONS

The Low Base Starting Point

On the eve of reform in 1978, China's GDP was $352 billion, putting at least 150 other nations above it in global economic size rankings that year.[6] In per capita terms, this meant $366 for each man, woman, and child, placing China just below Tanzania and above Cambodia, near the nadir of its history relative to other nations. This gravely impoverished position did not come naturally but reflected the immiserating mistakes of Mao-era economic policy: an ideology of self-reliance enforced down to the village level; collectivization of assets and incentives; the elevation of political credentials over expertise in government and industry; and other misguided notions, some socialist and some idiosyncratic to China and Mao.[7]

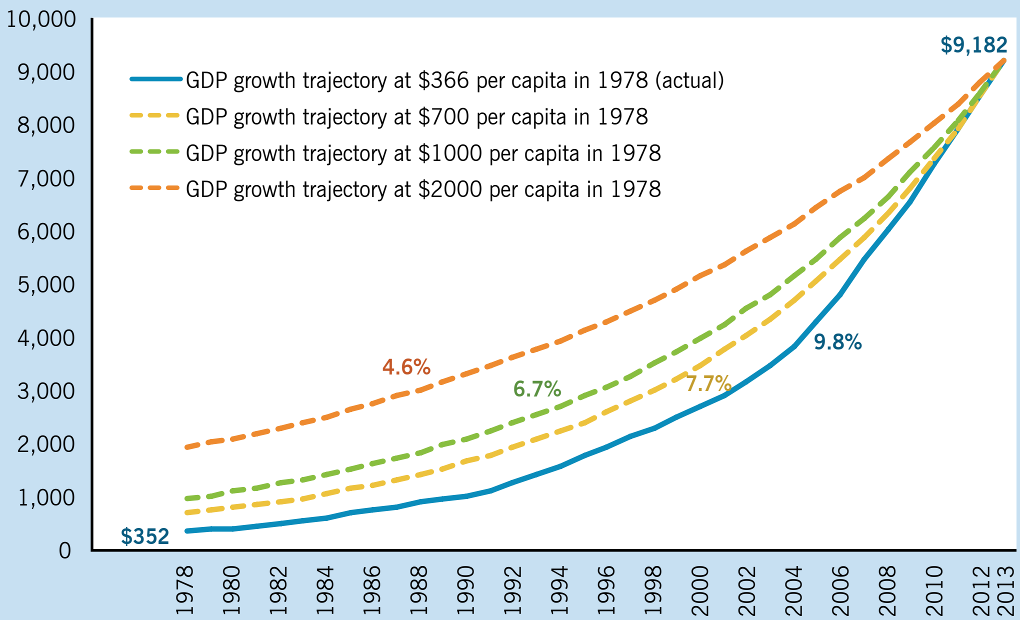
China's 9.8% GDP growth average over three decades was to a great extent a result of this base effect: it is far easier to achieve double-digit growth starting from such a low per capita beginning. Had China begun its long march from the Third Plenum of the 11th Central Committee in December 1978 from a per capita GDP level of $700 – between East Timor and Togo that year – getting to where it is today would have entailed average GDP growth of 7.7% (Figure 1.1). If it had started a little better off – say at $1000 per capita GDP, near the $1027 Indonesia achieved that year – then average GDP growth to get to today's $9.2 trillion ($6748 per capita) would have been 6.7% – not bad, but not world beating either. If China had started at $2000 per capita GDP in 1978, around Albania's $2040 that year, then its accomplishment to date would have been an average growth rate of just 4.6% over the past 35 years: a modest achievement in line with the Dominican Republic's or Panama's average growth since 1978. If China had averaged

China grew so fast for so long in large part because it was so poor to begin with.

9.8% annual growth from those higher starting points, it would be far beyond its current GDP level – but that would have been unlikely, because today's need for an economic policy overhaul would have arisen long ago. China grew so fast for so long in large part *because it was so poor to begin with.*

Figure 1.1: China's GDP Growth Rate at Different Wealth Levels in 1978

GDP in constant 2013 $US (billions), average annual growth rate (real)



Sources: Chinese National Bureau of Statistics, World Bank World Development Indicators, Rhodium Group estimates.

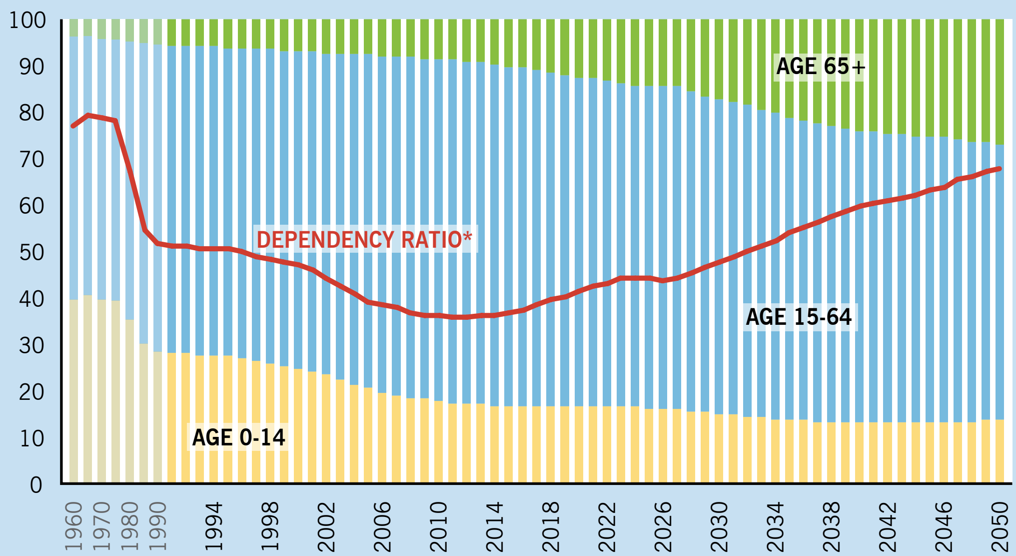
Labor: the Demographic Dividend

Economists reduce the inputs to growth to three fundamentals: labor, capital, and total factor productivity – a measure of the ability to increase output *without* additional labor or capital. When the working-age population of an economy grows relative to the non-working-age population, the *dependency ratio* falls. That can result from a decline in child mortality occurring before birth rates adjust to that change, leading to an exceptionally large cohort of working-age people. An abundance of working-age people creates more disposable income and savings, frees workers to migrate away from their parents toward better economic opportunities, and reduces workers' inclination to take time out of the workforce to bear and raise more children. The consequent boost to GDP is referred to as a *demographic dividend*.

A large demographic dividend accrued to China over the reform period. As the medical advances of the 1960s lowered child mortality and the one-child policy instituted in the 1970s reduced birth rates, China experienced a boom in the size of its working-age population

Figure 1.2: China's Population Structure by Age Group

% of total



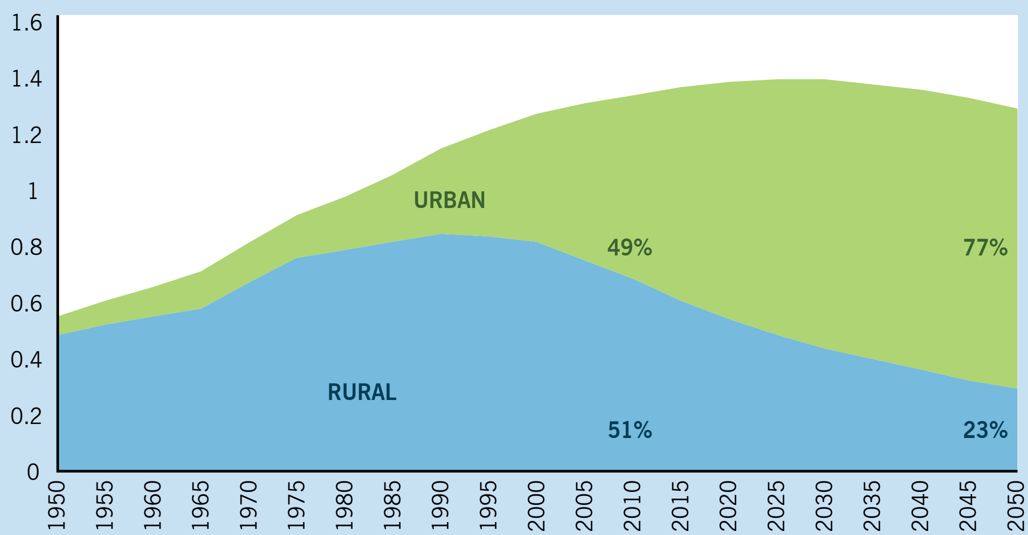
* Ratio of people younger than 15 and older than 64 to working-age population (15–64).

Sources: China Statistical Yearbook, U.S. Census International Database (1990–2050), Rhodium Group estimates.

relative to its non-working-age population. Labor force growth accounted for more than a quarter of China's GDP gains from 1978 to 1993 and continued to be positive until the present.[8] However, the labor contribution to growth is diminishing today: China is right at the turning point. Within a few years, labor force growth will turn negative, with considerable demographic headwinds lying ahead (Figure 1.2).

The *size* of China's working-age population was not the only demographic factor favoring economic growth after 1978. China's population powered growth in two other important ways. First, Chinese citizens faced tight restrictions on internal migration under Mao's model of making every village and town economically self-reliant. Under reform, Beijing permitted internal migration of labor to urban areas and internal flow of investment to areas with underutilized labor – including by foreign investors. Distribution of labor between rural and urban China evolved, permitting much more productive use of the labor pool. Whereas 71% of workers were employed in low-return agriculture in 1978, by 1995 that number had been reduced to 51% – 125 million workers had shifted into higher-return work. By 2012, only 34% of workers were still in farming, as an additional 159 million Chinese had moved into more productive jobs, typically in urban areas (Figure 1.3). While this structural adjustment improved China's output potential and per capita income, Beijing stopped short of entitling internal migrants to urban welfare benefits and kept their social entitlements pinned to their rural origins, keeping resources available to promote state-owned enterprises (SOEs) and

Figure 1.3: China's Urbanization Outlook
Billions of people



Sources: United Nations Department of Economic and Social Affairs World Urbanization Prospects (2011 Revision), Rhodium Group estimates.

infrastructure investment instead, but creating human capital weaknesses that we discuss in detail in Chapter 2.

Second, as China's labor pool became larger and more mobile, it also got more skilled. During the 1966–76 Cultural Revolution, the higher education system was largely shut down, and basic education was severely disrupted. In the reform era, the education system was restored and bolstered, and scientific and technical training was embraced with ardor as a correction to the ideological struggle of the prior decade. Eager to expand their skill bases, private firms – especially foreign investors with more sophisticated technologies – rapidly scaled up their training programs.

Capital: Domestic and Foreign

Capital availability was a key constraint on post-1978 growth, as China began reform severely short on savings. Leaders had believed oil production and exports would boom from new discoveries in the 1970s, yielding hard currency to pay for needed imports of industrial technology. After thousands of empty oil wells were drilled, that hope evaporated, and China's export earnings came instead from labor-intensive light manufacturing. This was a blessing in disguise, as natural resource–fueled development often leads to a "resource curse" that addicts a nation to foreign demand without incentivizing opening to foreign technology, investment, and trade. World Bank lending, bilateral assistance from Japan and other nations, and direct investment by foreign firms and overseas Chinese were critical for closing China's capital shortfall, which would not have been the case had Beijing's oil dreams panned out. China's rules on inward foreign direct investment by overseas firms required that outbound payments for equipment, goods, or parts for final assembly were more than offset by export earnings. Earnings in foreign hard currency were subject to a strict surrender requirement on amounts above narrowly defined working capital needs for trade and firm profits that could be repatriated.

Because China's industrial base was so primitive, almost any capital investments, including plants and equipment that were antiquated in advanced economies, improved productive capacity in China, allowing both China and foreign investors to generate good returns from joint ventures. Domestic financial intermediation in China remained embryonic, and most light industry – both indigenous and foreign invested – was by and large self-financed. During the 1980s, a commercial banking system was reestablished to fulfill the needs of mostly state firms and facilitate trade finance. As the 1990s and 2000s progressed, an array of formal and less formal financing channels evolved to meet demand for credit from other firms and individuals in the non-state sector, and to take advantage of the privileged access to capital enjoyed by state firms.

Since 2000, the dominance of investment-led growth as a development strategy has changed China's economic structure, not always in healthy ways. Households saving out of caution and for major purchases created a huge capital pool predominantly deposited at state-owned banks because of limits to competition from other players. Underdevelopment of capital markets – stock exchanges and bond markets – permitted banks to dominate credit provision, and capital-intensive firms, either state owned or operating with state project approvals, absorbed most available credit. Given over-investment in many of these sectors, such as steel, coal mining, and aluminum, and their connection to a property bubble that hit its ceiling, returns on lending are starting to suffer, and servicing China's debt has become increasingly difficult.

These basic capital characteristics – a system built on hoarding foreign reserves and banks predisposed to look after capital-intensive SOEs instead of enriching depositors or serving a burgeoning private sector – propelled China's growth through the first two decades of the reform period. However, today they hold little marginal value, have forestalled needed reforms, and require a growing portion of leaders' attention to be adjusted.

Total Factor Productivity

In addition to growth driven by labor shifts and capital injections, reform-era China grew by *reorganizing* economic assets to put them to better use. Economists count the gains from anything *other than* adding inputs as total factor productivity growth, or TFP for short. Permitting old, inefficient uses of people and money to be wound down quickly, so that resources can be redeployed to more valuable uses, permits an economy to realize greater GDP growth than otherwise possible, often along with painful social adjustment challenges. That is precisely what China did after 1978.

China's drive toward greater economic efficiency was propelled by technological change and structural adjustment. In the year a new technology is purchased, the purchase price counts as investment in national GDP. Thereafter the country continues to benefit from this technology through more efficient production and greater output. China's intensive technological upgrading starting in the 1980s fed economic growth well after initial capital investments were made. Technological upgrading did not just mean new machines but also new ways of doing things, managing processes, and thinking about opportunities. Much of this was learned from foreign firms or development institutions such as the World Bank that were eager to build goodwill by sharing know-how, and this knowledge contributed to GDP growth even though it could seldom be observed on balance sheets.

Another aspect of growth without additional labor or capital is structural adjustment, or a change in the mix of economic activity that brings an economy closer to its potential. The China of 1978 had near-full employment, but only because the vast bulk of the workforce was employed in agriculture – a crucial but low value-added activity. With the flexibility and better information flows possible under reform, China's available labor and capital were redirected into a more productive mix of activities, generating better overall welfare for the nation. This included adjustment into export-oriented light manufacturing, in which China's labor pool provided an extraordinary comparative advantage to supply markets at prices that were highly competitive yet more remunerative than farming. Even without technological advancement, structural adjustment into productive activities created economic growth; in combination with technological change, it was even more powerful.

China's drive toward greater economic efficiency was propelled by technological change and structural adjustment.

Gains from technological advancement and structural adjustment were possible to the extent government desisted from micromanaging firms and production processes, permitted managers to make company decisions, and allowed changes in the industrial structure to drive the Five Year Plans instead of the other way around. This approach was taken in some industries, but not all. Beijing's positive role, meanwhile, was to prevent hyperinflation and manage the social instability often caused by economic shifts. Leaders were able to fulfill those roles part of the time: severe inflationary periods occurred in the mid-1980s (contributing to the crisis of 1989) and again in the mid-1990s, while incidents of social unrest are a persistent problem necessitating a degree of authoritarianism that will be hard to maintain as China grows wealthier.

Indeed, as the Chinese economy grows more sophisticated, the tasks required of government to sustain technological change and structural adjustment become more complicated across the board. If a government cannot perform these tasks, then the TFP component of growth will erode if not disappear. Governance itself is an element of technology that becomes more important at higher income levels, and a shortfall in governance technology is precisely what China faces today and must correct to realize its potential in the years ahead. This is a deciding variable we return to in projecting China's future growth in Chapter 3.

A Favorable Geo-Economic Setting

A propitious external setting contributed to China's post-1978 growth. Despite historical rivalries with Asian neighbors and ideological differences with advanced capitalist democracies, China found a world ready to embrace its participation in trade and investment, help finance its growth, transfer technology, and deploy legions of technicians and development consultants who could increase China's economic capacity. Incumbent economic powers, foremost the United States, propped open their doors to Chinese exports, exchange students and – later – firms, including SOEs, often in spite of difficult internal adjustments and objections from labor, environment, and human rights interests. While trade frictions and complaints from legislators were frequent, incumbent economic and security powers generally accommodated China's growth purposefully.

This factor in China's growth deserves mention not just for the sake of historical accuracy, but also because a sympathetic geo-economic setting can no longer be taken for granted. While most of China's bilateral trade and financial relationships are still deepening, misgivings about China's political and economic future are greater today than they have been in many years. When China's economy was smaller than Sweden's, misjudging its future behavior would not have been an existential error from the perspective of Washington, Brussels, Tokyo, New Delhi, or Moscow. But China is now the world's second-largest economy, on track to be the largest within a decade or so, and is dominant in many global product and commodity segments. Chinese foreign policy doctrine and behavior have changed demonstrably in recent years, and the relationship of economics to China's strategic posture is of far greater concern than it was in an earlier era of adherence to Deng's advice to maintain a reserved profile abroad.

Economic Policy after 1978

While withdrawing many bounds on economic activity to make room for profit-oriented management and reducing interventions that barred foreign commerce and investment, China's leaders maintained control over the economic system, governance, and many industries to determine the pace and direction of development. A vast fleet of SOEs was retained in "commanding heights" sectors of the economy, including banking, power generation and distribution, coal mining and production, oil and petrochemicals, ferrous and nonferrous metals production, transportation equipment manufacturing, basic telecommunications, and shipping. In other industries, the state exerted a heavy influence through planning, regulation, and approvals. This allowed Beijing to support growth levels. Whereas private or foreign invested firms are prone to suspend investment plans in the face of weakening economic conditions, state-dominated firms could be induced to stay the course and deliver an officially promised floor level of activity – as long as the impaired returns on politically motivated investment could be tolerated or swept under the rug.

Even as Beijing maintained a dominant position in parts of the economy, it crafted policies to foster competition and innovation in others, including from foreign entrants, to reshape a host of downstream, consumer-oriented sectors. By the time of China's World Trade Organization accession in 2001, market competition was driving outcomes in automobile manufacturing, consumer goods retailing, food and beverage, textile and apparel manufacturing, furniture, and dozens of other industries. A gradual shift in the share of resources going to these dynamic, market-oriented sectors and withdrawal of the state from activities better served through private competition were the hallmarks of the reform era. The question is whether that tendency has stalled or even gone into reverse. The extent to which the role of state in the economy has grown or diminished has been debated in recent years: those familiar with Chinese data can assemble the numbers to argue either case. However, anyone running a business in China in 2014 will confirm that the state's role remains pervasive in most sectors, and President Xi Jinping's own public calls for reform make clear that this is a problem, and one that will be difficult to fix.

A major factor sustaining China's high growth during the past decade was the weak regulatory power of government, even as the Party maintained political control over the state. For producers, weak regulation meant low operating costs, while ongoing political controls deprived workers, farmers, and savers of the leverage they might have used to command higher wages and prices. All this benefited firms and amounted to a producer-welfare–oriented system. In other words, China was a hard place to beat for manufacturing costs. In the 2000s, China's growth model delivered two other significant advantages. First, by the time industry needed to expand inland in search of more labor, an extraordinary build-out of transportation infrastructure was underway, allowing firms to keep labor costs low. Second, a tightly managed exchange rate regime kept the renminbi somewhere between mildly and significantly undervalued as current account surpluses swelled, thereby extending the competitiveness of light manufacturing and assembly for export (e.g., apparel and consumer electronics). Building the Chinese economy around the goal of maximizing producer welfare rather than consumer welfare – the opposite formula to that found in advanced economies – benefited China during its takeoff. It has become an impediment to sustainable growth today.

A major factor sustaining China's high growth during the past decade was the weak regulatory power of government, even as the Party maintained political control over the state.

WHERE TO FROM HERE?

Each of the factors described above added to China's economic performance after 1978; each is now trending in a less supportive direction. China's labor pool is at its maximum size, capital is showing diminishing marginal returns and debt service is mounting, total factor productivity gains are falling pending changes in regulation and the incentive structure, external enthusiasm for engaging China has turned to a more balanced wariness in many nations, and policies to smooth growth through state ownership and suppressed regulatory costs are increasingly counterproductive.

But China has not exhausted its growth potential. On the contrary, the promise of decades of high-quality growth stands before the nation. Opportunities to upgrade manufacturing to produce higher-quality products with greater intangible value are massive. Modernization of the agricultural sector holds tremendous potential to benefit the nation and the 100 million citizens who will remain in farming rather than migrating to new cities. Service industries ranging from advertising to health care to engineering are ripe with potential. And hundreds of millions of middle-class Chinese are eager to see investments in environmental remediation. These growth opportunities depend on regulatory and political reforms that have been slow in coming but can be enacted more quickly than many assume.

The external dimension of China's growth also requires an overhaul. Trade plays a critical role in the economy: China has tremendous comparative advantage in servicing global demand and vast internal appetite for welfare-increasing imports of goods and services. Financial globalization has only just begun for China, with cross-border portfolio flows a tiny fraction of what they would be if China's savings portfolio were optimized. Foreign direct investment in China, a springboard for past growth, holds huge future potential, but a new parochial sense that foreign participation is big enough must be squelched for that potential to be realized. Outbound Chinese direct investment is essential if China's firms are to retain global market share and upgrade their capabilities at home. And under any scenario, China will continue to be dependent on globally sourced natural resources for the foreseeable future – even as a once propitious foreign policy environment becomes cloudy with geostrategic misgivings.

The reality that growth as we knew it in China has come to an end is not regrettable: it is the natural result of having made it so far. China would only avoid its current challenges if it were poorer. The judgment between optimism and pessimism about China's economic outlook comes down to two questions. First, do China's leaders understand the systemic changes required to maximize sustainable growth from this juncture forward? And second, do they have the capacity to institute those changes in a timely manner while handling the other mission-critical elements of governing China and serving its interests? Within the cacophony of official rhetoric, bureaucracy, earnest debate, and uncertainty emanating from China today, we can discern new departures that may answer these questions. In the following chapter, we analyze the leadership's economic reform manifesto for proof of a coherent understanding and assess the evidence of action so far for guidance on the likelihood and timing of implementation.

2. THE THIRD PLENUM REFORM PROGRAM

THE PREVIOUS CHAPTER CLOSED WITH TWO LOOMING QUESTIONS: will China's new leaders respond to slowing growth with reform or resistance to reform; and in either case, do they have the capacity to steer an effective course past stiff pressures from family, factional, and bureaucratic interests to maintain the status quo? Analysts hoped the Third Plenum of the 18th Central Committee, held in November 2013, would provide some answers. Within China's 10-year leadership cycle, Third Plenum meetings have traditionally been the occasion for major shifts in economic policy. And for President Xi Jinping, the clock on his tenure was already ticking.

Most observers in China and abroad concluded that Xi would spend the first years of his term trying to consolidate power and wrestle with the tangle of inside deals and corruption that had developed over decades. This conclusion turned out to be wrong. From the start, Xi moved quickly to assert control and force change on vested interests. The size and composition of the new Standing Committee of the Politburo Central Committee, the paramount executive authority in China, were reengineered to enable Xi to act decisively.[1] He answered skepticism about the prospects for change by investigating or arresting the management of some of China's most powerful state-owned firms and by dismantling the power base of the supposedly untouchable former security chief on the previous Standing Committee, Zhou Yongkang. While these moves were a necessary prelude to real economic reform, targeting figures who were impeding reform for personal gain, they could also be interpreted as a self-interested power grab for Xi and his own faction. As there was no way to be sure, on the eve of the Third Plenum, reform observers remained uncertain whether a decisive economic overhaul would be unveiled.

The Third Plenum was held November 9–12, 2013, in Beijing. On November 12, the Communist Party (the "Party") leadership adopted two policy documents: a *Communiqué* and a detailed elaboration entitled *Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform* (which we refer to in this report as the *Decisions*, in reference to the 60 articles set out in the document). The Party also issued *Explanatory Notes for the "Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform"* (the *Explanatory Notes*) under Xi's personal signature.[2] The *Decisions* surprised most observers with their boldness and direction. The document was demonstrably different from previous policy statements: as a leading American chronicler of China's economic policy reform put it, the *Decisions* was complete in scope and observable, did not evade difficult areas, was associated with the top leader directly, and included bureaucratic mechanisms for implementation.[3] By many measures, the *Decisions* qualified as the most significant departure from the usual course of Chinese policy since at least the 1980s.

The program's timetable was bold as well, pledging implementation by 2020, thus requiring an immediate start. This 2020 deadline is not just a stretch goal, but also a necessity. While reforms are afoot in some areas, such as financial system reform, there are internal and external doubts as to whether policy can outrun looming problems such as bad debt. Officials refer to the "Sword of Damocles" to describe the urgency for reform.[4] The language of the Third Plenum documents made clear that the 2020 target was not just about succeeding but also about avoiding failure.

Despite this clarion call, observers in China and abroad have found several reasons to wonder what shape the reforms will take and whether they can be put into full effect. First, the *Decisions* consists of more than 300 distinct points organized into 60 constituent articles and further grouped under 16 subheadings (listed in Table 2.1). This is not a typical scheme for economic policy design; rather, it reflects long-standing political debates within the Party over the definitions of modernization, urban-rural interests, the use of the rule of law, and other themes. Second, as with earlier waves of Chinese reform under Deng Xiaoping, the November 2013 program leaves room for experimentation, and the final design of implementing regulations is not specified. The body of the *Decisions* defines only a few concrete actions, as opposed to principles and goals. Third, some of the same commitments have been promised before and not delivered, leaving analysts cynical. Fourth, and perhaps most importantly, full implementation of the principles set out in the *Decisions* – such as a decisive role for market forces in allocating resources – portends a greater transfer of control over the economy from the Party to independent regulators than most observers assume will be palatable to China's leaders. Rather than bringing about a sea change in business and policy expectations about China's course, the new economic program fed further uncertainty.

Table 2.1: The 16 Subheadings of the *Decisions*

i. The Significance of and Guiding Thoughts on Deepening the Reform Comprehensively
ii. Adhering to and Improving the Basic Economic System
iii. Accelerating the Improvement of the Modern Market System
iv. Accelerating the Transformation of Government Functions
v. Deepening the Reform of the Fiscal and Taxation Systems
vi. Improving Mechanisms and Institutions for Integrated Development of Urban and Rural Areas
vii. Building a New Open Economic System
viii. Strengthening Building of the Socialist Democratic System
ix. Promoting the Rule of Law
x. Strengthening Check and Oversight System of Exercise of Power
xi. Promoting Innovation in Cultural Systems and Mechanisms
xii. Promoting Reform and Innovation of Social Undertakings
xiii. Making Innovations in Social Governance System
xiv. Accelerating Ecological Progress
xv. Deepening Reform of National Defense and Armed Forces
xvi. Strengthening and Improving the Party's Leadership in the Course of Comprehensively Deepening the Reform

The first task in our systematic appraisal of China's reform program is to resolve the ambiguity about what has been decided by examining the stated objectives and re-classifying them along lines recognizable to international readers. Senior Chinese officials had in fact organized their reform plans for the Third Plenum using simpler groupings. A Politburo Standing Committee meeting held around May 1, 2013, employed an eight-category taxonomy for high-priority economic reforms.[5] This meeting was followed by a May 6, 2013, State Council meeting at which Premier Li Keqiang issued a nine-pronged program for economic work.[6] Senior planners confirmed these clusters to us privately in July 2013.

The design of President Xi's policy program appears consistent with the approaches favored by advanced market economies.

We reorganize the *Decisions* into nine economic reform clusters, some of which (e.g., competition policy) were not broken out in earlier reports on what the Third Plenum would cover. These groupings are subjective; other categories might be used instead. Our breakdown highlights the economic reform agenda and sets aside political and security affairs (although we touch on those dimensions in our analysis). These nine clusters are:

1. Center-local fiscal reform
2. Competition policy reform
3. Financial system reform
4. Foreign trade and investment reform
5. State-owned enterprise reform
6. Land policy rationalization
7. Labor and shared welfare
8. Environmental policy reform
9. Innovation policy reform

This chapter examines each of these reform priorities in turn. For each, we summarize the purpose of the reform cluster and then describe the objectives set out in the *Decisions*. We then assess the evidence of implementation so far. Finally, we discuss notable counter-indications to reform and explore metrics that might be used to gauge implementation and the economic impacts of the reforms going forward. In each of these nine areas, we are able to identify at least some amount of movement, generally to a greater extent than most observers expected prior to the Third Plenum, and new evidence presents itself by the week. Not at all surprisingly, signs of resistance are also evident, as is the ambiguity about how liberally or conservatively officials expect to overhaul regulation. By the time this study is published, new developments will have occurred, so we emphasize that we do not provide a definitive catalogue of actions taken but rather a preliminary assessment.

In a preview of our concluding judgment, we will say here that the design of President Xi's policy program appears consistent with the approaches favored by advanced market economies. But advanced-economy regulatory concepts will produce different results if China's categorical imperative is not also changed to optimizing the rights and welfare of individuals. In the past, Chinese officials and political scientists have often argued that other tests of statecraft, such as the Communist Party's authority or comprehensive national power, take precedence over individual rights.[7] Some of the most well-argued skepticism about Beijing's ability – or intention – to enact the Third Plenum program focuses on this conundrum: if the Communist Party judges China's interests to be best measured in terms of its monopoly on power, then it will not surrender its power to abstract market forces; but if the Party fails to allow market forces to guide the economy, then growth will slow or even stop, undermining the Party.[8] Some have conjectured that the Party is willing, even happy, to relinquish control of parts of the government and the economy that are hard to manage, and that leaders think about their historical legacies, not just their present moment. But none of this can be taken for granted, and old habits and ways of thinking die hard.

The Party's traditional aversion to jeopardizing its position makes the Third Plenum all the more extraordinary for transparently identifying, discussing, and setting out plans to alter the roles of Party and state in China. In his 7600-plus-word personal *Explanatory Notes*, President Xi explicitly says that reformulating the missions of the Communist Party and of China's government is a task of existential importance. While uncertainty remains about the balance of concern for the Party's interests and consumer welfare, the new government mission statement found in the *Decisions* is unambiguous. Indeed, it could have been taken almost directly from the advice of liberal Western economists.[9]

REDEFINING GOVERNMENT: A NEW MISSION

At the highest level, the *Decisions* constitutes a manifesto on modernizing governance. Third Plenums typically stick to economic work, not political affairs. Yet like its 1978 predecessor, the Third Plenum of November 2013 called for comprehensive reform in political and security affairs, as well as economic matters. It addressed the balance of power between levels of government (center and local), between state and Party, and between government and governed. The lack of political adjustment helped doom the economic reforms of the prior 10-year period, and the wider scope of the new program makes it more promising.

Some lofty platitudes in the *Decisions* are not new, such as the imperative set out in Decision 2 to "deepen political system reform that features the organic unity of upholding the leadership of the Party, the people being the masters of the country, and governing the country according to the rule of law." But the revised mission statement for government laid out in Decision 3 and the related discussion of center-local relations and "Transformation of Government Functions" in Decisions 14–16 are major changes, and they might represent the most underappreciated elements of the *Decisions*. The *Decisions* states that both market and government play important roles in guiding economic outcomes; some have interpreted this as worrisome. As in Organization for Economic Cooperation and Development (OECD) economies, the prospect of government intervention will no doubt remain a concern. Nevertheless, the call for government to stop interfering in commercial activities that can be handled by markets and shift instead to regulatory roles that the state has not played to date is radical for China. President Xi himself laments, "The lack of unified market rules means rampant protectionism initiated by departments or local governments; and market competition is not good enough to select the superior and eliminate the inferior, and thus slows down economic restructuring."[10] This is far from a rhetorical flourish: it is fundamental re-envisioning of the purpose government serves.

The revised mission statement sets out eight primary functions for the government (Decision 3). Definitions of these functions are not provided and in many areas they are debated among and within advanced economies – so some uncertainty exists. In the list that follows, the interpretations are those we developed in consultation with policy advisors and officials in Beijing:

- *Maintain macroeconomic stability* – Define, implement, and enforce policy that maximizes long-term welfare by reducing economic volatility and vulnerability to economic shocks so as to create healthy conditions for growth.
- *Strengthen and improve public services* – Deliver public goods that the private sector will not provide efficiently to optimize general welfare, including public safety and defense, a predictable and accountable legal and court system, basic health care, education, sanitation, water, and other utilities.
- *Safeguard fair competition* – Define, implement, and enforce pro-competitive regulations, and maintain a competition/anti-monopoly policy regime.
- *Strengthen oversight of the market* – Define, implement, and enforce regulations to ensure the efficient functioning of markets toward the objective of consumer safety and welfare.
- *Maintain market order* – Maintain balance between markets and stability, especially in terms of tighter enforcement of commercial law.[11]
- *Promote sustainable development* – Define, implement, and enforce regulations to ensure sustainable development of the environment in the context of economic growth.
- *Promote common prosperity* – Define, implement, and enforce regulations to ensure sufficient distributional equity in terms of national income and other indicators of prosperity such as access to affordable health care, education, and social safety nets.
- *Intervene in situations where market failure occurs* – Maintain government involvement in the allocation of goods and services when competitive markets fall short.

The message of government redeployment echoes throughout the *Decisions*. Other manifestations include decrees that enterprises, not government, must determine investment flows (Decision 7), and that the market, not government, is decisive in setting prices (Decision 10). Decision 14 goes into depth on the objectives of macroeconomic control, emphasizing that fiscal and monetary policies should be the principal tools of macroeconomic management rather than GDP targets. Other novel themes running through the reform program are unification of rules and legal equality (between state and non-state firms, and ideally for foreign invested enterprises as well, though as discussed later the text on this is not as clear as it could be); annulment of regulations that serve little purpose other than to shield some firms from competition or otherwise harm efficiency without serving a necessary public good, such

A Note on Political and Judicial Reforms

While this study focuses on the economic policy overhaul embodied in the Third Plenum program, reforms concerned with politics and judicial affairs are underway as well. Many items in the *Decisions* deal with noneconomic governance. Section X, on "Strengthening Check and Oversight System of Exercise of Power," acknowledges that unchecked power is a danger: "The fundamental solution to keeping power under control is to put power, government operations and personnel management under institutional checks to ensure that the people oversee the exercise of power and that power is exercised in a transparent manner." This shows that President Xi understands that political systems must change to facilitate economic reform, though clearly that reform is meant to strengthen the Party, not to limit it.[12] Judicial reform was one of the first two areas to receive top-level Party clearance for national implementation plans to be developed, in that case by the Supreme People's Court.[13] These are necessary complements to the process of re-regulation – without political and court authorities properly incentivized and tasked with defending the authority of regulators, even the most well-defined regulatory reforms would be feeble in the face of vested interests.

as income distribution or environmental protection; and transparency in regulatory policy and enforcement in the service of these objectives.

These messages amount to nothing less than a regulatory call to arms. The Third Plenum seeks to convert China from a development-fostering state into a regulatory one, with regulators and regulatory institutions powerful enough – and well defined enough – to discipline the moneyed special interests that are a natural and even desirable result of economic modernization. As a poor nation at the outset of reform in 1978, China delivered fast growth for decades without the benefit of efficient regulation. Output and income were so depressed at the outset that wealth-creating competition and efficiency could be achieved with little more than a handshake and permission to do business. China's success and advancement over those years is the reason that regulatory policy is now essential to sustaining growth. The sheer quantity of economic output alone is no longer sufficient to bolster national income: quality is also required in terms of product safety, environmental impacts, labor conditions, innovative value, and legal predictability (as it relates to business and personal decision making).

Whereas rules and regulations are ancient bedrocks of society, a systematic approach to regulatory policy is more modern, even in advanced market economies. It should be expected that heated debate will accompany this reform process in China, which gives us all the more reason to be disciplined in thinking about China's objectives for regulatory reform. Regulatory policy can be considered one of three primary economic powers of a modern state, alongside monetary authority and fiscal power to tax and spend. The characteristics of regulatory modernity start with a clear definition of the public interests to be maximized –

generally, economic welfare. Effective regulation requires political leadership that will pursue and protect these public interests, legal and institutional infrastructures to enforce regulations, and a system of assessing and revising rules in a transparent manner over time so they do not ossify and become counterproductive. The OECD describes the ultimate objective of regulatory policy as follows:

> Design economic regulations in all sectors to stimulate competition and efficiency, and eliminate them except where clear evidence demonstrates that they are the best way to serve broad public interests. Eliminate unnecessary regulatory barriers to trade and investment through continued liberalization and enhance the consideration and better integration of market openness throughout the regulatory process, thus strengthening economic efficiency and competitiveness.[14]

The mission statement in Decision 3 is generally consistent with advanced-economy concepts of state and market, but the true test of China's reform agenda will come during its implementation. The Third Plenum's plans for changes in nine policy areas, and the evidence of such regulation to date, is the focus of the rest of this chapter.

Chinese and advanced-economy models of economic governance have more in common than those who perceive a "Beijing Consensus" development alternative have suggested. The ideal policy mix is, of course, debated endlessly *among* advanced economies, so no single advanced-economy blueprint can be compared with China's proposals. Some Chinese plans, such as market-determined interest and exchange rates, fit neatly into the OECD playbook. Others – including government-led innovation, centrally financed urbanization, and an ongoing role for strategic industrial policies such as green energy – sit comfortably with some Westerners but rankle libertarians and conservatives. Still other aspects of China's plans – such as continued state shareholding in large enterprises, an Internet kept "clean and chipper" through suppression of nonconformist voices, and the Communist Party's rule without a democratic mandate – find almost no support in advanced economies. But the *Decisions* indicates that China's regulatory agenda is converging with that of the advanced economies, rather than hardening into an incompatible breed of state capitalism, as some have predicted.[15] Preeminent scholar of the Chinese economy Nicholas R. Lardy comes to a similar conclusion in *Markets Over Mao*, a major treatment of the question of state capitalism in China released in September 2014.[16] While acknowledging the pervasive and unique role of government activism in the economy, the study argues that these legacies of the past model continue to recede in importance relative to market forces, private sector firms, and international norms.

The Third Plenum seeks to convert China from a development-fostering state into a regulatory one.

Beijing is pursuing most of the government mission set out in Decision 3, although these are long-term goals and even authorities in advanced economies depart from their standards at times. Central leaders, working through the new Deepening Reform Small Leading Group, the State Council, and the People's Bank, are intensely focused on macroeconomic stability.

Efforts are ongoing to stress-test the banking system and squeeze high-risk liquidity out of the capital markets. Short-term crosscurrents are evident, such as additional encouragement for property lending, but macro-stability is a core goal. Leaders are devoting a new degree of attention to improving public services as well, in a race to arrest the deterioration of quality of life driven by shortfalls in education, health care, environmental quality, and public safety.

Competition policy is nascent, and almost any action to promote competition should be constructive. We explore how some movements on competition policy are discouraging while other steps are encouraging. Maintenance of *market order* is the least clear-cut objective laid out for government, because the term is used in different ways by different agencies. In April 2014, Premier Li chaired a State Council Executive Meeting that set out new goals for competition policy that mixed "market order" with "fair competition" and "oversight of markets" in a confusing way.[17] Meanwhile, in February 2014 the Ministry of Commerce announced its priorities for maintaining market order, applying a different and narrower definition to the term.[18] The dissonance here reflects internal debate and disagreement about the proper role of government, and we see this as an unavoidable interim reality. The old conception of maintaining market order is not compatible with the role for markets spelled out in the *Decisions*, and a sea change on this front is anticipated.

Sustainable development and common prosperity, two more elements of the government's new mission statement, show indications of new urgency. The National People's Congress amended the Environmental Protection Law in April 2014, and meaningful improvements will come into force on January 1, 2015. Beijing has shut down highly polluting plants in neighboring Hebei province and is starting to unleash activists to go after polluters nationwide. As for common prosperity, campaigns against public sector extravagance and corruption have been intense, but the most meaningful steps – on matters such as taxes, land and labor issues, pension and social benefits reform, and affordable housing – are still forthcoming.

Finally, the *Decisions* mandates government to intervene where markets fail. This should translate into governmental retreat from industries that are adequately managed by market forces in advanced economies, accompanied by a governmental *advance* into public services that have been neglected, including environmental remediation, health care, and education. On May 28, 2014, President Xi led a Politburo workshop on the roles of government and market.[19] He talked about the invisible hand of the market in resource allocation and the visible hand of government in macroeconomic stability, urging the bureaucracy to step back from marketplace micro-intervention: this has been Xi's consistent message since 2013. Since the Third Plenum, Premier Li has similarly emphasized the need for government to withdraw from commerce and concentrate on providing public services.

The true test of their intentions will be whether the government publishes clear and limited negative lists specifying which zones of the marketplace Beijing sees as suffering from market failure or exhibiting other reasons for the government to determine supply and demand. Time will tell. As economist John Williamson wrote 20 years ago, "The most difficult part of a reform program is not introducing the reforms but sustaining them until they have a chance to bear fruit and thus generate political support from the potential beneficiaries."[20]

CENTER-LOCAL FISCAL REFORM

In the run-up to the Third Plenum, National School of Development Dean Yao Yang penned a compelling essay explaining how local political practices led to perverse economic outcomes and overbuilding in the post-1978 period. He attributed this phenomenon to troubled center-local fiscal relations and hoped that the Third Plenum would try to resolve this:

> To change local government behavior the root of the problem must be addressed, which involves asking why the role of the state has been expanding in China. This has to do with the lack of checks and balances in the country's governance structure, most significantly the lack of accountability on the part of the officials toward their constituencies. In such a system, officials are free to pursue the one goal that affects their careers the most, that being short-term economic growth. Real change therefore demands bold political reform to strengthen democratic participation in policy formation.[21]

The regulation of center-local relations lies at the heart of China's fiscal flows, tax policy debates, and resource allocation concerns. Dividing responsibilities and financial resources between the central government and the local authorities has been an ongoing challenge for China since reform began in 1978 – as it has been since ancient times – but the problems associated with it have grown acute in recent years. Officials have resorted to requisitioning and reselling land and setting up shell companies to take on debts that local governments cannot to finance GDP-boosting projects and other expenditure responsibilities. As the initial solvency of these local finance vehicles has turned to an inability to service debt, bailouts and other costly stopgap measures have been increasingly needed.

To President Xi and his economic advisors, solving the problems that stem from an unsustainable center-local fiscal balance is a paramount concern. Center-local relations received considerable concrete attention in the *Decisions*, and – as discussed later – was one of the first two priorities for which the Politburo handed down a national plan to the government bureaucracy.[22]

In his essay, Dr. Yao anticipated that adjusting revenue shares and expenditure obligations between the central and local governments would be the necessary solution. The *Decisions* indeed called for reforms along this line, as well as other crucial changes such as de-emphasizing local GDP targets in evaluating the performance of local officials, more open and transparent center-local budgeting, and an altered tax system. The government has taken some steps to implement these changes and specified tasks that it would take to fulfill some of the general pledges it made in this area. For observers, the serious need for reform of center-local relations on fiscal and tax matters means that this topic will be one of the most revealing about Beijing's true desire to modernize its economy.

Third Plenum

The *Decisions* addresses government organization and the distribution of power and responsibility between central and local authorities. They establish new top-level authorities to orchestrate reform, including a new national security commission called the Council of State Security (Decision 50) and – most relevant to economic reform – a new Leading Small Group for Comprehensively Deepening Reform (58). This leading group is tasked to oversee institutional restructuring to transform government functions (16). This requires reducing government's administrative role in the economy, breaking up administrative monopolies such as state limits on who can import crude oil (7), and many other changes. With regard to economic reform, perhaps the most important plans for organizational changes concern center-local fiscal relations and related tax system issues. The present division of responsibility has led to an increasing misallocation of resources and resistance to reform in recent years.

The *Decisions* breaks the seal on reforming center-local dysfunction. There are instructions to "improve the structure of the administrative setup and geographic administrative divisions" (16) and "formulate national and local balance sheets" to promote rationalization of governance at different levels (14). The core of the problem is addressed in Section V of the document, "Deepening the Reform of the Fiscal and Taxation Systems." The section has three decisions: "Improving the budget management system" (17), "Improving the taxation system" (18), and "Establishing a system whereby authority of office matches responsibility of expenditure" (19). The preamble to this section sets the tone:

> Finance is the foundation and an important pillar of state governance. Good fiscal and taxation systems are the institutional guarantee for optimizing resources allocation, maintaining market unity, promoting social equity, and realizing enduring peace and stability. We must improve legislation, clarify powers and responsibilities, reform the taxation system, stabilize tax burdens, have transparent budgets, increase efficiency, and establish a modern fiscal system to mobilize the initiative of both the central and local governments.

Finance is the key to center-local relations, and Decision 17 starts with fiscal management. In the past, achievement of local GDP targets was the primary test for local promotion, while Beijing required localities to self-finance expenditure obligations beyond central tax transfer payments.[23] This incentivized many local leaders to sell whatever assets they could seize. Converting farmland to commercial and industrial use is a common strategy: it creates tax revenues from business use of the land (farmers pay no tax today) and brings business to local materials and construction companies. Without *locally* domiciled industrial enterprises, those sales would be registered elsewhere and appear on some other local official's promotion scorecard. It is no surprise then that local officials shield hometown enterprises, no matter how subscale and inefficient, from consolidation.

Decision 17 pledges to unwind this financing codependency by making center-local budgeting more standardized, open, and transparent to the public. To date, budget management in China has focused on short-term financing deficits, which can be hidden by selling assets such as land without regard for their true value. The Third Plenum calls for a shift in focus to expenditure size and to how well budgeters address local needs.[24] The decision also pledges "cross-year budget balance" practices that analyze the performance of programs over their life cycles, not just during the first years when a local official can be held responsible and then leave with a promotion. Another important statement is this: "Local fiscal gaps caused by the central authority's policy of increased spending [handing down expenditure mandates] will be filled by general transfer payments in principle." While this is a step toward center-local fiscal reform, it does not elaborate principles for determining which responsibilities should be central, which should be local, and which should be shared.

Decision 18 turns to the source side of the ledger: the taxation system. It specifies five changes regarding the collection and management of state and local taxes: a shift toward direct taxation (income and property taxes) rather than indirect (consumption taxes, tariffs); simplification of value-added and other taxes including individual taxation; imposition of demand-managing resource taxes on high-energy and polluting goods (these are indirect taxes – an exception to the first point); acceleration of national property tax legislation (critical but controversial because it will hurt developers and banks); and elimination of tax preferences across industries and regions to facilitate fair competition and remove tax inequalities (with exceptions to be more transparent).

Decision 19 concerns matching central and subcentral expenditure and policy responsibilities. It underscores central responsibility for national defense and foreign affairs, domestic security, and "unified national market rules and management." It identifies "trans-regional projects" for which central and local governments should share costs after they "gradually clarify authority of office." The third line explains that "regional public services are the responsibilities of local governments." This does not make clear who should bear the burden if central authorities decide, as they did in the face of the financial crisis in 2007, to instruct national state banks to make tens of trillions of renminbi in dubious loans to hastily established, local government-linked firms, which later required bailing out. We italicize the ambiguities in the remainder of this decision:

> The central and local governments will shoulder their respective expenditure responsibilities according to the division of the authority of office. The central government *can* delegate *some* expenditure responsibilities to local governments through transfer payments. In terms of trans-regional public services with *great* impacts on other regions, the central government will *share* some of the expenditure responsibilities of local governments through transfer payments. We will maintain the *overall* stability of the current financial pattern of the central and local governments, and *further rationalize* the division of revenues between them through tax reform and *taking into consideration* the tax categories.

In light of China's financial challenges resulting from inadequate budget discipline between Beijing and the provinces in recent years, the outcome on the *Reform of Fiscal and Taxation Systems* was less than heartwarming to Chinese reformers. However, as noted later, work in this area is moving faster than in some others, so the nebulous *Decisions* should be understood as a starting point rather than a limiting factor.

Implementation and Analysis

Even though the *Decisions* did not provide a center-local reform implementation plan, Beijing started to change the rules of the game immediately after their release, by making examples out of local officials who proved unresponsive to central instructions. On November 27, 2013, the deputy governor of Hubei Province was investigated for questionable growth-seeking investment decisions while serving as mayor of Yichang, where GDP more than doubled during his four-year tenure.[25] In December 2013, the Communist Party of China Central Committee released an *Announcement on Improving Local Party and Government Leadership Achievement Evaluation Work* that drove home the expectation that local officials would be judged against a broader slate of performance criteria than just GDP growth.[26] In March 2014, Standing Committee member Wang Qishan, tasked with the role of secretary of the Central Commission for Discipline Inspection, dressed down the party secretary of Jilin Province for being formalistic in his response to Wang's speech: a serious charge connoting canned, pre-planned thinking rather than consideration of the facts at hand.[27]

Initial changes in the mechanics of revenues and expenditure sharing were evident after the Third Plenum as well. In late December 2013, the National Development and Reform Commission (NDRC) announced plans for a pilot program permitting provinces to issue bonds to refinance some of the 10,000 or more local companies that Beijing had encouraged as vehicles for government financing in response to the financial crisis.[28] On May 20, 2014, the State Council endorsed NDRC's plans and gave 10 provinces clearance to issue such bonds directly, within quotas and with central review, instead of counting on bank lending to finance their local projects.[29]

More demonstrative steps were taken in June 2014, when an "Overall Plan for Deepening Fiscal and Tax Reform" was reviewed by the Deepening Reform Small Leading Group and then adopted by the full Politburo.[30] This plan specified reform priorities and tasks and, to the surprise of some, set a clear deadline of 2016 for "basically" finishing major tasks (the use of the qualifier "basically" leaves some room for Beijing to excuse unfinished business).[31] The interim deadline is a notable feature. In a lengthy interview, Finance Minister Lou Jiwei explained the blueprint by drawing a connection between 1994 reforms that addressed the state-enterprise and center-local revenue relationships and these current reforms, which redefine the roles and functions of central and local governments, enhance overall state governance, and seek to improve bureaucratic efficiency.[32] Minister Lou clarified that the urgent tasks for fiscal and tax reforms are (1) improving budget management, (2) improving the taxation system, and (3) rationalizing the center-local fiscal system to align administrative responsibilities with financial resources – a frequently echoed goal. These deserve elaboration because the fiscal system is the backbone of the Chinese economy.

First, improving budget management means transparent budgeting, better fiscal decisions, and better enforcement of fiscal discipline. Today, subcentral budgets are not developed in a transparent manner and standards vary, limiting the Ministry of Finance's ability to supervise. The soft budget constraints for local governments and state-owned companies – meaning they expect to be bailed out if poor decision making renders them insolvent or illiquid – render them less sensitive to funding costs than competitive entities, which crowds out borrowers essential to China's growth. Minister Lou pledged to make the process clearer and to clean up the messy "special transfer payment" program that has generated tremendous economic rents. He said budget supervisors' focus would shift toward expenditure items and away from the scale of deficits, and he announced the creation of a multi-year balance framework to better guide the year-to-year budgeting process. This move is designed to alter the incentives for local cadres when making fiscal decisions, so they begin to think beyond the short term and invest efficiently. Finally, Minister Lou said the government plans to regulate and reduce the number of fiscal items for which local expenditures are calculated in proportion to total fiscal balance growth or GDP growth. Such mechanically budgeted items, which now account for nearly half of total fiscal expenditures, have tied up funds that could be spent on other needs. Reducing the number of these items would mark a major shift of responsibility to local governments.

The real bellwether for China's direction is internal tax and center-local fiscal reform.

Second, enhancing the tax regime means pushing ahead with a shift from a business income tax to a value-added tax (with a previously stated completion date of 2015) to expand tax resources for local governments and eliminate policies that distort the market. New property and resource taxes, along with a larger share of consumption taxes, are intended to plug local government revenue gaps. On the legislative front, the new regime bans regional fiscal preferences for enterprises without State Council approval and also bans any law or stipulation of tax benefits that is more preferential than national laws permit. Minister Lou made clear that the goal of these reforms is to lessen local governments' dependence on revenues from questionable land deals and inefficient investments.

Third, rationalizing center-local fiscal dynamics means clarifying the roles and administrative powers of central and local governments, and aligning resources to match responsibilities. Currently, Beijing claims almost half of national fiscal revenues while it lays out only a third of expenditures. To address this imbalance, Minister Lou indicated that spending responsibility for Beijing would be strengthened. Changes will include concentrating spending on nationwide public services and market regulations by Beijing and reducing expenditure mandates for local government. On August 25, 2014, this thrust of reform received additional support when the National People's Congress reviewed major changes to the national budget law – a step to formal implementation and legitimizing of the process.[33]

Observers of China's economic policy reforms pay huge attention to minute-to-minute shifts in exchange rate values and foreign investment restrictions. But the real bellwether for China's direction is internal tax and center-local fiscal reform. This is one of the most valid tests of the sincerity of reform, and the Politburo's decision to push ahead with fiscal and tax reforms is a powerful indication.

Counter-indications and Tracking

No universal template exists for center-local relations and fiscal and tax policy in an advanced economy. Profound differences exist even among OECD members, and these have distant political origins. Therefore, tracking Chinese reforms and counter-indications in this area is not a simple matter of looking for alignment with advanced-economy models, but rather of gauging changes in fiscal and social health and sustainability. The major counter-indication to watch for in this area is not that reform is absent – for clearly, it is occurring – but that it is insufficient to address the mounting local government debt and developmental risks that are threatening macroeconomic stability. A stress test of local governments' ability to remain solvent – to 2016 at minimum, as Minister Lou's plan suggests – is necessary. Various departments in Beijing have conducted assessments, but the results are not fully public. In its 2014 Article IV report, the International Monetary Fund (IMF) addressed local financing concerns in some detail, calling the system nontransparent and difficult to assess.[34]

The effects of center-local fiscal reform can be tracked with a number of observable metrics. Estimates of local debt sustainability can be assembled (to a degree) using commercial databases, and official audits and surveys are periodically available to supplement regular data. However, these are only measures of whether problems are getting worse. More significant measures are the level of central transfers as a share of centrally mandated expenditures and the central share of all local expenditures relative to local revenue. These ratios help clarify whether the expenditure balance among different levels of government is better aligned with revenue sources, and hence whether unsound local financing practices can be wound down. Additional metrics to watch are the growth rates of sustainable new local sources of financing as a share of local expenditure obligations: direct financing (bonds) and local property taxes that officials say will be implemented in the coming "few" years to cover local expenditures.

COMPETITION POLICY REFORM

Competition policy is a relatively new function of government for China: it is not a policy function developing countries typically invest in heavily. To a great extent, China's post-1978 economic growth model was intentionally biased *against* the objectives of conventional competition policy, in that it deliberately sought to benefit enterprises, and thereby to accelerate capital formation, at the expense of consumers. Competition policy was introduced in China gradually, beginning in 1980 when the State Council issued its first formal competition policy instrument, which validated the role of private markets and open competition (but left state monopolies and price controls intact). The removal of price controls began in 1982. The most significant shift from a planned economy to a "socialist market economy" took place in 1992, when the "basic" role for the market and protection for private sector enterprises were introduced into Party doctrine.[35]

In 2007, China finally passed its Anti-Monopoly Law (AML), the most important among several competition laws in force today, which went into effect on August 1, 2008, after 14 years of preparation. Assessing where China stands today is challenging: global best practice continues to evolve, while China's competition policy regime remains relatively immature and not entirely transparent. Competition policy and antitrust practitioners in the United States generally credit China with having the necessary pieces in place, but they also recognize that other Chinese policies conflict with competition goals. Most obviously, the competition regulators have largely eschewed applying their rules to the state-owned sector and industrial policy targets, leaving a huge swath of the economy largely exempt from normal market disciplines.

From a practical standpoint, regulatory enforcement in China is inconsistent. Contestable markets and hence consumer welfare-maximizing conditions are found in many industries; in other segments, especially capital-intensive industries, favored players dominate. While most Chinese industries have become less concentrated in recent years, and barriers to market entry have generally been lowered, distortions to competition are omnipresent and often acute for nonlocal firms, whether from a different province or a different country. The potential, if not the use, of competition policy for interventionist purposes has risen in recent years. Concerns exist that as regulators such as the NDRC lose project review and approval powers, they will grasp for correspondingly more important competition policy responsibilities, changing the quality of policy implementation in unhelpful ways.

The *Decisions* marked a step toward making competition policy central to how the Chinese economy functions. The document lays out the general objective of a market-oriented economy based on fair competition, unequivocally describes competition and market forces as deserving the "decisive" role in China's economy, and identifies reforms that must be made to activate an effective competition policy regime. At the same time, the *Decisions* maintains old imperatives that conflict with a pro-competitive mission. It remains to be seen whether Beijing will prove doubters wrong by making transparent due process a feature of its competition regulation approach, and by proving that it can prevent anticompetitive behavior rather than just punishing such behavior after it has occurred.

Third Plenum

Although competition policy is arcane, received little attention in reactions to the Third Plenum, and invites skepticism about Beijing's intentions, the *Decisions* addresses this regulatory subject extensively. The framework President Xi lays out in his *Explanatory Notes* starts with this bold declaration:

> The Political Bureau of the Party Central Committee believes that, facing the new situation with new tasks and new requirements, China must take comprehensive measures to deepen its reform. To do this, the key lies in further *developing an environment for fair competition* [our emphasis], further invigorating economic and social growth, further enhancing the efficiency of the government, further exploring social equality and justice, further promoting social harmony and stability, and further improving the Party's leadership and governance.

The *Decisions* describes many reforms – such as those for state-owned enterprises (SOEs) and border barriers – that are necessary for a fully functioning competition policy regime.

Competition policy, in its own right, appears in the *Decisions* in a number of places, starting with Decision 3 on economic system reform as the focus of China's overall program. The decision "promotes … market competition, so as to maximize benefits and optimize efficiency" and defines "safeguarding fair competition" as one of the eight primary functions of China's government. Xi's explanations also refer back to the new definition for government's mission, which includes ensuring fair competition.

An unlevel playing field for intellectual property severely distorts competition in China, and a long-standing pattern of tolerance for the subsidizing effect of illicit transfers of intellectual property continues to harm many innovative firms, Chinese and foreign. Decision 5 pledges to confront that problem and protect intellectual property rights (IPR) so that all firms "participate in market competition on an open, fair and just footing" and receive "equal protection and oversight according to the law." It is instructive that the point of this decision is not IPR for its own sake, but the protection of IPR so that firms do not shy away from market competition. That emphasis reflects a sophisticated understanding of the risks. At the same time, many competition policy cases since the Third Plenum have treated innovators, especially foreign firms, as though their core technologies were unfair sources of market dominance rather than hard-earned comparative advantages. Clearly, arriving at a common understanding of what is fair and unfair competition will be difficult.

The *Decisions* describes many reforms that are necessary for a fully functioning competition policy regime.

Pro-competitive policy overlaps significantly with innovation-related reforms. Our discussion of "Innovation Policy Reform" later in this chapter covers these reforms in greater detail. They include pledges to "strengthen the application and protection of IPR, improve the technological innovation incentive mechanism, and explore ways to set up IPR courts" (Decision 13). If implemented, these would do much to reduce the anticompetitive barriers erected over 30 years of soft IPR protection, during which Chinese market incumbents have disregarded patent, copyright, and trademark protections; stolen trade secrets; and mass-produced counterfeit goods. However, it does not appear to us that there are corresponding "technological innovation incentive mechanisms" in most advanced economies, beyond legally protected and predictable intellectual property rights, so the meaning of this term must be clarified.

The language "participation in competition on an equal footing" is applied to SOEs in Decision 7 on "Promoting a modern corporate system for SOEs," along with other injunctions to rationalize state ownership of firms competing in the marketplace (which we explore in the "State-owned Enterprise Reform" section of this chapter). This is an important step toward competition policy reform. The question of whether China's competition policy framework applies fully to the SOEs – representing approximately 40% of all industrial assets[36] – is still debated by legal experts, but differential treatment in terms of anti-monopoly enforcement has undermined the goal of competition: selecting the superior and eliminating the inferior (to quote Xi's *Explanatory Notes*).

As discussed in the "Foreign Trade and Investment Reform" section of this chapter, Section III of the *Decisions* turns to the core work of building a modern market system for China. The preamble to this section reads as follows:

> Establishing a uniformly open, orderly, and competitive market system is the basis for the market to play a decisive role in the allocation of resources. We must put in place a modern market system in which enterprises enjoy independent management and *fair competition*, consumers have free choice and make autonomous consumption decisions, products and factors of production flow.[37]

Following that ambitious start, details follow in Decision 9 ("annul all sorts of regulations and methods that impede the national unified market and fair competition, strictly ban and punish all unlawful acts extending preferential policies, combat regional protection, and oppose monopoly and unfair competition"[38]); Decision 10 ("Any price that can be determined by the market must be left to the market"[39]); Decision 11 (level the playing field in competition for rural land development, to "ensure that it can enter the market with the same rights and at the same prices as state-owned land"); and Decision 13 (applying competition policy disciplines to higher-technology sectors, "give free rein to the market's guiding role in technological research and development orientation, choice of paths, pricing of factors, and allocation of all innovation factors").

Section IV of the *Decisions* is critical for ramping up competition policy regulation in China, for it deals with redefining the mission statement of government. Two commitments stand out. First is the commitment to withdraw any government intervention that is not justified by transparent objectives with a social purpose that cannot be served by market forces. Second is the commitment to "introduce a competition mechanism" into government procurement when the state is *not* withdrawn from the marketplace. Both of these points are made in Decision 15 on correctly performing government functions. Reform to one of government's most powerful functions – taxation – is explained in Decision 18 in terms of "promoting equality in tax burdens and fair competition."

The *Decisions* turns to the external sector in Section VII on the "New Open Economic System" – the commitments on opening to the outside – starting with Decision 24. The preamble calls for further economic opening to "speed up the building of new competitive advantage in participating in and leading international economic cooperation." In contrast to the extent of the discussion about the domestic economy, the text is more limited in confirming that foreign firms share in the need for equal competitive footing in the Chinese marketplace. One can read the opening line of Decision 24 – "We will have the same laws and regulations on Chinese and foreign investment, and keep foreign investment policies stable, transparent and predictable" – as fully resolving this concern. However, the bulk of Section VII focuses on special zones and "qualified areas" (areas designated for new treatment but not considered "zones" per se) for testing national treatment parity, which raises the question of what will occur elsewhere. Special zones have been valuable in the past for moving China forward on the national treatment of foreign and private Chinese firms, but with concerns over the application of competition policy enforcement spread widely over China today, the prospect of a zone approach is not comforting to foreign firms.

Implementation and Analysis

Chinese competition policy has evolved gradually in recent years, driven by internal interests in regime formation more than by external pressure. The *Decisions* definitively lays out the general objective of a market-oriented economy based on fair competition but does not specify details other than negative steps such as cancelling government interference in the marketplace. Positive guidance for building institutions is less clear than in other areas including finance and cross-border investment. Here, we review three categories of action to reform competition policy since the Third Plenum: institutional, administrative, and bureaucratic reforms; new directions suggested by specific competition policy cases; and more inclusive coverage of SOEs.

Institutional, Administrative, and Bureaucratic Reforms

A number of institutional reforms to the competition regime are required to fulfill Beijing's objectives. These include clarification of responsibilities among multiple agencies, empowerment of agencies to enforce competition objectives nationwide, consistency with other laws and reforms (including those that are legacies of a nonmarket economy), and clear elucidation of the goals of fair competition and keeping markets "orderly" so that private parties can contest their treatment. In light of the heavy-handed and extralegal pressure applied to many private firms, especially foreign ones, over the course of 2014, a serious overarching priority has been to ensure that institutionalized due process for firms is provided, including clarification of charges, effective opportunity to present a defense, the requirement for published decisions with rationales, and appeal institutions outside the immediate enforcement agency.

The State Council Anti-Monopoly Committee oversees competition regulation in China, with Vice Premier Wang Yang holding this portfolio.[40] The Ministry of Commerce (MOFCOM), the NDRC, and the State Administration of Industry and Commerce (SAIC) share enforcement authority for different aspects of competition policy, and firms have watched closely to see how the division of responsibility among these agencies might evolve. The NDRC is losing traditional approval powers to the introduction of market mechanisms.[41] In response, some NDRC officials have requested a larger role on competition.[42] In December 2013, the agencies involved in competition adopted a work program to reduce administrative monopolies and other hurdles to commerce in response to the Third Plenum.[43] Comments by the NDRC Price Supervision and Anti-Monopoly Department head Xu Kunlin in March 2014 suggested that the NDRC would take a more active role in competition policy enforcement.[44] This has turned out to be the case. In the area of pricing regulation, in January 2014 officials published pricing policy guidance including an amended regulation on handling price-related complaints filed with the NDRC.[45] The NDRC has also been more aggressive in using its price abuse enforcement authority.

For merger reviews, in February 2014 MOFCOM issued interim implementing regulations[46] to classify "simple" merger and acquisition (M&A) cases, a necessary first step toward a "fast track" merger review system. In April 2014, it followed up with the launch of a trial program for this system. The Ministry sees this program as a step toward more comprehensive review of mergers with lower regulatory burdens. In practice, users remain unsure because the program does not have a fixed time frame, requires public disclosure of proprietary business strategies, and may require resubmission under the standard merger review track at the whim of regulators.[47]

Anticompetitive practices received attention in February 2014, when SAIC started a process for revising the Anti-Unfair Competition Law (AUCL). Revisions to the 2003 law have been stalled since 2009. This law prohibits a variety of fraudulent practices injurious to consumers, as well as horizontal anticompetitive practices such as predatory pricing and bid rigging. The draft revisions would add prohibited practices including "abuse of an advantageous position" and bring the AUCL into concordance with China's 2008 Anti-Monopoly Law.[48] In its 2014 work report, SAIC says it will focus on anticompetitive conduct in public sector industries including telecom, transport, and certain utilities. But many in the business community – especially those in foreign businesses – are concerned that the new authority sought by the AUCL could give it too much discretion to interfere in the ways firms compete.[49]

Competition Policy Cases

Competition policy cases have received mounting attention since the Third Plenum and offer the most concrete evidence of how regulation is being implemented in this area. Stepped-up enforcement action by China's competition authorities is a sign of modernization and attention to a necessary government function. However, the manner in which these cases are being pursued has raised serious concerns among competition advocates and especially among foreign businesses. First, there is the appearance of a disproportionate focus on the practices of foreign firms and lighter treatment of Chinese firms. For example, authorities have accused Audi and other foreign carmakers of monopolistic practices while declining to charge their Chinese joint venture partners of the same infractions (First Auto Works in the case of Audi).[50] Second, the pursuit of these cases has lacked due process and procedure: firms have been threatened with uncontestable punishments or the doubling or tripling of fines if they resist pleading guilty and have been told not to involve lawyers in meetings. Third, the remedies imposed on firms in recent cases have been arbitrary and seemingly designed to benefit Chinese competitors rather than the quality of competition.

A predominant theme has been the tension between protecting innovation and ensuring that the owners of intellectual property rights do not use their patents in an abusive manner. This is an old tension in competition policy, both in China and abroad. NDRC investigations of patent licensing practices by foreign technology firms have aimed at pressuring commercial businesses to lower prices for their intellectual property in China, but they have been pursued in ways that raised questions about regulators' objectivity and fairness. At the high-tech frontier, the analysis of legitimate and abusive use of IPR is a quickly evolving matter; in Europe and the United States, controversial cases also involve high-tech giants. At this early moment for China's new competition policy activism, it will be most important for China to establish a foundation of due process and good governance so that all firms – private, foreign, and otherwise – will maximize their contribution to China's growth potential, along with the dividends to be enjoyed from a healthy innovation environment.

On the merger approvals side, MOFCOM's sign-off in May 2014 for Microsoft/Nokia and Merck/AZ Electronic Materials came with conditions calling out their potential to abuse their intellectual property rights to the detriment of customers, and specifying remedies that have – as with the abuse cases noted earlier – seemed concerned with goals other than promoting competition. In February 2014, MOFCOM approved Thermo Fisher Scientific's acquisition of Life Technologies – both U.S.-based firms – with modest conditions requiring price discounts to Chinese customers for some of the resulting firm's high-tech medical products. Legal observers noted that MOFCOM applied more sophisticated economic tests to come to its conclusion and finished the cases more quickly than previously expected, despite those additional quantitative steps. However, they also noted that this case reflected China's new fixation on using competition policy to challenge the pricing power of foreign technology firms with behavioral remedies in idiosyncratic ways not typical among other competition regulators worldwide.[51] On July 17, MOFCOM blocked a proposed shipping merger between MSC (Mediterranean Shipping Company), Maersk, and CMA CGM, the second block since the AML was implemented in 2008.

State-owned Enterprise Coverage

To be meaningful, implementation of enhanced competition policy regulation in China must include areas of the market currently dominated by state firms. Competition policy regulators have generally shied away from challenging SOEs.[52] Of 792 MOFCOM merger reviews under the AML since 2008, a mere 7 looked at central SOEs, 155 concerned subcentral SOEs, and 340 involved foreign firms. It is difficult to see how this proportional split reflects the actual potential for market dominance in China today.

Some steps on SOE reform are underway, including dilution of state shareholding in favor of private investment, investigations into SOE manager behavior, and concrete new schedules for higher dividend payments. The *Decisions* describes four categories in which the state will have a dominant role in enterprises deemed vital to national security, public security, or social welfare, whereas other industries will presumably be market based.[53] Shanghai's SOE reform guidelines, introduced in December 2013 after the Third Plenum, indicate that government will invest 80% of state-owned assets in key industries – advanced manufacturing, modern service industry, and infrastructure – and withdraw from others. The plan is that SOEs will live on in many sectors, while gradually withdrawing from contestable markets or those in which private firms can compete on an equal footing. This shift is intimately connected to the competition policy landscape.

Counter-indications and Tracking

China has invigorated its attention to and use of competition policy regulation since the Third Plenum. The question is not whether an upgraded role for competition policy enforcement is appropriate and convergent with advanced economy practice – it is. But the value of competition enforcement to China depends on transparent due process to prevent abuse and an ability to deter bad behavior – rather than an ability to go after every violator or scare off commercial activity altogether – that comes from demonstrating evenhandedness and imposing fair remedies. The early days of the new competition policy era have created some concerns in these areas. Without an international competition policy template, it is important that Beijing take the initiative to ensure that it does not replace old forms of economic intervention with uneven competition policy enforcement.

Marketplace outcomes are important indicators. Herfindahl-Hirschman Indices (HHI) are traditionally used to gauge high rates of concentration and inadequate competition. However, these measures are better suited to disaggregated industry segments than to broad categories. Monopolization concerns in China often exist at the provincial or local level rather than at the national level: local protectionism can be quite pronounced even with many firms throughout the country. And domestic concentration ratios say nothing about whether foreign firms have opportunities to compete.

China has invigorated its attention to and use of competition policy regulation since the Third Plenum.

We suggest gauging the state of competition policy regulation in China with a number of metrics. One number that matters is the share of industries excluded from normal rules by various carve outs. This requires that Beijing clarify which industries are to be placed on a promised "negative list" for special consideration. Until that clarification is made, the implementation of significant competition policy reform is likely to be graded as "limited."

Tallying new business starts (market entry) and bankruptcies (market exit) as a percentage of existing businesses can track changes in contestability within industries. In addition to entries and exits, the pattern of restructuring among existing firms is indicative. The ratio of SOE or domestic-only merger reviews to foreign firm-related merger reviews should provide a powerful indication of whether Beijing is taking an evenhanded approach.

The ultimate goal of increasing market competition and contestability is to improve consumer welfare. Price patterns for final consumers (which can be households and other firms) can be tricky to attribute to competition effects as opposed to other factors such as supply and demand conditions, but this should be possible in the future with better Chinese statistical coverage.

Finally, it may or may not be accurate to believe Beijing has focused competition policy disproportionately on foreign technology firms to force them to discount their intellectual property, but that belief is broadening, especially among foreign firms, investors, and policymakers. Developing an index of cases by type would permit observers to test whether foreign technology firms are being discriminated against. Categorizing cases, some of which may involve more than one aspect of competition policy, may be somewhat more subjective than most of the tracking approaches we consider in this study, but in this case it may be warranted – as much to see if foreign concerns are misguided as for any other reason.

FINANCIAL SYSTEM REFORM

The *Decisions* deals extensively with financial reforms, for good reason. Promoting capital formation and directing it to finance national economic development plans have been imperatives for the Communist Party and the state since the first days of the reform era. Control over financial intermediation helped sustain GDP growth for three decades. Financial reform is critical today because it is equally true that returns on financial intermediation have diminished in recent years – partly because financial challenges burgeon as a nation grows wealthier, and partly because vested interests benefiting from business as usual have stifled needed reforms. Moreover, and perhaps more importantly, the key conditions do not exist for a successful transition to a market-oriented economy, in which the prices discovered by participants accurately reflect value, and law and regulation promote long-term stability and efficient financing for commercial activity.

Rather, key prices in China's financial markets are influenced by political intervention, including bank deposit rates (by definition), lending rates (by access to government-controlled banks such as China Development Bank), and currency exchange rates (by a band for daily fluctuation, specified daily opening rates, and central bank open market operations). Intervention controls access to capital, in terms of preferential access to bank lending, rights to issue equity and debt on public bourses, and rights to take money in and out of China. The market and regulatory infrastructure to resolve financial failures and dispose of insolvent assets according to contracts and the rule of law do not yet function efficiently.

These realities give rise to systemic problems. The growth of some sectors has been over-financed (e.g., steel), while others are severely underdeveloped (e.g., health care). National debt has grown to worrisome – if, for the moment, still resolvable – levels. Arbitrage between the formal financial sector and an under-regulated shadow banking industry creates risk of domestic financial crisis. Investors have developed irrational portfolios reflecting excessive expectations of yield on savings directed to property and hazardous expectations that high-risk trust and wealth management product assets are no more risky than standard deposits. Borrowers in the state sector are not responsive to interest rate signals because they are unlikely to face bankruptcy, yet they have the easiest access to lending.[54] Beijing is aware that the greatest risk of crisis comes precisely at the time of transition to a more market-oriented system, and yet deferring transition only makes the eventual risks greater still. The maximum period that process could be deferred has grown short.

We find three thrusts in the *Decisions* related to financial reforms: fiscal and taxation system reform that is the foundation of government redeployment, discussed in the opening section of this chapter; financial services industry market access, which we address under "Foreign Trade and Investment Reform" later; and the present issue of fundamental financial system reforms. In an IMF working paper from 2008, Abdul Abiad, Enrica Detragiache, and Thierry Tressel review 32 years of financial reforms up to 2005 across 91 economies and identify seven principal objectives for financial deepening: credit controls and reserve requirements, interest rate controls, barriers to market entry, bank regulations and supervision, privatization, financial (capital) account opening, and securities market reform.[55] Achieving each of these objectives will be a tall order. But China has made some progress on each of these dimensions, with significant financial system reforms put into place over the past decade. Renminbi exchange rates were partly liberalized beginning in 2005 and permitted to move within a band against the U.S. dollar (a managed float) in the direction of equilibrium; bank lending rates were partly liberalized; and new forms of nonbank financing were permitted to enter the market. As a result of these reforms, China has less left to be completed, and observers accept that reform is being implemented in this area – though they differ on whether it is fast enough to outpace the risks.

Third Plenum

The *Decisions* describes extensive plans for reforming the financial system. Decision 12 deals with almost a dozen aspects of improving financial markets; Decision 14 addresses government rent-seeking in the investment process; and Decisions 9, 13, 23, and others identify financial system reform as the solution to other problems. Decision 24 includes finance among the industries called out for liberalization to foreign participation – an aspect of financial system rationalization that we deal with in the section of this chapter on "Foreign Trade and Investment Reform." None of these modernizations to the financial system will be possible without the related objectives of redeploying government, reforming the SOE sector (sustaining it has been a categorical imperative for the financial system to date), reregulating the economy, and instituting a consumer-oriented competition policy that prioritizes savers' returns on deposits over borrowers' interest in cheap financing.

Decision 12 on improving China's financial markets is one of the most expansive in the document and commits to the full spectrum of changes consistent with advanced-economy financial systems. Indeed, the following list covers all of the financial-system policy priorities discussed in Abiad et al.'s comprehensive review of financial reforms, except for full privatization of state banking. The decision calls for:

- Private market entry into banking (small and medium)
- Repair of capital-raising markets and conversion to registration-based stock issuance
- Deepening of market-oriented bond markets
- Rationalization of the insurance sector
- Market-determined exchange rates
- Accelerating the move to market-based interest rates
- Marketizing the government debt sector
- Opening the financial account[56] for two-way capital market flows, and realizing renminbi convertibility for those transactions
- Redefining financial system regulatory functions to facilitate marketization
- Introducing deposit insurance
- Proactively facilitating financial institution market exit (avoid "too big to fail")

Other elements of the Third Plenum program partly address banking privatization, including the admonition to reduce state shareholding in SOEs in favor of nonpublic capital. IMF research argues that state-owned banks soften financing and budget constraints on public firms.[57] Decision 12 also calls for reform of the policy-driven financial institutions – which we assume to mean entities including China Development Bank – that exist explicitly to soften those constraints, but the Third Plenum did not make clear what that reform means. Because such policy lenders have contributed to overcapacity in many industries, because soft budget constraints have defeated efficient market exits in competitive sectors such as steel, and because more market-oriented financing has been crowded out, reforms are badly needed. Lardy argues that the concentration ratio of the largest state-owned banks' share of total bank sector assets has come down significantly to just 44%, which suggests that central dominance of the banking sector has diminished, but he nevertheless maintains that the state is not withdrawing from banking.[58]

Decision 14, on macro controls, pledges to "deepen the reform of the investment system, and ensure the dominant role of enterprises in investment." To date, government project approvals have been the golden ticket to bank loans: once the NDRC gave its blessing to a project, banks could lend to it with little fear of blame regardless of financial viability. This has contributed to an over-allocation of capital to sectors controlled by government authorities. Decision 14 commits to eliminating these approval requirements except in cases of national or ecological security, distribution of "major productive forces," strategic resource development, or "major public interests." These are potentially very big exceptions, for the categories are vague and subjective and not properly defined. But Decision 14 specifies that market access for investment should be improved in energy, land and water conservation, the environment, technology, and security. It also calls for accelerating mechanisms to shut down overcapacity. Ending the tradition of putting government in a position to approve deals between savers and borrowers is absolutely essential to modernizing China's financial system. It is also key to freeing government to perform critical functions such as pro-competitive regulation, shareholder protection, and environmental conservation.

Additional measures important to financial system reform are called for elsewhere in the *Decisions*. Decision 9, which deals with the fairness, openness, and transparency of market rules generally, ends with an important line: "We will improve the market exit system in which the good eliminates the bad, and perfect the enterprise bankruptcy system." China's reluctance to permit weak firms to fail perpetuates distortions of firm accounting, ties up assets that could be redeployed, causes good money to be thrown after bad, and perhaps worst of all forecloses growth opportunities to more competitive firms. Market exit and bankruptcy proceedings need to be destigmatized and activated as real consequences to unleash the "creative destruction" that is a major engine of market competition.

Other decisions underscore the importance of financial system reforms, and the principles behind them, to reform in related areas. Decision 13, on the ecosystem for science and technology, contains a pledge to promote venture capital investment mechanisms. This reinforces commitments in Decision 12 and elsewhere to develop "multilayer" capital markets.[59] Decision 10 emphasizes the new commitment to market-determined pricing for resource inputs that remain price controlled, including water, natural gas, oil, and electricity, which in other markets often rely on dependable financial market trading (commodity exchanges) for price discovery. Decision 53 addresses natural resource use rationalization specifically and again emphasizes the need for financial trading exchanges, rooted in a sound financial system, to internalize environmental costs efficiently. Decision 23 points to financial system reform as the key to rationalizing the financing of China's urban development.

Unlike SOE reform, a topic for which the *Decisions* promises actions that are difficult to reconcile with full-blown reform, in the area of financial system reform nothing is particularly counter-indicative or missing, other than the issue of bank privatization that is partly subsiding with the rise of Internet finance and other alternative channels of capital intermediation. Residual limits to financial system reform are found in more advanced economies as well, especially in light of the mid-2000s global financial crisis. The main issue is not the program – which is arguably the most complete of any in the *Decisions* – but the implementation.

Implementation and Analysis

Coming into 2014, financial system reform was more tangible than in many other domains of policy, and financial policy leaders – especially People's Bank of China (PBOC) Governor Zhou Xiaochuan – were relatively clear about priorities for reform, strategies for managing the politics, and the urgency of the effort. This outlook was necessary because as positive as financial reforms have been in recent years, demands for further reform have grown even more quickly. It is unsurprising, therefore, that post-Plenum implementation is more evident in financial reform than in areas that started from a standstill. It is not known exactly how Beijing groups the myriad elements of financial system reform for bureaucratic management, but to simplify the task of reviewing what is happening we bundle them into six groupings.

Post-Plenum implementation is more evident in financial reform than in areas that started from a standstill.

Financial Regulatory Reform

Responsibility for financial regulation has been actively and often publicly contested by various agencies in Beijing for some time. Two important questions remain: whether responsibility for the design and coordination of financial policy among relevant agencies is clear, correct, and comprehensive; and whether the system is sufficiently independent from interference by political and other vested interests that are not singularly interested in good financial governance.

China's financial regulators have defined roles, but the likelihood that reform will create winners and losers necessitates that the hierarchy of responsibility be clarified. In August 2013, shortly before the Third Plenum, the State Council approved the establishment of a PBOC-led inter-ministry financial regulatory coordination mechanism. The mechanism was established to strengthen policy coordination across the board: monetary policies, financial policies, and regulations of individual financial products and product markets. However, the *Decisions*, in diagnosing a plethora of financial system concerns, makes clear that further reorganization is to come. Improving the financial system will require more than implementing a finite if long list of specific reforms such as opening certain capital flow channels: it requires institutional reform of the financial regulators themselves and their relationship to Party power.

China's interaction with the Financial Stability Board (FSB), an international monitoring and advisory body set up by the G20 caucus of major economies and hosted at the Bank for International Settlements, has provided valuable signals about its evolving approach to financial regulation. China came into the post-Plenum era with good nominal answers to all the standard questions about regulatory system sufficiency – all presented in the 2013 FSB report for China.[60] Further bureaucratic shifts in financial infrastructure and policy priorities have occurred since the Third Plenum. The PBOC's regulatory shift has emphasized expanding equity and bond financing (market-driven financing) and reducing the share of indirect financing (bank-driven financing), so that a more diverse set of financial intermediaries participates in the market. There are also indications that the PBOC is mulling a transition from a "quantity control" approach – such as setting hard interest and exchange rates – to a "price control"-driven monetary policy mission, which would involve setting softer targets with benchmark rates and widening the renminbi trading band.[61]

In February 2014, the China Securities Regulatory Commission (CSRC) created several new offices including a private equity funds regulation office, an innovative business office, a bond regulation office, and an illegal securities and futures activity crackdown office.[62] It also combined and reorganized a host of fragmented listing approval offices into a more streamlined organizational array. On the policy side, new IPO regulations and a January 2014 restart for IPO issuance were motivated by the goal of increasing direct financing and upgrading China's capital markets. But after approving 40 to 50 IPOs in the first quarter, the regulator encountered additional problems and suspended IPOs again. In August, the CSRC formally released a measure regulating private equity funds, requiring registration, setting criteria for qualified investors and rules for attracting funds, and guiding operations.[63]

The China Banking Regulatory Commission (CBRC) has conducted an internal reorganization as well. Its post-Plenum policy emphasis, consistent with the PBOC's priorities, has been on cleaning up the wealth management product (WMP) and interbank funds markets. The CBRC is expected to transform its WMP regulatory unit in line with the State Council's call to delegate more power from Party policy offices to government regulators. On the banking industry side, CBRC reforms to date have been modest. A promised deposit insurance system that will include both state and private banks and permit small players to compete more effectively for deposits is an important addition that is expected to be completed in 2014.[64] The CBRC has tolerated the growth of new bank-like ventures such as Alipay's Yu'e Bao, which can compete with traditional banks for some forms of deposits and threaten to disrupt business as usual in this critical area of the financial system. This tolerance reflects high-level political support for such new entrants to create just that sort of pressure.

The China Insurance Regulatory Commission (CIRC) was somewhat slower to demonstrate movement after the Third Plenum, as the Commission was preoccupied with maintaining the solvency of incumbent firms rather than allowing new entrants to pressure it as in banking.[65] In mid-August 2014, the State Council released a comprehensive insurance industry blueprint for the period through 2020.[66] The document emphasized the role of insurance in a restructuring economy and set numerical targets for 2020. Insurance has been an underdeveloped sector largely because of heavy and ineffective regulations, such as micromanagement of what investments insurers can make. More importantly, Beijing has neither imposed an administrative requirement on firms and individuals that they must fully invest in insurance, nor – more practically – allowed the consequences of the market to impose the logic of insurance coverage on enterprise managers – yet. With soft budget constraints to date on many firms, especially state-owned firms, they had little incentive to manage their risks with insurance. Both for firms and individuals, the lack of consumer-oriented competition in insurance and a court system that could be counted upon to enforce consumer rights has reduced the penetration and efficiency of insurance product use. To reinforce the benefits of insurance provisioning, tax deductions or deferrals for insurance investments would quickly invigorate their use.

The new blueprint says insurance should be the "fundamental approach" for residents and companies to manage their wealth, in contrast to the dependence on property investment seen to date, and specific liberalizing rules from the CIRC are expected by the end of 2014. The general strategy of letting market forces reward strong and well-managed firms which reduce risk through insurance coverage, and punish weak firms that merely count on bailouts, is positive for the industry – *if* these insights about market forces are carried through. The State Council's blueprint does call for the pilot use of tax incentives to marketize health insurance, the deferral of personal and business taxes for pension insurance products, tax incentives for corporate hosting of supplementary pension insurance and medical insurance programs as well as agricultural insurance tax incentives, and incentives to use insurance services to control the risks associated with corporate research and development. Hopefully the specific regulations expected from the CIRC will move these goals forward.

Insurance should be the "fundamental approach" for residents and companies to manage their wealth.

The insurance plan stresses that the program intends the "reform of government's role," not just the tweaking of the industry. The main principles communicated are that the market should decide resource allocation in the sector, with government just providing guidance in "special" areas (meaning unclear); that the industry should be "opening up to both domestic and foreign players" to promote the inflow of advanced management, innovation, and competition; and that regulation should focus on protecting consumer rights (as well, however, as "market order," that ubiquitous but nebulous goal). The plan echoes the larger message by citing 2020 outcomes, with numerical specificity to go beyond the general *Decisions*, and includes some useful interim 2015 targets.[67]

Aside from these encouraging niche moves, the systemic question is how the financial regulatory bureaucracy can be insulated from interference by political or vested interests. In its FSB reporting, China maintains that the major regulators are free from interference. For instance, it states, "The State Council and government agencies under it do not interfere with the daily operations of the CBRC. The CBRC has the legal authority to promulgate and implement supervisory rules and guidelines independently."[68] But it is clear that Party leaders covet the multifunctional role of the state banks and see them as more than just financiers of commercial activity. Beyond the CBRC, the PBOC has the mandate to manage and adjust bank reserve ratio requirements (RRRs). The FSB report makes clear that the use of RRRs goes beyond banking efficiency to include broader and more vague goals: "[The dynamic RRRs] measure is used based on the extent to which the growth of bank lending diverges from the level needed for economic development, also considering the systemic importance and soundness of different financial institutions."[69]

Market Entry

Permitting new players to enter markets is considered, along with privatization, a reliable way to enhance efficiency and consumer welfare in all but a handful of special case industries. With the efficiency of incumbent capital intermediaries lagging in recent years, Beijing has permitted nontraditional players to provide more financing. However, the lower regulatory standards governing these entities, such as trust companies, securities companies providing entrustment loans, and other shadow-banking entities, have created their own set of problems by obscuring liabilities and systemic risks. Regulators are now permitting new players to develop but are scrutinizing them more carefully. The PBOC and the CBRC would like to push more of this activity under the normal regulatory aegis of banking, where capital adequacy and other standards can be monitored.

Some steps have been taken toward permitting private capital into small and medium banking operations. In March 2014, the CBRC announced that the decision had been made (in January) to grant licenses to 10 companies, working in pairs, to provide private banking services in a pilot zone of four cities. Alibaba is expected to work with Wanxiang Holdings, and Internet services conglomerate Tencent will be another licensee. These firms are already pressuring traditional banks with online cash management products such as Yu'e Bao that allow individuals to steer demand deposits into higher than bank deposit rates – an example of backdoor market entry and competition. The new private banking licenses do not cover that nonbank activity, and it is possible that this "reform" will eventually force new actors into the over-regulated traditional-banking tent rather than permit them to circumvent it. As mentioned earlier, the launch of deposit insurance will be important for making market entry meaningful. Without it, incumbents have a dominant position because they are perceived to be too big and too well established to fail and enjoy an implicit guarantee.

Capital Market Deepening

China has traditionally had a bank-dominated financing system: when firms need financing, they have had to rely on bank loans rather than private placements of stock, initial public offerings of equity, or debt in the form of bonds or shorter-term promissory notes. Deepening direct financing lowers financing costs and provides better outlets for savers. The *Decisions* pledged to improve the stock market and make it easier to list, develop the bond markets, develop other market-oriented exchanges, improve the environment for institutional investors such as insurance firms, and improve conditions for private equity financing and venture capital.

Some progress has occurred on each of these fronts. One of the first outcomes of the Third Plenum was a barrage of CSRC circulars released on November 30, 2013, covering stock market reform. The CSRC pledged to eliminate arbitrary IPO approvals in favor of checks limited to procedural and prudential requirements but to prevent mispricing and manipulation as well.[70] The latter concern has ended up getting the most attention so far. After initially planning to get 50 IPOs cleared by January 2014,[71] the CSRC retreated, forcing five firms to withdraw their applications because of excessive prices, while allowing the first IPOs in 14 months (since November 2012) to go through on January 8, 2014.[72] Through the end of February 2014, 48 IPOs were completed, and another 28 had been cleared to proceed by the end of April. The CSRC's listing process has unfolded in stop-and-go fashion, and its goal is clearly not just a quota of listings but also a new standard and changed culture. The micromanagement that was evident in early 2014 – Aosaikang Pharmaceutical pulling a bid because the CSRC said it was "too big," and Yangzhou Yangjie Electronic Technology turning down higher investor offers on the CSRC's advice when it set a share price for its $64 million IPO – is likely a transitional tendency that will subside.[73] On August 19, 2014, 11 companies were approved for listing in the third round of approvals since IPO resumption.[74]

The CSRC has committed to abolishing 21 approval requirements in three years starting from 2014. The Commission intends to selectively liberalize trading restrictions that have made China's bourses less attractive to traders, such as the "T+1" rule that has required investors to hold newly purchased securities at least until the next day. Gui Minjie, chairman of the Shanghai Stock Exchange, said the exchange would promote T+0 for blue chip companies to woo investors.[75] An important new program that demonstrates Beijing's confidence that its bourses are nearly ready for unfettered international competition is the Shanghai–Hong Kong stock connection initiative that will permit bilateral cross-border portfolio liberalization between special accounts at the two exchanges. The trial run was conducted from August 11, 2014 to September 30, 2014.

Evidence of steps to improve debt market conditions has been less encouraging as of this writing. Debt markets are subject to fragmented regulatory oversight, dominated by government and government-related firms both as sellers and buyers, and small relative to the size of the economy. The CSRC has only partial oversight of the bond market. The NDRC handles approvals for unlisted SOEs, while the PBOC oversees interbank market bond trading.[76] On April 25, 2014, the CSRC reported that it was working to implement the Third Plenum objectives for bond market development by revising the *Measures for the Pilot Program of Corporate Bond Issuance*.[77] The revisions are meant to reflect "the transformation of governmental functions through decentralized administration, relaxed entry requirements and strengthened supervision."[78] However, the timing for release of revisions to the *Measures* is unclear, and an overhaul of the regulatory fragmentation afflicting the bond market has not been discussed publicly.

The advent of corporate bond *defaults* since the Third Plenum is, perhaps counterintuitively, a sign of progress in improving capital markets. Bond defaults are normal in a market economy – recent rates of 2.2% for the United States in 4Q13 and 3.6% for Europe in 3Q13 are typical of non-crisis periods, and default rates in emerging markets are generally higher.[79] China, by contrast, reported a 0% default rate from the early 1990s reestablishment of the markets until March 7, 2014, when solar panel maker Chaori was permitted to default on its debts.

The underwriter, China Securities, is government owned and until then would have bailed out the firm. Other near-defaults in 2014 were stopped at the last minute by interventions intended to stave off disgrace for the firms' home officials or other concerned players. At least two other firms have defaulted since. We interpret this as a signal that underwriters, issuers, and investors must take responsibility for diligence in the bond market to avoid moral hazard and the rapid ballooning of bond default risks. In the same vein, on July 4, 2014, the CSRC released draft amendments to the current delisting system for the equity markets. New rules will allow more voluntary delisting and introduce a mandatory delisting mechanism for companies that have breached the law.

However, as growth slowed through 2014 and fears of financial distress mounted, Beijing has leaned more toward mitigating the chances of defaults and failures rather than emphasizing its willingness to see more. Monetary policy has been more accommodating and the PBOC's tone has grown more conservative. On July 23, 2014, China avoided an onshore bond market default as Huatong Road & Bridge Group paid principal and interest on RMB 400 million of notes amid speculation of a bailout.[80] On July 31, 2014, the CBRC approved local asset management company (AMC) establishments in five provinces (the CBRC allowed one per province in a 2012 measure).[81] These local AMCs help alleviate local debt problems but can also interfere with normal default processes.

Special efforts to improve capital flows to small and medium enterprises (SMEs) have been made in 2014. At a July 23 State Council meeting, Premier Li announced 10 measures to ease financing costs for SMEs.[82] And on August 14, the State Council released the *State Council Administrative Office Guiding Opinions about Several Measures Aimed at Relieving High Cost of Enterprise Financing*.[83] While these measures are pro-private sector and hence pro-competition and seek to broaden capital flows to cover otherwise excluded firms, at the same time these administrative, ad hoc solutions are inferior to a systemic plan to rationalize the capital markets.

Finally, new exchanges for energy commodities are an additional element of capital market deepening that has seen important reform implementation. Shanghai is preparing to launch an international crude oil trading market.

Interest Rates

Since the Third Plenum, the PBOC has continued to make steps toward interest rate liberalization. By the end of 2013, controls over lending rates had been largely freed, while controls on deposit rate competition were maintained to prevent erosion of net interest margins and damage to bank balance sheets. Although this is good for banks in the short-term, in the longer term it retards their competitiveness and harms depositors and overall economic efficiency.

Steps taken since November 2013 make additional progress on interest rates. In December 2013, a large trial of certificates of deposit with negotiable denominations began.[84] In its February 2014 report, the PBOC said, "The market needs to tolerate reasonable rate changes so that rates can be effective in allocating resources and modifying the behavior of market players."[85] Since mid-2013, Beijing has permitted enhanced deposit rate products from Internet-based finance players including Alibaba, which have experimented with the sale of high-yielding financial products that offer as much as 7% annual interest for Chinese retail investors.[86] Jack Ma, creator of this business, was featured in the Party's *People's Daily* saying, "The finance industry needs a disrupter, it needs an outsider to come in and carry out a transformation," and that he was it.[87] This was a powerful indication that business as usual for the state-owned banks was coming to a close. By early 2014, traditional banks were raising deposit rates to the upper limit and launching new products to keep pace.[88]

PBOC Governor Zhou said at a March 11, 2014, press conference following the National People's Congress, "I personally believe it's very likely to [finish liberalizing deposit rates] in one or two years." More competitive deposit rates are already resulting in higher borrowing costs for firms accustomed to benchmark rates. On June 27, 2014, the PBOC liberalized deposit rates for small-scale foreign currency deposits in Shanghai. Since March 1, 2014, interest rates for foreign currency accounts (with balances less than $3 million) have been deregulated within the Shanghai Free Trade Zone (SFTZ). The new policy is an expansion of the March policy to the entire Shanghai area and will first apply to corporate deposits.[89] According to the PBOC's Zhang Cuiwei, foreign currency deposit interest rate liberalization is moving forward (citing SFTZ deposit rates reform), although he believes marketization will be a gradual process.[90] As noted earlier, an important facilitating step toward interest rate liberalization is deposit insurance: on August 8, 2014, PBOC official Ma Jun indicated that preparation work for deposit insurance was basically finished, and that the insurance scheme would cover all banks and implementation would occur in a single step.[91] On July 10, 2014, at the U.S.-China Strategic & Economic Dialogue, Zhou reiterated his goal to achieve interest rate marketization within two years, but he hinted that reform at other departments might be slower, and that "two years" is the PBOC's own timeline and successful implementation depended on domestic and international factors.[92]

Exchange Rates

The *Decisions* mentions exchange rates only once: China "will improve the mechanism for market-based renminbi exchange rate formation." Beijing is doing that. China has engineered a gradual adjustment in the renminbi's value since 2005 by establishing a trading band and generally setting fixed rates to reflect market sentiment. Since the Third Plenum, additional steps have been taken, including a public medium-term liberalization commitment. In March 2014, the PBOC widened the daily renminbi trading band to 2% from 1%. This was explained as an effort to give the "market a bigger role in exchange rate pricing, and build a managed floating exchange rate regime based on market supply and demand."[93] The PBOC further stated that authorities would strive to *generally* desist from intervention, leaving rates up to market forces except under conditions of abnormal volatility.[94] This move took place alongside continuing action to internationalize the currency – in particular, the volumes in circulation offshore and the permeability of financial accounts for making use of those assets. As discussed later, the PBOC continues to promote and facilitate currency internationalization by concluding bilateral agreements.[95] On July 4, 2014, the PBOC and State Administration of

Foreign Exchange (SAFE) granted banks the right to set their own rates for renminbi/dollar exchange with retail clients on the basis of market demand. Before the move, the spread was subject to regulatory controls.[96] PBOC official Ma Jun has stated that the PBOC is retreating from normal foreign exchange intervention, only intervening when fluctuation exceeds the given range, capital accounts exhibit large imbalances, or a financial crisis develops.[97]

Beijing engineered a depreciation trend during the first half of 2014, inviting argument that China's commitment to exchange rate reform had gone into reverse rather than forward. In his press conference following the March 2014 National People's Congress, PBOC Governor Zhou said that change in the current account balance was the most relevant guide to renminbi directional change.[98] That is the logic U.S. officials recommended to Beijing frequently in the past, and it is reasonable if controversial.[99] It is understandable for Beijing to have orchestrated a two-way movement in the renminbi following a period of sustained appreciation and growing concerns about one-way bets on further appreciation. Rather than settle these debates, we wish to point out that short-term renminbi volatility is no counter-indication to reform and that in the larger picture China's band widening and expanding renminbi internationalization are significant steps toward liberalization. However, PBOC Governor Zhou's previous comments that exchange rate liberalization could be basically implemented by 2015 have been called into question.[100]

Financial Account Opening and Currency Convertibility

Many nations – especially at China's development stage – limit full financial account opening for purposes such as reducing speculative flows.[101] Beijing does not yet permit full convertibility for major categories of financial flow including institutional and household portfolio investment, cross-border currency and deposit management by importers and exporters, or intra-firm financial management,[102] but it has made significant strides in recent years and most categories already show partial opening. Beijing has taken further steps since the Third Plenum. On May 9, 2014, a new outbound foreign direct investment (FDI) approval system went into effect. Projects greater than $1 billion and those directed into sensitive countries and sectors continue to require approval, while all others transition to registration only.[103] Liberalization for some inbound FDI went into effect on June 17, 2014. Under the new measures, "restricted projects" and "encouraged projects with Chinese holding requirement" will continue to require approval; all others transition to registration only.[104] Negative lists for investment have been promulgated in the SFTZ and other pilot zones, although they have been long and somewhat disappointing because they did not reduce the list of restrictions enough.[105] A national list is being negotiated between the United States and China on a bilateral basis and may be completed in 2015.

On May 19, 2014, SAFE released a policy to simplify cross-border loan guarantee operations.[106] To date, SAFE has reviewed such contracts on a case-by-case basis. For both "offshore lending under domestic guarantee" and "domestic lending under overseas guarantee," SAFE said it would eliminate all pre-transaction approvals and quantitative controls and use only registration and self-discipline as regulatory controls. Notwithstanding some complicated rules, SFTZ-based firms can now pool cash in renminbi or foreign currencies with related entities inside the SFTZ, elsewhere in China, and offshore. By creating significant pools of renminbi liquidity outside China, Beijing is allowing a market to come into existence that gives practical importance to the capital account opening reform process. Recent agreements on bilateral cross-border arrangements for offshore renminbi servicing, such as renminbi clearing houses, are part of this broad-spectrum process.

Counter-indications and Tracking

The need for far-reaching financial system reform in China competes with other uses of the financial system, such as achieving GDP growth targets and bailing out specific firms. Beijing is not yet experienced at maintaining economic and political stability under a market-oriented financial system. Capital market deepening is seeing starts and stops, tolerance for bond defaults has been limited, and the market entry of new banking players has been moderate. New AMCs have been fashioned at the provincial level to help refinance banks exhausted by keeping local government finance vehicles (LGFVs) afloat, but China has not yet confronted bad debt systematically. Chinese bankers believe actual nonperforming loans are greater than stated, while even official estimates are rising. The PBOC has talked less aggressively about deposit rate and exchange rate liberalization as the year has worn on and the pain of slower "new normal" GDP growth has sunk in, steering down fixed asset investment.

These counter-indications are concerning, but they are not surprising in light of the scale and scope of reform being attempted. Short-term palliatives to buy time for more structural reforms were to be expected. Rather than debating how to interpret the crosscurrents, the more productive exercise is to define indicators of real change in outcomes and then monitor those data.

In terms of market entry and contestability, we can gauge deposits held by traditional state-owned banks as a share of total deposits in the banking system, and the shares held by private and foreign players. Perhaps 30% of current listed bank deposits are likely to migrate to alternative deposit takers under reform, according to working models employed by senior Chinese banking executives.

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On capital market deepening, metrics should be explored both for how efficiently regulators permit markets to work, and for the extent to which these markets are serving the needs of consumers. With regard to the regulatory process, we can observe the ease of IPO listing in terms of time required to list, the current backlog of firms waiting to join exchanges, and the total number of listings by period. One way to examine whether capital market deepening is on track is to assess the ratio of direct financing for firms – equity and debt offerings – to indirect bank lending, which has been dominant to date. We should expect to see a clear trend toward deeper bond and equity financing for firms as financial system reform is implemented.

China's embrace of market-based exchange rates and interest rates is a critical aspect of overall financial system reform, and one that is relatively straightforward to assess. For exchange rates, the degree of intervention relative to commercial market volume would be most telling. Tracking this measure will require greater transparency from the PBOC and SAFE on their interventions. Estimates of equilibrium exchange rate divergence have been given great attention over the past decade without satisfying many observers as to the true state of affairs, since measurement methodologies are debatable. For interest rates, the removal of remaining controls on deposit rate competition is the most important step to monitor, along with the corresponding convergence between formal rates and informal curb market rates for lending that should follow.

As for financial account liberalization, a steady increase in the ratio of non-foreign exchange reserve cross-border flows to GDP over time will be the most important indicator of reform. A related metric is the number of financial account lines in the balance of payments table that are in the partially, largely, and fully open categories. The IMF's "De Jure Restrictiveness and De Facto Openness to Capital Flows" series can be used to assess this.[107]

Finally, the coverage of domestic bank deposit assets under a deposit insurance scheme will provide an important indication that the playing field for domestic financial sector competition has become more level. If current comments from PBOC officials are accurate, this should be completed for all banks by the end of 2014, but it is possible that Beijing will decide to extend coverage incrementally instead.

FOREIGN TRADE AND INVESTMENT REFORM

China's reform program is foremost a domestic undertaking: the Party is strengthening the role of the market in China's economic system at home. But while the internal overhaul is the priority, international economic relations are critical in many ways. A major share of output is for trade, and most natural resources must be sourced abroad. Trade and investment flows link global production chains to China and China to its vast overseas markets. And foreign firms and investors still play a vital role in technological and industrial innovation. While China's domestic household demand should take the baton of growth from exports and investment in the years ahead, external economic relations will grow in importance for Beijing: China contains 20% of the world's population today but only 10–11% of trade, 6–9% of direct investment flows, and 0.2–1.3% of global portfolio flows. Even if China goes just halfway to closing these gaps, its foreign trade and investment policies will be of paramount importance.

At the start of the reform era, China was isolated from external economic relations. It embraced trade and investment liberalization to an impressive extent after 1978, as Deng Xiaoping made the case that reform was needed not just on the inside but also in terms of opening to the world. But like a bird in a cage, the role of market interaction with the world was constrained. Foreign investors were required to balance foreign exchange needs and export more than they imported, permitted and prohibited industries for inbound investment were carefully limited through a catalogue, and outbound investments of almost all sorts were strictly limited until the 2000s.[108] Joint venture requirements and a litany of laws, rules, and regulations put a speed limit on foreign players in many sectors.

For most of the reform era, the foreign trade and investment trend was positive, however. Opportunities for Chinese firms to sell to global markets and for foreign firms to operate in China in increasingly market-driven sectors grew through the 1980s and 1990s. WTO accession in 2001 locked in trade reforms and ensured more in the years to follow. But the slowdown in domestic reform since the mid-2000s, widely acknowledged by China's leaders, affected foreign trade and investment policy as well. Massive trade surpluses resulted. Although these have moderated and been partly offset by growing services imports, trade and investment policy momentum is needed to ensure against backsliding in a crisis.

China's leaders, like those in advanced economies, see the long-term gains from foreign trade and investment but weigh them against the pressures of heavier competition.

China's leaders – like those in the advanced economies – see the long-term gains from trade and investment but weigh them against the heightened adjustment cost pressures of heavier competition. Both the positive and negative effects of economic engagement have been felt acutely over China's history, and nationalistic attitudes compete with Deng's admonishment to further open to the world. In principle, the *Decisions* is clear about putting China's external economic relations on a market-oriented and even-handed basis; in practice, the same kinds of questions that apply to Beijing's reform intentions at home must be asked about intentions internationally: How much room will government retain to interpret what makes markets "orderly"? How many industries (dozens?) should be treated as special and shielded from the market? Should due process to protect private firms from special interest abuse come before stepped-up enforcement to protect consumers from those firms?

Third Plenum

President Xi takes up the mantle of "opening up" both on the trade front and for cross-border investment. The *Decisions* touches on trade liberalization in Decisions 2, 3, and 4; Decision 9 deals with a level playing field for trade; and Decisions 24, 25, and 26 go into detail on special zones for hosting trade activity. Decisions 9 and 12 commit China to liberalizing foreign direct investment flows. Decision 24 – "Relaxing control over investment access" – starts with the promising pledge, "We will have the same laws and regulations on Chinese and foreign investment" and spells out a dozen specific industries for opening as well as the intention to enable the SFTZ and replicate it around China. We examine the coverage in the *Decisions* of trade and investment in turn, and then do the same for implementation.

Foreign Trade

The Third Plenum is rich with general commitments to permit the market to play a decisive role in the allocation of resources and the conduct of economic activity. This is the fundamental reform work needed to make China a level playing field, which is the key to supporting healthy growth in two-way trade. Decision 2 turns on the "decisive role of the market in allocating resources." Decision 3 goes further still:

> It is a general rule of the market economy that the market decides the allocation of resources. We have to follow this rule when we improve the socialist market economy. … We must actively and in an orderly manner promote market-oriented reform in width and in depth, greatly reducing the government's role in the direct allocation of resources, and promote resources allocation according to market rules, market prices and market competition, so as to maximize the benefits and optimize efficiency.

Finally, Decision 4 provides a cross-cutting deadline of 2020 for allowing market forces to shape China's profile in international trade. These decisions do *not* clarify whether markets will be accessible to foreign exporters or investors, but the following decisions do provide some further specifications.

Decision 9, "Enacting market rules that are fair, open and transparent," commits to establishing a level playing field for all firms (except where stated otherwise) and to ensuring that consumers have free choices. Notably, foreign interests *are* included in the text of this decision. Section VII of the *Decisions*, titled "Building a New Open Economic System," gets to the heart of the trade agenda but also reveals the important idiosyncrasies embedded in the Chinese perspective. The introductory language reads as follows:

> To adapt to the new trend of economic globalization, we must promote domestic openness together with openness to the outside world, better integrate the "bring in" and "go global" strategies, stimulate the orderly and free flow of international and domestic factors of production, highly efficient allocation of resources and in-depth market integration, and speed up fostering new competitive advantage in participating in and leading international economic cooperation, in order to promote reform through opening up.

This paragraph encapsulates the way Beijing sees trade reform. Reform is a *necessary* reaction, an adaptation, to new global trends. Openness is segmented into "domestic" and "outside world" components. Product flows should be free, but they should be "orderly" too – again, with international and domestic products mentioned separately. The imperative to "stimulate" those flows suggests a sense that markets will not evolve organically. There are seeming contradictions here, or at least tricky compatibilities, to Western eyes, but these are precisely the core challenges perceived by the Chinese leadership.

The ostensible concern of Decision 24 is relaxing control over investment access, a topic discussed later. That investment access is certainly related to trade. But the decision also pledges to "integrate and optimize customs special supervision zones at a faster pace," which relates not to investment but trade. This is also the decision that calls for the SFTZ initiative. It is widely observed that the SFTZ is something of a misnomer, because the innovations there have more to do with investment than trade. However, the investment objectives of the SFTZ are important for services trade flows and for trade facilitation. Given that, it is also significant that the Plenum makes clear that China will build on the Shanghai experience and expand it to elsewhere in the country, not leave it bottled up there.

Decision 25, "Speeding up the construction of the free trade zones," contains the most direct treatment of trade in the *Decisions:*

> We will keep to the world trading system and rules, persist in bilateral, multilateral, regional and sub-regional openness and cooperation, seek more converging interests with other countries and regions, and carry out the free trade zone strategy at a faster pace with neighboring countries as the basis. We will reform the management systems of market access, customs oversight, inspection and quarantine, and others, and accelerate negotiations on environmental protection, investment protection, government procurement, e-commerce and other such new fields, so as to form a global, high-standard network of free trade zones.

The Third Plenum is rich with general commitments to permit the market to play a decisive role in the allocation of resources and the conduct of economic activity.

The first half of this pledge is a re-endorsement of business as usual: *keep to* and *persist in* (what is already being done), seek *more* and carry out plans *faster*. The second half, reforming the system of managing market access and all sorts of non-tariff barriers such as customs and quarantine, sounds more promising, especially in light of the overarching call to build a newly open economic system. That said, this pledge specifies no concrete actions or changes. By contrast, foreign concerns about Chinese trade barriers are very concrete and extensive, covering issues such as trade subsidies, unfair IPR and indigenous innovation promotion policies, unscientific standards, and export restraints. The language on trade in the *Decisions* might be applauded for its spirit, but it will be hard to hold to account.

Trade comes up in other sections, too. Decision 26 touches on trade in the context of China's inland areas, mostly having to do with domestic development using trade linkages with the global economy. Decision 41 seeks to "draw on the fine cultural achievements of other countries, and bring in talent, technology, and operation and management expertise," which could certainly portend a growing trade flow for services in this heretofore mostly closed sector. Decision 48 addresses the need to separate trade associations and chambers from government to make the marketplace less prone to manipulation, collusion, and other interference with competition. While foreign trade is not explicitly called out here, many will wish for domestic industry associations to play less of a semiofficial protectionist role.

Foreign Investment

Decision 9 sets out to "implement a unified market access system; and on the basis of making a negative list, all kinds of market players may enter areas not on the negative list on an equal basis and according to law." The decision makes explicit that such a system should address *cross-border inflows*, promising to extend pre-establishment national treatment and take a negative list approach. These two reforms were pledged at the summer 2013

U.S.-China Strategic & Economic Dialogue (S&ED) meetings and were later confirmed in meetings at the presidential level to be incorporated in the U.S.-China Bilateral Investment Treaty (BIT) negotiations. By placing these intentions in the *Decisions,* China makes clear that these commitments will be multilateral and not just bilateral. The PENT policy means that investment approvals for foreign investors will be handled in the same manner that domestic undertakings are handled: on a commercial basis, with government ending its noncommercial gatekeeping role in normal cases. Decision 9 elaborates many of those reforms:

> We will make the business registration system more convenient by reducing the number of items that require qualification verification, turning certification before licensing into licensing before certification, and gradually changing the paid-in capital registration system into a subscribed capital registration system. … We will reform the market oversight system, implement uniform market oversight, tidy up and annul all sorts of regulations and methods that impede the national unified market and fair competition, strictly ban and punish all unlawful acts extending preferential policies, combat regional protection, and oppose monopoly and unfair competition.

The approval system extending these reforms should be blind to whether a proposed investment is from a domestic or foreign firm – with two exceptions. First, foreign investments will be screened for national security and other defined sovereign concerns, as described in China's national security review regime (which is more expansive than that of the United States and the subject of some concern).[109] Second, China will switch from defining which industries are *permitted* for foreign investment to a system that defines specifically which industries are prohibited or restricted, and why. These are important commitments, although, as discussed under implementation, if this negative list is excessively long (like the initial negative list for the SFTZ), then little will change. The test of whether Decision 9 has real impact is captured in an admonition to "improve the market exit system in which the good eliminates the bad, and perfect the enterprise bankruptcy system." If foreign players are permitted to grow market share by displacing uncompetitive Chinese firms – or other foreign firms, for that matter – this will be a breakthrough.

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Decision 12 commits China to allowing market-oriented competition in the *financial* industry and includes coverage for two-way opening of the capital markets and financial industry players. Decision 14 underscores that *enterprises* are expected to play dominant roles in making investment decisions, and it provides the decision's clearest hint about the shape of the negative list prescriptions to come:

> All enterprise investment projects, except for those concerning national security or ecological security, distribution of the major productive forces, strategic resources development and major public interests, should be decided by the enterprises independently in accordance with the law, and no longer require government approval.

While these exceptions still permit a broad interpretation, Decision 14 could be a meaningful step toward restraining government in the marketplace – depending on how generously terms such as "major public interests" are interpreted. Decision 15 says it again: "We will cancel all administrative approval procedures for economic activities under the effective regulation of the market mechanism." The burden is on government to explain why regulation by market mechanisms would *not* be effective.

More meaningful actions to reform foreign investment market access are described in Decision 24, "Relaxing control over investment access." The decision makes clearer still that PENT means "the same laws and regulations on Chinese and foreign investment." And it sets out industry priorities for opening:

> We will promote the orderly opening up of finance, education, culture, healthcare and other service sectors, lift limits on access for foreign investment in childcare, care for the elderly, architectural design, accounting and auditing, trade and logistics, electronic commerce and other such service sectors, and further liberalize general manufacturing.

Decision 24 also makes three other important commitments. It highlights the SFTZ program for a rapid rollout of the revised rules for treatment of foreign investment; it confirms that liberalization concerns outbound as well as inbound investment flows; and it signals a clear intention to complete bilateral and plurilateral agreements, like a bilateral investment treaty with the United States, as part of the process.

Implementation and Analysis

For some Third Plenum reforms, the signs of implementation will be unambiguous: deposit interest rates are either freed or they are not. But for most aspects of foreign trade and investment, implementation will be much less clear cut. Progress will be incremental, as old regulations are phased out, but China may yet replace them with a new generation of rules designed to confer a home court advantage.

Foreign Trade

The Third Plenum trade commitments are aligned with international standards but are not concrete. China is indisputably the world's top trader, but it is also the most populous country and the second-largest economy, so that top position is not surprising. Foreign concerns about structural trade imbalances, subsidies, market-distorting intellectual property and indigenous innovation policies, unscientific standards, export restraints, and a host of other issues are in many cases legitimate, as confirmed by the emphasis in the *Decisions* that China has extensive work to do to promote reform through opening up. A set of State Council *Opinions* on foreign trade, released May 15, 2014, provides overarching policy guidance on the trade front and Third Plenum implementation.[110] The first topic in the document is imports, but the bulk of the message does not describe a new way forward.

Rationalization of China's foreign trade structure requires that government withdraw from interfering in commercial decision making in favor of a decisive role for market forces. That is not so much a trade-policy task as an overarching problem with the economic system reflected in *all* the reforms in this report. To the extent that the State Council *Opinions* do address trade directly, they micromanage a slew of special policies for tweaking the picture: manage the ratio of export-processing trade to trade for final consumption, promote Chinese firms going abroad to trade, encourage trade facilitation, target growth rates for imports and exports, advance efforts to "optimize the trade structure," and determine the pace at which services imports should grow (the answer? "gradually"). One can appreciate the need to offer guidance in new areas and on adjustment assistance for sunset industries, but the *Opinions* lack an overarching concern with withdrawing from intervention. One can, nonetheless, discern some positive movement on matters that have traditionally generated trade friction.

First, as explored in the "Financial System Reform" section of this chapter, steps forward on the exchange rate system continue to dial down the conflict over valuation that dominated trade relations with major countries through the 2000s. While this issue could reemerge in the face of trade surpluses arising from a growth slowdown, most economists, long fixated on the role of the renminbi in contributing to China's external trade imbalances, are presently satisfied that the currency is at or near a fundamental equilibrium value at least on a multilateral basis.[111] This is a significant change from just a few years ago.

Second, the SFTZ, while falling short of the expectations that followed its 2013 creation, has exhibited some progress in trade-related areas. Opening to capital inflows, especially foreign direct investment in services, is directly connected to trade opening; in this regard, the announced investment by Amazon.com should provide a good example and could facilitate much growth in two-way goods trade.[112] Many of the regulatory moves on cross-border foreign currency handling in the SFTZ were originally conceived to facilitate additional trade flows; while they so far have been more exciting to firms looking to use the zone as an offshore financial hub, the trade role could follow.

Third, the May 15 *Opinions* and subsequent reports suggest crude oil import rights will be expanded beyond the small number of licensees permitted to dominate this trade to date. These trade distortions, and their connection to domestic fuel costs, inflation patterns, and global direct investment patterns, aggravate China's domestic and foreign trade relations in a number of ways. Domestically, the oil trade oligopoly trade enriched a handful of state-owned firm managers and spurred corruption; internationally, reliance on a handful of national champions to pull in China's crude oil has shaped a foreign policy overweighted to petroleum exporters regardless of their stability as long-term partners, such as South Sudan and Venezuela. Beginning to dismantle this legacy of central planning is encouraging.

Fourth, the *Decisions* emphasizes the role of deepening external trade and related agreements in helping achieve economic development and opening. On this front, implementation has been modest and the most important negotiations have progressed little in 2014. The fundamentals of a Bilateral Investment Treaty with the United States are to be resolved by the end of 2014, but the negative list will not be addressed until 2015. In October 2013, China signaled its interest in joining WTO talks on further liberalizing trade in services (TISA), but many are skeptical that Beijing is interested in negotiating. In Information Technology

Agreement (ITA-II) expansion talks, China has offered little since joining negotiations, prompting the EU trade commissioner to state, "The EU regrets that China has so far been unable to contribute to the negotiations of the Information Technology Agreement (ITA) in a way that is consistent with China's position as the largest world exporter of IT products."[113] Talks on Chinese participation in the Government Procurement Agreement (GPA) have not moved visibly forward since the Plenum. In December 2013, China agreed to revise its offer to join the GPA, opening up more sectors for foreign access, but more, not fewer, restrictions have arisen since then. In May 2014, the People's Liberation Army (PLA) banned procurement of foreign automobile brands, and China banned the purchase of Microsoft's Windows 8 operating system for government computers.[114]

Company Law and Other Foreign Investor Laws

In a significant stride toward market-oriented regulation, the National People's Congress amended the Company Law just after the Third Plenum – the first amendment to the 1999 law since 2005 – and the changes came into force on March 1, 2014. This is important for private domestic firms as well as foreign and helps explain a doubling of new business starts in China – overwhelmingly private – to more than 2 million in the first eight months of 2014. The revisions call for switching from a registered capital system to a subscribed capital system; streamlining business license approvals, thus removing a hidden investment barrier; unifying market regulation; and implementing the pre-establishment national treatment and negative list commitments. Thus, wholly foreign owned firms' minimum registered capital requirements, previously determined by an operation's scale, were reduced to zero, and capital verification requirements were also abolished. However, regulators will continue to monitor the value of foreign invested firms, and the Catalogue of Guidance that greatly limits industries in which foreign invested firms can be wholly owned is still very much in effect.[115] The SAIC has issued regulations to align local procedures with the new Company Law.

Changes are being made to other laws that constrain the commercial freedom of foreign firms. In February 2014, the central government issued a *Decision of the State Council on Repealing and Amending Certain Administrative Regulations*, calling for amendment of the Joint Venture and Wholly Foreign-owned Enterprises laws. Under this decision, MOFCOM must coordinate with other agencies and propose revisions to the foreign investment laws, which then go to the National People's Congress. Officials state that the process will produce a unified new foreign investment law by 2018.[116] That *may* bring an end to the current Catalogue of Guidance that restricts foreign participation by sector. MOFCOM issued a notice on March 7, 2014, that it was researching how to revise regulatory measures governing the sectors laid out in Decision 24 – finance, education, culture, medical treatment, elderly care and child care, construction design, accounting, auditing, commercial trade, logistics, e-commerce, and general manufacturing – so it is fair to say that the process is underway.[117] The Supreme People's Court has published new interpretation guidance to comport with all these changes, and its 2014 Major Tasks Report[118] highlights its responsibility to "provide an effective judicial guarantee" for implementation of the Third Plenum economic reforms – which will be easier said than done.

The Shanghai Pilot and Other Zones

Some steps have been implemented to realize the vision set out for the SFTZ. The PBOC has elaborated a macroeconomic framework first issued in December 2013, which permits "sweeping" by five institutions, including Union Pay and HSBC Bank (this refers to moving clients' renminbi and other cash in and out of the SFTZ), some cross-border lending using these funds, and cross-border renminbi trading from within the SFTZ. Other measures adopted in March 2014 liberalize deposit rates for some foreign currency deposits.[119] Limited sector opening was permitted in April 2014 for gaming, performance agencies, and entertainment, and in July 2014, a German group announced permission to build China's first wholly foreign owned hospital in the SFTZ. In May 2014, financial account opening was initiated in the SFTZ, when the PBOC announced that SFTZ-registered companies could manage "zone" or "tagged" accounts, the capital from which could be freely converted and transferred to and from overseas accounts. Shortly thereafter, Xi Jinping visited the zone for the first time (the first Standing Committee member to do so), with local leadership indicating that plans for a fuller financial account opening were underway.

The SFTZ is watched closely because it may be a model for China-wide reform. In the past, China has often followed a "start local, scale global" approach. Furthermore, it is hard to imagine how the SFTZ could coexist over the long term alongside a closed financial system in other parts of the country, as inputs to growth (talent, capital, enterprises) would flood the SFTZ to benefit from the liberal regime, draining the rest of the country of economic resources. According to a PBOC circular of December 2, 2013, the lessons learned from the Shanghai pilot are to be extended to other parts of China starting in 2014. China's Customs Administration expanded many of the trade regulations previously exclusive to the SFTZ – including centralized tax reporting and entry of trade goods ahead of customs declaration – to 51 supervision areas in the Yangtze region on September 3, 2014 and nationally, to regions outside custom supervision zones, on September 18.[120]

While opening in the SFTZ is happening piecemeal, foreign investors are still awaiting a number of SFTZ reforms. A signature benefit for foreign investors doing business in Shanghai is supposed to be early application of PENT to an expanded range of industries not excluded by a negative list. This privilege has not yet become available because the pre-Third Plenum negative list did not open many industries, and the post-Third Plenum revision put out in July 2014 was little improved, with 139 industries instead of 190.[121] (Fujian's Pingtan district and Shenzhen's Qianhai district have also released negative lists.[122] Chengdu has piloted negative lists in three districts.[123]) The bottom line is that the SFTZ is being put to interesting and in some ways pathbreaking uses in a handful of niches, such as cross-border financing and health care services, but so far it has not fulfilled its promise to be a proving ground for China's next generation trade and financial interactions with the world. That said, there should be more to come.

Foreign Capital Participation in Restructuring and Other Opportunities

China's economic overhaul could expand participation in financial restructuring work in China for Chinese firms, foreign firms, and joint ventures. Two points must be clarified:

whether Beijing means to open state enterprises to non-state investment, and whether those new players can include foreigners. First, the *Decisions* does discuss opportunities for private, "social," and "non-public" capital to play an important part in financial restructuring. The State Council has followed this up with a circular to stimulate more mergers and acquisitions both at home and abroad to help digest domestic overcapacity and reduce debt.[124] In keeping with the Third Plenum requirements, the circular stipulated that all sectors should be open to private investors unless explicitly defined as prohibited. Private capital is welcome to enter the "competitive segments" of the monopolized industries, the document said, and state enterprises must not use their power to restrict their private counterparts.

But whether these non-state categories include foreign money is unclear in some contexts, including the *Decisions*. Luckily, we find many examples where "social capital" – *shehui ziben* in Chinese – is used to *include* foreigners, and that is translated variously as "investment," "social capital," or "private capital" in the English version of the *Decisions*. In other words, the language Beijing used to invite private capital to participate in financial restructuring in China does include foreigners – unless specified otherwise. To be sure, despite formal relaxation in the approval processes for foreign direct investment, many foreign investors are feeling discouraged presently because of national security reviews, the aggressive pattern of antitrust investigation currently in evidence, or other indications of discriminatory treatment.[125] But it is important to note that the Third Plenum design is to include foreign investment in the financial restructuring.

In addition to the SFTZ investment windows and the Company Law amendments, other measures have contributed to two-way investment prospects. These include procedural reforms (reducing MOFCOM approval timing), ad hoc sector opening (national opening to private hospital investment by foreigners), and new investment products and markets (the Shanghai-Hong Kong Stock Connect program, and soon to come on-shore petroleum futures trading open to foreign traders). For foreign direct investment, MOFCOM officials report that approval and registration procedures will be shortened to three days (with national security reviews likely to take longer).[126] Many measures, meanwhile, relate to the financial sector. As noted earlier, in February 2014 China's State Administration of Foreign Exchange (SAFE) released a draft policy to simplify cross-border loan guarantee operations. For both "offshore lending under domestic guarantee" and "domestic lending under overseas guarantee," SAFE said it would rescind pre-transaction approvals and quantitative controls and rely on registration and firm self-regulation. This change would facilitate foreign capital participation in a variety of activities. In a related shift, in May 2014 SAFE pledged to ease offshore borrowing by simplifying its approval process for foreign exchange cross-border guarantees, reducing quotas on onshore guarantees for offshore loans, and standardizing cross-border management as part of an overhaul of cross-border loan guarantee regulations.[127] SAFE also promised to remove "unnecessary" requirements, including certain asset-to-liability ratios for onshore guarantors. These moves make it easier to borrow offshore and move in and out and support trade by easing currency risk and streamlining imports and export payment.

Regulators continue to build out two programs to support cross-border investment and renminbi internationalization: the Qualified Foreign Institutional Investors (QFII) program and the Renminbi Qualified Foreign Institutional Investors (RQFII) program. Both allow foreign investors to directly invest in Chinese stocks and bonds. Launched in 2002, the QFII program allows foreign institutional investors to buy these securities using dollar-based quotas; the RQFII program, its sister pilot launched in 2011, permits quotas for foreign investors using renminbi obtained offshore.[128] Investment opening via both schemes requires China's securities regulator to continue issuing RQFII licenses and the foreign exchange regulator (SAFE) to continue dispensing investment quotas – and to turn them over or increase quota maximums. Since the programs' inception, the CSRC and SAFE have done so. Analogous efforts to develop private equity flows across the border, under the 2010 Qualified Foreign Limited Partner Pilot Program (QFLP Pilot), are being tuned for growth as well.

Investment opening is also underway via the Shanghai Clearing House, which launched trading for interest rate swap (IRS) derivatives in January 2014. An IRS derivatives market is a step toward market deepening for China, where derivative products are underdeveloped. The Shanghai Clearing House has invited foreign banks to trade for their overseas clients.[129] In April 2014, the PBOC clarified settlement mechanisms and regulatory requirements for over-the-counter derivatives, opening the way to expand Shanghai Clearing House-traded products in the future.[130] Cross-border trading of crude oil futures, with settlement in renminbi or foreign currency at the traders' discretion, is expected in the near future.

As noted earlier, preparations are also nearing completion for the Shanghai-Hong Kong Stock Connect investment link, which allows investors from each bourse to trade equities at the other exchange. Trading is expected to be extended to commodities as well. Mainlanders are expected to be able to trade most Hong Kong stocks using yuan, while investors based in Hong Kong will be able to trade certain shares on the Shanghai exchange. This program opens up cross-border investment for traders and chips away at China's closed financial accounts.

Finally, as we have mentioned in several places, investment barriers are being altered ad hoc in a number of sectors. In the SFTZ, barriers around value-added telecommunications (VATS) are being lowered somewhat, including in online data and e-commerce processing, Internet access, virtual private network (VPN) services, app stores, and Internet data centers.[131] It has not been immediately clear that foreign firms will be readily able to acquire permits to operate in these niches, however, despite announcements of regulatory streamlining. Further, some of these niches were committed for opening under WTO obligations long ago. However, in early August 2014 Amazon.com announced an agreement permitting it to invest in the SFTZ and use these new rules to make its full international services available to Chinese consumers. This approach may turn out to be groundbreaking regardless of the vintage of the commitment. Nationwide, meanwhile, MOFCOM and the Ministry of Health announced foreign invested hospital pilots in seven provinces in late August,[132] while, as noted, a German firm is already approved for a wholly foreign owned hospital in the SFTZ.

Counter-indications and Tracking

Counter-indications to foreign trade and investment liberalization come not from trade and investment policies per se, which are generally moving forward, however modestly. Rather, the chilling factors for foreign firms and trade are China's new aggression in competition policy enforcement, its intimidating tone in national security and in particular information technology security regulation, the growing tension between China and major advanced economies in areas of international relations other than economics, and the tendency of regulators to put demonstrations of toughness in standing up to foreigners before adherence to principles of due process. The European Chamber of Commerce in China declares that the "golden age" for foreign firms in China is over.[133] The U.S. Chamber of Commerce concludes that new competition regulations defeat competition, promote native industries, and systematically go after foreign technology and property.[134]

Students of the politics of economic adjustment in transition economies will recognize these patterns. China's economy is slowing, both because it needs reform and because reform itself disrupts extant activity until it delivers future results. That slowing results in conflict among firms and economic regulators. Other problems of this sort – especially those affecting information technology sectors – are newer and may reflect understandable Chinese attempts to buffer against a seemingly ubiquitous foreign intelligence collection apparatus. But regardless of whether this pushback is "understandable," it is in China's interest, not just that of its foreign partners, to better manage it. Complications will grow more troublesome before they subside, with strategic rivalries between China and international economic incumbents likely to continue for decades. There is no one right answer to how to respond, but an accurate measure of China's progress in self-professed trade and investment opening plan is the starting point.

Foreign Trade

For trade, the first measure is the trade balance component of the current account. China's trade balance has in recent years hovered in a reasonable range as a percentage of GDP, although it remains perennially in surplus. Reform implementation should help even out China's trade flows so that the surplus does not increase in the face of domestic adjustment pressures. Some argue that a current account balance that might have been reasonable in the past – 2% of GDP surpluses – is unacceptable, year in year out, for the world's second-largest economy, and that China's balance should move toward zero over the long term. As a result of rising services imports, we expect an overall trade deficit by 2020, and a balanced current account because of investment income flows.

Reform will make Chinese industry more competitive in some sectors and less so in others. Thus a changing composition of China's trade – regardless of the balance – will indicate adjustment and rebalancing. As China moves away from the investment-led growth model, the ratio of consumer goods imports for final consumption to raw materials imports should go up, reflecting the rise of consumption-led demand.

The ratio of services trade to goods trade should rise significantly in the years ahead as well. Because of China's acknowledged competitiveness in manufacturing, which should largely endure reform, advanced economies will need to rely on their services exports to deepen their trade engagement with China. Those exports will include both services consumed abroad by Chinese travelers, such as education, health care, and tourism, and services delivered in China following investment market access liberalization for financial firms, health care providers, and myriad others.

While more a policy outcome than an economic flow change, conclusion of the raft of next-generation trade agreements currently under discussion will be a valuable indication that China has adjusted its traditional domestic policies. China's participation in additional agreements on the horizon, such as the Trans-Pacific Partnership, should be possible within three years if China's reforms stay on track and would be a further indication of modernization. Learning from the experience of advanced economies, we reject the idea that the number of disputes involving China handled under international agreements is a good measure of reform. As nations trade more, they have more disputes, so this metric cannot be presumed to indicate deteriorating conditions.

Foreign Investment

A critical policy outcome to watch for – not just for foreign investment but also for reform overall – is issuance of a national negative list of industries excepted from the normal, decisive influence of market forces. That is at the top of our list. China's negative list will be judged according to whether it establishes clear justifications for continued barriers in other industries.

Trends in FDI, both greenfield (built from scratch) and M&A, are a powerful indicator of reform implementation. The inbound FDI stock will need to grow to permit restructuring of existing foreign invested operations and to secure the capital needed by sunrise areas of growth. Past Chinese thinking viewed flat growth in FDI as a reasonable expectation for the years ahead, but a clear uptick in these inflows should accompany reform. One can gauge the implementation of reforms in terms of direct investment inflows in previously closed sectors mentioned for priority opening, such as hospital, child, and elder care services; architectural design; accounting and auditing; trade and logistics; electronic commerce and other such services; and general manufacturing. FDI to restructure foreign participation in newly competitive sectors (i.e., those previously constrained by joint venturing requirements, such as automotive manufacturing) should be visible in data by the Third Plenum deadline of 2020. Implicit in these data will be confirmation that private investment in the context of restructuring will include foreign private investment. Outbound FDI flows have been growing rapidly in recent years as a result of policy opening and commercial development and readiness; we expect this trend to continue, with a measurable increase in the ratio of outbound FDI to foreign reserve assets invested abroad.

A critical policy outcome to watch for – not just for foreign investment but also for reform overall – is issuance of a national negative list of industries excepted from the normal, decisive influence of market forces.

Elsewhere we point to a steady increase in the ratio of non-foreign exchange-reserve cross-border flows to GDP over time as an indicator of financial account liberalization. Another indicator will be increases in the number of partially, largely, and fully open categories in the IMF's *De Jure Restrictiveness and De Facto Openness to Capital Flows* series. To this we add measures of what shares of these flows are handled through foreign intermediaries. Foreign banks' ability to invest in China to conduct services is reflected in their share of total deposits, which should be expected to grow in the years ahead. Other categories of institutional portfolio and private equity investors should similarly see steep growth in assets invested into China and assets managed on behalf of Chinese consumers.

STATE-OWNED ENTERPRISE REFORM

State-owned and state-related enterprises (simplified as SOEs) play a massive role in China's economy, and the sought-after gains from reform will elude China without heavy pruning in this sector. It is not that all SOEs are inherently harmful to a country's economy. Many advanced economies are home to large state-related entities, which coexist with private firms because of clear mandates. But in those cases, the burden for explaining why state involvement is required is high, and government's power to abuse its position in the marketplace is limited. Large swaths of China's economy are today foreclosed to private domestic firms, let along foreign businesses and investors, by SOE dominance. Sometimes these monopoly rights are defined, but oftentimes they are not, and it is the informal and differential application of the rules that puts state firms in charge. Unwinding these conditions is complicated by opposition from powerful families and factions often aligned with these SOEs.

SOE reform is not starting from scratch today. By 1988, the National People's Congress had already created a legal framework for SOE restructuring, and some state firms were fully privatized by the late 1990s. The Asian financial crisis of 1997–98 sounded the death knell for many smaller, strategically unimportant SOEs: President Jiang and Premier Zhu allowed thousands to be shut down or combined. The largest, fittest firms not only survived this wipeout but thrived in its aftermath. Loss makers in the 1990s, SOEs became more profitable thereafter and thus able to influence policy, keeping dividend payments to the state down and reinvesting their growing profits in massive additional capacity, new ventures, and purely speculative assets. The vogue for divesting the state from these powerful entities had waned over the 2000s, and the impact of the global financial crisis beginning in 2007 further silenced many advocates of SOE reform. By the end of the 2000s, Chinese economists were debating whether the state was advancing and the private sector was being forced into retreat.[135]

Many analysts do not think the Party wants to reform the SOE sector; others do not think it can – given how deeply enmeshed these firms are in both growth as we know it and special interests. To those with a deeper understanding of the faltering quality of China's growth and the risks ahead, the question is how any leader could choose *not* to pursue SOE reform. The collateral damage to future competitiveness and welfare needed to sustain the sector, by and large, is enormous and seemingly untenable. The overcapacity and hence poor loan recovery potential, past and present environmental liabilities, and dearth of experience operating under level playing field conditions alone are reasons for deep distress. But dividends taken from SOEs and used to prop up GDP and for other purposes are equally important. The *Decisions* calls for government to withdraw from competitive sectors and dilute official ownership but at the same time for public ownership to remain dominant in the economy, with a leading role, and as a controlling force with major influence over the economy. As the majority of any economy is suited to normal market competition, it is unclear what purpose SOE dominance is to play, or how it can do so without undermining market competition, as it has to date. There are clear contradictions here: as President Xi has said, SOEs are not *just* to be weakened but *also* strengthened.[136]

Third Plenum

Prior to the Third Plenum, Chinese officials involved in planning reforms feared that SOE reform would be largely left out. While the *Decisions* makes many references to SOE reform, these are scattered, mixed with counter-indications, and more nebulous than specific. Decisions 6, 7, and 8 discuss reforming the role and nature of SOEs, and nine other decisions touch on them. The goals laid out include diluting the state's shares in SOEs by "mixing" them with private capital; making government where it does stay involved a "capital manager" instead of an "operating manager;" taking more SOE profit in the form of dividends to finance public goods; clarifying the industries in which government needs to remain a controlling shareholder, and why; and ensuring that firms in normal, competitive industries face a contestable marketplace even if they do have minority government shareholding.

Decision 6 in its entirety pledges China to develop a "mixed economy" in terms of state and non-state shareholding in enterprises: the state will sell down its shares in most industries so that private investors can expand their stakes. That said, under pressure to restructure and become more competitive or face shutdown or combine with stronger players, many SOEs might conceivably buy private firms to bolster their competitiveness or enter into strategic tie-ups with non-state firms to guard against acquisition by rivals. Indeed, this has been a significant motive in outbound foreign direct investment by SOEs in recent years.[137] The decision allows non-state capital to hold shares in the same projects in which state capital invests. The key to making this commitment meaningful will be to guarantee the rights of private shareholders to influence management and governance and to have recourse in the event that these rights are impaired.

Decision 6 also describes a new kind of state-owned capital operating company (SOCOC) to be created to manage the state's shareholder interests in mixed-ownership enterprises. In essence, these holding companies shift the state's role from managing industries to managing capital as a more passive investor concerned with financial returns. The decision specifies that these companies must serve the goals of the state as fiduciaries; hence, the firms in which SOCOCs hold shares should presumably seek to maximize profits for all their shareholders, rather than serve the two masters of profit and political needs as often happens today. Such SOCOCs would be similar to Singapore's Temasek. However, the *Decisions* defines eligible industries for SOCOC investment in terms that are broad, vague, and suggestive of government priorities: "key" industries,[138] areas vital to national security, areas that are the "lifeblood" of the economy, public service sectors, important and forward-looking strategic industries,[139] areas in need of environmental protection, and areas that support scientific or technological progress. Portfolio managers do not need to be told

There are clear contradictions here: as President Xi has said, SOEs are not *just* to be weakened but also strengthened.

by a drafting committee which industries should be in their portfolios. Decision 6 includes one of the more concrete commitments in the *Decisions*: "Increase the proportion of state-owned capital gains that are turned over to public finance to 30 percent by 2020." Initially, this was understood to mean that dividend payments by SOEs to the public coffers would increase from 0–15% to 30% – a change that many reformers consider important both to constrain the penchant of many SOEs for ill-advised capacity expansions using excessive retained earnings and to augment the ability to finance public goods. However, the final meaning of this commitment remains unclear.

Decision 7, "Promoting a modern corporate system for SOEs," lays out the objectives of SOE governance reform: to improve managerial and operational efficiency so as to enhance the value of state-owned assets, make it possible for them to compete without corrosive intervention by the government in the market, and ensure that they can meet their pension and other social obligations. It also includes the noteworthy commitment to define the reasons for designating categories of firms that should remain SOEs. It is implied that the focus of state ownership should be concentrated in enterprises that provide for public welfare, provide public services, or are in natural monopoly industries. Elsewhere in the *Decisions* are strong instructions that state intervention should be withdrawn in areas where the market can do the job, but this does not mean that the state will not maintain a shareholding position in firms in competitive industries. Decision 7 does refer to the state maintaining its *controlling* shareholder role in natural monopoly industries, but under new regulatory conditions:

> [In these natural monopoly sectors, China will] carry out reform focusing on separation of government administration from enterprise management, separation of government administration from state assets management, franchise operation [meaning government procurement], and government oversight, separate networks from operations and decontrol competitive businesses based on the characteristics of different industries, and make public resource allocation more market-oriented. We will continue to break up all forms of administrative monopoly.

This implies that the state will not be a *controlling* shareholder in firms in competitive industries. Decision 9, among others, makes clear that China will provide a negative list of competitive industries. That list will be essential for understanding to what extent the state's controlling position will be withdrawn. "State-owned Assets Supervision and Administration Commission (SASAC) firms (the large central SOEs that make up 113 of the 799 SOEs covered in the Finance Ministry's 2014 budget) now include airlines, arts and crafts, salt (an ancient Chinese preference for revenue monopoly – as with the British in India), network equipment (Potevio), television parts (IRICO), and many more sectors that are hard to see as strategic necessities. The state's presence and its chill on private investment go far beyond the central SASAC family to include myriad provincial and local enterprises with state shareholders.

While many Third Plenum decisions assert that non-state firms will be separate but equal (e.g., Decision 5: "The state ensures that property rights and access to factors of production shall be equal for the private and public sectors"), Decision 8 partly acknowledges that separate but equal can be inherently unequal. This decision directly addresses the development of the non-public (i.e., private) sector. It specifies that in the mixed-ownership enterprises described earlier, private investors can be *controlling* shareholders. It also notes that many forms of irrational regulation burdening private firms must be abolished, along with hidden barriers.

Other details in the *Decisions* support SOE reforms. Decision 9 calls for a market oversight system to combat regional protectionism and oppose monopoly and unfair competition. Numerous decisions allow private entities to create or invest in a variety of sectors that were previously off limits: financial institutions including small and medium-sized banks (12); medical services, with insurance reimbursements permitted (46); environmental protection (53); and even supporting functions for the military sector, which were once an absolute bastion of state industry (57). Further efforts to foist competition on SOEs in the land business (11), media (39), and cultural institutions (39) are in the text. Finally, the administrative and governance reforms described in virtually all the other reform clusters are critical adjuncts to the process of modernizing the regulatory environment in which public sector firms operate.

For SOE reform to succeed and to be self-sustaining, the government must also foster new, pro-reform constituencies in place of incumbent interests.

Implementation and Analysis

China's structural adjustment and rebalancing require SOE reforms to be meaningfully implemented because the public sector has such a pervasive and distorting impact on the marketplace. SOE reform is not just about overriding incumbent vested interests; for SOE reform to succeed and to be self-sustaining, the government must also foster new, pro-reform constituencies in place of incumbent interests. The first aspect of implementation that we analyze is disciplining vested interests. We then look at steps to reform SOE dividend extraction, to issue operating authority to non-public firms, to restructure firms toward mixed ownership, and finally to level the playing field with neutral regulatory governance.

Disciplining Vested Interests

Since the Third Plenum, President Xi has demonstrated the capacity and the willingness to discipline vested interests. On the eve of his ascendance, most analysts inside and outside China expected him to be hemmed in by factional politics and hard pressed to move the powerful figures controlling SOEs. Willy Lam, a well-regarded political writer based in Hong Kong, argued in a November 2012 essay, "Reform has become nigh impossible because any change of the political or economic status quo will threaten the vested interests – and finances and earnings – of these near-omnipotent CCP clans." He went on to argue that all stripes within the Party would at least agree to avoid threatening SOEs' cash flows out of self-interest:

> These factions have come to a solid consensus on the major goals of the country. Politically, the CCP must preserve its near-total monopoly on power. And while aspects of the economy are being integrated with the global marketplace, about 120

yangqi or centrally-held enterprises will continue to enjoy monopolies over key sectors, ranging from oil and gas to banking and telecommunications.[140]

As it turned out, Xi consolidated power early and immediately established credibility as a leader capable of disciplining elite families who use SOEs as piggy banks. In September 2013, Jiang Jiemin, who had just been appointed head of SASAC, was arrested and replaced by deputy Zhang Yi. Jiang was associated with the patronage network of former Standing Committee member Zhou Yongkang and oil major China National Petroleum Corporation (CNPC). Xi has undertaken this campaign in the name of combatting corruption, but the effect on SOE reform has been immense. The removal of the deputy chairman of the NDRC, China's economic super-ministry, confirmed that the campaign would extend into the bureaucracy that supports SOE giants, not just target a handful of firms. On March 15, 2014, anti-corruption chief Wang Qishan instructed disciplinary inspectors to consider themselves "the sword of Damocles," announcing a list of ministries, provinces, and SOEs for investigation in 2014.[141] As of June 2014, major new investigations had shaken CNPC, the State Grid Corporation, COSCO,[142] Nanjing Tanker, and many other central SOEs. Xi's deputies have taken the message to provincial officials with unusual aggression.[143] In June 2014, the National Audit Office (NAO) reported that 190 people at 11 SOEs were "punished" for mismanagement and "policy breaches." The offending breaches occurred in areas such as compliance with bidding procedures, financial management, and regulation of internal processes.[144]

Lest vested interests undermine reform by slow-walking bureaucratic implementation, Xi has broken with previous practice to personally chair the small leading groups responsible for reform rather than delegating leadership to the premier.[145] The supposedly unimpeachable vested interests sitting atop the system have gotten the message, which has not been confined to one rival patronage network, and thus initial movement to implement concrete SOE reforms is visible.

Dividend Policy

Overhauling dividend policy is key to SOE reform. In 2007, the State Council first mandated that some SOEs begin paying dividends; prior to 2013, these firms paid 0–20% of profits to their state shareholders – a small proportion by international standards.[146] Furthermore, most of these payments were not allocated to public expenditures but routed *back into SOEs* as various support funds. Some estimate that up to 90% of SOE dividends paid to the state flowed back into SOEs in 2012.[147]

In March 2014, the Ministry of Finance announced plans in the State Capital Management Budget (SCMB) for all central SOEs to ratchet up their 2014 dividend payments to the government by 5% from their pre-Plenum baseline, which ranges from 0% to 15% for all SOEs other than China Tobacco Corporation, which pays 20% of its profits. This plan was enacted in May.[148] The SCMB sets revenue collection shares for 799 SOEs, including 121 central SOEs.[149] Household names now required to pay 20% of dividends to the state include the oil and gas conglomerates CNPC, Sinopec, and CNOOC, as well as the State Grid, the five largest electric power generation companies, China Mobile, and China Telecom. Certain central SOEs, including state-owned banks, are exempt from dividend payments, but Beijing is planning to add them to the SCMB.

The Ministry of Finance, which controls China's state budget, and SASAC, which manages the SCMB, are haggling over whether dividend ratios should be applied to total net profits (a larger base) or total net profits paid into the SCMB (smaller). A combination of fiscal consolidation and other downward pressures on agency revenues means this interpretation is fraught with major financial implications for both. Reformers prefer to see the Ministry of Finance win, which would augment resources for social welfare, while industrial policy mavens side with SASAC. In any case, the step up in rates demonstrates seriousness.

Private Firms in SOE Territory

Private firms are advancing into some state-dominated areas. Following an April 2014 State Council meeting on tapping private capital, 80 projects in state-dominated sectors were listed for private investment.[150] These included railways, highways, ports, and other transportation infrastructure; information infrastructure; hydropower, wind power, solar power, and other clean energy projects; oil and gas pipelines and storage facilities; and the modern coal, chemical, and petrochemical industry base. Joint ventures, wholly owned structures, franchise structures, and other modes of investment were judged acceptable.[151] The statement also promised to reduce the scope of administrative approvals for investment projects, with Premier Li stating, "The government should not serve as the dominant force in boosting investment, but should put more energy into public services and market supervision."[152] However, there are reports that some projects among the 80 were under construction pre-announcement, raising doubts whether the policy change is a true opening to private capital or a tool to leverage projects already financed by state capital during a period of tight finances.

Private firms have made inroads in other state-heavy sectors, via new operating licenses, interest rate–driven competition for financial deposits, and pilot programs. The Ministry of Industry and Information Technology (MIIT) awarded business licenses to 11 private companies in December 2013 and January 2014, including a subsidiary of Alibaba and Beijing Jingdong Century Trading, to operate as virtual telecom service providers. The Ministry said this would "stimulate competition within the telecom industry" and "provide users with more choices."[153] Private players are similarly being given a taste of the banking sector, as we described in the "Financial System Reform" section of this chapter. However, more room for private players has not yet meant more room for foreign private firms.

Private Capital and Ownership Restructuring

Some initial ownership restructuring has occurred in 2014. In December 2013, SASAC head Zhang Yi elaborated on ownership diversification pledges, committing to introduce private capital into state firms and major project finance. In March 2014, the dominant player in China's electricity distribution duopoly, State Grid Corporation, announced private capital could invest in and build charging stations for electric cars. State Grid's vice director of sales said, "To attract private investors, the government should set up a supportive market mechanism. ... Otherwise, there will only remain state players."[154] In April 2014, the Ministry of Finance announced plans to involve private capital in China's munitions industry for the first time. And in May, the country's major nuclear power operator, China National Nuclear Corporation (CNNC), announced plans to raise capital via an IPO – the industry's first – that would ostensibly open it to private and foreign investment.[155]

Also in May 2014, the municipal government of Chongqing pledged to invest two-thirds of the city's state-owned assets in *mixed* SOEs, up from 47.4%. So far the most important developments for private investments in SOEs have been restructuring commitments from Sinopec and PetroChina (the listed subsidiary of CNPC), two of China's oil majors. In February 2014, Sinopec's listed subsidiary announced it would diversify the ownership of up to 30% of its downstream oil retail business, worth RMB 300–400 billion ($48–64 billion), by allowing investment from "social and private capital." Social capital, in this context, is used in current Chinese parlance to include foreign, so foreign investors, too, are able to participate in these spin-offs in principle. The news set off a round of speculation about whether this was ownership restructuring in practice or stealth capital fundraising.[156] In April 2014, Sinopec transferred all its oil retail assets to its sales operations, in a preparatory step to forming a stand-alone company. Following Sinopec's announcement, PetroChina announced it had identified business segments that are qualified for a mixed-ownership model, including undeveloped oil and gas reserves, unconventional oil, pipelines, refining and petrochemical, and overseas businesses.

Sinopec and PetroChina have distinct rationales for ownership restructuring. For Sinopec, aggressive overseas acquisitions and challenging domestic refinancing conditions have elevated interest in new funding sources.[157] In March 2014, Sinopec Chairman Fu Chengyu said he hoped to establish at least 10 listed companies under the parent-company umbrella. Fu has also announced that the stake sale could involve foreign private investors and emphasized that the business is looking for strategic investors, not just a liquidity injection. There is no legal or company limit on domestic private or social capital investments, but Fu has suggested the appetite for private and social capital is probably 49% at most. PetroChina is relatively more liquid but has been under anti-corruption campaign pressures to change its shareholding structure. PetroChina Chairman Zhou Jiping has said that any private partnership will likely be implemented via production share contracts (PSCs), under which private capital would pay for specified exploration and development costs. CNOOC, China's third-largest oil and gas major, has also announced it intends to bring private capital into its sales business.[158]

On July 15, 2014, SASAC announced pilot implementation of a new model of reform at six of its central SOEs.[159] Food conglomerate COFCO and the State Development and Investment Corporation will experiment with a new government supervision framework that focuses on state capital over state assets. The objective is to improve the return on state assets by reducing the government's part in day-to-day operations. The pharmaceutical giant Sinopharm and China National Building Materials Group are also enlisted in a mixed-reform pilot, for which the primary task is to create an internal checks-and-balances system to protect shareholder interests. These two companies, along with China Energy Conservation and Environmental

Protection Group and Xinxing Cathay International Group, are also conducting a parallel pilot designed to strengthen the role of the board of directors. Guangdong province followed SASAC on August 18, 2014, with an aggressive provincial plan of its own, committing to restructure all of its SOEs by 2015 and achieve mixed ownership in at least 70% of them by 2017.[160] By the end of August 2014, more than 20 of the 32 provinces had come out with SOE reform plans, all with components limiting executive compensation and committing to higher dividends.

Leveling the Playing Field

SOE reform requires a level playing field. This means SOEs, mixed enterprises, and private firms play by the same rules; are judged according to them without bias; compete on an equal basis for factors of production; and have equal access to markets. If China is to benchmark itself against international standards of development and competitiveness and to expect its firms to be treated as "normal" abroad, then its domestic playing field must be level to foreign firms too. A level playing field must – to use the OECD's checklist – include regulatory neutrality, capital neutrality, market-determined costs of production (removing subsidies), fair tax policies, and public procurement neutrality.[161]

New investment policies that invite private capital or convert state-owned enterprises into privately owned and managed firms should have the effect of leveling shareholders' rights and corporate governance – two SOE reform priorities highlighted in a February 2014 statement on SOE reform deepening, noting that mixed ownership is the "key" to SOE reform.[162] Once private shareholders are in a position to receive dividend payments from these enterprises, public expectations that they be treated with regulatory even-handedness should be greatly amplified, as opposed to under the pretense that only state interests are at issue.

On the capital neutrality side, as part of fiscal reform China passed a new Budget Law on August 31, 2014, under which the SOEs' State-owned Asset Operations Budget is subject to a unified management process consolidating government revenue and expenditure activity.[163] This process requires SOEs to balance their budgets and not count on state budgets to make up operating deficits, and it ensures the payment of SOE capital gains to government coffers. The new Budget Law has requirements on transparency and public reporting. If carried through, this reform implementation from the fiscal side should help level out the soft budget constraints that set SOEs apart from the rest of the marketplace and buffer them from the ordinary commercial disciplines affecting other firms. A memorandum of understanding agreed to by SASAC, CBRC, SAIC, and three other regulatory agencies in January 2014 promised to impose harsher restrictions on defaulters and to coordinate monitoring and implementation.[164] SASAC's involvement in this decree indicates its ultimate application to SOEs.

A level playing field must – to use the OECD's checklist – include regulatory neutrality, capital neutrality, market-determined costs of production (removing subsidies), fair tax policies, and public procurement neutrality.

In terms of market operating costs, SOEs' ability to play fast and loose with internal accounting is ending. The NAO's June 2014 audit report revealed financial irregularities and lack of due process in SOE investment projects at CNPC, China Resources, China Shipping, China Metallurgical, China Nuclear Engineering, China State Shipbuilding, China Aerospace Science & Industry Corporation, and others. The NAO announced it had recovered RMB 3.3 billion (roughly $535 million), indicating that regulators are forcing SOEs to play by new rules.[165] Greater scrutiny should not only force SOEs to pay up but also make them adhere to market-determined operating conditions.

The Budget Law and other fiscal policy reforms are explicitly seeking to level the tax policy environment, so that a national marketplace is not segmented by a patchwork of local tax incentives crafted over decades to favor local special interests. However, as with trade policy adjustment, new fiscal rules appear to leave room for tax incentives to remain in many categories of industry, such as "lifeblood" and "emerging," and the right of higher echelon authorities to make special tax transfer payments does not end under the new law. Transfers earmarked as significant for national security are not subject to transparency, and China's definition of national security interests is expansive.

Finally, there is the issue of public procurement neutrality for SOEs. China is not yet a member of the Government Procurement Agreement plurilateral framework under the WTO, although it has stated its intention to join, and aadvanced-economy standards for convergence on this point seem a ways off. While the *Decisions* is encouraging in places with regard to private participation in government procurement, even in the realm of military supply, the main developments on this front in 2014 have centered on the exclusion of foreign firms from procurement. This issue had arisen previously in terms of foreign reluctance to file patents in China in the first instance to be qualified for government procurement. As noted earlier, this year the People's Liberation Army has issued outright instructions to ban foreign auto brands from procurement and a general ban on Microsoft's Windows 8 in government computer purchases.[166] There are national security arguments for such actions, no doubt, but these could invite reciprocal escalation abroad, and the risk of a protectionist downward spiral.

Counter-indications and Tracking

Despite positive moves, parts of the *Decisions* recognize SOEs as a pillar of the economy. Prefatory language to Section II of the *Decisions*, which lays out the signature SOE reforms, says the basic economic system, with public ownership playing a dominant role and different economic sectors developing side by side, is an important pillar of the socialist system and the foundation of the socialist market economy. It also states that the Party aims to continuously increase its "vitality, controlling force, and influence." President Xi has said SOEs are not *just* to be weakened but *also* strengthened.[167] This language is strong and hard to reconcile with the marketization drive. The extent to which this presents a paradox depends on how much of the economy will remain prone to controlling state shareholders, and at what pace they withdraw.

The Xi Jinping leadership has clearly set out to make changes to the functioning of SOEs in the Chinese economy, in terms of management, financing, and dividend extraction, and the industries in which they operate. Shocks to business as usual for the SOEs are underway. But counter-indications to government's complete withdrawal from the market are also clear.

Expansive and vaguely defined areas for continued controlling state shareholding are present. SASAC Vice-Chairman Huang Shuhe said:

> Absolute majority shares can be held by state-owned capital for SOEs in major industries and key fields that are the lifeblood of the economy. … State capital can hold a relative majority of shares for important SOEs in pillar sectors and new- and high-technology industries. [And] it can hold minority shares in or totally exit from SOEs that do not need to be controlled by state capital and whose majority shares can be held by capital from other sources.[168]

At the provincial level, steps to mix ownership are encouraging, but stated intentions from Shanghai and Chongqing to place 80% of their municipal capital in certain industries call into question whether market forces – and private firms – can play a decisive role in determining resource allocation in these competitive sectors.

Reform skeptics are justified in arguing that state dominance is not clearly ending in many industries that in other countries were long ago consigned to efficient private players. Optimists are equally right to point out that the initial changes are substantial and that Beijing would be tactically well advised not to trumpet the expected endpoint unnecessarily at this stage, lest it provoke a campaign of resistance. Certainly, previous reform campaigns soft-pedaled the implications to avoid prompting debate on whether to proceed, including the initial 1978 program.

The ambiguity of SOE reform intentions may be deliberate, giving China's leaders more leeway to strengthen them or slim them down without more resistance. Alternatively, the lack of clarity may reflect indecision, or unresolved internal debates, or some notion of a third way between privatization and statism. We do not know. In any case, policy and business leaders abroad will be forced to accept a working hypothesis long before the outcome is clear, and given the competitive consequences that ride on the answer, they will tend to err on the side of caution. That means assuming SOEs will remain in competitive industries and enjoy advantages that distort the marketplace. And as China's firms expand their global footprints, as Beijing expects them to, that distortion will not be limited to markets inside China. These considerations make the effort to benchmark the status and direction of SOE reform implementation particularly important.

There is little consensus on how to gauge the state's reach into the Chinese economy. Economists disagree on basic questions such as how much influence the government has in the marketplace and whether its influence is growing or shrinking. This discord is mirrored in internal debate among Chinese economists. Complicating matters, opinions vary among advanced economies about the proper extent of state ownership of enterprises, between, say, the United States and Italy, or Hong Kong and Korea.

Convergence in profit margins or return on investment between state and non-state firms is probably *not* the right metric; in fact, those gaps could likely widen, even as the efficiency of state firms rises. If the state remains in market-failure industries where financial returns are meager even though social returns are high, the *average* returns for state firms should fall. Similarly, we do not expect borrowing costs for state and non-state firms to converge even with a level playing field: reform should ensure that state firms have state backing *to provide public goods*, and thus their borrowing will likely be state guaranteed, justifying lower risk premiums.

To measure whether state participation is migrating to public goods, the first necessary tracking indicators should focus on China's implementation of a transparent and comprehensible negative list of industries in which the state should maintain a controlling influence, rather than vague meta-categories such as "lifeblood industries." As in other reform clusters analyzed in this study, we suggest watching for fulfillment of China's own self-appointed goals for SOE reform, rather than gauging their progress against an external set of ideals.

Though there is a range of views on what degree of state ownership is reasonable, advanced economies generally have an order of magnitude fewer exceptions in their negative lists than China presently does. Therefore, the availability and length of a national Chinese negative list for categories of state intervention will naturally be the first indicator of China's SOE reform implementation to assess. There are different ways to appraise such a list, whether in comparison to where China is coming from or where it is going.[169]

Second, one can assess the extent of ownership restructuring at central SOEs as reflected in shares held by non-state investors, and their participation in firm governance. Focusing on the central SASAC SOEs would be more manageable given their modest number, and these firms represent some of the largest and most important in terms of industrial assets, profits, and influence over the national economy.

Third, SOE reform will be reflected not just in the sell-off of some state shares noted earlier but also in the growth of the non-state sector's market share, especially in segments of the economy previously dominated by state firms. One can look for such evidence through the issuance of operating licenses to private firms, or more directly in terms of market shares and sales reported by private players.

The message of the *Decisions* is that the state has an important mission to provide public goods and welfare in areas the market cannot service, not in industries where profits from competition are abundant. The ratio of central SASAC firm profits to national enterprise profits in the economy should reflect the adjustment in market structure that best serves China's stated objectives. Associated with this transition, the ratio of SOE dividend payments for general government budgetary use – not the State Capital Operating Budget that exists to get turned back to the SOEs – relative to total SOE profitability should increase. These shifts should result both from structural adjustment of state ownership into a new set of activities and from more rapid growth of enterprise activity in public interest sectors where the state remains.

Finally, while we have generally stayed away from judging SOE reform in terms of expanded opportunity for foreign private firms in China, some measure of the consequences of these reforms for overseas interests is important. The reason, foreshadowed earlier, is that foreign governments are wrestling with how to treat Chinese SOEs in their own economies. The United States, for one, has chosen to screen SOEs only for narrow national security considerations – in inbound FDI reviews, for example – and not based on whether U.S. firms have reciprocal opportunities to invest in competitive industries within China. China has concluded, as the *Decisions* suggests, that the legitimate interests and welfare of its private firms will be best served if SOE reform takes place. Foreign officials naturally expect that *their* private firms share in that opportunity, especially with China's SOEs now operating globally. Foreign ability to participate in the SOEs' share restructuring will gauge investment openness in this sector. Of particular importance is evidence that foreign firms can expand their positions in their *existing* SOE joint ventures, especially with private Chinese firms are expanding their investment in those same sectors. Evidence that foreign firms are gaining market share in competitive industries in China would also be a more powerful indication of whether the state is lessening its intervention in the marketplace than simply gauging whether state ownership is giving way to other purely Chinese classes of owner.

LAND POLICY RATIONALIZATION

China's rapid economic growth has been enabled by a set of rules governing the allocation and transfer of land. For decades, local governments have had ample incentive to convert land in their jurisdictions to uses that boost local tax revenues, increase the local GDP figures crucial to officials' career prospects, and enrich vested interests. In rural China, farmers hold the rights to use land but not the title to it, and local governments have incentives to acquire land from farmers at modest, below-market prices; develop it at a profit; and move on to the next assignment before protests hit. On the urban front, China's cityscapes are broadening not just because of migration but also because urban municipalities are annexing peripheral areas to provide space for development and capture tax revenues – usually with the same lack of transparency and styles of market failure that exist in the countryside.

The predictable rush to develop housing, infrastructure, and other construction projects has inflated a huge and widely recognized property market bubble. China is facing severe macroeconomic challenges as a result, and the inevitable market correction is sure to be painful. The social and environmental costs of China's land-conversion drive cannot be overlooked either. Local governments have made major concessions to prospective land buyers, whether in the form of subsidies or lax enforcement of rules governing land uses or environmental protection, causing tremendous harm to local residents' quality of life and to the environment. This has resulted in petitions, incidents of unrest, and crisis-level environmental degradation.

Solving these problems will not be easy. Unlike other areas of the reform program, advanced economies offer few model practices to imitate: property rights were generally resolved long ago, a low percentage of the population works in agriculture, and conflicts over land use and control can be managed by well-established institutions. Land reform is also intertwined with many of China's other reform imperatives, including financial system reform, state-owned enterprises restructuring, labor reform, and center-local fiscal reform.[170]

The Third Plenum program set out commitments to modernize various aspects of China's land policies, from high-level considerations such as property rights, to region-specific matters such as agricultural development and urbanization. (Related topics of environmental management and labor policy are addressed later in this chapter.) These reforms have the potential to improve China's economic outlook and will serve ambitious political and social goals such as vastly expanding the urban population by 2020. Skeptics, however, have reason to question the seriousness of China's intentions: China has announced land policy reforms of the sort found in the *Decisions* on previous occasions but failed to deliver them. All the reforms described in the program could come to the same fate without a steadfast commitment to enforcement and institution building.

Third Plenum

The word *land* makes its *Decisions* debut under Section III, "Accelerating the Improvement of the Modern Market System," in Decision 11, "Forming a unified construction land market for both urban and rural areas" – neatly tucked between decisions ordering that any price that can be determined by the market be left to the market (10) and the call to reform and partly privatize financial markets (12).

In past practice, for the nonagricultural land held by rural collectives to be resold to commercial uses, local government authorities had to first expropriate it from the farmers and collectives and then rezone it as urban so it could be used for industry. With local government as the only buyer one could sell to, and at a fraction of the land's value, the system disadvantaged farmers under the justification of protecting them from themselves (from selling off their home plots). Decision 11 states that Beijing will "allow rural collectively owned profit-oriented construction land to be sold, leased and appraised" directly into the market by collectives on the same basis as other state-owned urban land. This should eliminate an unnecessary intermediate markup and abolish a monopsony condition in which farmers had only one buyer with no interest in negotiating (their local government). This reform has opponents both at the top, who fear buyers could sweep in to take advantage of farmers' new freedoms, and at local government levels, where this reform could disrupt the accustomed system of driving GDP growth by usurping land for seemingly endless but not always well-thought-out redevelopment. This change is thus closely related to the center-local fiscal reform described earlier.

Decision 11 also pledges to discipline and apply due process when land expropriation continues to be necessary. The document pledges to "regulate the procedures for land appropriation, and improve the rational, regular and multiple security mechanism for farmers whose land is requisitioned." In addition, misallocation of land for private gain will be addressed, and the use of revenues from local land sales will be audited to ensure it serves public needs. Researchers working under China's State Council have shown that poor management of expropriation to date has led to massive social unrest and discontent toward the government and the Party.[171] Given the importance of land sales to local governments, meaningfully constraining such funding channels will be a challenge.

The decision sets out to improve the secondary market for land leasing, transfer, and mortgage. As the World Bank's 544-page 2014 magnum opus *Urban China* describes in detail, secondary markets for property in China are "underdeveloped and opaque," unmonitored for revenue, and unregistered.[172] After an initial land-grab and building boom, local authorities often ignore the regulatory work required for a functioning secondary marketplace, and the *Decisions* reiterates long-standing pledges to remedy that.

While Decision 11 is part of "creating a modern market economy," land comes up with equal importance in Section VI of the *Decisions,* "Improving Mechanisms and Institutions for Integrated Development of Urban and Rural Areas," which has four major thrusts: improving the agriculture system, augmenting farmer property rights, fostering equity between urban and rural areas in flows of resources including inputs and public investment, and improving urbanization. These are Decisions 20–23. The preamble to this section is clear on the importance of resolving the urban-rural double standard in China if the nation is to consolidate development and sustain growth:

> The urban-rural dual structure is a main obstacle to the integrated development of urban and rural areas. We must improve the mechanisms and institutions to form new relations between industry and agriculture and between urban and rural areas in which industry promotes agriculture, urban areas support rural development, agriculture and industry benefit each other, and urban and rural areas achieve integrated development, so that the overwhelming majority of farmers can participate in the modernization process on an equal basis and share the fruits of modernization.

Decision 20 is titled "Accelerating the building of a new type of agricultural operation system." Instead of something new, this decision is about staying the same: all rural land will continue to be owned by collectives, and the family unit is to remain the principal farming operator. However, the decision endorses a number of reforms too – although most of them have been on the table for some time. It promises to stabilize farmer land-use rights, "for a long time to come." This means protecting the current 30-year land-use rights from frequent or arbitrary reapportionment or lengthening them. It is also intended to promote further renting out, transferring, or mortgaging land-use rights. The motive here is to assemble farms of more commercially viable size, in partnership with enterprises, which is the genesis of "allow farmers to develop industrialized operation of agriculture by becoming shareholders using their contracted land-use right." This was tried in many parts of China over the past decade with decidedly mixed results. The overwhelming majority of land remains farmed by families.

For China to meet its urbanization goals, as many as 300 million rural citizens must formalize their urban livelihoods over the coming decade, leaving no more than 140 million remaining in farming, necessitating bigger, more capital-intensive farms with fewer laborers and more tractors. As the drafters of the *Decisions* know, there is only one way to make the math work: either rural agriculture modernizes or this degree of urbanization will not materialize. Decision 20 recognizes that this requires financing and points to fiscal support and lending for farmer cooperatives to help capitalize operations and enhance productivity. Over the longer term, that is useful; for the time being, entrepreneurs with tractors and other equipment fill the gap fairly well.

Decision 21 expands on the endowment of farmer property rights. It states that the Party "will safeguard the rights and interests of farmers as members of collective economic organizations, vigorously promote farmers' joint-stock partnerships, grant farmers the rights to possess, profit from, pull out with compensation, mortgage, guarantee and inherit shares of collective assets," giving farmers shareholder rights in their collective that are negotiable and tradable. Land market and transfer rights pilots have been ongoing for years, and the roadblock is not so much the rules but empowering farmers to enjoy these rights, seek legal recourse when they are denied, and rely on a functional registration system to defend and track titles.

Like Decision 21, Decision 22 – "Promoting equal exchanges of factors of production and balanced allocation of public resources between urban and rural areas" – is short but important. The decision aims to further disassemble the two-tiered politics of modern China in which the urban-rural divide comes with alarming material and political inequalities. It includes an equal pay provision for rural migrant workers, less pell-mell planning processes for infrastructure and community development (urban and rural), and more equitable access to basic public services such as education and health care. Without such policy improvements, development will continue to grow more imbalanced and unstable, as during the past decade. Section VI finishes with Decision 23, "Improving the institutions and mechanisms for promoting the sound development of urbanization." While the text does touch on conversion of land for urban development and urban land use, the main thrust is more relevant to labor reforms, as is Decision 44 on property rights and income distribution. Decisions 51–54 deal with land extensively, but under the rubric of environmental protection. We therefore discuss those decisions under other sections.

For China to meet its urbanization goals, as many as 300 million rural citizens must formalize their urban livelihoods over the coming decade.

Finally, Decision 23 heralds a profound and concrete announcement: softening the household registration (*hukou*) system (which in addition to its significance for land policy is important for labor dynamics). The second half of the decision reads in full:

> We will help the eligible population to move away from agriculture and become urban residents. We will introduce new population management methods, accelerate the reform of household registration system [*hukou*], completely lift restrictions on new residence registration in administrative townships and small cities, relax restrictions on new residence registration in medium-sized cities in an orderly manner, lay down appropriate conditions for new residence registration in large cities, and strictly control the population size of megacities. We will steadily make basic urban public services available to all permanent residents in cities, and incorporate farmers who have registered as urban residents into the urban housing and social security network, and make sure their previous subscription to old-age insurance and medical insurance in the countryside continues in the urban social security system. We will establish a mechanism dovetailing fiscal transfer payment with the urbanized agricultural population, provide land for urban development with reasonable restrictions, and increase urban land use efficiency.

A system created to keep people out of the cities is being replaced by one crafted to do the opposite. There have been pilot *hukou* reforms previously, but the Third Plenum commitment is broader. This reform would be a linchpin for the urban labor force outlook and hence labor-intensive industry competitiveness, urbanization policy in general with its trillions of renminbi in infrastructure outlays, the viability of the overbuilt property sector in many urban areas, the urgency and opportunities entailed in agricultural modernization, and center-local fiscal restructuring and hence overall political reform.

Implementation and Analysis

We organize our appraisal of land reform implementation into three subgroupings: rural property rights and due process, land policy to support urbanization, and rebalancing of government policy priorities between the urban and rural sectors. The land commitments in the *Decisions* are not new – most have been piloted for years – and current definitions of land rights are generally adequate. The problem is enforcement and institutions, including land registration and court systems, civil protection for lawyers and other public interest groups to help farmers seek recourse, and environmental protection. The signs of movement in these areas are motivated, we believe, by awareness that the objective of urbanizing 300 million people by 2020 is not possible without these reforms because many rural dwellers are increasingly reluctant to trade their current livelihoods for second-class citizenship in the cities. Even under new plans, Beijing expects only one-third of these new townsfolk to be granted formal urban residency privileges. In rural Beijing, where land appropriation has been generously compensated in recent years, rural *hukou* has become more attractive than urban *hukou* because of compensation opportunities. Many farmers worry about the extent of "guaranteed benefits" under urban *hukou*. They are happy about their current coverage.[173] A survey by the Chinese Academy of Science suggests a growing reluctance to switch from rural to urban *hukou*, especially if the trade comes at the expense of rural land rights. This is a generational pattern: young ruralites want to be in cities, while older individuals hold onto their land rights. This is likely to be disruptive when the time comes to pass the farm down.

Rural Property Rights and Due Process

The first challenge to land policy is title registration. Specialists point out that China's rural agricultural land is composed of more than 1 billion individual plots, and it has been 15 years since their last general reallocation. Title has to be authenticated before land can be negotiated through markets and this takes time. Electronic records are often not available, and a definitive survey of every plot is onerous, especially after the epic internal migrations and disruptions that have occurred since 1949. In early August 2014, the Ministry of Land Resources (MORL) announced that a new national system for comprehensive land registration, including for farming and collective land, would be set up by the end of 2014, implementation of the system would occur in 2015, the system would enter normal operation by 2016, and full information sharing and public availability would be realized by 2017.[174] A comprehensive and transparent database would be the foundation of property rights and due process for landholders in China, especially rural citizens. We note that in this area, as in many others, the sole original Third Plenum deadline of 2020 is being fleshed out with a clear timetable of interim targets designed to ensure that concrete action is front-loaded rather than left for the last minute.

Many provinces and cities have land title registration pilot projects to support leasing of operation rights, so the MOLR national timetable is not starting from scratch – it is ambitious but not unrealistic. The majority of provinces, such as Fujian, already aim to complete their pilots by 2015 and the entire registration process by 2017.[175] Farmers can use "perfected" titles – those certified to correctly represent their current use rights – to collateralize land to finance capital equipment purchases (such purchases are already growing fairly well, as a result of farmer wage and income growth). To help ensure that local officials do not withhold information needed to do this registration work, on August 15 the State Council announced a comprehensive audit of national land-related fiscal accounts. The campaign will cover transactions from 2008 to 2013 and is aimed at exposing provincial rent-seeking behavior and corruption.[176] On August 21, the Agricultural Bank of China (ABC) released draft measures on the use of rural leased land as loan collateral, the first time a large commercial bank has done so.[177] On a purely commercial basis, few properties are really valuable enough to collateralize yet, but this helps create more rational expectations about what is possible in the future. Each of these moves is modest by itself, but taken together there appears to be some movement on improving due process and land rights.

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Land Policy and Urbanization

On March 16, 2014, China released a massive new urbanization plan for 2014 to 2020. The plan sets out and updates a range of highly ambitious targets and objectives, including a 60% urban residence ratio by 2020. In practical terms, the plan is an anchor justification for approving and financing huge additional infrastructure, property, and other construction projects. For instance, the plan stipulates, "Every city with more than 200,000 residents will be covered by standard railways by 2020, with high-speed services connecting cities with more than 500,000 residents." The plan argues that urbanization is the basis for future household consumption growth.[178]

After the December 2013 Central Economic Work Conference – the annual economic agenda-setting meeting of economic leaders and senior staff – President Xi announced a 2020 deadline for liberalization of the household registration system – a key reform needed to effect these urbanization objectives. The idea is that rural citizens will be able to transfer their residency and hence access basic social services in towns and cities under a certain size but will be required to liquidate their collective land interests to do so (hence, the importance of land markets, as discussed earlier). On June 6, the Deepening Reform Small Leading Group reviewed a comprehensive plan on reforming the *hukou* system and rural land system. Subsequent to this, the State Council formally released the plan on July 30.[179] This step clarified key principles for the process – such as that farmers cannot be forced to trade rural land for the prospect of urban *hukou* – and reiterates the 2020 endpoint for implementation. Officials in smaller cities and towns as well as farmers are accustomed to central plans and programs that hand down unfunded mandates, so many rural development experts have reacted skeptically to this land-reform-through-urbanization notion. However, as described earlier, center-local fiscal reforms have starting moving forward in parallel, which makes this initiative more important to watch.

Other big urban development projects specific to certain regions were rolled out in the first half of 2014. A massive "Beijing-Tianjin-Hebei Development Plan" was introduced. The program envisions radical alterations to the region, home to 100 million people, with redistribution of industries, commerce, and government service facilities to improve the livability of the great capital area and "ease Beijing's urban malaise."[180] Separately, a $170 billion program for urban shantytown reconstruction was announced. While these projects have the potential to be welfare enhancing, they can also be understood as stimulus programs as much as reforms: they reflect government planning in the fabric of China's economy at the same time that regulators are being told to withdraw from making allocation decisions and project approvals that markets can handle. With old-style urbanization fiscal-stimulus programs underway, and new-era institutional reforms still at an early stage, one may conclude that implementation of urban development reform is proceeding slowly and competing with old approaches.

Rebalancing Policy between Urban and Rural Sectors

The *Decisions* pledges to promote "equal exchanges of factors of production and balanced allocation of public resources between urban and rural areas." This is important because as long as a two-class system remains whereby urbanites have preferential access to public services and opportunities based on their birthplace, with internal controls on migration, instability arising from this social injustice will swell. As noted earlier, *hukou* reform and rural land titling are important parts of this process. The audit of 2008–13 land sales, new transparency requirements under the Budget Law, and other reforms to government accountability also help. More important is that Beijing is already moving on center-local fiscal relations, which should improve the management of responsibility for social expenditures to address some of the inequalities that result from land reform delays – such as the displacement of some rural citizens through land expropriation. At its June 6, 2014, meeting, the Deepening Reform Small Leading Group discussed steps Beijing can take on urban-rural dynamics to "transform the economic development pattern, build a fair and unified market, and promote equal access to basic public services," though President Xi said that these reforms were complex and would require time.

Nonetheless, the meeting reviewed a comprehensive *hukou* and rural land system reform plan, leading to formal release of a plan by the State Council on July 30, as discussed earlier.[181] The plan does not envision complete liberalization of residency rights and entitlements. It describes formalization of urban residency, shy of full *hukou* provision, for roughly 200 million migrant workers now temporarily in urban areas, an additional transfer of 100 million citizens out of agricultural work into towns and cities, and up to 100 million new formal urban *hukou* permits. For the remainder of new urbanites, provision of public services in some manner other than full *hukou* is intended. The formality of migration rights is graduated, from extensive in smaller cities and towns to tightly restricted in the largest cities. The plan clarifies rights for ruralites, that they cannot be forced to trade rural land for the prospect of urban *hukou* – and reiterates the 2020 endpoint for implementation. It also commits to eliminating the vocation distinction within the *hukou* system (farmer versus non-farmer, another legacy of communist-era approaches).

Full implementation of this sweeping change will likely require until 2020 and beyond, but enough local reforms are afoot to make clear that progress is occurring on this front. An array of pilot measures are in place in many cities and provinces, although some had been instituted pre-Plenum.[182] In March 2014, Shandong province issued its 2014 *hukou* reform policy, which permits migrants to counties and small-to-medium cities to obtain *hukou* by meeting two criteria: a stable job and a stable residence.[183] In May 2014, Jiangsu province announced a still more liberal 2014–20 urban and rural development policy, wherein migrants to counties and small-to-medium cities may obtain *hukou* by having *either* a stable job *or* a stable residence.[184] These local pilots will be superseded to some extent by the national policy, but in the interim they serve as proof that reform is underway.

Counter-indications and Tracking

The indications discussed earlier demonstrate a modicum of movement on land-related issues, including registration, titling, and *hukou* reform, but by any measure the challenges in this area remain extreme. Official plans are written as though complications around the land rights of up to 300 million formerly rural citizens expected to be in urban areas in 2020 can be resolved without providing urban residency permits and equal access to social services including health care and pensions for all, and that is unlikely to be the case. Surveys suggest that many rural Chinese are increasingly reluctant to accept that deal. The prospect of a full audit of the use of RMB 15 trillion in local revenue from land sales since 2008 hangs over the heads of local officials, but it is premature to be confident that this transparency and accountability will be sustained and permanently change government behavior.

Land reform can help Beijing achieve the urbanization defined as a key driver of 2020 potential growth, but it is far from sufficient.

Land reform can help Beijing achieve the urbanization defined as a key driver of 2020 potential growth, but it is far from sufficient. Expenditures well beyond those currently discussed will be required to make urban existence an attractive trade for rural life for many of those remaining on the land: strong wage growth driven by privatization and marketization, and investment in affordable urban housing, schools, and hospitals will be needed. Not only is future investment predicated on adjusting China's rural-urban patterns, but returns on vast tracts of property and infrastructure already laid down depend on this great migration.

We suggest three indicators with which to monitor the progress on land reform and its connection to urbanization: titling, *hukou*, and rural land purchase prices.

First, as discussed, progress on full national land title registration is a critical variable for multiple reasons, including its connection to social stability as well as the efficiency of rural land markets. Verifiable completion of the stages of implementation for national land registration, as set out in the MOLR plan, is a first indicator to watch on land reform. With completion of this initiative, we should, over time, expect average farm size to increase.

Second, progress on *hukou* reform of residency status and access to social services is critical. Rural citizens hold onto land because it is an important social security asset for them. Rationalization of landholdings and fulfillment of urbanization both depend on *hukou* reform. The total number of Chinese permitted new urban *hukou* status, and hence access to health coverage, education for children, and unemployment and other basic benefits afforded to city dwellers, will demonstrate the state of progress. An assessment of whether their new urban benefits are equal to those already in cities will be a necessary indication that land reforms are proceeding in a sustainable manner as well.

Third, if titling and reforms to the way rural land markets function are carried out, then rural land-use purchase prices should increase. This will reflect a greater degree of efficiency but also social justice and better protection for farmers against exploitation. These purchase prices, including for expropriations, can be observed in some areas of China with pilot projects to date; with the reforms intended in the *Decisions,* a more comprehensive picture of rural land purchase prices should be feasible.

LABOR AND SHARED WELFARE

In the reform era, demographics were on China's side: from 1982 to 2013 the working-age population increased by 375 million to just over 1 billion – a marginal increase two and a half times the entire U.S. labor force – while the dependent population fell in absolute terms from 390 to 353 million. With such workforce growth, a revolution in technologies for making labor-intensive products, and access to consumer markets to buy them at home and abroad, policy had merely to stop *prohibiting* internal labor migration to secure growth. For most Chinese, manufacturing skills were taught on the job, while more advanced skills were supplied by China's small cohort of university-trained professionals, Chinese returning from abroad ("sea turtles"), or by expatriates and foreign enterprises. Starting at such a primitive per capita income position – $366 a year, as noted in Chapter 1 – advanced labor and social welfare policies were not needed to ensure rising prosperity: all that was required were broad growth, adjustment, and mobility. But as a result of such growth, that mix is no longer enough, and absent major changes for labor and shared welfare policies, China's growth will fade.

Higher incomes and the One Child Policy have led to the end of China's demographic dividend: the working population is no longer growing and will soon shrink. The absorption of hundreds of millions of workers from farming into the urban economy has run its course, so additional demand for workers pushes up wages in a normal way, but a way not seen except for high-skilled professions in the past. This wage pressure is a healthy sign of middle-income status, and today's wages are the foundation of tomorrow's transition to consumption-led growth. The only catch is that labor productivity must rise with wages if China is to remain competitive.

There lies the problem. Public services – foremost education and basic health care – must improve greatly to match the demands for rising labor productivity. So-called barefoot doctors and village schools were advanced by China's standards at the start of reform, but the adequacy of basic social services for supporting middle-income growth has fallen badly behind. Some 200 million migrant workers currently reside in China's cities but are denied legal residency status, or *hukou*, and thus have no entitlement to local education or health care. Back in the rural areas where most are registered, such services are often primitive. Thus, the current state of affairs presents a social stability crisis; a social justice crisis given the inequality in services two-thirds of the population are consigned to at birth; and an economic crisis, as urban China's need for workers will not be met based on a presumption of second-class citizenship.

It is clear from the *Decisions* that the Party understands the entangled risk requirements of this situation, and it offers elements of a solution. There are calls to reform education, boost job creation and entrepreneurialism, provide unemployment statistics, regulate discrimination and labor abuse, address income distribution, fund social security, and – importantly – improve health care. Overarching reforms to the *hukou* system are planned, which lie beneath many of these narrow initiatives. Xi Jinping's great ambition to make China equitable for the people who do not have an urban residency permit, and for their children, is both the reason to celebrate the cluster of land and shared welfare policies pledged in the *Decisions* and the reason to moderate expectations: we are talking about making 850 million more people eligible for urban entitlements. While some of them are already contributing to the tax base needed to support such expenditures, many are not. Much of the fiscal and political wiring needed to enact this vision of a great society is yet to be worked out, and some hard financial realities stand in the way of a progressive outcome. China's 2020 growth, meanwhile, requires that progress be made now, so that businesses can plan and invest based on an assumption of social stability and human talent availability in seven years, rather than on the assumption that rising expectations are unmet and are leading to instability.

Third Plenum

The *Decisions* includes a whole section aimed at labor and shared welfare – Section XII, Decisions 42–46 – titled "Promoting Reform and Innovation of Social Undertaking." We look at the objectives set out in each of these decisions, then circle back to the connection to the *hukou* system reform in Decision 23.

In Decision 42, the Party pledges to broaden curricula to make education less monotonous and more complete – a response to employers' frequent complaints that Chinese students graduate with a pronounced lack of well-roundedness. The decision also calls for reducing the importance of a one-time college placement exam as the major determinant of citizens' career prospects. But the decision's commitment to address basic educational equality, especially between urban and rural areas, points to the heart of China's human resources problem. For the 63% of all Chinese who do not have urban residency status, the quality of education is generally vastly inferior. This imbalance virtually ensures future income inequality. Decision 42 says policy will promote equality vigorously, offer financial aid to help, and balance compulsory education expenditures between urban and rural areas so social, regional, and rural-urban divides can be closed. Responsibility for implementing education is to remain with the provinces, with central authorities focusing on regulation and policy. "Social organizations," such as think tanks and civil society organizations, are permitted to help evaluate and monitor. Many of the education pledges are qualified with terms such as "boost," "intensify," "try," "explore," or "further push ahead:" in other words, they have a tone of evolution, not revolution. Given structural challenges for society and the economy presented by current educational inequalities, some development economists question whether the *Decisions* was thus bold enough.

Decision 43, "Improving systems and mechanisms that boost employment and business startups," addresses labor and welfare by focusing on the demand side – boosting employment growth and new business start-ups, as well as through many other measures. It is more demonstrative than the education section and uses stronger terms. China *will* target employment-oriented growth: in past years, investment has been concentrated in non-job heavy capital-intensive sectors such as steel, so this reflects a clear understanding of the relationship of structural adjustment to labor prospects. China *will* regulate the labor market and remove *all* institutional barriers to equal employment opportunities for rural citizens, women, and others facing discrimination based on age, ethnicity, religion, and many other factors even including height and physical appearance. While laws on the books prohibit labor discrimination, in practice these rules are routinely ignored.[185] Ethnic profiling remains a pervasive element of Chinese society today, as the political response to civil unrest in various provinces has made clear. These commitments are aspirational, and institutional changes including the right to sue (or some equivalently powerful incentive to cease discrimination) will be needed to make them real, but it is a good start that these problems are recognized.

Other items in Decision 43 will be "improved" – a less forceful term. Affirmative action and incentives for entrepreneurs to start new businesses will be revised to promote job creation, as will government-run vocational training. Two important government functions to be strengthened are the unemployment insurance system and unemployment statistics. Since the 1990s, China has had labor laws mandating unemployment insurance and other pay-in systems, but to date these have only been fully implemented for a fraction of urban workers; rural workers are essentially not covered, and migrant workers in cities have no access to local benefits, nor an ability to "port" whatever benefits they might have accrued back home to their current jurisdiction. Corruption often siphons off a portion of the worker welfare set-asides.[186] The Decision 43 objective of strengthening unemployment insurance will require reform of the thorny center-local fiscal relationship (explained earlier in this chapter), *hukou* reform (Decision 45, discussed previously under "Land Policy Rationalization" and later in this section), and land reform to be meaningful.

The pledge in Decision 43 to overhaul employment statistics seems more tractable. With a modest budget increase and clear authority, the National Bureau of Statistics could make good progress in measuring unemployment, and this will help refocus the work and mission of economic policy makers. Subsidies and transfers that tax households to benefit enterprises are common in China, as they are elsewhere. When the costs borne by citizens – including unemployment – are made more transparent, citizen expectations for change rise. Some assume that the Party would never willingly permit such transparency and see this need for it as a paradox.[187] But suppressing transparency around employment, like attempting to suppress air quality data, is increasingly not even an option. Moreover, the Third Plenum program provides evidence that the Party is embracing the realities (of public pressure) that come along with greater transparency around economic data, rather than trying to fight them, because successful suppression is a pyrrhic victory: growth will plummet if economic trends are not addressed forthrightly and publicly. In fact, it already has. Implementation of reliable employment statistics is a change whose time has come.

Implementation of reliable employment statistics is a change whose time has come.

Real labor unions are touched upon in Decision 43, but so tremulously that they may as well have been left out. The text says China will "innovate the labor relations coordination mechanism, opening up channels for workers to effectively make reasonable appeals." While it is good that the Communist Party deigns to permit the nation's 1 billion people of working age to make appeals that the Party deems reasonable, incidents of labor action, strikes, and protests over everything from workplace safety and wages to corruption in recent years have begun to swamp the bureaucrats and Party cadres tasked with palliating them. Provinces experiencing the greatest labor pressures – such as Guangdong – have already gone well beyond the Third Plenum in trying to accommodate and open space for labor activism, in an effort to head off unrest. It is not clear whether those progressive experiments will be enough, let alone the thinner treatment labor rights get in this section.[188] In contrast to the sparse 18 words (none of them "union") that collective worker organization gets in the *Decisions*, recent college graduates having trouble finding jobs get 129 words of attention in Decision 43.

Decision 44 on income distribution has two subsections: measures to raise *primary* income distribution to labor (what people earn from salaries, profits, and returns on assets) and measures on income from *secondary* distribution, or *redistribution* of income. What Beijing intends here is critical because of the inevitable income inequality locked in by education disparities. Four points deal with primary income. First, regulation will better protect workers from having wages and benefits unfairly taken away through exploitative practices, and minimum wage requirements are mentioned. Second, policies that favor the growth of capital-intensive industries over labor-intensive sectors such as services are to be altered, such that "the returns for capital, knowledge, technology, managerial expertise and other production factors are determined by the market." This echoes the call throughout the *Decisions* for organic forces including wage pressures to be more decisive. Third, government employment will reflect better income distribution. This should mean properly benchmarked salaries and prohibition of improper fees, gifts, and other payments. For some SOE executives, it means salary cuts. This point is far from minor: more than 42 million Chinese are public sector employees, and 87 million if state-controlled enterprises are included.[189] Fourth, the decision calls for augmenting the flow of household *property income*, such as bank interest, capital gains on securities or pension assets, or rental income. Household *business* income – the third channel of individual income after salaries and property – is not discussed, although Decision 43 promotes it.

The second half of Decision 44 addresses income *redistribution* through tax policy. Revenue for redistribution is to be extracted from the profits of "public assets" – SOEs – for transfer to narrow gaps between urban and rural residents and among regions, and to support other low-income populations. The decision commits to a systematic new "individual income and property information registration system," as a basis to attack "excessively high," illegal, undeclared, and other hidden (hence untaxed) income. We note similar new registration requirements for business establishments (Decision 9), stock and bond ownership (12), public service entities (15), and land and commons (51). The objective is clearly better governance through more transparent *registration* of interests. Finally, Decision 44 pledges to address income distribution by improving the tax-incentivized operation of charitable organizations.

The income redistribution goals laid out here coincide with one of the most concrete commitments made in the *Decisions*, which is the order to extract profits from the SOEs in Decision 6:

> We will transfer part of the state-owned capital to social security funds. We will improve the budgeting system for the operation of state-owned capital, and increase the proportion of state-owned capital gains that are turned over to the public finance to 30 percent by 2020, to be used to ensure and improve the people's livelihood.

We have discussed this in detail in terms of the new Budget Law in the "State-owned Enterprise Reform" section of this chapter. While the exact mechanics and rates to be extracted are murky, the general thrust here is clear: SOEs will be a source of money for public expenditures, not a license to harvest rent from the Chinese people.

Investing in Human Capital and Wealth Redistribution

Pledges to upgrade the safety net continue in Decision 45, "Instituting a fairer and more sustainable social security system." The goals here – such as "respond actively to the aging of the population" – are long-standing, but solutions are unspecified. Skepticism aside, the decision extends the state's obligations beyond the expansion of unemployment insurance set out in Decision 43 to promise a reformed pension system combining government, employer, and variable individual contributions (incentivized with tax exemptions and other preferences); an expanded universal (urban and rural*)* welfare stipend or minimum living allowance; expanded insurance coverage; and expanded social services for at-risk groups including the elderly, children, and the disabled. All these benefits will be costly, so the decision calls for better management of social welfare assets. With marginal returns on assets diminishing with headline growth, that will be challenging.

Decision 46, "Deepening reform in medicine and health care," sets out general principles and restates a number of reforms under pilot implementation. Reforms to virtually all aspects of the health system are promised, including making sure that personnel training and compensation are "suited to the characteristics of this sector." The decision points to shortcomings in basic diagnostics, seeking more "rational modes of graded diagnosis and treatment" – a reflection of studies showing that the odds of getting a correct medical diagnosis in China's health facilities, followed by a rational treatment plan, are shockingly low.[190] The decision points to business practices that must be discontinued, such as letting hospitals close funding gaps by overprescribing medicines, and to desired features, such as an "appropriate compensation mechanism." Universal health insurance is to be achieved, and catastrophic coverage expanded, but financing mechanisms are not elaborated and the same inequalities faced by 850 million Chinese in education services are present in health care. Opening health care to private investment is specified, but "first" into "not for profit" health care institutions.[191] In practice, private investment is already permitted in some niches of the health system. Decision 46 also invites "private funds to invest directly in services that are short of resources or are to meet diverse demands;" it is hard to think of a health care niche in China that does not meet those criteria. The decision also explicitly clears doctors to work for more than just a single hospital, which has been an impediment to private endeavors.

Tacked onto Decision 46 is one of the most concrete and significant Third Plenum reforms: a step toward ending the One Child Policy, one of the most intrusive and significant policies from the 1970s. Partial relaxation of the policy for farm families, non-Han minorities, and couples that were both only children has been in place for some years, but Decision 46 permits a second child for any urban Han Chinese married couple when just one of them is an only child – which covers about one-third of all Chinese. In the long term, this could alter China's demographic patterns. However, fertility rates are falling even for couples that already have permission to have a second child, so demographers expect little change in population growth in the short term. Only once social services and education are better assured for migrants is this likely to result in a significant change in birthrates.

Finally, Decision 23 softens the household registration (*hukou*) system, which in addition to its significance for land policy is important for labor dynamics. Basic public services including education and health care are not just luxuries for a future well-off China to look forward to; they are investments in a healthy, productive labor force and social stability. The decision commits to reform the *hukou* system by creating pathways to urban citizenship through a graduated system that makes it relatively easy to move into small cities while maintaining restrictions on migration to the largest cities. The details of how many formal urban *hukou* permits will be granted, whether they will permit benefits equal to those enjoyed by existing urbanites, what procedures are required and over what time frame, and whether rural land must be relinquished to qualify were all left to subsequent regulations.

Implementation and Analysis

The *Decisions* confirms in Section I that the Party pledges to "put the promotion of fairness, justice and improvement of people's lives as the starting point and ultimate goal." Many of the commitments on labor and welfare policies are recycled from older documents in stages of implementation or provincial-level incubation. It is stepped-up implementation and the promised 2020 completion target that are important.

Labor, Job Creation, and Education

On education, in February 2014 the Ministry of Human Resources and Social Security issued a notice on *National College Graduate Employment Work,*[192] expanding on the *Decisions'* commitments and pledging training, aid, microfinance, and tax breaks. The notice recognizes the need to get elite talent to choose innovative sectors instead of governments as a career choice.[193] A nationwide plan to reform the *gaokao* system – the annual college entry exam seen as a poor screen for potential – was under development pre-Plenum, and in October 2013 Beijing released a draft proposal (which notably gives a lower weight to English and other subjects deemed "nonessential"[194]). On August 18, the fourth meeting of the Deepening Reform Small Leading Group reviewed and passed a *Measure on Test-Based Admission*.[195] The national plan, which will allow students to take parts of the exam multiple times and loosen admissions criteria, will be implemented in 2017. In September, Shanghai and Zhejiang, the two designated pilot provinces, both released implementation plans. In addition, more than 10 provinces are working on drafting new rules.[196] Other prominent reforms include a moratorium on preferential policies (*gongjian*) for children of parents employed by government and SOEs in Beijing.[197]

These are piecemeal steps to improve the education system. However, preparing a workforce that is capable of sustaining Chinese GDP growth requires the massive expenditure reprogramming that center-local fiscal reform comes closest to addressing. We find nothing in the current slate of education policy reforms commensurate with the structural macroeconomic challenge of maximizing labor's contribution to growth. As discussed in Chapter 3, economists forecast that the labor force's contribution to GDP in *growth accounting* terms come 2020 is -0.2%, since the working-age population is shrinking over those years. We can increase this contribution to 0% if the best-case improvements to education equality are made. The central budgeting reforms hold out the promise that such expenditure reprogramming can now happen, whereas before – absent a seminal reshuffling of public service spending priorities – it was not much of a possibility. But we see no outcome yet.

On the job creation side, indications are more promising. As mentioned, the elimination of capital requirement for registered companies (RMB 30,000 for registered LLCs, RMB 100,000 for one-person LLCs, and RMB 5 million for corporations) is already having a significant impact on new business formation, as reported by SAIC. Through July 2014, the number of new market entities surged compared to the previous year, to more than 7 million, bringing the total to 65 million, 72% of which are individually owned.[198] In new measures to promote business creation released February 19, the State Council and SAIC initiated financing and credit supports, tax breaks, credit guarantees, entrepreneurship training, project recommendations, consulting services, and pilots for incubating new businesses[199] to promote employment opportunities. Other labor-related provisions include reforms promoting equal opportunity for China's workers,[200] vocational training,[201] and pledges for employment support for new graduates.[202] On June 22, 2014, both President Xi and Premier Li spoke at a national conference on vocational education in Beijing, and the State Council released *Decisions on Speeding up Development of Modern Vocational Training*.[203] The Ministry of Human Resources and Social Security (MOHRSS) has also published documents[204] hinting at the possibility of a decrease in unemployment insurance rates, which should result in expanded coverage.[205]

In the first two quarters of 2014, 16 regions have increased their minimum wages for an average increase of 14.2%.

In December 2013, the vice-minister of MOHRSS at the State Council Information Office said China would begin to conduct a national labor survey and urban labor survey – the first step toward providing comprehensive unemployment statistics. Officials at the National Bureau of Statistics are promising their support and cooperation in this undertaking.[206]

The task of improving wage and income growth has received attention. In February 2014, the State Council, Ministry of Finance, and MOHRSS jointly released *Several Opinions Regarding Deepening Reform on Income Distribution System,* detailing wage-related targets (e.g., collective bargaining contracts must account for 80% of total contracts by 2015, which seems to go beyond the *Decisions*).[207] Implementation is cropping up in many locations: Anhui has established a legal advice council for worker's rights,[208] Nanjing has drafted a workers collective bargaining law; Xiamen has released worker's collective bargaining work goals,[209] Henan has promulgated a collective bargaining law,[210] and Beijing is preparing to pilot a collective bargaining law.[211] Work has been done on adjusting minimum wages[212] and rights to be paid on time and in full.[213] In the first two quarters of 2014, 16 regions have increased their minimum wages for an average increase of 14.2%.[214]

Labor-related tax reform is moving. Tax breaks and tax exemptions for entrepreneurs and small businesses are under implementation at the provincial level and being discussed nationally. Wuhan, the most populous city in central China and capital of Hubei province, introduced pro-small business tax reform in May 2014,[215] implementing a pre-Plenum State Council plan for supporting SMEs that was originally released in 2012.[216] Personal and property tax laws have not yet been changed as of this writing, but property taxes are being piloted and broader taxation is discussed in growing detail in policy documents.[217]

Social Security, Insurance, and Health Care

SOE dividend rates for transfer to the social security fund have been increased, although we have noted the exact ratios are still being debated. [218] On February 26, 2014, the State Council released *Establishing Unified Urban and Rural Residents Basic Pension Plan*.[219] The document was specific and has been put into provincial implementation in a number of places (Guangdong and Anhui, for example).[220] Unification of well-funded government pension and poorly funded enterprise pensions is rumored to be in the works. Creative experimentation is evident. For instance, on June 23, 2014, the insurance regulator (CIRC) released guidelines for House-for-Pension Schemes, whereby elders will receive pensions from insurers every year until their death by pledging their property. The pilot phase is scheduled for completion in 2016.[221]

There is an effort to knit together social safety net reform and insurance modernization. On August 13, 2014, the State Council released *Several Opinions on Speed up Development of Modern Insurance Service Sector*, a blueprint for the period through 2020.[222] These reforms recognize the need for insurance to play the asset preservation role that property investment has played to too great an extent in recent years. The design is for government's role to be exchanged for commercial incentives, with consumers' welfare as the goal of regulation. The system is intended to resemble the 401K program in the United States. The plan intends that insurance should be the "fundamental" pool for household and enterprise asset management, and specific rules for industry are expected from CIRC by the end of 2014. In a positive sign, the plan states that industry should see "opening up to both domestic and foreign players."

The State Council released a comprehensive document for health care, *Deepening Medical and Health Care System Reform 2014 Key Work Goals*, on May 13, 2014.[223] At 5000 words, the document is detailed and discusses financing, competition, and bureaucratic oversight. It addresses basic public health insurance schemes, for the moment committing to increase subsidies to the Urban Residence Health Insurance Scheme and the New Rural Cooperative Health Insurance Scheme to RMB 320 per person by year-end 2014 (about $52). It deals with financing, prohibits hospitals from profiting on pharmaceutical sales (a pervasive way to cover costs for hospitals today, since fees for procedures are fixed), and pledges to provide additional subsidies to cover operating expenses instead. This reform has already seen pilot implementation at the provincial level (in Beijing and Shandong,[224] for example), so national rollout is not starting from scratch. But again, since more than 50% of both health care and education expenditures are administered at the county level, several rungs down from national leadership, a meaningful reprogramming of expenditures will not be possible until center-local fiscal reforms are worked out.

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The State Council *Goals* deal with health care competition as well. The current Five Year Plan had already decreed that private hospitals should make up 20% of all hospital beds by 2015.[225] The *Goals* elaborate that all localities should rescind regulations that do not serve reasonable objectives and ensure implementation of equal market access between public and nonpublic medical institutions.[226] Various reforms have been implemented to promote the entry of private firms to the health system, such as relaxing the entry regime, providing tax breaks, increasing the number of private hospitals as designated health care providers under the three existing health insurance programs, and providing preferential land policy and fair licensing for private health care professionals. Encouragingly, this opening has extended to foreign health care firms. As of July 25, 2014, wholly foreign hospital investors have been approved to operate in an initial seven cities, and – as discussed under in the "Foreign Trade and Investment Reform" section of this chapter – the first such investment, by a German firm in the Shanghai FTZ, has commenced.

Administrative reform in the management of the hospital system is also evident. Shandong now prohibits government officials from serving as hospital heads and has implemented a hospital leadership-recruiting regime (i.e., "social recruitment") that is open to the public. Guangdong has abolished administrative ranking for public hospitals. Other provincial reform plans have established management boards for which hospital directors are elected by vote. The deadline for eliminating bureaucratic officials from hospital leadership posts is the end of 2014.[227] Pilot schemes to involve private capital investors have been ongoing since 2013, including at medical centers in Zhejiang,[228] Wenzhou,[229] and Foshan.[230]

Hukou and the One Child Policy

Following a series of preliminary actions, on June 6, 2014, the Deepening Reform Small Leading Group reviewed a *hukou* and rural land system reform plan. The State Council formally released this plan on July 30, 2014.[231] The plan calls for a number of measures that will go a long way toward liberalizing the rights and entitlements of China's rural citizens but stop somewhat short of full liberalization. These measures include the sanctioned relocation of 100 million citizens from rural areas into towns and cities, the issuance of up to 100 million urban *hukou* permits, and the granting of formal but non-*hukou* urban status to some 200 million workers who have already left the countryside and are living in cities without government permission.

As part of China's scheme for achieving widespread urbanization by 2020, these changes will likely require at least the next six years to implement. But considerable evidence already suggests that related *hukou* reforms are well underway. Indeed, some had been initiated on a pilot basis at the city and provincial levels before the Third Plenum and before the State Council's July 2014 release of its far-reaching national plan for reforming the *hukou* and rural land systems.[232] Under its 2014 *hukou* reform policy released in March, Shandong province now grants *hukou* to migrants in counties and small-to-medium cities if they can show that they possess a stable job and a stable residence.[233] In May 2014, Jiangsu province announced an urban and rural development policy for 2014–20 that is built on a similar relaxing of the requirements to secure urban *hukou*.[234]

Change to the One Child Policy has already been substantially implemented. Hebei's only-child-second-child policy was implemented in May 2014,[235] Shandong's in July 2014; as of mid-2014, a quarter of a million previously ineligible couples had applied for permission to have a second child.[236] The danger of China's demographic problems is sinking in, and there is little resistance to this policy reform. In fact, policy is already shifting toward *encouraging* more births, given that rising affluence and busy careers are discouraging young Chinese from having children regardless of the policy restraints that exist.[237]

Counter-indications and Tracking

As noted from the outset, the obstacles to the labor and shared welfare reforms found in the *Decisions* are enormous; they are financial, social, and political. Chinese citizens and firms with the means will need to contribute disproportionally to the cost of making the foundations of a healthy labor force – especially education and health care – much more equitable. The first step to that is opening center-local fiscal relations and tax policy to reform, and that has been done. But the public service policies that have been rolled out so far are not nearly up to the task of closing China's development gaps and rising inequality.

To maximize employment and business start-ups, regulators need to shift missions. While the burst in new business starts in 2014 demonstrates that something good is happening, the big bang in job creation depends on promulgation of a negative list defining the extent of SOE sector privatization in competitive industries; until that happens, the crowding-out effect of the public sector will remain an issue. Taking advantage of *all* of China's human resources requires that a new urgency be given to affirmative action for China's private sector.

One other counter-indication in the labor and shared welfare cluster deserves mention. While a number of details in labor regulation related to firm-level worker rights refer to collective bargaining with workers, at the economy-wide level there is little acceptance of broader empowerment for independent labor unions. Without a level playing field between labor and employers, many concerns will remain unresolved.

Tracking labor and shared welfare reforms is important to maintaining confidence that China's growth is on sustainable foundations. Inherent in the old model were unequal rights and benefits that could be tolerated because at the initial stages of development, the great majority were satisfied with rising welfare despite inequalities. China's future growth depends on a new social contract that remedies these conditions. We propose three metrics for tracking the progress of implementation in this area.

A breakthrough in reorganizing social spending on education and health care is needed to ensure a productive future for the 63% of the population that does not have urban *hukou*.

First and foremost, a breakthrough in reorganizing social spending on education and health care is needed to ensure a productive future for the 63% of the population that does not have urban *hukou*. Therefore, observers must watch the progress toward granting citizen urban *hukou* or equivalent standing, and to what extent the entitlements are equal to the existing benefits for urban citizens. This is a measure of equalization of benefits. We expect national authorities to provide data to make analysis of this question more tractable. Chinese leaders and the *Decisions* repeat calls to improve income distribution dozens of times and set out an "olive-shaped" society as the goal – a metaphor meaning very few citizens on the top and bottom of the income scale, and the bulk in the middle. The standard measure of societal income distribution is the Gini coefficient, which measures the degree of income equality or concentration (with higher values corresponding to greater inequality). China's Gini coefficient has reached very high levels in recent years, as documented by researchers at Peking University, and implementation of reform should stabilize and reverse this trend.[238]

Second, beyond the issue of benefit equalization to ensure shared welfare is the question of reprogramming public expenditures to put a greater emphasis on public services. The revised mission statement of government underscores strengthening and improving public services in general. Today, education and health care expenditures as a share of total public expenditures at all levels of government are equal to 19.4% and 1.3% respectively.[239] Indications that the weight placed on these investments in shared welfare and high-quality, sustainable economic growth are needed.

Third, continued strength in new business creation statistics will indicate that China's economic overhaul is on track. High-frequency data from SAIC make it possible to watch this trend. Complementing efforts to track employment via new business starts will be new unemployment statistics. For employment performance to shape statecraft, this data series should be transparent, publicly available, and open to public debate.

ENVIRONMENTAL POLICY REFORM

It is easy to be pessimistic about the prospects for environmental reform in China. Beijing has made many high-level commitments to environmental protection over three decades, and conditions have steadily deteriorated. Analysts argue about the costs of China's environmental pollution. The inherent uncertainties about these costs will not be settled here, but basic realities are not debatable. The World Bank puts the overall cost of China's environmental crisis at 9% of its GDP, and the cost of China's particularly acute water crisis at 2.3% of GDP.[240] In March 2014, the World Health Organization (WHO) increased its estimate of the number of annual premature deaths related to air pollution in China from 2.3 million to 7 million. A large number of wealthy Chinese have moved their families and often themselves out of China to avoid the physical environment, and both Chinese and foreign firms are experiencing difficulties keeping executives in China.[241] The Ministry of Environmental Protection and the Ministry of Land and Resources report that 20% of all agricultural soil is polluted, and that conditions are getting worse.[242] Xinhua, China's official news service, reports that 60% of underground water cannot be consumed unprocessed now (let alone surface water), and that conditions are deteriorating.[243] Smog and other ambient pollution have reduced the amount of sunlight reaching crops on the ground for more than a decade, and air conditions continue to get worse not better.[244]

It is also clear that much of China's production for export operates on razor-thin margins and already faces cost pressures from other factors such as labor, leaving industry resistant to environmental compliance costs and giving rise to starkly unpalatable choices for China's leaders. Policy that improves China's environmental outlook will necessarily harm vested interests dependent on lax environmental enforcement, so cynics argue that short-term profit will trump long-term sustainability as a priority for both policy makers and business leaders. For the outlook to be otherwise, one must assume that China's appetite for the "luxury" of a livable environment has risen enormously, or that the cost of business as usual is soaring. It seems fairly evident that both are the case. This does not ensure change, but it presents the possibility.

Indeed, the advanced-economy world offers many examples of highly livable cities where environmental conditions were noxious not long ago. In the 1950s, the city of London was regularly disrupted by major air pollution events, New York had its smoggiest day ever in 1966, mercury disease afflicted Tokyo severely as a result of soil and water pollution well into the 1970s, and Los Angeles had more than 40 "stage-one" smog alert days as late as 1990. All of these problems have been solved through the implementation of environmental regulation. Luckily, much more is known about the solution today than decades ago. Unfortunately, the scale of the problem in China is probably the biggest the world has ever encountered and has reached crisis level at an earlier stage of per capita development than in these advanced economies. China is choking on its growth but is not prepared to live without that growth. It is in this context that Xi Jinping's economic policy advisors gathered to draft the treatment of the ecology in the Third Plenum *Decisions*.

Third Plenum

The *Decisions* includes four items on the faltering environment in Section XIV. Before that, it makes reference to the environment in several places. Decision 1 says reform and opening are the essential aspects of China today, and reforming "ecological systems" is part of that imperative *in the first sentence of the manifesto*. Decision 2 accepts that defects in society remain, and the lack of progress on preserving the ecology is listed among them. Decision 3 lists *promoting sustainable development* among eight "main responsibilities and roles" for government in the new China. Environmental imperatives are included in the justification for other reforms, including SOE reform (Decision 6); retaining government involvement in environmentally sensitive sectors, upgrading sustainability, and downgrading growth rates in political evaluation (14); administrative reform of government operations (15); tax reform (18; "accelerate resource tax reform, and change the current environmental protection fee into an environmental tax"); accelerate negotiations on environmental protection–related goods trade (25); and delegate administrative law power to environmental protection officials (31).

Policy that improves China's environmental outlook will necessarily harm vested interests dependent on lax environmental enforcement.

The one-tenth of the *Decisions* dedicated completely to environmental policy is in Section XIV, "Accelerating Ecological Progress." Decisions 51–54 focus narrowly on environmental protection reforms, and they are relatively brief and to the point. Decision 51, "Improving the system of natural resource property rights and the system of natural resource utilization control," starts with tragedies of the commons: because property rights over commons and wild lands such as rivers and mountains are poorly defined, they are systemically undervalued and abused. Decision 51 calls for the creation of a unified registration database for all natural assets and clarification of administrative responsibility for their stewardship. As with reforms to the statistical systems related to unemployment, property taxes, and other assets, Decision 51 recognizes that if the government cannot *measure* what is happening in an area of its oversight, then the government cannot *manage* that area.

Decision 52, "Delimiting the red line for ecological protection," pledges to implement environmental protection laws, establish national parks, monitor and pursue environmental remediation programs in fragile and damaged areas, and audit government officials for environmental impact. GDP targets are waived for environmentally depleted areas. The decision establishes "lifelong accountability" for environmental damage, so that the political liability of officials approving projects regardless of sustainability considerations will be unlimited.

Decision 53 elaborates market mechanisms Beijing intends to use to compel firms to "internalize" the costs of environmental impacts, emphasizing the principle that emitters must pay whatever costs their pollution creates for other constituencies. The decision pledges to accelerate natural resources price reform to reflect supply and demand, build in cleanup costs, expand resource taxes, establish price mechanisms to regulate industrial and residential land prices, build interprovincial pollution compensation mechanisms, build markets for environmental protection services and emissions trading (including carbon), and use the market to steer private capital into environmental protection and remediation. All these changes are already being applied on some pilot basis and could be ramped up quickly. Decision 10 elaborates which resources are due for movement: "push ahead with pricing reforms for water, oil, natural gas, electricity." Decision 53 promotes conversion of farmland back to ecological buffers (forest and grassland) and pledges rehabilitation of farmland, rivers, and lakes.

Decision 54 circles back and emphasizes priorities implied elsewhere. Strict supervision of all pollutant emissions is intended, based on licensing and administrative law enforcement. To do that, and in keeping with the transparency and governance reforms throughout the document, Decision 54 pledges to "publicize environmental information in a timely manner, improve reporting systems, and strengthen social supervision." Better operation and management of state-owned forest regions and collective forest rights are promised in this decision as well.

Implementation and Analysis

We focus on four changes in environmental reform implementation since the Third Plenum. These are populist campaigns of action against polluting facilities, energy and coal policy reforms, a revamped environmental protection law, and stepped-up regulatory activism.

Populist Campaigns

The popular backlash against poor air quality; polluted water and soil; deforestation; and other obvious, visible harms is vocal and forceful. China's leadership is acutely aware of this pressure from Chinese citizens, and it has sought to make a show of efforts to solve environmental problems.

Given its visibility and acute impact on public opinion and social anxiety, air pollution gets priority in reform implementation. In June 2013, President Xi issued a decree called the *10 Measures* in response to the shockingly bad air conditions that winter and spring; in September 2013, the State Council issued an action plan for implementing it.[245] This plan rehashed old aspirations but added deadlines and measurable objectives. In January 2014, the Ministry of Environmental Protection (MEP) started negotiating requirements for particulate matter reductions with each of China's provinces. It also implemented a bold strategy for emphasizing public disclosure the same month by making available to the public real-time air and water pollution emissions for 15,000 Chinese industrial firms. The data have also been made accessible to application designers who have developed public interfaces for viewing them.[246] On March 25, 2014, the MEP started reporting national ambient pollution data based on a measurement program begun in 2013, and it announced that at least 30 million Chinese were breathing polluted air on a typical day.

After the Third Plenum, President Xi demonstrated what a more concrete program of implementation looks like. Starting in December 2013, teams started blowing up cement plants in Hebei province with high explosives, directly upwind of Beijing outside Shijiazhuang.[247] In February 2014, similar demolitions of steel and iron facilities began, with 19 being dynamited in a first round and footage posted online.[248] In total, hundreds of factories were exploded. Considering that Chinese industry has excess capacity in cement and ferrous metals production, it is not clear whether these campaigns will reduce output or just capacity, or just shift production from one part of China to another. The populist techniques on display in Hebei are not typical nationwide and may be more about saving Beijing than enacting national environmental reform.[249] Such techniques also raise legitimate questions about the future of workers who had been employed in the demolished factories. In June 2014, Hebei released a province-wide industrial sector reform plan emphasizing reduced emphasis on GDP.[250] If the aggressive approach to Hebei is to offer lessons for reducing air pollution in other provinces, then the effects on employment of dynamiting factories will have to be addressed.

Given its visibility and acute impact on public opinion and social anxiety, air pollution gets priority in reform implementation.

In Beijing and Hebei, along with the neighboring megacity of Tianjin, the proposed answer to the need for growth is a vast plan to forge the "Jing-Jin-Ji" integrated development ring – a greater metropolitan region encompassing Beijing, Tianjin, and surrounding Hebei province – with a coordinated environmental protection improvement plan. To our knowledge, the plans for this massive undertaking have not been described with sufficient public clarity to allow observers to determine whether it would be a net-positive for the environment.[251] The historical record of mega-projects proceeding in China – as elsewhere – without adequate environmental impact assessments underscores the need for additional enhancements to China's environmental regime.

In March 2014, the Central Committee of the Party together with the State Council released a massive 2014–20 national urbanization plan as a centerpiece for growth and development. It envisions construction and investment to absorb 100 million new citizens into urban China, as well as upgrading to make permanent and sustainable the homes and public services of 200 million migrant workers already in cities. The plan calls for executing this plan in an "environmentally friendly" manner.[252] However, as with the Jing-Jin-Ji program and the premier's generally equal weight on environmental protection and economic growth stability, evident at the March 2013 National People's Congress, there are unanswered questions about how officials will reconcile the competing imperatives of growth and development on the one hand and environmental responsibility on the other.

Energy Policy and Coal

The evolution of Chinese energy supply will have a decisive influence on the environmental future of China and the world. Coal accounts for 66% of the total primary energy supply and 75% of power generation in China – among the highest levels in the world.[253] Coal consumption is a leading source of air pollution, particularly the "fine particle" (PM2.5) emissions that have been the leading cause of the air quality crisis in China in recent years. There has been an increased focus on the installation of pollution control technology on coal-fired power plants since the Third Plenum, as well as modifications to the Environmental Law that provide new legal tools to help ensure that technology is actually operated as opposed to being left idle to save on operating costs, as has often occurred in the past. Broader fiscal reform is likely to push more stringent air pollution penalties as well.

At a publicized June 13, 2014, meeting of the Central Committee's Financial and Economic Affairs Leading Group, President Xi called for a revolution in China's energy supply system, including reductions in coal's market share. However, it remains unclear what exactly this means and what policies will be put in place to bring such a revolution about. Moving away from coal is not a new idea. In 2009, the State Council set a goal of increasing the share of total energy supply coming from non-fossil-fuel sources (i.e., nuclear, hydropower, wind, and solar) from 7.8% to 15% by 2020. The 12th Five Year Plan established an interim 2015 goal of 11.4%. Since 2009, China has constructed nearly 130 gigawatts of nuclear, hydro, wind, and solar capacity – more than the total installed capacity in the United Kingdom. As a result of this and growth in natural gas consumption, coal's share of total energy supply has fallen from 70.4% in 2009 to 66% in 2013. But absolute coal consumption still grew by 682 million tons over that period – more than two-thirds over the total current coal consumption in the United States. With just 9.8% of its energy supply coming from non-fossil sources at the end of 2014, China has a long way to go to reach its target of 15%, and significant energy policy changes – from resource planning to transmission and distribution regulation to price reform – will be required to make President Xi's revolution a reality.

It is entirely possible to address China's air pollution problems without reducing national coal consumption. In the United States, air quality improved from the 1970s to the 1990s, even as coal consumption increased, because of successful efforts to combat air pollution that took advantage of low-sulfur coal supplies in the Western United States and the effective deployment of pollution control technology. A reduction in coal consumption in Eastern China resulting from macroeconomic rebalancing and pollution control efforts could result in an increase in coal consumption in Western China as coal-rich provinces invest in the heavy industrial capacity and coal-fired power generation that the East is ready to shut down. While this relocation of coal consumption would improve air quality in the East and could likely be done in a way that minimized the air quality consequences in the West, it fails to address the *global* environmental costs of Chinese coal use – particularly the impacts on the climate. Addressing local and global environmental challenges together will indeed require the reduction in coal consumption President Xi has called for.

In August 2014, somewhat more encouraging indications were apparent regarding China's response to climate change and carbon emissions concerns. On August 4, Beijing officials announced that they would ban coal use in all six city districts by 2020. A week later on August 15, the NDRC and its subsidiaries from 25 coal-producing provinces, together with energy regulators, released relatively strong measures to get a handle on coal production.[254] Legally operating mines are to be registered in a database listing their approved volumes and actual output, and this registry is to be fully open to the public. (Note again the prevalence of public registries in the Third Plenum overhaul.) Public scrutiny of the sector is encouraged, as is reporting of unregistered activity. Unapproved coal mines are to be shut down. *Document 104*, published in 2013, limited new entry into coal mining, but the new measure goes further and cuts existing capacity.[255]

We focus on air pollution measures because ambient conditions are most obvious and to illustrate the extent of policy change currently underway. But air quality is not the only focus of policy implementation. Other vectors including soil and water are acutely in need of attention too and are getting that attention.[256] National plans to address soil and water pollution are due this year. Detailed new regulations on farming-related pollution were promulgated right after the Third Plenum and came into force on January 1, 2014.[257] The self-described "radical" measures pledge, among other things, to alter subsidy rates between organic and chemical fertilizers to reduce soil and water pollution from agricultural runoff.

New Environmental Laws and Powers

China's tendency to under-enforce competition policy and regulations on SOEs, described earlier, has also short-changed environmental protection. Decision 6 states that SOEs "must serve the strategic goals of the state … protecting the ecological environment." The SOEs will need to comply with strong environmental regulations if China is to level the playing field for competition purposes *and* repair the environment. SOEs have often been immune from meaningful enforcement in the past. In the Ministry of Environment's August 2013 MEP Emissions Report, Sinopec failed to meet targets, and as recently as February 2014, CNPC was on the Ministry's blacklist for widespread failure to treat waste.[258] These and other SOEs are pledging renewed vigilance, but nothing short of objective metrics proving improved environmental performance will alter perceptions at this point.

Price system reforms for natural resources are an important, cross-cutting aspect of current implementation activities. Decision 18 covering tax reform includes imposition of higher consumption taxes "on products that consume too much energy and cause serious pollution," as well as the need to "accelerate resource tax reform, and change the current environmental protection fee into an environmental tax." The State Council is reviewing a national environmental tax draft targeting waste water and gas. Price-based resource taxes on crude oil, natural gas, geothermal water, and rare earth minerals are already implemented, and coal is expected to be next. On August 11, 2014, the NDRC increased residential natural gas prices and liberalized wholesale prices for imported liquefied natural gas (LNG), coal-to-gas, and coal-bed methane. Shanghai and several other cities are implementing a three-tiered national gas price structure scheduled for national implementation by 2015, and this could be extended to water and electricity.[259]

Regulatory Activism

Bureaucratic reform, specified in Decisions 14, 15, and 31, is key to environmental reform. Decisions 14 and 15 address government administration and environmentally sensitive sectors, and Decision 31 commits to "allocate more law-enforcement resources to the primary level in such key areas as … environmental protection." This goes to the heart of the environmental crisis in China: the nation's environmental laws and regulations are not weak, but they are not enforced. The April 24, 2014, adoption of amendments to the Environmental Protection Law (EPL) – the first since enactment in 1989 – was a major achievement. The amendments enter force in January 2015, and they give environmental NGOs standing to file public interest lawsuits against polluters. The Natural Resources Defense Council, an American NGO that has used such standing to push for pollution abatement in the United States since 1970, estimates that 300 NGOs in China will qualify for the right to bring cases. The *Decisions* foresees a role for social organizations such as these (Decision 48), though acclimatizing Chinese courts to such actors will surely take time, as it did in other advanced economies.

Price system reforms for natural resources are an important, cross-cutting aspect of current implementation activities.

The EPL also sets out clear requirements for real-time pollutant emission data disclosure for "key polluting enterprises" and generally secures the rights of citizens for full reporting of environmental impacts by regulators – rights that the Beijing government was still disputing on public security grounds just two years ago. These information disclosure rules (which echo the transparency theme seen in many other areas in the *Decisions*) along with the legal standing of social organizations (NGOs) are found in Chapter 5 of the EPL. As noted earlier, these emissions disclosure and transparency reforms are already being implemented in many cases as of this year.

The amended EPL also imposes real penalties on polluters. To date, penalties have often been trivial and a minor cost of doing business compared to the significant cost of pollution abatement and remediation. Article 59 of the EPL stipulates that instead of the one-time fines previously imposed, authorities can now impose fines daily until the activity at issue ceases. Article 63 calls for incarceration of up to 15 days for executives refusing to comply with environmental orders. Further, local officials will be held culpable for enforcement, as the EPL formally establishes fulfillment of environmental protection targets as a criterion for performance evaluation. On August 15, Xinhua News reported that the NDRC had begun incorporating an evaluation of local officials' efforts to reduce carbon intensity into their promotion appraisals.[260] Abolishing GDP-only promotion assessments is good; counting carbon reduction accomplishments is too.[261]

Counter-indications and Tracking

Gauging counter-indications and tracking implementation in the environmental policy cluster are especially challenging, because there is likely to be a lag between enforcement and broad improvements in environmental quality, a net assessment of impacts is difficult to define, and cyclical and structural changes are hard to disentangle. In October 2013, Xi Jinping used strong language to describe the importance of dealing with environmental cleanup: "Killing the goose that lays the golden eggs and draining a pond to catch fish is no formula for sustainable development."[262] But these concerns still fight for attention with GDP growth. At the March 2014 National People's Congress, Premier Li Keqiang pledged to "declare war against pollution and fight it with the same determination we battled poverty,"[263] while laying out a steady-as-it-goes plan for 2014 GDP – the same basic trade balance outcome as 2013, modestly higher retail spending growth of 14.5%, a slightly higher government deficit, and overall GDP growth of 7.5%.[264] The idea that China can achieve radical environmental change with only minor adjustments in its macroeconomic structure is hard to accept.

After all the pageantry of blowing up plants in Hebei and announcing national plans, in August 2014 the Ministry of Industry and Information Technology (MIIT) had to again issue orders for a mandatory halt to new plant construction in two industrial sectors – cement and glass – that the State Council had ordered to freeze a year earlier. Despite environmental campaigns, local officials evidently remain under enormous pressure from Beijing to deliver GDP growth and economic performance.[265]

Despite resource taxes on other raw materials, coal is truly king in China, and the apparent delay in promulgating a coal tax plan reflects the singular importance of this fuel.[266] Coal offers the litmus test of environmental policy adjustment to a great extent (the same can still be said about the United States). While substantial steps are being taken on coal, the coal tax is an important final line of resistance to adjustment. Coal is too central to be taxed into submission overnight; the question is just how favorable its treatment will be.

Finally, in terms of counter-indications, environmental conditions in China continue to worsen, and that is ultimately the proof that matters most. For instance, on August 19, 2014, the MEP released its July air quality report, showing that acceptable air quality days declined from same period last year. The Beijing capital region was the worst performer in the nation, with less than half of the days in July 2014 acceptable.[267] The golden era of environmental data availability in China is just beginning, and with better transparency it is likely that the severity of conditions will grow more alarming in the years to come, partly because of better measurement and partly because of the lag between enforcement and outcomes.

To track implementation of environmental regulatory policy reform, we look for behavioral change from government, spending priorities, and emissions outcomes. First, with the creation of emission permit trading markets, more transparent reporting of newly enacted resource taxes, and registries of pollutant flows from industrial facilities, it should be possible to observe changes in emissions and rising costs imposed for environmental impacts. Organizations such as China's Institute for Public and Environmental Affairs have already pioneered applications to help track changes in emission patterns.

Second, as in other economies, the task of squeezing down firm-level emissions in China will depend on cost internalization – that is, making the firm shoulder the cost of pollution and thus be incentivized to reduce it. This will depend on local courts and regulators and clearly established enforcement precedents. Therefore, the number of public interest environmental lawsuits accepted by courts from January 1, 2015, forward, under the new EPL, will be a powerful predictive indicator that the regulatory incentives facing producers are likely to change. It is not possible to permanently alter firm pollution behavior through temporary, ad hoc political campaigns. Systematic progress must be an ongoing regulatory mission. Other indicators of shifted state priority on the environment that can be observed are expenditures on environmental protection and remediation.

Third, the alternative to observing the specific emissions of firms is to look at overall environmental quality. Air quality – average AQI ratings – are already watched in real time by millions of Chinese and foreigners, for both scientific and policy interests and as a clue to whether it is safe to go outside. An index of cities can be assembled to gauge trends in ambient conditions, and with expanding public access to data, measures of water quality can be provided.

INNOVATION POLICY REFORM

China is no stranger to innovation. During the Song dynasty (A.D. 10th–13th centuries), China's innovative capacities produced historic technological advances including printing, iron works, gunpowder, and the compass among others. Around this time, Western Europe was emerging from the Dark Ages, and many historians consider China to have been the most advanced society in the world at that point in history. Yet modern China has not replicated earlier successes. China's "economic miracle" of the late 20th and early 21st centuries had little to do with technical innovation. From an economic, social, and legal perspective, the enabling environment for innovation in China is inadequate today. Many of China's business models are designed to circumvent innovation. Firm-level economic conditions required for innovation have also fallen behind. Copying from competitors is a common workaround, but it is inherently problematic. While IPR violations by Chinese firms cost foreign producers dearly in lost sales, royalties, and licensing fees, they also weaken China and keep the knowledge-based economy in its infancy. This is serious: China's producers need to move to higher-value parts of the value chain to deliver economic growth, but they lack the innovative abilities to do so.

Advanced economies generally agree on a stylized scheme for innovation policy that organizes priorities into four groupings.[268] First, an innovative economy requires framework conditions, an enabling policy environment that sets rules and incentives that favor the risk taking that innovation involves. Second, innovation depends on the capacity of human capital, which is a function of education and elements of social security that permit talented people to invest their efforts in uncertain pursuits. Third, for innovation to take place at a meaningful scale, public and private investment in knowledge-based capital, that is, "the tools" for innovation, is essential. The OECD identifies collaboration as a fourth essential pillar of successful innovation policy. Innovation entails such complexity and cost today that redundant efforts can be irrational, yet competition and restrictions *against* collusion are also essential. Setting innovation policy regulation to optimize the balance is an important objective.

It is not an overstatement to say that the entire Third Plenum overhaul is an innovation plan. The adjustment to the government's mission statement and the reorientation of financial, land, and labor allocation systems to embed a more decisive role for markets are intended to provide an enabling environment for an innovative economy that works and sustains growth. Education and other reforms seek to enhance the potential of China's human capital. Redirecting resources to knowledge-intensive sectors rather than perpetuating the bias toward heavy industry regardless of overcapacity is a priority of the *Decisions*, though urbanization and infrastructure remain core drivers of growth. A marked ambivalence toward collaboration is seen in statements in the *Decisions* and post-Plenum evidence that Beijing seeks to police foreign cooperation more tightly.

Third Plenum

We do not review all the ways in which the *Decisions* – if faithfully implemented – would improve the enabling environment for innovation because virtually all the reforms described so far would be supportive. Here, we focus on aspects tailored specifically to innovation. We explore Decision 13 on promoting science and technology and Decision 42 on changing the culture of education. We look at Decision 57 on innovation and the defense sector. Finally, we note Decision 59 on attracting worldwide talent into public service in China.

Decision 13, "Deepening reform of the management system for science and technology," is the principal section addressing China's innovation regime. The emphasis is on the role of the market in optimizing innovation: the word appears five times in the first paragraph. "Market-based technological innovation mechanisms" are to be encouraged; the "market's guiding role in technological research and development orientation, choice of paths, pricing of factors, and allocation of all innovation factors" is to be given free rein; applied technology research and development institutes are to be "market-oriented" and transformed into business enterprises; the "market is to play a key part in determining innovation programs and allocation of funds, and assessing results and administrative dominance is to be abolished;" and the "technology market" is to be developed so that technology-transfer transactions and financing mechanisms and venture capital investment for small and medium-sized science and technology firms can function. The market emphasis is significantly greater than in, for instance, China's 12th Five Year Plan for 2011–15, which focuses on innovation as the key to competitiveness but not the role of market forces.

Another thrust in Decision 13 is that publicly funded research should be available to the public and not just be a subsidized input to privileged firms. This is a principle of R&D support in advanced economies. The decision instructs, "Major national scientific research infrastructure that should be open to the public in accordance with prescribed regulations is to be open without exception." This notion reflects past difficulty ensuring that public expenditures serve general welfare and not just vested interests, which gave rise to weak innovation processes and results. Part of the remedy to this systemic problem is provided in the decision: "We will establish an innovation survey system and an innovation reporting system, while building an open and transparent mechanism for state scientific research resource management and project appraisal." The advent of transparency and registries for public expenditures and property rights found here is echoed throughout the *Decisions*, for government fees, real estate property, financial securities, land rights, environmental impacts and pollution emissions, employment levels, and other factors.

Decision 42, "Deepening comprehensive reforms in the area of education," has a social justice element, as discussed in the "Labor and Shared Welfare" section of this chapter, but it is concerned with innovation as well. The decision seeks to ensure that students "enjoy studying" and develop a "sense of social responsibility, innovativeness and practical abilities" – qualities not cultivated by the rote memorization and obeisance that characterize Chinese education. Education is to "intensify physical education and extracurricular activities to promote young people's mental and physical health," as well as "aesthetics education to raise students' aesthetic and artistic ability." These are not just nods to art teachers but important efforts to promote a rich and civilized population interested in more than material gain. The academic burden on students is called out in several lines, and an effort to eradicate the drawback of "one's fate being determined by an examination, and give young people multiple opportunities in the college entrance examinations" is underscored.

Two additional decisions, 57 and 59, discuss modernizing innovation in the government sector. Decision 57, "Deepening the integration between the military and civilian sectors," commits to "improve the national defense industry system and sci-tech innovation system serving national defense." Improving management of research and the importance of information sharing – pillars of advanced-economy innovation frameworks – are highlighted. Many 20th-century technological innovations arose from national security research and their spillover to civil applications, including jet aircraft, the Internet, computing systems, prosthetics, radar, and countless more. The decision is about strengthening defense capabilities, not introducing liberalism, but it demonstrates awareness that security is connected to overall innovation in an economy and that science for defense must be integrated with civil society.

> It is not an overstatement to say that the entire Third Plenum overhaul is an innovation plan.

Finally, Decision 59, "Deepening reform comprehensively requires forceful organizational and personnel support," seeks to "create the best conditions to attract talent from all over the world," and "remove institutional and other barriers to smooth the channels for each individual to exercise to his or her full potential and … put their talent to the best use." China's public service must attract internationally mobile talent, as well as "attract high-caliber personnel from overseas to start up business and pursue their careers in China." This recognizes that the Communist Party and government of China require top-notch talent, that they compete for people with other sectors inside and outside China, and that personnel systems have grown turgid. This decision is firmly about strengthening the Party's management of the system, not innovation for its own sake. It is not explained how, within the limits of the Party's uncontested authority, the conditions of working in China's public sector are to be made more attractive.

Implementation and Analysis

We identify three areas of effort to move ahead with the Third Plenum's vision on innovation. These are general steps on administration and law, education reforms in particular, and action specific to national security.

Administration and Legal Developments

The NDRC's April 30, 2014, report on reform priorities for the year reiterates the innovation goals laid out in the *Decisions*. For instance, these *Opinions* pledge to punish counterfeiting and intellectual property infringement; recommit to "give full play to the guiding role of the market" and push forward to reform both science and the SOE sector; and counsel external opening to promote innovation, cultural sector innovation, and further development of online networks.[269] But while consistent, the NDRC document did not provide much additional guidance.[270] State Council meetings have continued to emphasize a general endorsement of market forces to guide innovation along with mixed ownership for state-related innovative firms, start-up incubators and support for key laboratories, R&D subsidies, and a proposed 15% tax cut for high-tech companies.[271]

Guidance on due process in intellectual property rights cases has been issued, including *Opinions on Making Publicly Available According to Law Information on Administrative Penalties Concerning the Production and Sale of Fake, Counterfeit and Sub-standard Goods and Intellectual Property Rights Infringement (Pilot).*[272] These *Opinions* state that publishing the facts of IPR cases is a normal and important part of government disclosure, and they respond to company objections to being accused of abusing their technological advantages without being told what regulations they violated or how.[273] This is an example of the top-down effort to eliminate powers proclaimed by government agencies that are nontransparent and arbitrary and serve no purpose other than distorting competition. However, as discussed later, the Third Plenum concerns over due process have come to a boil rather than cooling off.

The Xi leadership has embraced a forceful policy to control cyberspace and manage China's vulnerability to what are perceived as cyber threats.

Notwithstanding acute concerns over the evenhandedness of regulators in dealings with technology firms, additional steps have been taken toward modernizing judicial infrastructure to support innovation. At its June 6, 2014 meeting, the Deepening Reform Small Leading Group approved a *Plan Regarding Establishing Intellectual Property Rights Courts,*[274] which was a key step toward implementation of the "explore establishing IPR courts" provision of the *Decisions*. The plan says Jiangsu, Guangdong, Beijing, and Shanghai have been formulating pilot programs in this area since December 2012. Separately, on May 1, 2014, an amended Trademark Law came into force, with accompanying State Council amendments to the

Trademark Law Implementing Regulations.[275] The new law makes useful improvements on trademark protection and administrative processes.[276]

Research organizations also moved forward on implementation of one Decision 13 commitment in May 2014: open access rules for nationally funded research. The Natural Science Foundation of China (NSFC) and the Chinese Academy of Sciences (CAS) announced that starting immediately all supported research publications would be freely available online after one year.[277] This is a step toward better collaboration and assurance that public funds do not just benefit private interests.

Education

Some steps have been taken to improve the relationship between the education culture and innovation. In May 2014, education officials announced changes in the content of the national college admission examination, or *gaokao*, starting in 2017. The emphasis on English language proficiency will be dropped. On August 18, 2014, the Deepening Reform Small Leading Group reviewed and passed *Measures on Test-Based Admission* moving this reform ahead.[278] A larger debate about college admissions pressures (and corruption), the testing system, and the quality of secondary education is taking place, but concrete changes have not yet been made.

In June 2014, reports appeared that China's Ministry of Education intended to convert up to 600 colleges to vocational institutions to equip students with needed technical skills rather than university degrees with little immediate value to employers, which is clearly a response to the crisis in university graduate employment rates identified in Decision 43. On June 22, 2014, President Xi and Premier Li spoke at a national conference on vocational education in Beijing, and the State Council released the *Decisions of Speeding Up Development of Modern Vocational Training*.[279] This is a fairly bold revamp of the college landscape, and a frank acknowledgment that past management of higher education had generated poor results, despite large expenditures.

National Security

In the atmosphere of heightened concern over information technology (IT) and electronic surveillance that has arisen in recent years, the Xi leadership has embraced a forceful policy to control cyberspace and manage China's vulnerability to what are perceived as cyber threats. In February 2014, Beijing announced the creation of a small leading group on Internet security and "informatization" – the Chinese word for the spread and use of the online culture. The steering body, chaired, like the other new leading groups, by Xi himself, is focused on the dual tasks of developing IT and safeguarding Internet security to make China a "cyber power." Xinhua quoted Xi admonishing his Party colleagues, "Cyberspace should be made clean and chipper," and continuing, "No Internet safety means no national security. No informatization means no modernization."[280] The challenge here is that an innovative civil society is generally boisterous and gives dissenting, disruptive views the room to compete with establishment thinking.

Every nation must find a balance between restrictions on freedoms to ensure security and acceptance of the disruptive forces that spur progress. Concerns exist both inside and outside China about the balance Beijing is now pursuing, just as there are concerns in the United States and other countries, and it is beyond the scope of this report to judge whether "clean and chipper" is optimal for innovation: suffice it to say opinions vary. Foreign observers are concerned by talk of banning foreign goods and services, Internet routers, and strategic consulting services from China's high-tech marketplace. Given the degree to which trade and investment between China and the advanced economies are interconnected, and the reality that more advanced economies are predominantly weighted to higher-technology offerings in terms of what they have to trade with China, the chilling effect of a Chinese impulse to "de-Cisco-ize" could be colossal.[281] This techno-nationalism has made its way into the think tank sector in China as well. Disciplinary inspectors have insinuated that China's state think tanks have been corrupted by involvement with foreign scientists.[282] Such charges between nativist and internationalist scholars have been going on in China for hundreds of years, and no doubt they will continue; however, in light of the rising importance of innovation for securing growth, the need to ensure that the level playing field extends into this sector is all the more important.

Counter-indications and Tracking

While there has been no shortage of activity in the intellectual property rights realm since November 2013, concerns are acute about due process and administrative transparency by China's regulators and courts in dealing with trade secrets and other intellectual property. In some cases, the issue is not just due process but out and out intimidation and threats. Foreign firms and business associations are voicing these concerns the loudest,[283] but Chinese lawyers are speaking up as well.[284] Time will tell whether China is simply climbing the learning curve of more active regulatory enforcement of competition policy and is not motivated by a nascent techno-nationalism in these cases; for the time being, the discouraging effect of these cases on foreign attitudes toward Chinese innovation is palpable.

China's handling of information security, particularly cyber-security, and the freedom of speech and association is also having an unnerving effect on innovation. Online censorship is extensive and routine, disrupting the flow of ideas. Pressure on well-known bloggers and progressive groups has squelched the exchange of views. Foreign and Chinese think tank scholars have found it more difficult to collaborate. The question is not whether the motivation for these intrusions is rational – as seen from Beijing – but what consequences this pattern will have for China's innovation ambitions and desire to attract the best talent from around the world.

A final counter-indication to innovation system reform that should be pointed out is a general practice of industrial policy – efforts to alter the short-term verdict of market forces in determining an economy's structure. While the Third Plenum was definitive in pledging a greater role for market forces, it left plenty of room for industry policy both for reserved, market-failure sectors for government involvement and for government's residual authority to craft "orderly" competition in normal industries. Beijing has issued little guidance on the negative list for the former category. And enough loopholes exist in the regulatory reform plans to keep skeptics well supplied.

Industries that are innovation intensive, deemed strategically important, and based on market competition elsewhere in the world are the most likely to invite Chinese-foreign disagreement over the appropriateness of state intervention. The IT sector is one, including electronics, software, computing, information and communications technologies, and related services. Semiconductors – memory chips, microprocessors, integrated circuits, and complex chips systems – for instance, continue to get heavy policy support from Beijing, whereas they are private sector dominated elsewhere in the world. China's chip imports were worth $200 billion in 2013, more than its oil imports at $120 billion. China's lack of domestic capability in semiconductor design and manufacture is seen as problematic in terms of national security considerations. State Council officials lament the limits to homegrown products that can support China's IT backbone, noting, for example, that foreign products comprise 82% of servers, 73.9% of storage devices, 95.6% of operating systems, and 91.7% of database products used by government offices and in important industries.[285] In December 2013, the MIIT announced a $5 billion fund to support China's semiconductor industry.[286] In April 2014, reports surfaced of a $19 billion dollar fund backing the domestic integrated circuits industry.[287] The combination of formal moves against foreign products – such as a ban on Microsoft Windows 8 from government systems in the name of network security[288] – and encouragement for SOEs to replace them raises questions about China's innovative potential in the future, and the specter of ongoing friction with foreign firms and officials, especially as China's national champions seek to venture abroad.

China's lack of domestic capability in semiconductor design and manufacture is seen as problematic in terms of national security considerations.

We propose three observable indicators for gauging China's success at implementing its stated innovation policy objectives. First, related to the relationship to market direction of resource flows to innovative industries, the assessment of the negative list for government intervention is again suggested. Complementing this, a calculation of the ratio of SOE and other government funding for R&D activity to total R&D activity will be useful. Readily available statistics track R&D funding in China by government and enterprises, and with additional research it should be possible to break out SOE funding from private enterprises on a reasonably timely basis. As a minimum, an index of select leading SOEs and private firms individually reporting R&D spending can be developed.

Second, two-way licensing and patent revenue flows are visible in China's balance of payments data. With reform, we expect continued growth in these cross-border flows in both directions. This will demonstrate that China is fully engaging in global collaboration to foster technological innovation. Commercial payments offer a better indication of innovation than simple patent filings because not all patents reflect real innovative activity.

Finally, realization of the Third Plenum goals for China's innovation system should result in a clear upward trend in indigenous, original innovation capable of global recognition. In a handful of sectors, Chinese firms have established themselves as cutting-edge leaders in high technology. Telecom giants Huawei and ZTE are examples, as is the private online-commerce giant Alibaba – which set an all-time record for an initial public offering in September 2014 in a demonstration of China's innovative potential when dynamic new firms are permitted to disrupt the existing marketplace. Despite these success stories, for the world's second-largest economy the list remains modest, and the branded firms associated with truly innovative work are few.[289]

3. THE IMPACT OF CHINA'S REFORMS ABROAD

ONE THING IS CLEAR FROM THE PREVIOUS CHAPTER: China's reform initiative is one of the most complicated policy undertakings in history. Seldom has such a large economy running at high speed required such a profound overhaul in a compressed period of time. The difference between success and failure in this endeavor will be felt not just in China but around the world. China is massive in absolute terms: when it set out to reform and open up in 1978, only 2% of world GDP was at stake; today, it is a hefty 15.4%. China's marginal contribution to global growth was near zero in 1978,[1] and little of the Chinese marketplace was accessible to other economies. By the time the Tiananmen crisis of 1989 unfolded, leading to a temporary shock as the nation recoiled from its laissez-faire trend, China's share of marginal global growth was 4%. Eight years later (1997), during the Asian Financial Crisis, this share was 11%. For the past three years, China has delivered an average of 28% of world growth. It is more interdependent with world markets than nations going through a middle-income policy shock have tended to be in the past. And the time period over which China's adjustments must play out will be short. All this means China's present shift from past patterns will be profoundly disruptive to the global economy.

Few countries have prepared to weather a sea change in Chinese economic policy because few yet believe that business as usual is really coming to an end. Gradualism has long been China's mantra, and most observers still think power politics imposes a speed limit on reform. The analysis in the previous chapter suggests that may be mistaken. Xi Jinping and his colleagues are pressing forward with a reform initiative broader and quicker than previously thought possible. The success or failure will determine China's economic size in the years ahead and be felt acutely both in terms of changing opportunities inside China and in other economies through trade and financial impacts.[2]

Few countries have prepared to weather a sea change in Chinese economic policy because few yet believe that business as usual is really coming to an end.

This chapter assesses the external economic implications of China's reforms. We start with growth accounting for 2014–20, incorporating the impact on labor, capital, and productivity of the reform clusters examined in Chapter 2, to estimate China's maximum 2020 GDP growth and alternative rates if reform derails. These scenarios and the policy adjustments laid out in the previous chapter are then used to project likely outcomes for China's cross-border trade and financial flows. This approach yields a matrix of current data and reasonable assumptions about China's economic adjustment: it is not a quantitative modeling exercise, which is well beyond the scope of this study. Our contribution is a thorough weighting of regulatory reform for potential growth, an assessment of the costs of failure to reform for trade and financial flows, and a distillation of themes relevant to business and policy.

INTRODUCTION: PAST SHOCKS WHEN CHINA ADJUSTS

China's reengagement with the world following Mao's insularity has had transformative global effects over the past four decades, but it is not a new phenomenon. The initial reopening to trade and investment after 1978, the re-embrace of reform after 1989, then-Premier Zhu Rongji's restructuring and World Trade Organization (WTO) gambit in the late 1990s, and Beijing's response to the Global Financial Crisis of 2007–09 altered China's growth, with profound implications for cross-border flows. Some of these impacts were easy to observe, such as fluctuations in foreign direct investment (FDI) into China. Others were more diffuse and came into focus only over time, such as the displacement of manufacturing workers in Brazil or the United States. Still harder to pin down has been the effect on growth models worldwide, as other emerging nations shifted some attention from the prescriptions of traditional development banks to those offered by the China Development Bank and other new institutions. In fact, the full spectrum of impacts is yet to come, given that China's financial globalization is still at an early stage.[3]

When China started reform in 1978, it accounted for 2% of global GDP. The working-age population was a sizeable 402 million, but almost none of these laborers were connected to international markets in a meaningful way. Rural dwellers numbered 306 million and were far removed from any conduit to the outside world. No more than 69 million workers were in industry and construction. But the potential latent in this huge labor pool captured imaginations, and the move to allow foreign investment and engage in labor-intensive light manufacturing had important effects around the world.

A rapid shift of production to China from other East Asian tigers, which were bumping into the limits of export-led growth, ensued. Real wages in Japan and Taiwan were rising, and their options to keep costs in line with productivity were running out. By the mid-1980s, both countries were under pressure from Washington to limit currency appreciation. In 1985 and 1987, accords changed the exchange rate landscape, tipping the manufacturing cost balance in China's favor despite the odd mix of socialist and laissez-faire ideas in the country's mushrooming coastal special economic zones. The weaving together of regional production chains, with Japanese, Taiwanese, Hong Kong, Singapore, South Korean, and other firms tapping into China's freed-up surplus labor (along with pioneer U.S. and European firms) reinvigorated Asia's manufacturing rise. The geopolitical implications were historic. Most importantly, manufacturing alignment with the West divorced Beijing from the economics of the Soviet Union, then still locked in a showdown with Ronald Reagan's United States, and reinforced Moscow's awareness of the bankruptcy of its model. By the time the Berlin Wall came down in 1989, China's labor force had grown by another 200 million people in the single decade since reform had begun, reaching 27% of the global labor force that year.[4]

The Tiananmen Square demonstrations and resulting social crackdown in 1989 turned China inward for several years, and many international partners hedged their bets on China's future. The growth of China's participation in world FDI and trade stalled, but the costs of this interruption were minor because China's international economic ties were still modest. This made China's impact on the international economy all the more potent when Deng Xiaoping recommitted to the course of marketization and internationalization in 1992. In

1989, China had attracted less than 2% of world FDI. By 1994, the nation was pulling in more than 13% of global direct investment; in 1992–97, the FDI flow grew sevenfold. Average exports doubled in these years as a result of this investment, as foreign invested enterprises came to dominate China's export trade. The structure of U.S. trade with Asia was changing: U.S. imports that used to come from Japan, Taiwan, and other tigers were now coming from China. In garments, toys, and consumer electronics, the movement of manufacturing to China occurred at an unprecedented and disruptive pace,[5] changing advanced-economy trade politics, shifting attention from the WTO to Asian regional trade arrangements, and sending shock waves through boardrooms as supply chain managers discovered huge cost reduction opportunities and either seized them or looked on as their competitors did so.

Deng's decision to stay on a market path in 1992 locked in the transition to a "flying geese" model whereby firms in the most advanced Asian economies, with Japan often in the lead, kept innovative work at home and did downstream assembly in China. The addition of hundreds of millions of workers to the global labor pool changed traditional labor politics in Europe and the United States. With both labor and product costs held down, advanced economies were able to run closer to full employment without risking inflation, allowing a longer capital investment cycle and greater risk taking, followed by deeper deregulation. And yet, by 2000, while China was generating 13% of world textile exports, its share of overall global demand growth was still just 11% and its share of global GDP was a mere 7%.[6]

Another Chinese policy decision in the 1997–2000 period had a profound impact on the world economy, this one unambiguously on the upside: Beijing's decision *not* to follow suit with most other East and Southeast Asian manufacturing nations and attempt to currency-devalue its way out of the Asian Financial Crisis. Growth fueled by foreign currency debt came to an abrupt halt, starting in Thailand in 1997 and quickly spreading. Facing rapid loss of competitiveness against greatly cheapened exports from its neighbors, Beijing was predicted by most analysts to be on the verge of devaluing its own currency to keep pace. As it turned out, then-Premier Zhu Rongji made a strategic decision not to pursue short-term gain at the expense of currency credibility and maintained the value of the renminbi, helping limit panic over emerging market reform reversals and contributing to recovery.[7]

In addition to safeguarding currency stability, in the late 1990s Zhu restructured tens of thousands of state-owned enterprises (SOEs), which sent 25 million workers looking for other jobs;[8] liberalized an urban property sector previously locked up by those SOEs; and committed China to a decade-long course of adjustment for WTO accession. These moves laid the groundwork for the super-cycle years of the 2000s, which were driven by booming property and infrastructure construction and gave China a dominant role in world demand growth for energy and raw materials. In 2007, China was the world's leading importer of iron ore (which it remains today), purchasing 43% of global imports,[9] and copper ore (30% of global imports). With steel production capacity of 756 million tons and actual production of 566 million tons versus domestic consumption of approximately 520 million tons,[10] China found that its policies to spur domestic demand for construction materials quickly translated into profound impacts on global markets. Beijing's decision to unleash $765 billion[11] in stimulus from late 2007 stoked domestic construction and dampened the hit on global hard-commodity exports, principally for emerging markets, while consumption subsidies for household electronic products softened the blow for exporters from Taiwan, Japan, and South Korea.

The mix of trade and currency policies that China maintained through the mid-2000s propelled trade surpluses to record levels, resulting in a current account surplus amounting to 10.1% of GDP in 2007 (which has since retreated to 2% of GDP, or $183 billion, in 2013) and a massive buildup of foreign exchange reserves. China's reinvestment of these reserves into U.S. government debt grew large enough to raise strategic concerns in both Washington and Beijing by the late 2000s. With U.S., European, and Japanese growth low or negative at the peak of the crisis, China's share of marginal global GDP growth shot up dramatically in 2009[12] and stood at 30% for 2013, bringing its GDP that year to 15.4% of the global total.

The package of reforms under development in Beijing today will create major benefits for other economies.

China today is so big and deeply integrated with world commodities, goods, services, and financial markets that its economy affects global conditions more quickly and profoundly than ever. For the past four decades, integrating hundreds of millions of new Chinese workers into global production networks benefited consumers and hurt manufacturing workers, especially those in lower-skill industries. The package of reforms under development in Beijing today will also generate competitive pressure for workers abroad as resources are shifted into sectors with high potential, but to an even greater extent than in the past; these reforms will create major benefits for other economies in terms of their trade and financial flows.

OUTLOOK: GDP WITH AND WITHOUT REFORM

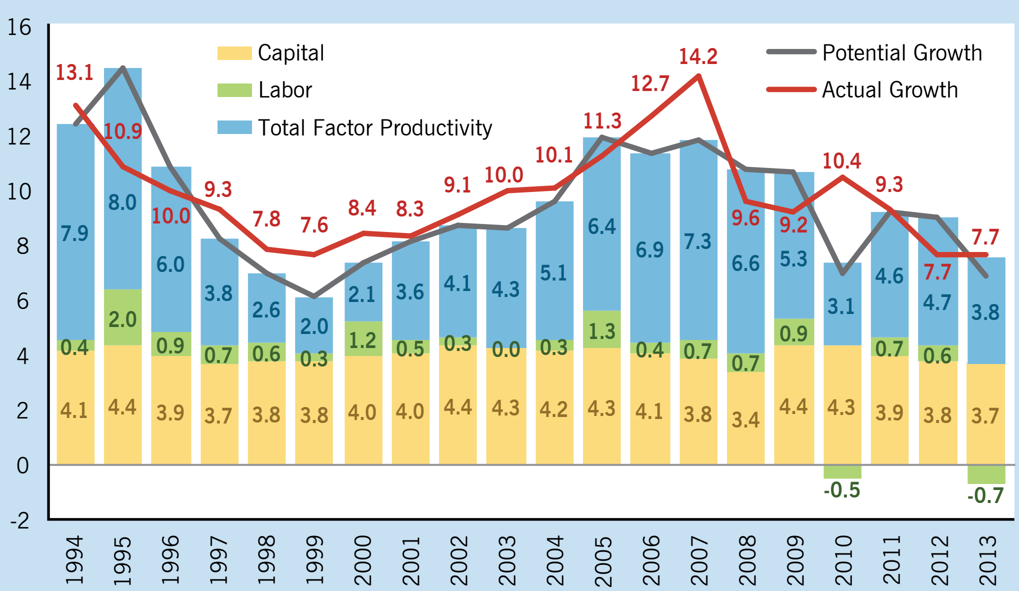
The starting point for projecting how China's economic policy choices will be felt worldwide in the years to come is to determine how fast it will grow, and hence how much new economic activity it will generate. At the end of 2013 just after the Third Plenum, China's official GDP stood just below $9.2 trillion, following a 7.7% GDP growth year.[13] In 2010, its GDP had grown 10.4%: if growth had stayed at that level, approximately $3.5 trillion in additional growth would have been generated in 2011–13,[14] creating opportunities for firms around the world. However, after 30-plus years of nearly double-digit average growth, fundamental factors had caused growth to diminish, and those factors continue to moderate China's performance today. The question is *how much* further slowing lies ahead, and how much that depends on reform. At $6748 per capita income today, China still has tremendous growth potential before it, but we know from history that attaining full potential is not guaranteed and becomes especially challenging at precisely today's middle-income levels.

To explore long-term potential growth, economists use *growth accounting* frameworks that combine assumptions about inputs and efficiency gains.[15] This is essentially a stocktaking of inputs to growth: labor, capital, and a broad measure of additional potential called total factor productivity (TFP). Labor demographics are the first consideration. As new births today will not produce workers for at least 16 years and likely more given higher education, demographics for the next decade and a half are fairly predictable. Mortality rates are usually predictable as well, although China's environmental crisis is complicating that. Population migration can also alter the picture, though China is generally not open to inward migration today (unlike countries such as the United States and Sweden, where immigration provides a big boost to potential growth). The extent of education (measured in years of schooling) is a variable usually counted in labor.[16] Second, the potential increase in the capital stock – all plant, equipment, and other productive assets – is tallied. The contribution of capital stock to growth potential depends on the depreciation rate for past investment and the annual investment share of GDP in the future. Finally, after labor and capital have been accounted for, potential GDP growth attributable to TFP is estimated. TFP expresses past growth achieved beyond that credited to labor and capital. It can result from the weather or where a nation is in its business cycle (slack or full), but most importantly TFP over time reflects technology and policies that facilitate the movement of labor and capital out of low-return uses into higher-return ones.

Good growth accounting projections depend on a firm grasp of how policy conditions

Figure 3.1: China's Potential Growth versus Actual Growth*

Growth (annual %)

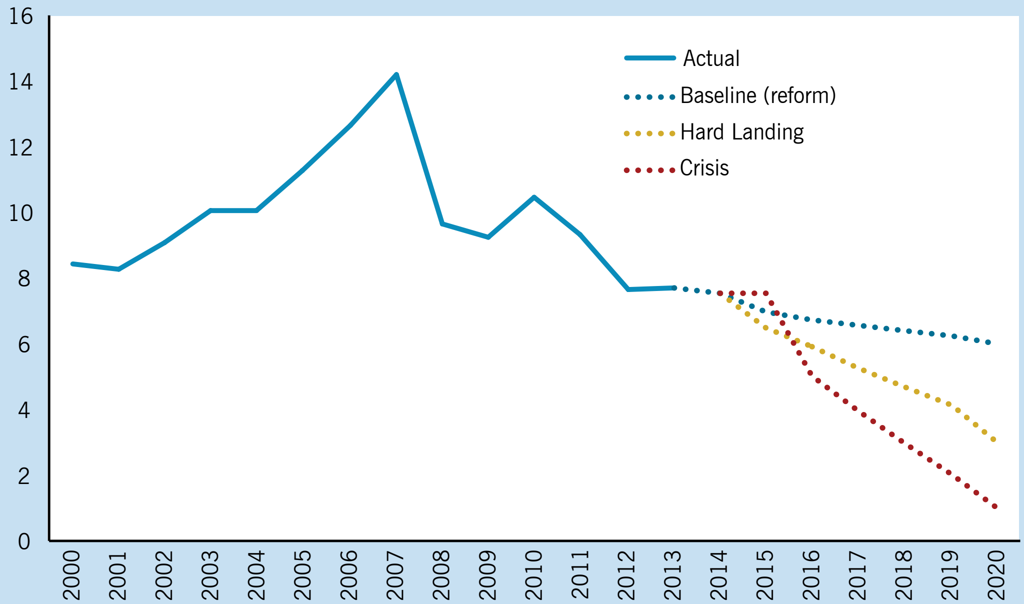


* Potential growth is the maximum growth rate an economy can achieve while keeping a constant inflation rate. Potential growth is a function of the available capital stock, labor force, and total factor productivity (residual output from technological upgrading and structural adjustment that enhances the productive capacity of capital and labor).

Sources: IMF 2014 Article IV Consultation, Chinese National Bureau of Statistics.

Figure 3.2: China's GDP Outlook with and without Reform

GDP growth (% change year-on-year)



Sources: Chinese National Bureau of Statistics, Rhodium Group estimates. Projections begin after 2013.

affect the growth of labor inputs, capital, and TFP. Therefore, one of the important contributions of this study is to take advantage of the careful assessment of regulatory reform initiatives discussed in the previous chapter to produce more precise assumptions of China's growth potential through 2020.[17] *Potential* growth means the best-case performance for the average over a period that would not be inflationary. *Actual* growth can be higher or lower than potential growth in any given year in that period. An *output gap* results if average actual growth is lower than potential growth. Figure 3.1 shows the International Monetary Fund's (IMF) estimates of both actual Chinese GDP growth from 1994 to 2013 (red line) along with the estimates of potential growth broken down by contributions from labor, capital, and TFP.[18] As the figure suggests, capital stock deepening – or *investment* – has been the biggest driver of China's growth for the past 20 years, and TFP has been the second strongest driver. The labor contribution to GDP growth was the lowest on record in 2013, at –0.7%. China's labor pool indeed shrank in 2014; however, this deep drop is an anomaly. Based on education-adjusted demographics, average labor force growth in 2016–20, according to the World Bank and Development Research Center of the State Council, should be –0.2% annually.[19]

What does our review of the state of policy reform tell us about how labor, capital, and TFP stand to contribute to growth going forward? Starting from the IMF's summary of growth accounting to date, we use our Chapter 2 assessment of the *Decisions* to project three scenarios for China's GDP growth to 2020: rebalanced growth driven by successful reform implementation (our baseline view) and two lower-growth scenarios (hard landing and crisis) that we envision if reform falls short, either because reform is not attempted or because it is implemented unsuccessfully. These growth assumptions are summarized in Figure 3.2 and in detail in Table 3.1 at the end of this section.

Next, we draw from our assessment of the *Decisions* to consider how reforms will shape the contributions of labor, capital, and total factor productivity to China's growth through 2020 and shape our GDP scenarios. We then turn to the impacts of these three scenarios on the global economy.

Labor

We anticipate that a number of reforms will augment labor's contribution to GDP growth. Measures to increase educational opportunities for rural citizens and the quality of education in general will enable the same number of workers to make a greater contribution to growth. Some growth accounting methods reflect the benefits of education in "education enhanced labor;" other research counts greater productive potential as part of TFP. Land- and labor-related policy reforms to the *hukou* system, property rights, and urbanization should have the effect of moving more workers into the modern, urban economy where they can be more productive, and where public education services are likely to be of higher quality. Social safety net policies including provision of adequate health care will make a significant difference. The greater competition and consumer orientation among firms that can be expected with implementation of a Western-style approach to competition policy in a market-oriented economy should drive up internal training at firms, as well as new business starts, both of which help create opportunities for labor to make a greater contribution to growth. In our judgment, implementation of the labor and shared welfare reforms in the Third Plenum program can increase labor's contribution from –0.2% to zero even though the workforce is shrinking.

Failure to implement education reform and provide basic social security will disincline farmers to urbanize and set back labor's potential contribution to 2020 GDP growth to the "headcount-only" level of –0.2% or worse. Without environmental and health care reforms, an epidemic of pathologies caused by air, water, and soil pollution may reduce the availability of a healthy workforce even further than existing demographic projections portend.

Capital

The IMF attributes 3.7% of China's 2013 potential growth to capital stock deepening. It shows that this potential has fallen steadily since 2009, when it was estimated at 4.4%. That significant trend contrasts with the fact that actual capital formation has run well above that level in recent years, indicating that more investment is taking place than is sustainable. Much of the capital deepening that has occurred has gone into overcapacity industries without any domestic demand for new factories to serve. That means that loans may not be repaid, reducing the capital available for future lending. The base value of annual investment, let alone marginal annual growth in capital deepening, may need to shrink – leaving only household or government consumption to provide additional demand growth.

In the past, overcapacity could be resolved through net exports. Even as prices fell, firms continued to produce goods rather than exit the market, as bailouts were available and local officials loathed seeing their records tarnished by a bankruptcy. But more and more lending was needed to perpetuate the rollover of growing debt, and foreign consumers' ability to import China's overcapacity was increasingly limited by foreign policies to prevent it, or just sheer saturation of markets. Recognizing this, the *Decisions* addresses the future allocation of capital in a number of ways. Here are three.

First, both the *Decisions* and President Xi's explanation make clear that weak firms should exit their markets and strong firms should grow their market share, and that the government should stop preventing this competitive process from playing out – including for SOEs. While we perceive counter-indications that state support for firms in special industries is to be maintained, this exception probably does not cover many of the most capital-intensive, overcapacity industries today – such as steel. As Decision 9 says, "We will improve the market exit system in which the good eliminates the bad, and perfect the enterprise bankruptcy system." So that is what we understand reform to mean.

The pledges in the *Decisions* and their initial implementation point to moderation of capital stock growth in GDP.

Second, the most capital-intensive sectors also happen to be the most resource intensive, and the *Decisions* is unambiguous that operating costs should rise for resource consumers and that the growth of resource consumption must slow – especially when the demand being served is not even in China, as is the case with so much of China's steel production. We perceive new seriousness about environmental policy enforcement, with government approvals for new projects in the most capital-intensive sectors being meaningfully held back.

Third, the biggest present driver of capital deepening is the property sector, both directly through construction and indirectly through the cement, steel, and other basic materials plants built to feed that construction. The reform program underway would appear, for now, to be set on deflating the property bubble and not letting it swell further only to pop within a few years. One policy that would systematically discipline appetite for more property is a property tax. Chinese officials indicate that they are within a "few years" of broad property tax implementation, and that such a tax will be a crucial element of funding local government budgets in lieu of unhealthy land sales proceeds. This is far from a *fait accompli*, but it is clearly stated as the design and we therefore build that into our picture of capital stock outlook.

Taken together, the pledges in the *Decisions* and their initial implementation point to moderation of capital stock growth in GDP. Some commentators find it hard to imagine that anything but an extreme slowing or even negative growth in capital deepening makes sense. We favor a more gradual investment landing. In addition to the policy changes helping discipline capital growth set out earlier, the *Decisions* and implementation efforts so far involve new plans to accelerate urbanization; build social housing for low-income migrants, schools, and hospitals; a huge regional redevelopment program for Beijing and Hebei province; and massive environmental remediation outlays. These investments are large, in most cases justified, and can go some distance to offsetting the end of the heavy industrial investment boom that has continued too long. Significant growth in investment in many other industries that have been poorly protected by regulation to date will make sense as well. We foresee capital deepening falling from a 3.7% contribution to GDP growth today to 3%, under the reform scenario, in 2020 – a modest assumption.

For our hard landing scenario, we assume that Beijing is able to sustain this 3% annual capital stock-deepening contribution come 2020; however, in the absence of sufficient reform, new sources of demand for growth capital are not eventuating and resource allocation continues to be driven by government direction rather than the organic demands of a more efficient marketplace. The upshot is that TFP growth suffers, as discussed later. In our more severe crisis scenario, the recent tendency to allocate capital to sectors already facing serious overcapacity continues, precipitating a financial crisis between today and 2020. In this scenario, failure to put capital allocation on a sustainable footing results in both a loss of TFP potential and a far deeper reduction in capital-deepening potential come 2020, as insolvency from old-style investment and risk avoidance from more promising sunrise industries aggravates the shortfall in investment demand. The 2020 capital stock growth contribution to GDP growth is 1% under that scenario. Even that assumption – that the base of investment activity is maintained and grows by 1% – is not the worst-case outcome one can imagine.

Total Factor Productivity

Finally, the TFP component of GDP growth is the most subjective and arguable. As Figure 3.1 shows, the IMF attributes 3.1–4.7% of potential growth to TFP since 2010. The IMF believes that the high TFP gains resulting from efficiency improvements that were driven by investment in needed infrastructure in the mid-2000s will not be replicated going forward. Other growth accounting studies looking at TFP averages in past periods have estimated 3.1–3.8% growth coming from TFP since 1978, with the exception of high TFP growth from 1990 to 1995 reflecting recovery and the takeoff in foreign investment in China.[20] In another effort, Li Xiaoqin at the Conference Board has calculated that growth from TFP has fallen from a 3.1% average during 2007–11 to zero today.[21]

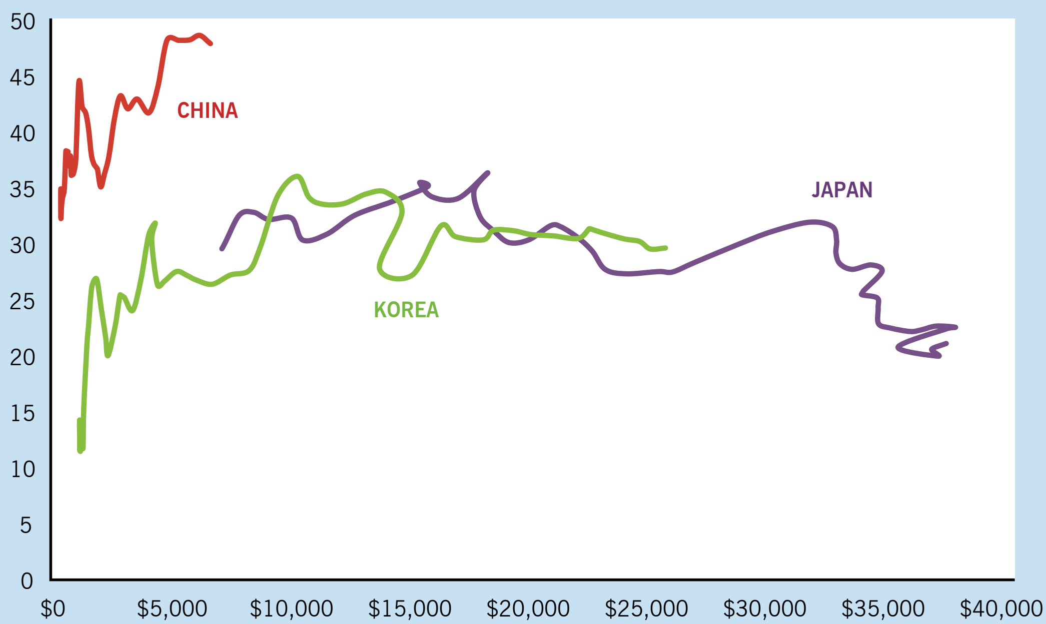
TFP should vary over the course of a business cycle – it is high when capacity utilization is high at the peak and low at the bottom of the cycle, so figures for one year or even a few years are not indicative. That said, all of the economists cited above who are doing careful work with growth accounting have come to the conclusion that TFP levels are falling. And they generally share a consensus as to why: the stall in needed reforms is diminishing marginal returns on investment and the efficiency gains that smart investment should promote. The same mix of labor and capital inputs can either be allocated efficiently and generate high output growth or be allocated inefficiently and generate low growth. In the 1980s, China's resources were so poorly allocated that high growth-generating adjustment was possible without much of a policy environment to complement the marketplace. Today, macroeconomic and social conditions are increasingly *un*stable, and firms are threatening to create jobs elsewhere around the world rather than continue to put up with an unfavorable Chinese setting. Reform must both abolish counterproductive policies and install new incentives that support higher growth. An antiquated policy environment designed to maximize investment growth has overstayed its usefulness, putting quantity of investment ahead of quality, which is the wellspring of TFP.

Figure 3.3 illustrates the investment intensity of China today, but it also makes clear that China is not done investing. China's investment share in growth today is past the peak reached in other major economies, and on that ground it should start declining. But note that *after their peaks,* Japan and Korea continued to see heavy if moderating investment flows until they had reached $20,000–30,000 per capita income levels – which are several decades away for China. China does not need a drastic slowdown in overall investment; it needs a different investment mix to generate high growth from TFP.

Sustaining TFP growth at 3% or higher to 2020 is possible under the reform scenario that

Figure 3.3: Investment at Different Development Levels for Selected Economies*

Investment as % share of GDP per capita (constant 2013 $US)



* Investment is equal to gross capital formation, or new investment on existing assets plus net changes in stocks of goods held by firms.

Sources: Chinese National Bureau of Statistics, World Bank World Development Indicators, IMF World Economic Outlook (WEO) database, Rhodium Group estimates.

improves capital allocation, and that is our reform scenario projection. The nine regulatory reform clusters examined in Chapter 2 must work together to permit this. The simplified two-leg picture of TFP potential is technological change and structural adjustment from low-return to high-return sectors. Unlike interest rates or the One Child Policy, these are not variables that Beijing can manipulate with the bang of a gavel. Technological change reflects a myriad of factors: education, business strategy, incentives to upgrade operations, the urgency of competition, the quality and openness to venture capital, intellectual property rights (IPR) protection, and rules governing the free flow of information, just to name a few. Even then, there are no guarantees: technological advancement is not a smooth line through history but rather a very bumpy one. The information and communication technology revolution of the 1990s built around the rise of the Internet boosted U.S. TFP growth significantly for half a decade, but it was not anticipated.

Structural adjustment is a process that creates winners and losers on various levels: among industries, among firms within industries, among regions, and among individual members of the workforce. In 2013, China's steel, nonferrous metals, and nonmetallic minerals industries alone – all way over capacity – invested an additional $400 billion into fixed assets. Surely much of that money would earn better returns in next-generation industries that are still underbuilt, such as eldercare, toxic waste management, or agricultural insurance, but cutting off traditional borrowers and preventing them from rolling over their debt will be difficult.

Of special concern is the nativism detected in China in 2014, which threatens to choke off the foreign component of TFP growth potential.

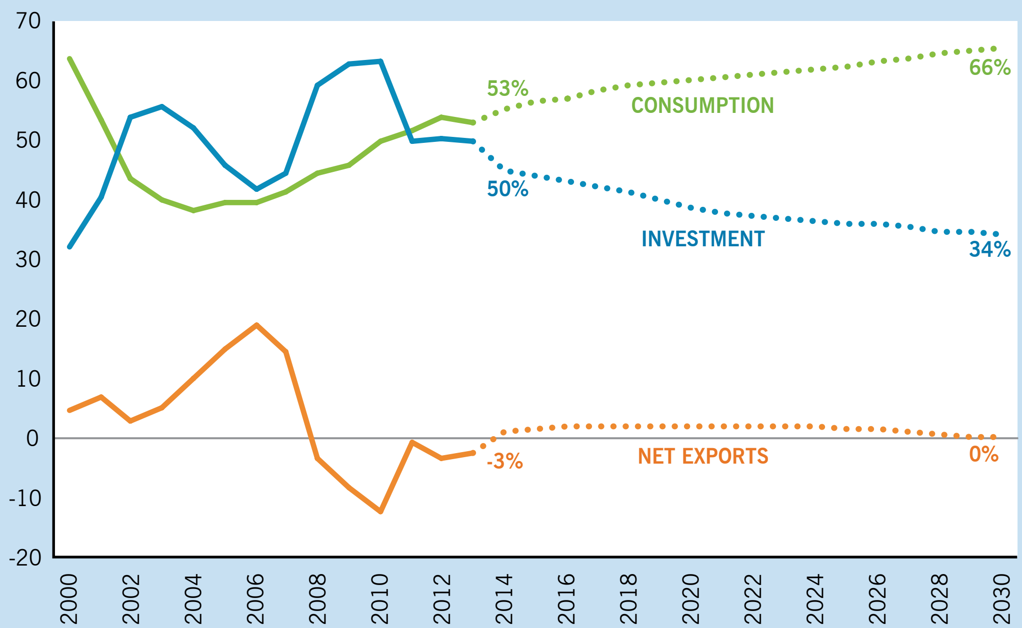
Nonetheless, we recognize that the *Decisions* contains the proper elements for making these improvements possible, and the more-urgent-than-expected tone of policy reform circulating through government today is the right one. This does not ensure successful implementation by any means, as we have stressed repeatedly, but at least it makes it possible. Education reforms and admonitions to employ the market to guide technology sector investment are in the mix, as we have seen. So are countervailing forces against marketization of innovation and structural adjustment. Of special concern is the nativism detected in China in 2014, which threatens to choke off the foreign component of TFP growth potential. If reform works, the evidence suggests that a 3% TFP contribution to GDP growth can be maintained in 2020. In either failure-to-reform scenario, TFP goes to zero, where more pessimistic economists (like those at the Conference Board) think it is already.

Finally, the shift in the quality of investment, consistent with high TFP growth, is connected to the share of household consumption in the economy. Old-style, overcapacity industries that need to see their fixed investment budgets trimmed employ fewer workers and hence pay out little in salaries. The sunrise industries that stand to benefit from freed-up capital tend to be more labor intensive and pay more wage income – they are service sector firms by and large. If China invests the same amount as it has in the past but redirects its investments into these wage-intensive sectors, it may not satisfy those who insist on cutting investment in GDP, but tomorrow those wages will show up as household consumption – the "Holy

Grail" of China's rebalancing proponents. Thus, the picture of China's GDP by expenditure components, consumption (household and government), investment, and net exports would evolve in a more sustainable way. This dimension of China's structural adjustment is shown in Figure 3.4 and captures what China's leaders hope to achieve from reform in the years ahead.

Figure 3.4: Rebalanced Growth: The Chinese View to 2030

GDP by expenditure, % of total, three-year average



Sources: Chinese National Bureau of Statistics, World Bank 2030 Report, Rhodium Group estimates. Projections begin after 2013.

With these estimates for labor, capital stock, and TFP growth adjusted to reflect the regulatory reforms set out in Chapter 2, we project the 2020 GDP scenarios shown in Table 3.1. To compile the aggregate 2020 GDP projections in this table, we begin with China's actual 2013 GDP of $9.2 trillion. Assuming reform takes place in full (and, of course, no other unforeseen shocks to growth occur), GDP growth slows gently from 7.5% in 2014 to 6.0% in 2020. IMF staff estimates arrive at a roughly similar conclusion for baseline 2020 GDP growth potential.[22] Chinese economists planning for the next Five Year Plan at the national Development and Reform Commission also assume 6% growth potential come 2020, although they arrive at that figure in an entirely different way.[23] This performance is half attributable to capital deepening and half to TFP growth; labor growth is flat. We assume that the steepest one-year slowdown will happen in 2015 as adjustment takes hold, and that gradual steps down to a 2020 GDP of $14.4 trillion take place thereafter. The most important element of this scenario is also its biggest difference with past economic policies:

Table 3.1: Scenarios Potential Growth to 2020

BASELINE (Reform)	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**
GDP growth (%)	7.7	7.5	7.0	6.8	6.6	6.4	6.2	6.0
GDP (2013 $US, bn)	9,181	9,870	10,561	11,274	12,018	12,787	13,580	14,395
HARD LANDING (Medium Downturn)								
GDP growth (%)		7.5	6.5	5.9	5.3	4.7	4.1	3.0
GDP (2013 $US, bn)	9,181	9,870	10,512	11,130	11,719	12,270	12,773	13,157
Losses compared to baseline								
Annual GDP loss (2013 $US, bn)		0	49	144	298	517	806	1,238
Sum GDP loss to date (2013 $US, bn)		0	49	193	492	1,008	1,815	3,053
Loss of global GDP (%)		0	0.1	0.2	0.3	0.6	0.9	1.3
Reduction in global GDP growth (%)		0	1.7	3.0	4.8	6.5	8.5	12.3
CRISIS (Severe Downturn)								
GDP growth (%)		7.5	7.5	5.0	4.0	3.0	2.0	1.0
GDP (2013 $US, bn)	9,181	9,870	10,610	11,141	11,586	11,934	12,173	12,294
Losses compared to baseline								
Annual GDP loss (2013 $US, bn)		0	-49	133	431	853	1,407	2,100
Sum GDP loss to date (2013 $US, bn)		0	-49	84	515	1,368	2,775	4,875
Loss of global GDP (%)		0	-0.1	0.2	0.5	1.0	1.5	2.2
Reduction in global GDP growth (%)		0	-1.7	5.8	9.2	12.6	16.2	19.7

Sources: Chinese National Bureau of Statistics, Rhodium Group estimates. Projections begin after 2013.

that Beijing ceases to prop up growth at an unsustainable level. This is our *baseline* outlook because we take the position that the Party leadership understands that refusal to reform will lead to much more dire outcomes, and so they will push ahead with a policy overhaul despite the risks. Harder landings could ensue because we are wrong about that cost/benefit calculation, or because reform implementation proves untenable or inadequate.

The first stepped-down scenario, a *hard landing*, reflects sustained capital deepening but under non-reform conditions that erode potential TFP. After this erosion in TFP growth, China is left with just 3% potential growth by 2020 and a $13.2 trillion economy: $1.2 trillion short of the baseline.[24] Our second downside scenario goes further and assumes that falling capital stock growth accompanies the TFP erosion – a relationship generally observed in the growth accounting literature. This is most likely to result from an attempt to prop up 2014–15 GDP with excessive stimulus and permissive housing policies, which would have the effect of delaying more earnest reform and further inflating the debt-to-GDP ratio to still more dangerous levels to achieve two more years of 7.5% performance. This scenario therefore shows stronger 2015 growth followed by a steeper decline and parallel erosion of both TFP and capital deepening. We refer to this as a *crisis scenario*, and it leaves China with 1% potential GDP growth in 2020 and a $12.3 trillion economy: $2.1 trillion shy of the optimal outcome. In the section that follows, we use these scenarios to help us explore China's trade and financial interactions with the world.

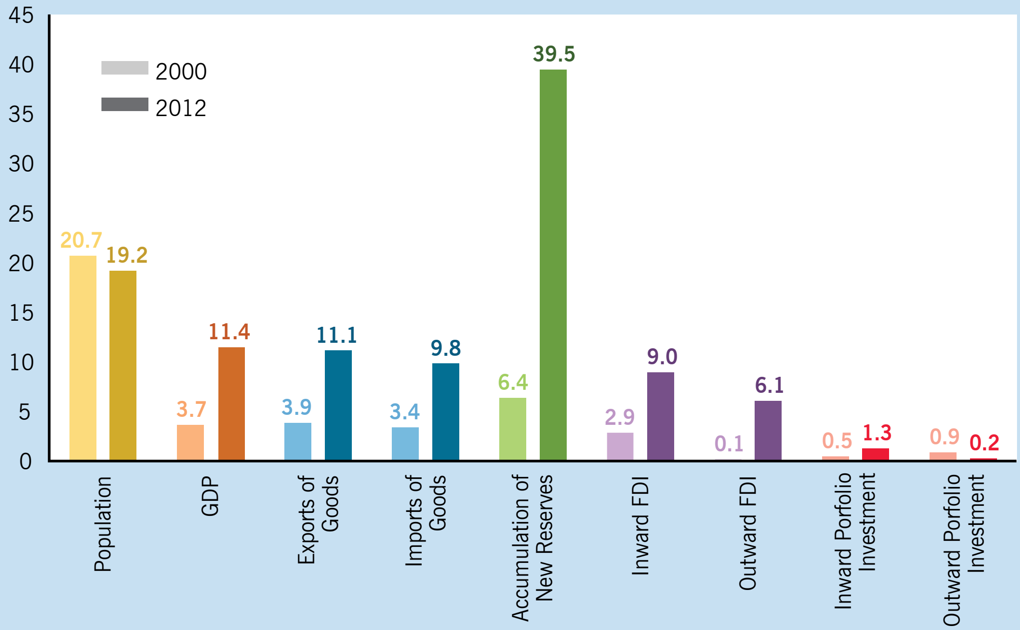
IMPACTS ON THE GLOBAL ECONOMY

Given its population size – roughly one-fifth of humanity – China is still underweight in the global economy in most respects, although it has closed the gap over the past decade. As illustrated in Figure 3.5, when Xi Jinping took the helm in 2012, China accounted for less than 12% of global GDP, with comparable shares of exports and (a little lower) imports of goods. Despite the attention China has garnered for attracting global direct investment since the 1990s, its share of inbound direct investment was just 9% of the global total; its 6% share of *outbound* FDI was smaller still. In terms of portfolio flows – investments in stocks, bonds, and other securities – China was barely on the map. Only in accumulation of new foreign exchange reserves did China punch above its weight. Of all these economic channels, two things can be said: first, the pace of China's catch up to its population weight has been rapid; second, it is only halfway there – much less in the case of most financial flows – so there is much more to come.

Cross-border trade and investment are not the only ways in which China interacts with the world, of course. Flows of people – tourists, students, emigrants, expatriates – are also booming. Chinese culture is growing in influence abroad, as is awareness of some Chinese brands. New Chinese inventions and patents are beginning to make their way out of the country. And China's military presence is increasingly visible abroad, especially in Asia but also in places farther afield where Chinese interests are located such as Africa. The connection between China's domestic reforms and any of these external manifestations could usefully be explored. For our purposes, however, we limit our assessment to trade and financial flows. They are better reflected in statistics, their definitions are relatively clear-cut, and they are dimensions of interaction that most countries experience.

In the following sections, we map out cross-border trade and investment flows under our three GDP scenarios for 2020. China's future growth and hence the size of its economy bear an important relationship to many economic variables, but other factors are at work as well. Taking advantage of our analysis of regulatory reform intentions in the previous chapter, we attempt to be nuanced by adjusting our GDP-based assumptions to reflect the policy, and politics, at work in China today. This is especially important in exploring the downside scenarios to illustrate the consequences that might be felt abroad if the progressive reforms found in the *Decisions* are not executed thoroughly.

Figure 3.5: China and the Global Economy in 2000 versus 2012
% of global total



Sources: World Bank, World Economic Outlook, United Nations Conference on Trade and Development (UNCTADstat), Rhodium Group estimates.

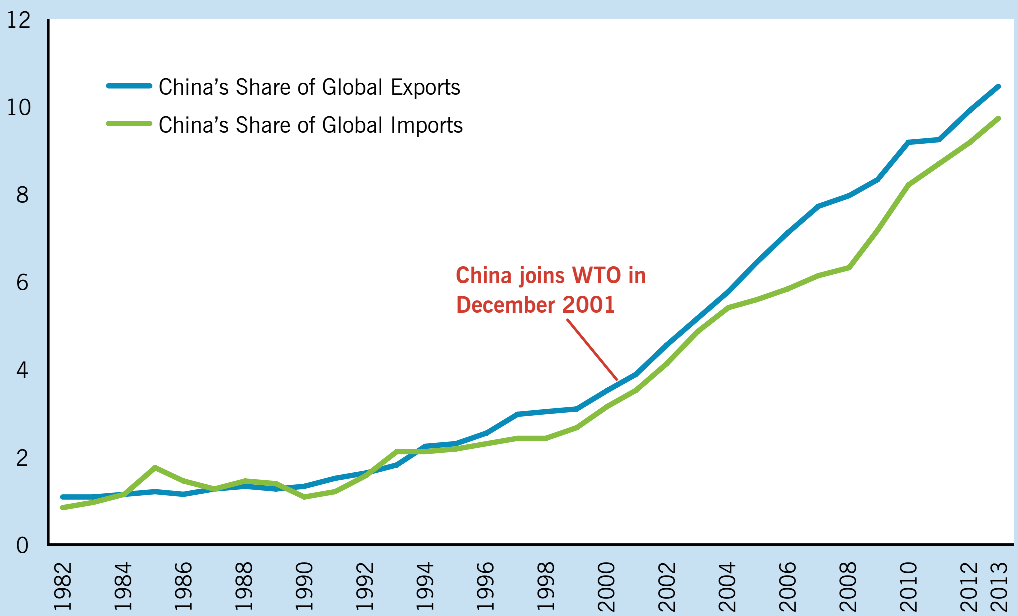
Trade

International trade has been central to China's development since 1978. Until the 2000s, China imported roughly as much as it exported, and much of what it exported resulted from low-skill assembly work on semifinished parts and inputs that had been made elsewhere. Most of China's exports – between 45% and 60% since 2000 in fact – were shipped out of China by foreign invested firms. But the wages and profits available in international production chains were a big step up for millions of Chinese workers. In addition to margins and salaries, a tremendous amount of production "know-how" spilled over into the Chinese marketplace, as engineers who had worked at joint ventures started new Chinese firms based on what they had learned. Trade and FDI were mutually reinforcing: FDI generated exports, which resulted in import competition in FDI sender countries such as the United States, thus generating new waves of FDI by rival foreign firms looking for the same low-cost manufacturing edge. As Chinese incomes rose slowly but steadily, those foreign investors focused more on the domestic Chinese consumer.

In the years after China's 2001 WTO accession, the country's trade surpluses boomed, not so much because of a concerted economic strategy but because extraordinary investment in output was outstripping domestic demand, leading firms to turn to foreign demand to clear their inventories. While China's trade profile had become an important international factor by the 1990s, by the 2000s it was systemically critical, as China amassed trade surpluses unheard of for a large economy. In 1982, trade amounted to slightly more than 15% of China's GDP; by 2013 it was above 50%.[25] Having generated only 1% of world trade in 1980, China became the world's largest exporter by 2010, passing longtime stalwarts including the United States and Germany. In 2013, China's imports and exports amounted to $4.64 trillion, and the country had a trade surplus of $235 billion.[26] Figure 3.6 shows China's rising trade since 1982, 10.5% and 9.8% of global exports and imports, respectively, by 2013; Figure 3.7 shows the totals in value terms.

Figure 3.6: China's Share of Global Trade

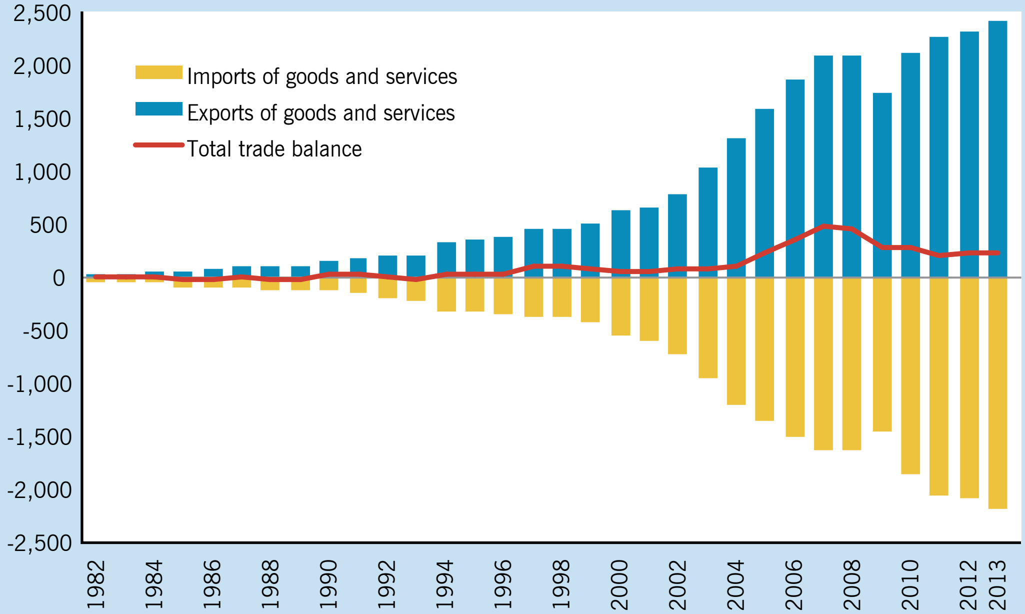
% of global imports and exports of goods and services



Sources: United Nations Conference on Trade and Development (UNCTADstat), Rhodium Group.

In the Xi Jinping era, China's trade picture has included both old and new themes. Imports and exports continue to grow, but at a slower pace, and the serious trade imbalances of the mid-2000s have come down, largely because of the burgeoning trade in services. China ran a $125 billion services trade *deficit* in 2013 (Figure 3.8) and as of this writing was on pace to finish 2014 with a deficit 20% greater than in the prior year. If it were not for nascent growth in China's services imports, particularly from tourism, education, and health care services consumed abroad, China's current account surplus would be closer to 4% of GDP today rather than 2.5%. International economists used to think of –3% to 3% of GDP as

Figure 3.7: China's Total Imports and Exports
Constant 2013 $US (billions)

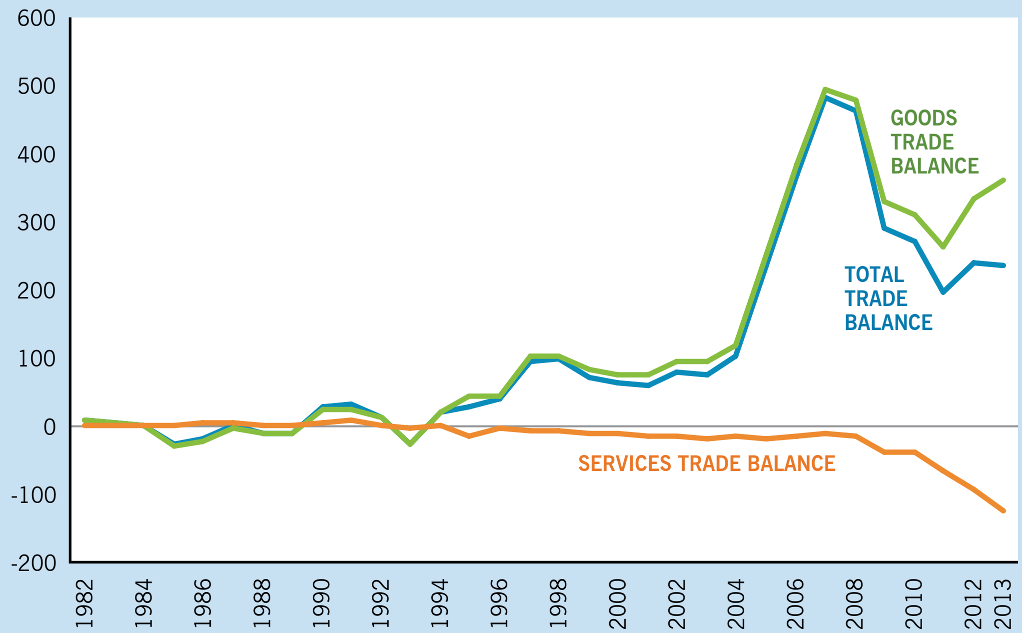


Sources: Chinese State Administration of Foreign Exchange, Rhodium Group estimates.

the reasonable range for current account imbalances, outside of which balance of payment problems were likely to occur, but for an economy of China's size, it is questionable whether that rule of thumb works. Measures of currency misalignment are often anchored to current account imbalances, so the fact that China's trade balance at the beginning of 2014 was modest as a share of GDP supports the argument that the renminbi is near equilibrium, helping tone down the acerbic currency debates that dominated the 2000s.

However, trade tensions are never far off, and several uncertainties remain. First, without capacity reductions, China's slowdown will spill surplus Chinese production onto international markets again, especially for basic materials such as steel. In August 2014, China had its biggest monthly trade surplus in history, and year-to-date exports of steel were at levels not seen since the record surpluses of the mid-2000s. Second, the services deficit that is believed to keep China inside the current account "safe zone" of –3% to 3% may not be measured or reported accurately. Services imports reflect Chinese going abroad to consume (casino gambling, for example), and this activity has been shown to obscure cross-border hot money flows (prohibited speculative capital masquerading as something permitted). Third, advanced-economy exports to China mostly come from three sectors of comparative advantage: generally high-technology or knowledge-intensive sectors, information and communications technology (ICT) products in particular, and services. Each of these sectors confronts hurdles in China. High-technology

Figure 3.8: China's Trade Balances
Constant 2013 $US (billions)



Sources: Chinese State Administration of Foreign Exchange, Rhodium Group estimates.

goods face intellectual property infringements and – lately – competition policy enforcement trying to negotiate down their profits. ICT firms see national security efforts to squeeze them out of Chinese networks, for instance with bans on government procurement. And provision of high-end services depends on the right to invest in a physical presence and wholly own a business. In many services, foreign firms are still waiting for China to open to investment. China intends to retain a wide variety of industrial policies, and new forms of economic nationalism will arise as traditional intervention is phased out. Fourth and finally, China has demonstrated a readiness to use trade policy as a tool of geopolitical statecraft. When there is a diverse set of nations competing as sellers or buyers of products, politicization of trade policy is less likely. But in a sector where China came to dominate 95% of global production – rare earth minerals – it used its market power as leverage to pressure neighbors in 2010. The case was resolved (against China) through the WTO, but the incident demonstrated the potential for abuse of production dominance in trade.

Outlook: Trade Flows with and without Reform

Two considerations go into our projection of China's trade flows under reform. First, imports and exports continue to rise as a function of GDP growth, as they have for decades. GDP grows as households and government consume more and as firms increase their spending on goods and services for investment. And as in the past, a portion of that consumption and investment will consist of imports of foreign goods and services. Likewise, a portion of China's expanded production capacity will go to serving foreign demand, thereby pushing up exports. Economists exploring China's outlook would not be unreasonable to simply hold China's trade intensity constant in the future. These relationships do not change overnight, and so many complexities shape the future that it is difficult to predict changes from the current pattern with precision.

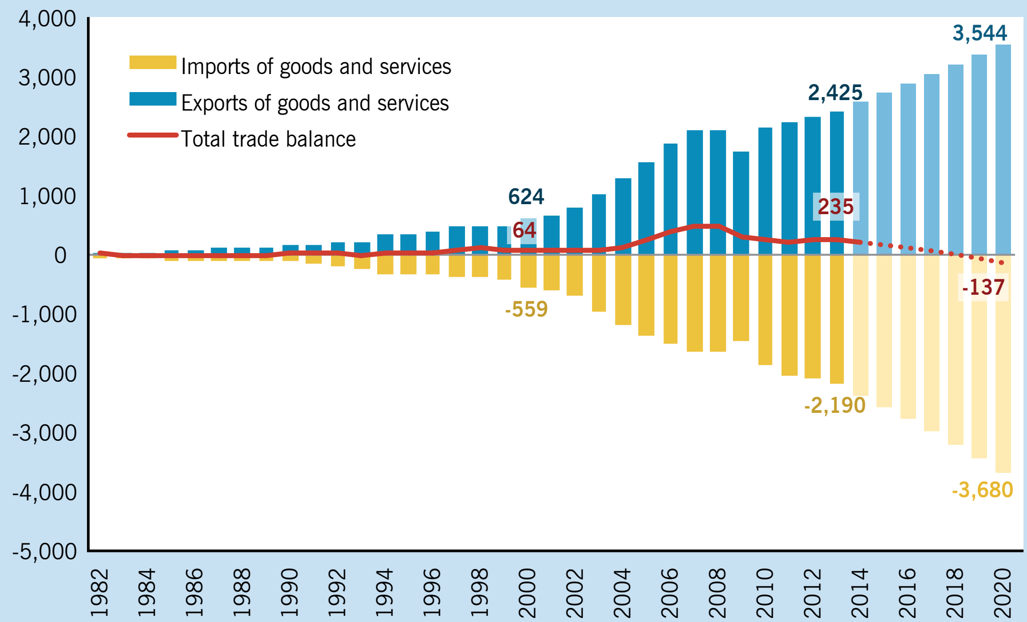
However, in light of the strong point of view we have developed about China's intended policy reform program, we do adjust China's trade outlook, modestly. For 2013, the values of imports and exports were roughly 24% and 26% of China's GDP value, respectively. As discussed at length, the *Decisions* sets out to temper many of the policy stances that tilted the trade balance toward surplus in the past. The planned reforms include exchange rate liberalization, substitution of market forces for government management of firm decisions, and an end to pressure on local governments to put growth over all other considerations. Capital allocation reform and government expenditure priority reform should divert income from lenders and firms toward household consumption, leading China to export marginally less of what it produces and import marginally more. Reforms to investment policy, with corresponding bilateral or multilateral agreements to open trade and investment channels, should make it easier for foreign firms to operate in China and sell products there. The shift in macroeconomic policy focus from maximizing capital formation and foreign reserve building to long-term economic stability with full employment should reduce the tendency to run perennial current account surpluses. The *Decisions* promotes environmentally responsible goods and services production, which will reduce China's longtime comparative advantage over manufacturers in countries with higher environmental operating costs. In many sectors, China will experience rising comparative advantage in international trade as a result of reform as well, but on balance we expect a greater propensity to import.

Under our baseline scenario of full reform implementation, we adjust China's import-to-GDP ratio upward by 1% annually through 2020 and adjust the export ratio downward by 1% annually. By 2020, the value of China's imports is therefore 25.6% of GDP, and exports are worth 24.6% of GDP. In combination with our GDP growth rate projections, this means China will have $3.68 trillion in imports and $3.54 trillion in exports, for a trade *deficit* of $137 billion in 2020, as shown in Figure 3.9. Given China's large trade surplus today and the gradualism of our adjustments, the crossover to deficit does not occur until 2019. With a foreign reserve position of more than $4 trillion as of March 2014, Beijing could run such a trade deficit for nearly three decades without depleting its foreign reserves, all factors being equal. As discussed in the next section, however, our outlook also includes significant growth in China's surplus inflows of income from its foreign investments, which we expect to balance out the current account at close to zero by 2020.

The *Decisions* sets out to temper many of the policy stances that tilted the trade balance toward surplus in the past.

Figure 3.9: China's Trade Outlook with Reform

Constant 2013 $US (billions)



Sources: Chinese State Administration of Foreign Exchange, Rhodium Group estimates.

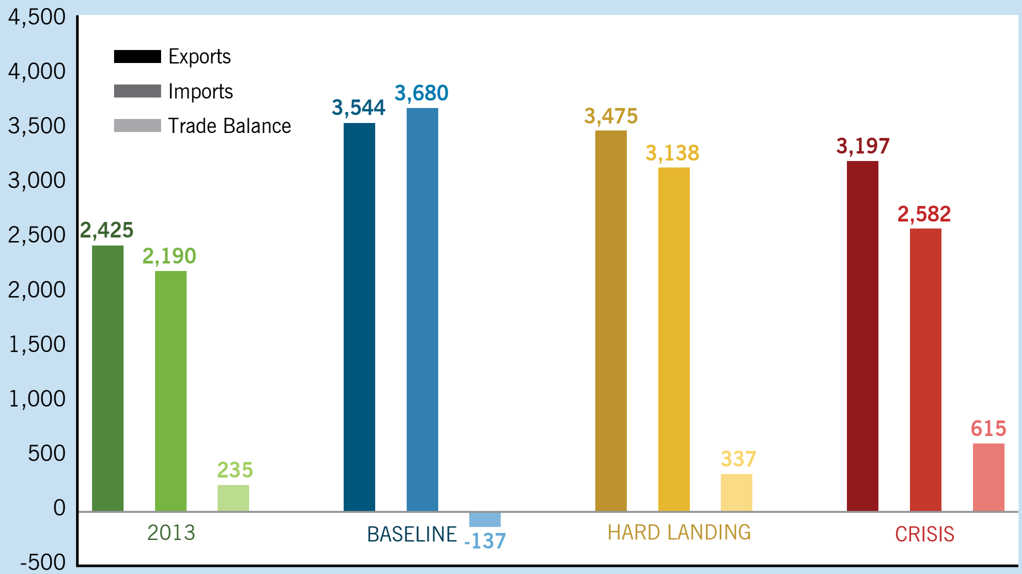
It is far trickier to anticipate trade patterns under the downside scenarios in which China's reform program is not implemented. In the baseline reform scenario, the assumption is continuity in the relationship between GDP growth and trade flows, with modest adjustments in patterns to reflect the end of policies that have fostered external imbalances for several decades. How China and the 440,000 registered foreign firms will behave in a hard landing or crisis scenario is unclear. No precedent is adequate to explain the Chinese case, but it seems reasonable to expect at least these three consequences.

First, rapidly falling domestic demand will dramatically reduce consumption of foreign goods and services, leading to a fall in imports and surge in exports as China seeks to increase net exports as a growth driver. In addition to volume effects, the weakened outlook for Chinese demand would trigger a significant decline in global commodity prices anchored to Chinese demand, such as those for oil, iron ore, and bauxite, amplifying the fall in Chinese imports in value terms. Second, trade-related reforms would be delayed or reversed, including exchange rate liberalization, opening to FDI for foreign firms, and negotiation of trade and investment liberalization agreements. Third, restructuring of ownership controls inside China, and general withdrawal of government from micromanagement in the marketplace, would also be delayed or reversed, making it harder to export to China.

This, of course, just describes the Chinese side. How trade plays out to 2020 depends not just on China but also on external supply and demand conditions, including the state of

Figure 3.10: China's Trade Profile in 2020 under Baseline, Hard Landing, and Crisis Scenarios

Constant 2013 $US (billions)



Sources: People's Bank of China, State Administration of Foreign Exchange, Rhodium Group estimates.

growth and recovery in the United States, Europe, and Japan; how rapidly emerging nations in Africa and Latin America grow and consume Chinese exports given that they will be losing revenues as a result of falling commodity sales to China; whether India shifts resources to light manufacturing to chip away at China's export base; and countless other considerations.

While external conditions could alter the outlook for trade flows under all scenarios, we make the following assessments about trade flows through 2020 if reforms are poorly implemented or, worse, stall: under the hard landing GDP growth scenario, we hold the ratios of imports and exports to GDP at the same level they are at today – roughly 24% and 26% of GDP, respectively – as deteriorating growth delays the implementation of trade policy reform. As a result, China's imports would be $543 billion lower in 2020 than in our baseline reform case, and exports would be $69 billion lower, leaving China with a $337 billion trade *surplus* instead of the $137 billion *deficit* – a swing of $474 billion. Under the crisis scenario, faltering Chinese GDP growth significantly lowers the nation's imports to 19% of GDP, leading to a spillover of negative impact on world demand for Chinese exports, which fall to 24% of China's GDP. Because 2020 GDP grows to just $12.3 trillion in the crisis scenario, the result of falling trade ratios is amplified, and a trade surplus of $615 billion results. China's total trade in 2020 (exports + imports) is almost $1.5 trillion a year less than under reform. Figure 3.10 summarizes the trade outcomes under our three scenarios.

Trade and the Reform Scenario: Selected Themes

The quantitative projections give us a useful but limited idea of what the aggregate trade numbers are likely to look like – all other factors being equal – with and without reform. Here, we explore some of the major qualitative implications under the reform scenario – our base case – for businesses and policy makers abroad.

First, while our base case is a good news scenario, it is not without difficult adjustments and negative spillovers. Regulatory reform will be life threatening for many Chinese firms. Indeed, weeding out weak firms that use resources poorly and creating room for more efficient enterprises to build market share and serve consumers is precisely the point. Many of the losers will face competition from imports and will demand trade protection in China, just as they do in every economy that embraces the advantages of globalization. And, as elsewhere, some of those demands for relief from structural adjustment will be heeded and will trigger trade countermeasures by other nations. If this dispute is not well managed, both in terms of actual protection measures and the rhetoric that feeds perceptions, the damage to existing production networks could be serious. Foreign investors' FDI assets around China were valued at around $2.4 trillion in 2013 in China's balance of payments statistics, and those investors will want assurance that those hard-built operations are not being sacrificed. Advanced-economy consumers, meanwhile, count on trillions of dollars a year in Chinese-made goods, and trade policy tensions could fuel major concerns over supply chains' reliability. We know very little about how China will adjust to running trade deficits, to being *normal* in other words. With such deeply engrained expectations of running surpluses, there will surely be heated disagreements internally, complicating Sino-foreign ventures and relationships that have been amicable and prosperous to date.

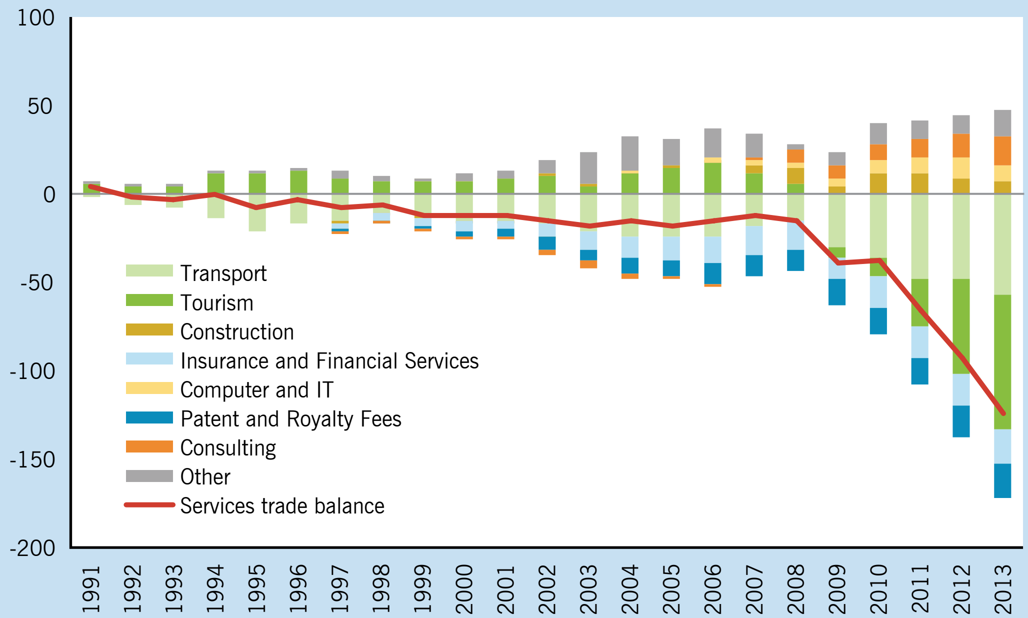
While our base case is a good news scenario, it is not without difficult adjustments and negative spillovers.

Second, successful reforms will make China both a more active partner in the international economy and a far more formidable competitor. Despite the "Made in China" stamping on so many labor-intensive products, China has not (for the most part) been a threat to advanced-economy profit margins based on brands, consumer satisfaction, cutting-edge innovation, or high-end quality and safety. The Third Plenum overhaul will not alter that overnight, but it should accelerate the upgrading process.

Third, reform will sustain the services trade growth trend. China has been a leader in goods trade but a lightweight in services trade, until now. As shown in Figure 3.11, the inflection point for services has arrived, especially in terms of imports.[27] The services component in traditional manufacturing and construction is taking off and will lead to stepped-up investment and employment growth in the years just ahead. This means going beyond quantity to quality and value. Service industries per se, including health care, entertainment, and finance, play a much bigger role in advanced economies than they do in China today, and major components of these industries are tradable. This is not just an import story: firms in construction engineering services, geological prospecting, and other sectors are actively exploring overseas markets.

Figure 3.11: China's Services Trade Balances by Category

Constant 2013 $US (billions)



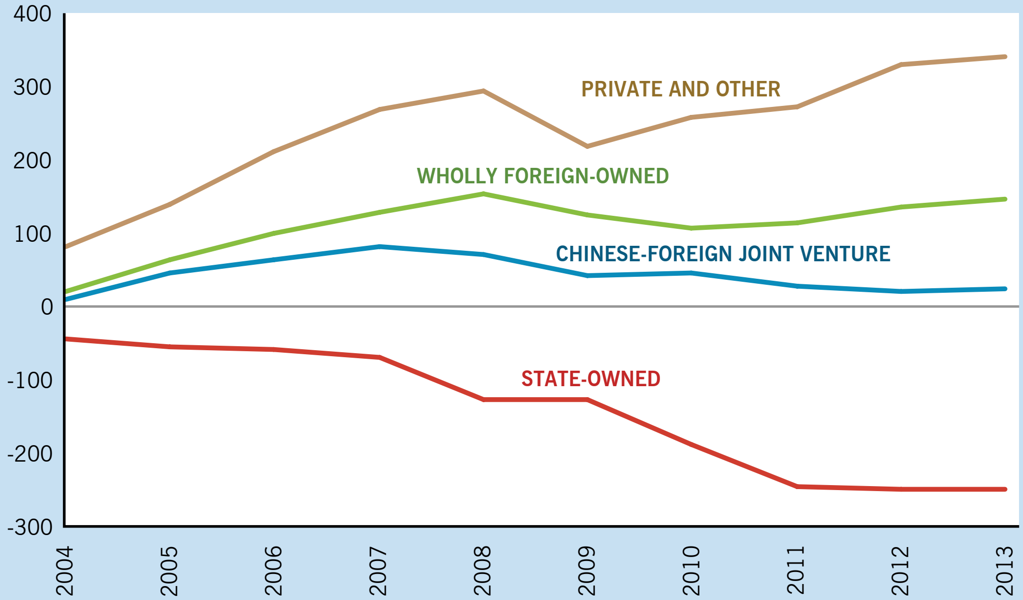
Sources: State Administration of Foreign Exchange, Rhodium Group.

Fourth, with domestic adjustment, China's trade negotiating posture will evolve. Since WTO accession in 2001, Beijing has been conservative in external agreements, emphasizing regional arrangements with political value over more global negotiations with potentially bolder terms. As internal barriers to competition fall, China may change gears externally. Information Technology Agreement (ITA) expansion, Trade in Services Agreement (TISA) talks, bilateral investment treaties with the United States and Europe, Government Procurement Agreement (GPA) participation, and progress on the WTO talks will be more tractable as China's reform progresses. Reform will improve China's carbon emissions profile, giving it leverage to challenge others to make progress in an international accord. If China achieves its self-proclaimed reform goals, it will become an excellent candidate for Trans-Pacific Partnership inclusion. The corollary to this observation is that China will have more influence in international negotiations.

Fifth, reform will bring about changes to the ownership structure of China's trade. Many observers are watching SOE reform for its impact on trade. It is significant, however, that state firms are net importers, not exporters (Figure 3.12). The SOEs' large import bill reflects their role as processors of imported raw materials. Reform should lower demand growth for imported commodity-intensive activity as heavy-industry SOEs show a greater propensity to ensure that their capacity, and imports of commodities to feed that capacity, is financially

Figure 3.12: China's Trade Balance by Enterprise Ownership*

Constant 2013 $US (billions)



* We rely on balance of payments (BOP) data from the Chinese State Administration of Foreign Exchange for trade balances in our economic forecast. Here, we rely on customs data, which vary slightly from BOP figures, to illustrate the trend in China's trade balance by enterprise over time.

Sources: General Administration of Customs, Rhodium Group.

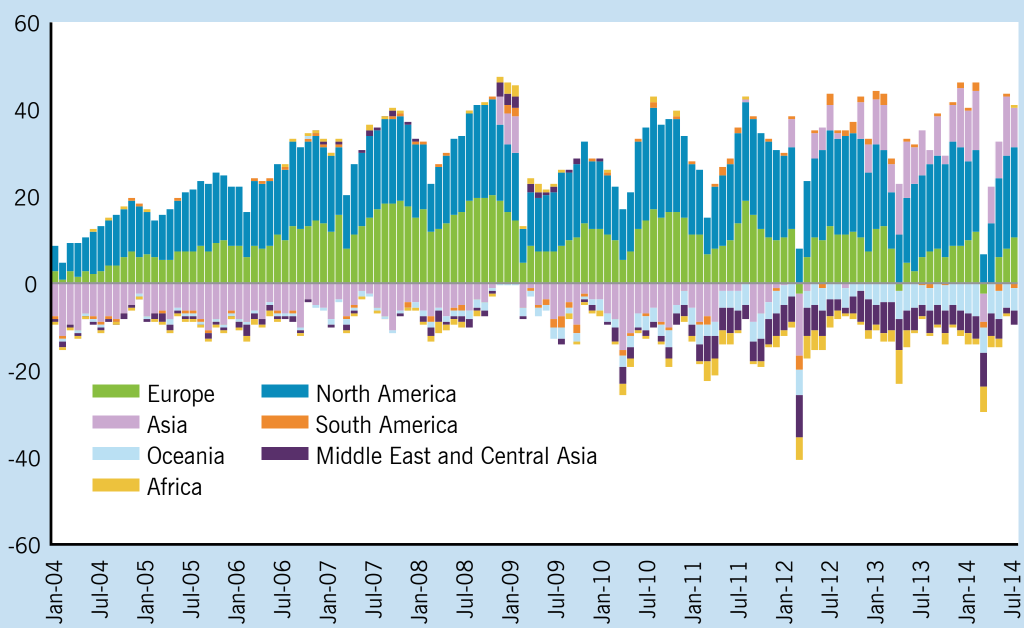
sensible. Basic materials-processing industries such as steel are basically competitive, and government should be withdrawing to promote more efficient outcomes, while redeploying into less tradable services such as education, health care, and environmental remediation. We see China's imports rising as a share of GDP as a result of the adjustment program underway, but not from SOE reform – which actually reduces imports. Reform is difficult for foreign economies that export the commodities China's heavy industrial giants buy, while good for those shipping commodities linked to household consumption, including foodstuffs, but also oil for vehicle fuels. Of course, in a crisis these flows slow anyway.

A shift in China's trade structure from state to private firms makes trade politics a little less contentious, but there is no reason to expect it to become less so in general. Disputes are a symptom of trade itself: the more nations trade, the more likely they are to have disputes in the normal course of business. The United States and Canada logged one of the longest lists of trade disputes in the twentieth century, not because they were adversaries but because they were such close partners. Disputes over trade – just like bankruptcies, nonperforming loans, and lawsuits – are not shortcomings of a market economy, but natural occurrences that reflect independent interests competing in an open environment. The better laws, institutions, and enforcement are, the fewer trade disputes are likely to require formal adjudication. As China's trade with the world increases and shifts into higher-value-added sectors, parties in China and abroad should generally anticipate more trade frictions and disputes and react to them as signs of a deepening relationship, not of pathology.

Finally, changes in China's trade interaction with the world will not be geographically uniform: consequences will vary across regions and nations. Figure 3.13 shows China's international trade balance by region since 2004. China has held a steady surplus position with Europe and North America through the past decade. Over most of that period, other Asian countries had a trade surplus with China. However, since 2012 that position has reversed and China has run a trade surplus with Asia – reflecting both the rise of middle-class appetites for China's consumer goods and China's ability to manufacture intermediate inputs previously made around the region. Rounding out the world, the Middle East, Australia and New Zealand, and Africa have remained net exporters to China because of their raw materials sales and modest consumer purchasing power.

Figure 3.13: China's Trade Balance by Region*

Constant 2014 $US (billions)**



* We rely on balance of payments (BOP) data from the Chinese State Administration of Foreign Exchange for trade balances in our economic forecast. Here, we rely on customs data to illustrate the trend in China's trade balance by region over time.

** The value for trade balances is in June 2014 dollars, as opposed to 2013 dollars, which we use for annual data in this report unless otherwise noted.

Sources: General Administration of Customs, Rhodium Group estimates.

Going forward, this picture will change. First, hard-commodity import growth is likely to fall as unsustainable property and infrastructure investment slows down. But by heading off the risk of the hard landing and crisis scenarios, a higher plateau of demand is protected post-2020. This means lower exports for many commodity-exporting economies.[28] A hard-commodity shock would also hit Australia and Canada, but well-managed producers that can take a long-term view may see a less volatile and crowded supply side down the line. Finally, as China evolves, light manufacturing may move to other economies (such as India), moving forward the takeoff of infrastructure and property build-out in those places. Chinese demand for raw materials could be handed off to these other economies, avoiding a prolonged downturn in commodity prices that would alter terms of trade for hard-commodity exporters.

Second, a reform-driven transformation of the energy intensity of China's GDP is likely, but even under the best of scenarios, the absolute level of energy consumption continues to rise, if at a lower growth rate. If the "revolution in energy supply" called for by President Xi comes to pass, however, changes in the *type* of energy that fuels China's growth will have significant implications for the international fuel trade. The recent slowdown in Chinese coal consumption growth has already put downward pressure on global coal prices. Successful economic rebalancing combined with diversification of China's energy supplies could lead to a peak in absolute Chinese coal consumption within the next 10 years.[29] Such a change would increase Chinese demand for natural gas, renewables, and nuclear energy technology. Much of the gas will need to be imported, both in liquefied form from Australia, Qatar, Indonesia, and others (including, potentially, the United States) and by pipeline from Turkmenistan, Myanmar, and Russia. China has successfully localized a great deal of the nuclear and renewable energy technology it needs to support a rapid build-out in the years ahead, but some foreign producers will still see new market opportunities arise if reforms are successfully implemented. The upside potential for foreign producers of pollution control and energy efficiency technology is also considerable. Chinese oil demand is likely to take a modest short-term hit as reform is successfully implemented, but it will continue to grow because of consumption-driven demand from passenger vehicles and domestic air travel.

A reform-driven transformation of the energy intensity of China's GDP is likely, but even under the best of scenarios, the absolute level of energy consumption continues to rise.

Third, reform lifts demand for soft commodities such as coffee, cotton, and oranges. As discussed in Chapter 2, rationalization of the agriculture sector and urbanization for 100 million more farmers mean relying on imports where China has no comparative advantage. Land-intensive, water-intensive, and highly labor-intensive food segments are under pressure, and the logic favoring greater importation is becoming more compelling. China has already embraced this reality to some extent, but there is far to go.[30] Environmental and health concerns amplify this imperative. A broad set of nations with comparative advantages in agriculture stand to benefit from acceleration of this trend, including the United States; Canada; Australia and New Zealand; and the nations of Southeast Asia, Africa, and Latin America.

Financial Flows

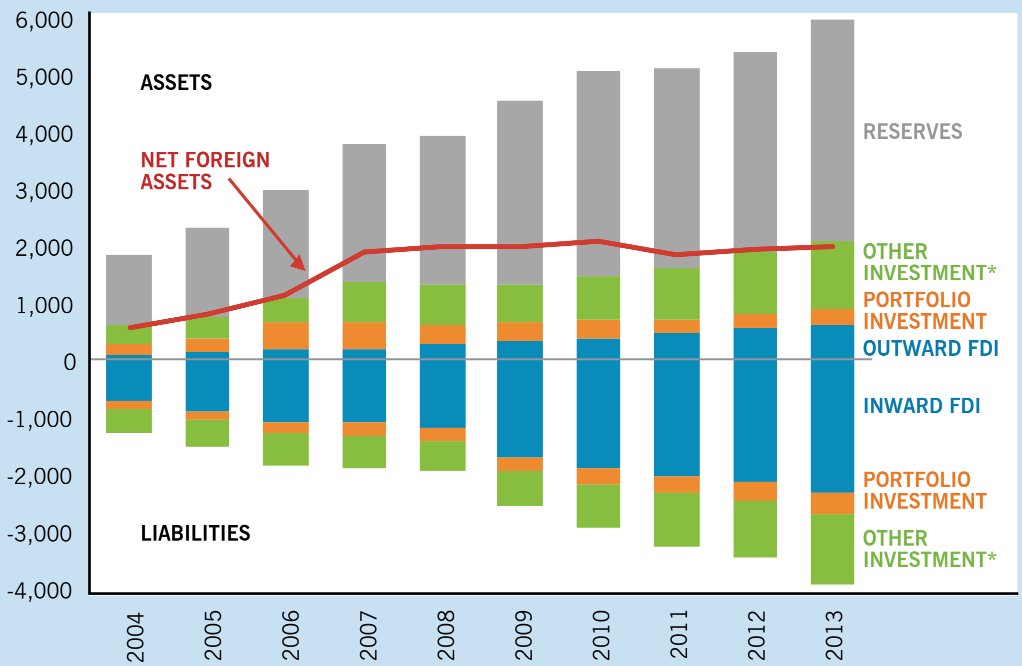
Cross-border financial flows connect real-economy borrowers, lenders and investors, and financial intermediaries. Financial flows are a massive channel of interaction in today's global economy, and financial integration is now deeper (in value terms) than trade integration for most economies. In 2011, for example, combined global cross-border assets and liabilities amounted to 341% of global GDP, while trade amounted to just 62% of global GDP.[31] China is among the few economies – developing or emerging – that have fully embraced trade integration but are still at the beginning of global financial integration. China is the world's second-largest economy in GDP terms and the largest trading nation, but it accounts for just 3% of global cross-border financial stocks.[32]

The first type of global investment that China embraced was foreign direct investment, which is best characterized as long-term investments with significant ownership control (typically more than 10% of equity or voting shares). While FDI was strictly limited in the earliest years of China's reform period, Beijing had opened the door to FDI by the end of the 1980s, ushering in much-needed capital, technology, and managerial know-how and enabling China to assume a place in efficient regional production chains. After joining the WTO in 2001, China became the world's second-largest recipient of FDI. In 2013, accumulated FDI amounted to slightly more than $2.3 trillion, or 59% of China's total liabilities to foreigners in its international investment position (IIP).

Other capital inflows remained tightly controlled, in particular portfolio investment, which entails shorter-term investments in liquid securities such as equities or bonds. Foreign portfolio investment inflows were only allowed through special government approvals (strategic stakes for foreign investors in partial privatizations for big state banks, for instance) and a special quota program introduced in 2002 for Qualified Foreign Institutional Investors (QFII), which allowed foreign investors to purchase mainland-listed (and renminbi-denominated) stocks. Gradual expansion of quotas and licenses under QFII since 2002 and the introduction of the Renminbi Qualified Foreign Institutional Investors (RQFII) program in 2011 (which allows financial institutions to invest in mainland securities using renminbi obtained offshore) have contributed to expansion. However, foreign access to Chinese stocks, bonds, and money market instruments remains tightly controlled. As of 2013, China's total inward portfolio stock only amounted to $387 billion (10% of total liabilities in China's IIP).

Inflows of bank lending and other cross-border credit also remained limited, partially in response to the experiences of other Asian economies, where the sudden withdrawal of short-term lending by foreign creditors contributed to widespread financial crises in the late 1990s.[33] However, the "Other Investment" category, which includes foreign bank deposits, currency holdings, cross-border lending, and trade credits, has expanded quickly in recent years and is now the second-largest liability position in China's IIP (31% of China's total global liabilities). This growth is largely the result of expanding trade credit associated with cross-border trade. Large swings in "Other Investment" flows following exchange rate movements suggest that this channel is also used to bring speculative short-term capital flows into the country (i.e.,

Figure 3.14: China's Global Assets and Liabilities
Constant 2013 $US (billions), total stock by category



* Other investment category includes trade credit loans, currency, deposits, and other investment.

Sources: People's Bank of China, Chinese State Administration of Foreign Exchange, Rhodium Group.

assets that should technically be accounted for under portfolio investment), but the extent of such speculative flows is difficult to estimate.

The picture on the asset side of China's IIP – made up of the same three categories as liabilities plus a fourth, official reserve holdings – is dominated by reserves (65% of the total at the end of 2013). Reserves are liquid assets held by China's central bank and include foreign government securities, cash, and other assets that tend to be low risk and low return. The combination of a perennial trade surplus and steady and growing FDI inflows has meant that China has seen massive capital inflows through both current and financial accounts over the past decade.[34] At the same time, Chinese authorities have tightly controlled channels for outflows such as outward FDI or investment in equities and debt instruments because of fears of capital flight and illicit outflows. This placed the burden of managing the country's surplus capital on the People's Bank of China (PBOC) and its foreign exchange manager, the State Administration of Foreign Exchange (SAFE). In recent years, non-reserve investment channels have begun to enjoy greater use, propelled by relaxation of outbound FDI policies, new policies permitting regulated outbound portfolio investment by qualified domestic institutional investors (QDII), and greater freedom for Chinese exporters to hold onto foreign exchange (FX) earned abroad. But assets other than reserves are still tiny by comparison: China's second-biggest position is "Other Investment," around 20% of its 2013 international investment assets; outward FDI assets and portfolio investment assets are only a small share, at 10% and 4%, respectively. The evolution of China's external assets and liabilities is illustrated in Figure 3.14 (note that as opposed to the "Trade" subsection, in this subsection we use total stocks and not flows).

Outlook: Cross-border Investment with and without Reform

This humble beginning means that with successful reform, China's global financial impact is still to come, with huge implications for other nations across all categories of financial interaction. China's financial interdependence stands today at the point its trade relations were in 2000: initial flows have raised eyebrows and whetted appetites to identify new opportunities, but the scale of development to come over the next decade is likely to be disruptively large.

We apply the same two strategies for projecting financial flows under various scenarios as we do for trade, starting with China's future GDP as the anchor for financial activity, but then adjusting the ratios of financial assets and liabilities to GDP to reflect reasonable assumptions about the impact of policy reform. As these financial flows remain more subject to restriction today, those adjustments are going to be greater. Financial flows in and out of China are now constrained by financial account restrictions on portfolio flows; controls on outward FDI; sectoral restrictions and other hurdles to inward FDI; rules against offshore debt; and macro risks arising from distortions in interest rates, exchange rates, and other factors. Huge official reserve balances are maintained to manage exchange rates and monetary pressures arising from intervention, and external portfolio and direct investment assets are modest as a result of the artificial shortage of foreign exchange. The change in the basic patterns of financial flow will therefore be much more substantial than for trade, which already went through its policy shock, and thus so will the real value of those flows, both inbound and outbound.

The list of caveats for this exercise is even longer, given the scope of policy adjustment, the diversity of policies maintained by advanced economies, and the fact that outcomes do not just depend on Beijing. Portfolio flows in particular go looking for the "best" returns – a subjective target dependent on relative current yields, historical returns, concerns about future stability of both economies and geopolitical conditions, and a reflection of the skills available for managing assets abroad. Many of these factors depend on the policy choices that will be taken in Washington, Brussels, and other capitals in the years ahead, not on Beijing's intentions. Our assumptions, explained here, simplify the financial reform indications seen over the past year to develop a picture of China's cross-border financial future.[35]

Implementation of domestic financial system reforms is the foundation for the external outlook under our baseline scenario. Domestic financial markets become increasingly contestable and efficient, with lending and deposit rates set by the market and the financial account basically open by 2020. Trade and investment in financial services are liberalized, along with exchange rates, and investors inside China are driven by normal profit motives in a market system.[36] And, of course, our baseline GDP scenario presumes the absence of any other direct or contingent policy shocks or crises that could disrupt the reform process along the way.

With regard to direct investment, we assume structural economic and legal reforms will ensure that China remains a relatively attractive destination for long-term investments, allowing foreign firms to use their comparative advantages on a market-based level playing field. Therefore, we project inward FDI by assuming that it continues to grow from its large base, but at a slightly slower rate than GDP growth, so its ratio to GDP falls slightly over the period even while investment liberalization permits absolute value growth. By 2020, this leads to an inward FDI stock of \$3.6 trillion. On the outbound side, we have argued in previous research work that economic reforms and maturation have been the major drivers for an ongoing surge in outward FDI flows.[37] Making China a more market-based economy will sustain this drive by pushing firms to acquire competitive assets (technology, brands, and human capital) and to expand their value chains and local market presence through greenfield projects. Under these assumptions, China's outward FDI stock should reach approximately \$1.5 trillion by 2020.[38]

We assume structural economic and legal reforms will ensure that China remains a relatively attractive destination for long-term investments.

Portfolio investment assets and liabilities are the most heavily affected component of China's IIP in the rebalanced growth scenario. Two-way portfolio investment flows are currently tightly controlled, so their liberalization is one of the most important events triggered by reform. Greater efficiency and thus sustainability of China's financial system is predominantly responsible for best-case 2020 potential growth, both in terms of capital stock deepening and TFP. Given the large and growing middle-class Chinese savings portfolio, even a modest increase in propensity to diversify into foreign portfolio assets would have major impacts abroad. Basic portfolio theory suggests that reasonable investors should want to spread their nest eggs over more than just a single emerging market, even if those investors are patriotic Chinese. Previous work by IMF and Hong Kong Monetary Authority (HKMA) economists has studied how capital flows would evolve following the liberalization of China's financial account restrictions, based on the experiences of other countries going through the same phase of liberalization. While there are tremendous uncertainties about the pace and scope of reform, we think the IMF and HKMA analysis is reasonable and rely on averages drawn from these studies for our projections, arriving at foreign portfolio assets and liabilities equal to about 26% and 19% of China's 2020 GDP, respectively. This works out to roughly \$3.5 trillion in capital flowing out into foreign stocks and bonds and \$2.4 trillion in capital from foreign portfolios flowing into improving Chinese capital markets over the next six years. To put those numbers in context, \$3.5 trillion is almost 20% of all U.S. stock market capitalization or roughly the entire value of the NYSE Europe's stock market capitalization (which, at \$3.6 trillion at the end of 2013, was the fifth-largest stock exchange by market capitalization in the world).[39]

Financial flows under the "Other investment" category are even harder to assess. The flows that show up in this category are believed to include some amount of capital movement that would be better categorized elsewhere. Under reform, these flows would most likely be reassigned to a more appropriate category. We opt to make slight upward adjustments to other investment assets from the current 12% of GDP to 14% in 2020, and to liabilities from about 14% to 16%. These changes reflect our expectation of growth in trade-related financial flows, and particularly a rise in cross-border lending assets and liabilities as China gradually liberalizes these flows. Anecdotal evidence already points to fast growth of off-balance sheet offshore debt for Chinese firms and banks, although Beijing will likely work to keep this exposure limited to avoid concerns about financial risk. By 2020, other investment assets and liabilities stand above $2 trillion in our projections, roughly doubling from current levels – meaning that if full-blown reform eventuates, China's global assets and liabilities in other investments would total more than $4.3 trillion by the 2020 horizon.

Finally, a balanced current account and modest deficit (net investment outflows) in the financial account balance by 2020 suggest that official reserves – Beijing's trove of foreign currencies and assets amassed over the past decades to manage exchange rates and moderate inflation – will trend down slowly from a 2017 peak and reach $3.9 trillion in 2020.[40]

Under the reform scenario, then, China's global assets grow from $5.9 trillion in 2013 to $11.2 trillion in 2020, and its liabilities rise from $4 trillion to $8.7 trillion. China's net foreign asset position would thus change from slightly less than $2 trillion today to $2.5 trillion in 2020. The *increase* in total cross-border assets and liabilities from 2013 to 2020 would amount to almost $10 trillion, more than China's entire 2013 GDP of $9.2 trillion. A notable difference between other projections for China's financial integration with the world in 2020 and our estimates of China's net foreign assets position here is that ours is more balanced.[41] This results from our optimism, expressed throughout Chapter 2, for a fully balanced current account, our lower outward FDI projection numbers, and Beijing's reduced propensity to build official reserves.[42] Figure 3.15 summarizes these changes in asset and liabilities under our assumptions.

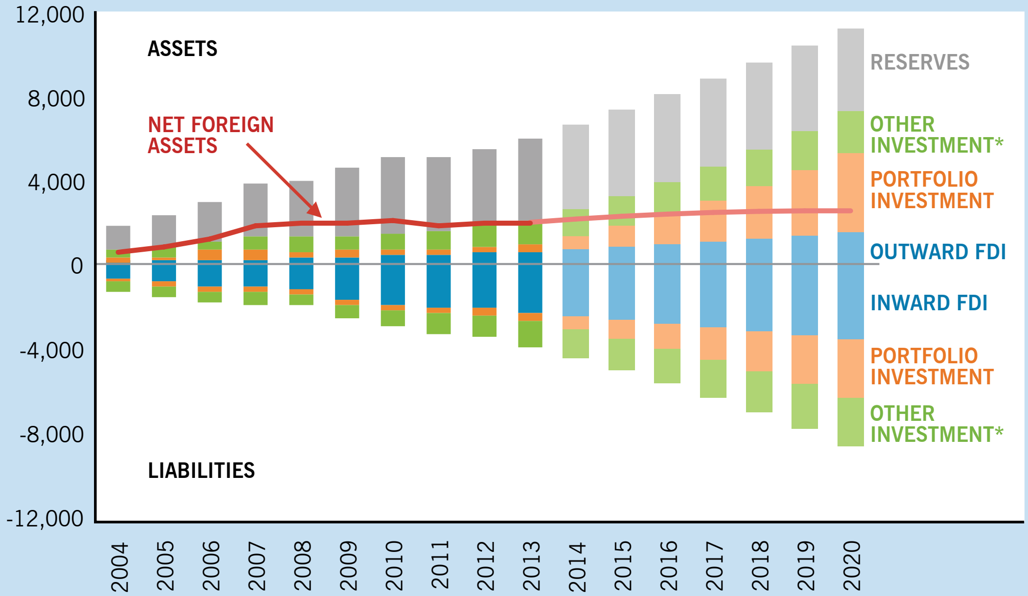
What will happen to China's financial integration with the world in the case of a hard landing or outright crisis is harder still to predict. The magnitude, pace, and volatility of financial flows depend on a dizzying array of reforms, and as with trade it is impossible to say which policy fixes Beijing would suspend if faced with a hard landing or crisis. Some leaders use a crisis to justify reform; some use it to defer change. We formulate what we see as the most reasonable basic assumptions to explore how external financial flows would be affected.

First, we assume that the lack of reform and growth in the Chinese economy would reduce the long-term attractiveness of the Chinese economy for foreign firms and investors and correspondingly make overseas markets relatively more attractive for Chinese firms. This shift will likely lead to a more substantial growth differential between inbound and outbound FDI, leading to much greater FDI assets and lower FDI liabilities compared to our baseline scenario.

Second, under a hard landing or crisis scenario, speculative short-term capital will leave China through existing gaps in capital controls. A substantial amount of such speculative capital has entered China in past years because GDP growth rates, interest rates, a real estate boom, and renminbi appreciation have made China an attractive destination. Data

Figure 3.15: China's Global Assets and Liabilities Outlook with Reform

Constant 2013 $US (billions), total stock by category



* Other investment category includes trade credit loans, currency, deposits, and other investment.

Sources: People's Bank of China, Chinese State Administration of Foreign Exchange, Rhodium Group.

on capital flows in 2008–09 and 2012 have shown that this capital finds its way out when sentiment turns negative, showing up under the FDI, other investment, and net errors and omissions channels. A significant hard landing or crisis would likely lead to reoccurrence of these patterns, though the magnitude would be unclear and to a great extent would depend on the question of how far financial account liberalization has gone and thus how tightly the Chinese government could control capital flight.

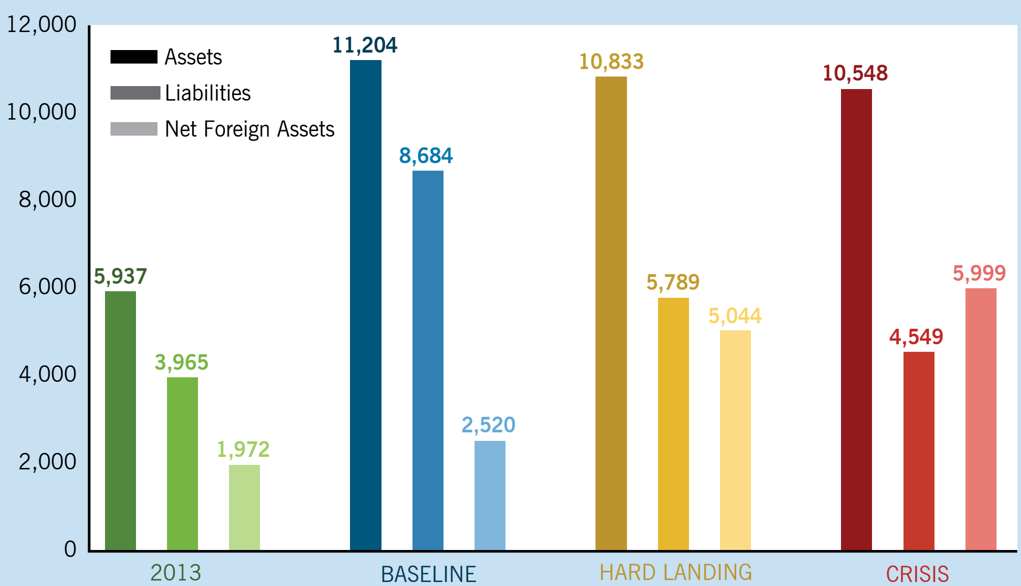
Third, it can be expected that the government would halt or reverse liberalization of the financial account under a hard landing or crisis scenario, with substantial implications for the 2020 outlook. Beijing has usually reacted quickly, though not rashly, to global market turmoil. In the late 1990s, China tightened capital controls in reaction to the Asian Financial Crisis and suspended steps toward outbound FDI liberalization, but then-Premier Zhu Rongji pointedly refused to follow others in a currency devaluation. In the 2008 crisis, China delayed new quotas for QDII/QFII investors but stepped up outbound investment to take advantage of distressed buying opportunities abroad. In the hard landing and crisis scenarios we project for 2020, with growth rates falling to 3% or 1%, respectively, we assume that Beijing's actions to reassert state control would be much more aggressive, and that reforms would be sacrificed.

Figure 3.16 summarizes the aggregate impacts of these changes on China's international investment position in 2020 compared to the base case.[43] Under the hard landing scenario, China's assets grow to $10.8 trillion by 2020, instead of $11.2 trillion. Liabilities grow to $5.8 trillion instead of $8.6 trillion. These changes result from lower GDP, lower levels of inbound FDI (20% of GDP), substantially lower portfolio assets and liabilities (15% and 10% of GDP, respectively), and higher reserves as capital controls force Beijing to soak up inflows from higher current account surpluses. The net foreign asset position would be $5 trillion, and the difference in combined assets and liabilities compared to the base case – $3.3 trillion – would mostly reflect foreigners staying away.

Under the crisis scenario, 2020 assets would be smaller still, at $10.5 trillion, and liabilities just $4.5 trillion. In addition to a smaller GDP, we assume that a crisis scenario would trigger greater political restrictions impeding flows in all categories, but mostly short-term portfolio investment, and lead to substantial capital flight through existing unofficial or illegal channels that circumvent controls. This capital exodus would typically trigger a depletion of reserves, but we assume that outflows are not large enough to offset the ballooning trade surplus resulting from crashing demand at home and a drop in commodity prices globally; thus, we see reserves increase further to $5.9 trillion by 2020. The net foreign asset position is just shy of $6 trillion, and the difference in combined assets and liabilities compared to the base case would be $4.8 trillion.

Figure 3.16: China's Global Assets and Liabilities in 2020 under Baseline, Hard Landing and Crisis Scenarios

Constant 2013 $US (billions)



Sources: People's Bank of China, Chinese State Administration of Foreign Exchange, Rhodium Group.

Finance and the Reform Scenario: Selected Themes

Reform promotes massive financial flow growth in both directions: that much is certain. But even more than with trade, the quantitative projections only begin to give us an understanding of the implications. Four considerations for external financial flows arising under the reform scenario merit immediate attention.

First, financial system and market reforms will alter the category composition of China's IIP. We project that by 2020, foreign reserves will fall from 65% of China's external assets to 35%, as Chinese companies and individuals are permitted to buy as much foreign exchange as they want and manage their assets freely. FDI liabilities that dominate foreign claims on China today fall from 59% to 41% of the total. The growth of portfolio investment flows explains that adjustment, in both directions – that is, there is a boom in the volume of investments that Chinese savers direct to stocks and bonds overseas to diversify their portfolios, and a boom in foreigners buying into China's markets. These investments go from 4% to 34% of China's external assets, and from 10% to 32% on the liabilities side. Overall, China's net foreign assets grow significantly, with implications for investment income flows back into China (discussed further later) and implications for global asset prices especially in areas where Chinese investors have shown a preference, be it real estate in Vancouver, vineyards in Bordeaux, or bungalows in Bora Bora. The shift from government debt securities (preferred by the People's Bank, by requirement) to portfolio and direct investment assets (preferred by firms and households) is important for nations that are in debt to China. While China's official reserves will still be huge, they will shrink instead of grow, lowering China's demand for the bonds of profligate governments. Washington, for one, plans to issue less debt come 2020: time will tell. If our projection of China's IIP structure is right, some countries must lessen their dependence on Chinese demand for their debt.

Reform promotes massive financial flow growth in both directions: that much is certain.

Second, the geographic composition of China's IIP will change. The bulk of growth in China's foreign portfolio assets position would occur in advanced economies with deep capital markets. Current leading centers including New York, London, Singapore, and Frankfurt would most likely continue to see an upswing in flows from China. Safe-haven destinations will also continue to be important in the geographic breakdown of Chinese assets abroad, whether for their tax advantages (like the British Virgin Islands) or their cultural and immigration attractiveness (like Sydney or Vancouver). With financial liberalization, market depth and efficiency will become the principal considerations for Chinese investors looking at overseas markets, rather than skill at handling the complications associated with Chinese flows. Hong Kong has an advantage managing these complexities, but that advantage may be less valuable in the future. Tensions with Beijing as the city passes the one-third mark in its 50-year transition to full political integration could also make financial opportunities harder to capture. Japan – one of the most important reform-era investors in China's development – has been disengaging with China to a considerable extent as a result of political tensions. Taiwan has taken strides to normalize its economic affairs with China, but Beijing has made it clear that political integration is a long-term requirement and the island's voters are far from reconciled to that fate.

In addition to seeking a "normal" allocation of portfolio investment, China's outward FDI will flow in different geographic patterns as a result of changes at home. Domestic evolution, after all, sent China's firms abroad in the first place over the past decade. In the future, China's FDI footprint abroad will reflect the domestic shift away from overbuilt heavy industries and toward sunrise industries. Chinese firms will buy more consumer brands, like Smithfield Pork, and fewer additional iron mines. They will seek out new technological capabilities. Chinese firms will also rush to invest in brands that command a direct relationship with OECD consumers because their competitiveness in manufacturing alone is faltering. In general, we expect slower growth of outward FDI in raw materials extraction, especially in less politically mature environments that present risk of instability, and more investment in advanced consumer economies.

Third, China's mix of investment income from its assets and liabilities is going to change. To date, China's global asset holdings have averaged little more than a 3% return, while the world's smaller position in China has earned returns from 6–10% in recent years because China holds mostly government bonds and higher-returning FDI dominates on the inbound side. Despite a $2 trillion net foreign asset position, China pays out income to the world. The shift from mostly U.S. Treasuries to a heavier portion of FDI and portfolio investment abroad will generate a swing from outward-flowing returns on investment to roughly $200 billion a year by 2020 from 2013's roughly –$44 billion in net investment income.

Net investment income is a component of the current account balance. Recall from the trade discussion that we expect market reforms in China to give rise to a modest trade *deficit* by 2020 in our reform base case. Investment income offsets that deficit, such that the current account is pretty close to being balanced – a healthy outcome consistent with Beijing's stated goals. If, however, the trade balance were not to shift in this way, and a large trade surplus eventuated as is the case in the downside scenarios, then the addition of investment income on top of China's trade surplus would make China's external position even more destabilizing to the world economy and require concerted intervention to remedy. Another scenario could give rise to an imbalanced current account because of investment income flows: a refusal by China to let foreign investors expand their footprint in China commensurate with growing market opportunities.

Fourth, China's financial globalization will alter its behavior and influence in the global financial system. With more Chinese financial firms, professionals, and funds doing business abroad, Chinese officials will monitor and participate in global governance more actively. China will have a profound self-interest in doing so and will challenge U.S. dominance in this realm. The United States and other financial incumbents have encouraged China to help with financial oversight at the global level and have gone so far as to complain that China is a free rider. The reforms Xi Jinping has promised should enable greater Chinese involvement in financial governance; having this new stakeholder at the table should be beneficial – *ultimately*. On trade, where China is well integrated already, Beijing has not contributed to momentum in global trade talks, preferring instead to focus on regional arrangements with political benefits closer to home. How a China with $20 trillion in combined cross-border assets and liabilities might behave remains to be seen. But indications of new activism are already clear. Beijing took a leading role in the creation of a new BRICS development bank (named for the five founders: Brazil, Russia, India, China, and South Africa), an Asian contingent reserve fund, and an infrastructure investment bank. It is also impatient to hold an expanding voting share at the IMF as promised during the 2007 financial crisis. And Beijing is pushing ahead with internationalization of the renminbi.

Importantly, regardless of Beijing's official stance, the bulk of portfolio flows will stay in private hands and thus remain prone to the same volatility that affects private capital flows elsewhere. Once China hard-wires itself into global financial markets, the rest of the world will be exposed to shocks originating inside China, and Chinese investors will be exposed to shocks abroad. Past opening of windows in China's financial account has been small, limited to a small number of "qualified" firms, and controlled by time limits on withdrawals meant to prevent a rapid dislocation of investment capital by speculators. Greater future exposure to volatility is by and large inevitable.

4. CONCLUSIONS AND RECOMMENDATIONS

MANY OF THE MOST IMPORTANT QUESTIONS confronting global leaders in policy and business today revolve around the future of China. Whether the issue is competition in international trade and finance, the risk of climate change, or security tensions arising from control over shipping lanes or Internet backbones, the pace and direction of change in the People's Republic are critical variables. They are also very difficult to assess.

The problem of how to respond to China's rise is not a new one. For centuries, outsiders coming into contact with China have fallen into discordant camps on how to interpret the motives and intentions of the nation's leaders, and they ended up pointing fingers at one another when events took unexpected turns. Today, the consequences of misjudging China's evolution are greater than ever. For the first time in its long history, China is deeply interdependent with the rest of the world, and both its welfare and the welfare of others are on the line. This is true in terms of short-term commercial flows, long-term dynamic economic balances, economic models for other emerging nations, and security affairs on China's periphery and ever farther afield. Despite these high stakes, the most authoritative voices jockeying for attention to explain China's future today offer diametrically opposed messages. Some career veterans assure us the Communist Party is bending the economy to its will, while equally experienced authorities argue that the state is already in retreat. Are we to engage and encourage or contain and condemn? How are we to do both, as a "hedging" option, without inadvertently sowing mutual mistrust and precipitating the confrontation outcomes we seek to avoid?

These questions are more than economic, and some security analysts would counsel economists to stick to their area of expertise and leave matters of geostrategic implication to better-qualified professionals. However, seen solely through the lens of political science, China's affairs make little sense today. Why would an authoritarian political fraternity such as the Communist Party set out to relinquish the right to intervene in the marketplace? Why would a paramount leader seek to devolve power and responsibility? The purely political answer is often that they simply would not. But filtered through the lens of economics, the same observations of events on the ground suggest a different story line. China's political and security outlook is only as strong as the nation's capacity to produce safe food and water, to fuel its rise without contaminating the air and soil, and to keep pace in innovation. These are inherently economic problems and they require economic solutions – solutions that cannot be taken for granted as they were when demographics and the low-hanging fruit to be had from partial globalization were on Beijing's side.

The rise of economic imperatives in steering China's course does not necessarily mean that China's economic future will be a liberal one favorable to the values and norms held in advanced economies. As journalist Jim Mann wrote in *The China Fantasy* (2007), Americans in particular have tended to equate economic maturation in China with ideological compatibility, which might better reflect hopes and aspirations than outcomes. To add to the confusion, China's new generation leader, Xi Jinping, has been explicitly liberal in his economic pronouncements and simultaneously illiberal in many political and security pronouncements, tying the traditional schools of *China bashers* and *panda huggers* in the West, as Mann describes their sobriquets, in knots.

This study has attempted to cut through that Gordian tangle with a particular style of analysis. The previous chapters revealed assumptions about why China grew for so long but is stalling, catalogued in detail what the Xi leadership has said and is doing to sustain potential growth, and offered a framework for gauging the impact of those reforms on other countries. In this final chapter, we summarize what we consider to be the most important conclusions deriving from this research, and we offer normative recommendations for actions that we think are most advisable in response to the developments we see unfolding in the Middle Kingdom.

We have written this study for a wide audience outside China, not solely Americans, and not just for policy makers but for all decision makers grappling with the shape of the international economy to come. This assessment is also intended to facilitate discussion between China and other countries on the scope of change afoot and acknowledge – in light of the projected global effects – that this is a legitimate concern not just to Beijing. The conclusions and recommendations presented here are relevant to observers based in China's global economic peers, including the United States, Europe, and Japan, as well as other nations, both advanced and emerging, that will be affected by China's development just as acutely. The pace and direction of systemic change in China are of first-order concern not just to officials but also to non-policy makers, including business interests, civil society groups, academic scholars, media, and the interested public. Finally, these conclusions are not at all exhaustive but rather a starting point for discussion and planning.

China's new generation leader, Xi Jinping, has been explicitly liberal in his economic pronouncements and simultaneously illiberal in many political and security pronouncements.

CONCLUSIONS

1. A Game-Changing Reform Program

The program of economic reform Xi Jinping and the Communist Party leadership issued in November 2013 is game changing, and not just a minor adjustment of business as usual or an attempt to stall for time. Foreign reaction to these developments so far has been fragmented, fractious, and divisive, with a good deal of the China-watching community still maintaining a wait-and-see attitude. This is not hard to understand: past reform commitments have often not come to fruition or have been implemented in a manner less consistent with advanced market economy norms than hoped. Ambiguous terms or counter-indications to market-oriented reform remain in the new *Decisions*. However, based on our analysis of the drivers behind China's new approach, new imperatives laid out in the program, and initial indications of implementation following the Third Plenum announcement, we conclude that a decisive break in policy formation and the Chinese economic model is underway. There are profound implications for the world arising from China's new policy trajectory, which will require that foreign officials and business leaders adjust expectations and respond accordingly. This necessitates a firmer consensus in understanding these developments.

In concrete terms, this means that the reform plan Beijing proposes is – if implemented and carried through – sufficient to permit 6% potential GDP growth in 2020, with growth declining on a moderate slope from today's levels to deliver a $14.4 trillion Chinese economy in that year. Senior officials in Beijing believe (based on an entirely different method than ours) that 6% growth in 2020 is what China requires to maintain macroeconomic and social stability. This scenario would sustain significant growth in two-way flows of trade and finance with the world: annual two-way trade is $2.6 trillion higher by 2020 as a result, the stock of cross-border assets and liabilities rises by $10 trillion over the period – plenty of work for shippers and investment bankers to do – and the current account is in balance rather than rising to as much as a $500 billion external surplus. Offsetting the cost to China of relinquishing trade surpluses, a greatly expanded and reconfigured Chinese net foreign asset position leads from today's net Chinese investment income payments to the world to a net income inflow from foreign investments of almost $150 billion a year, along with greatly enhanced domestic growth. Without regulatory reform, we see a Chinese economy trillions of dollars smaller, just 1–3% annual GDP growth come 2020, and dramatically smaller flows of trade, corporate FDI, and portfolio investment.

These altered fundamentals offer radically different pictures of the health and durability of the international economic system. The work and attention of international development economists at the International Monetary Fund, the World Trade Organization, and the Bank for International Settlements and of national financial officials in Washington, Brussels, and Tokyo depend on which trajectory – or intermediate outcome – prevails. Staffing, fixed investment, and working capital needs for Chinese and foreign firms involved in these flows depend on the answer: overestimate Beijing's ability to sustain growth and you will never recover your sunk costs; underestimate and you will be boxed out of the greatest growth of market demand of our times.

2. A Convergent Economic Picture – with Idiosyncrasies

Beijing does not believe different principles of economics apply in China, any more than it thinks gravity applies differently within its borders. The economic policy objectives Xi Jinping is pursuing in China today are by and large the same medicine prescribed by the advanced-economy establishment for decades. There is no Beijing consensus or other alternative economic theory at work here. In all the clusters we identify and explore in Chapter 2, we see urgency and intention to reform, with varying degrees of optimism about how quickly changes will occur.

There are, however, caveats. First, wide policy differences exist *among* advanced economies on basic implementation of the set of market-oriented economic precepts. Consider the differences of opinion between Germany and France over the appropriate level of social expenditures to GDP, or between Italy and the United States over government ownership of banks and energy companies, or between Korea and Poland over the power granted to labor unions to determine economic policy. These basic differences in interpretation and implementation are likely to be all the more idiosyncratic in the case of China, with its atypical population size, social and developmental challenges, low per capita income level, and political challenges. It will be difficult for Westerners to accept that residual differences in the future may be within the normal range of variance among advanced economies, rather than evidence of Chinese non-convergence. We are likely to have a China that is both reform convergent *and simultaneously unique* for some time, and that condition will be discomforting given that China will likely be the largest economy in the world in a decade or so.

A second caveat: however convergent China's regulatory reforms are, Beijing says it does not intend its political system to converge with advanced-economy norms, calling into question how it will implement an advanced-market policy formula. Indeed, President Xi has demonstrably tightened the reins on civil society to the point of limiting public discussion about policy to a considerable extent. Optimistically, one can read this domestic stance – and the correspondingly tough external stance evident during Xi's tenure – as a necessary display of authority aimed at preventing resistance to economic reform at a time when growth is already falling and there are no second chances. But it is taking a lot on faith to assume the Party will get around to restoring or expanding civil liberties and external niceties once the most crucial period for reform – these coming three years – has passed. As market economists in China and abroad understand, political reform is not just a luxury made available through economic growth; it has generally been necessary to sustain growth in a more advanced economy.

There are profound implications for the world arising from China's new policy trajectory, which will require that foreign officials and business leaders adjust expectations and respond accordingly.

It is not impossible for China to achieve market-oriented economic conditions internally and externally while maintaining its single-party, uncontestable political system and limitations on civil rights. However, there are no examples of such an outcome being achieved historically. It is reasonable, therefore, to be concerned that the shift to market orientation will stop short of completion, both inside China and in terms of external regimes. For instance, China may continue to be dominated by enterprises in industries that are competitive globally but skewed toward oligopoly at home, conferring an unfair advantage on them in global competition. Another risk of this asymmetric convergence is that political and social unrest may worsen, undermining reform and causing China to turn against itself. On the other hand, President Xi and other Party leaders are talking – in a limited context – about checks and balances, separation of Party and state, regulatory independence, and greater judicial empowerment. While sinologists are quick to point to limits to how the Party intends these tools to be applied, and especially to insulation for top leaders, this does portend a degree of political convergence as well.

3. Plenty of Exceptions and Counter-indications

A related point is that with such a broad reform agenda, and so many conflicting pressures to be managed, China may require time to work through adjustment at different speeds in different areas – even without arguing that exceptions are concordant with international norms in the long term. Most nations reserve some sectors from the normal logic of regulation because of internal politics, despite their principles and the welfare losses associated with protecting special interests. The United States departs from free trade principles when it comes to Mexican sugar because of politics, not economics. China will have its own sacred cows – hopefully not a vast herd of them. That is why a still-to-come negative list of industry exceptions to normal competition is so important, along with an explanation of the basis for those reservations – whether that explanation is an argument for the legitimacy of intervention or simply a plea for more time to work through adjustment.

It appears that reform will take extended time in a number of sectors. Moreover, talking to bureaucrats on the ground in China today or business managers contemplating the marketplace, one might get the impression that Beijing intends to make an exception of everything and that reform is already stalling out. Two observations mitigate these concerns. First, most of these arguments are long-standing. The claim that financial account opening should wait until the banking system is modernized was made for most of the 2000s, but ultimately leaders concluded that absent international exposure, domestic incumbents would simply not move forward. The sequencing has been largely decided already, as the daily cross-border financial flows taking place today are an order of magnitude greater than they were just a few years ago, and international renminbi settlement centers have been expanded at a rapid clip. Pressure on domestic incumbents is not just being introduced from outside, but from new domestic players as well, including nonbanks and new Internet banking players. Arguments that external opening should be deferred to buy time for the big local banks are antiquated. That they are being rehashed today is not surprising, in light of the real economic pressures building up, but it is telling that old arguments, not new ones, are being trotted out.

Second, these demands for more time or carve outs to reform are not unfamiliar to Chinese officials, and the skills required to deal with them are well developed. Many observers point to the intractability of state-owned enterprise (SOE) balance sheets as a major stumbling block to reform. But a large industry of restructuring bankers, turnaround specialists, and other investors and service providers exists to reform governance and management at China's corporations. Restructuring is a normal, daily fact of life in market economies, not some mysterious art China must learn. The crown jewels of state holdings are not likely to be transformed early on, but they do not have to be: the bulk of China's restructuring will not involve strategic national industries but rather sectors that are important to consumers but not especially sensitive to competition. No one should expect shock therapy with distressed investors and management consultants given free reign, but there is enough room to get started.

Not all of this experience is new to China. China has episodically taken on ambitious internal restructurings and worked through them in two-to-four-year time frames. Then-Premier Zhu Rongji oversaw a massive SOE restructuring and shutdown program from 1997 that furloughed tens of millions of redundant workers. As an Executive Vice Governor of Guangdong province, Wang Qishan oversaw a major asset and liability shuffle between distressed state banks and new asset management companies at the end of the 1990s and early 2000s, and he worked out insolvency issues in a number of trust and investment companies. In the mid-2000s, China managed to restructure decades worth of untradeable "legal person shares" for listed stock exchange firms (a class of shares held mostly by other quasi-state firms, now abolished). None of these episodes approached the scope of the reform required today, but each demonstrated an indigenous ability to deal with hard reforms that anti-reformers at the time said were too big and difficult to tackle. The arguments against trying do so were very similar to those heard today.

A special category of this looming discussion of China's exceptions to the reform plan is the area of national security. Governments worldwide are coming to grips with the new degree of security vulnerability resulting from globalization and information and communications technology. A much wider swath of an economy can be described as critical to national security today than was previously the case, and reliance on the Internet backbone for both mundane consumer activity and maintenance of critical infrastructure such as the power grid, fuel distribution, water, air traffic control, and other necessities raises the prospect of nations – not just China – hiving off larger and larger shares of economic activity from foreign or private participation. Such a posture has potentially gargantuan welfare consequences, certainly with foreign spillovers, and the likelihood of some abuse of national security arguments for protectionist purposes.

4. A Notably Fast Start and a Move to Transparency

Our working conclusion is that the pace of reform and structural adjustment happening in China today is far faster than was expected a year ago, or than most people believe today. However, the evidence for this – less than one year after the kickoff – is necessarily partial, anecdotal, and contestable. The target of 2020 for basic completion of reforms is ambitious. As 2014 progressed, many interim deadlines between now and 2020 were announced, with specific milestones. To make these waypoints more significant, in nearly every area of the marketplace registries and reporting mechanisms are being instituted, and public interests are being invited to scrutinize results. For instance, thousands of enterprises are reporting their daily pollution, and non-government advocacy groups are now empowered to sue them under the Environmental Protection Law – on the public's behalf – come 2015 if they are not complying with emissions constraints.

Some reform goals will be easy to track for implementation. We know whether competitive markets determine interest rates or whether foreign firms are allowed to invest in new sectors in China. Many others will be difficult to measure definitively. For example, how will we judge whether government has withdrawn in deference to market forces in competitive industries? These are hard questions to answer with simple, measurable data. We have proposed metrics for each category of reform we assess. So far, the rhetoric and the political economy of leadership reform are moving at a rapid pace; with the right metrics in focus, we hope to know if realities in the marketplace are changing as well.

5. A Real Prospect for Political Adjustment

Many analysts assume that China's push to restore potential economic growth is motivated by a desire to sustain the Communist Party's singular authority. If the Party is to endure, then indeed achieving potential economic growth is necessary – China's leaders acknowledge this unambiguously. But the economic reform track Xi is taking in pursuit of growth entails significant devolution of authority over economic activity to regulators empowered to conduct pro-competitive missions. We see four drivers of political evolution.

First, as the ongoing anti-corruption campaign makes plain, abuse of political power to use state assets and state regulatory authorities for private gains was endemic in the old model of vested-interest economics. Xi has disrupted that on a scale great enough to change politics. Second, reform will require a different – though not necessarily Western – approach to separation of powers and checks and balances. These are in the policy mix as noted earlier, and they change the political equation. Third, public information disclosure registries are proliferating for government fees, administrative powers, real estate property, financial securities, land title and use rights, environmental impacts and pollution emissions, employment levels, and other domains. While the upper echelons of the Party have no interest in using sunshine as a disinfectant, the political implications of this transparency campaign will be impossible to reverse, as the public availability of air pollution data has proven. Finally, reform is bolstering GDP growth and thus building the ranks of the middle class. While the small cohort of bourgeois Chinese in the past was inclined to be conservative and apolitical, the relationship between per capita wealth and political expectations is strong, even in China. So, ironically, accelerating growth also speeds expectations of individual protection from arbitrary political behavior. Conversely, Xi's efforts to consolidate power in order to overcome impediments to reform today could create other societal challenges several years from now.

RECOMMENDATIONS

We have argued that the changes underway in China are game changing, largely convergent with advanced-economy norms, likely to be full of exceptions either temporary or permanent (just as in other advanced economies), and happening quickly. Both a successful program of implementation and a reform derailment would present political tensions in China that spill out into the international economy. The commercial consequences of Beijing's policy choices – as explored in terms of GDP growth, trade, and financial flows – are huge for businesses and foreign economies, and the geopolitical importance of this quantitative picture is just as consequential for politicians and strategists. Despite the stakes, the mixed record of reform since the early 2000s has inclined many foreign observers to stay on the fence awhile longer rather than take China's adjustment seriously. Therefore, we close with five recommendations regarding the foreign response.

1. Find Ways to Gauge Incremental Progress

Discordant views on the pace and direction of reform in China and confusion about the implications if reform does play out as fully as we expect undermine policy formation and implementation abroad and distract from the urgency of a response. This is true within firms and governments. An effort to assess reform may leave decision makers unconvinced or in disagreement, but it still holds value even if certainty remains elusive.

A promising strategy for overcoming this hesitancy is to define and track economic metrics that will reflect reform. Xi's *Decisions* and subsequent implementation orders have called for a wealth of new economic data to be collected and made public in a timely manner, supplementing a rich foundation of real and financial economy indicators that are already observable. Foreign officials should encourage and applaud this trend, for it facilitates a shared understanding of China's economic direction. With solid-enough consensus around metrics indicating Chinese reform, for instance on the number of industries listed for exceptional treatment by Beijing, it becomes much easier to build a positive bilateral or multilateral economic agenda with China based not on where matters stand today but on mutual expectations about where China will be in three or five or seven years.

In September 2014, China's National Bureau of Statistics announced plans to develop a dashboard to reflect internal reforms and implementation of the Third Plenum program, so that Chinese leaders and citizens can refer to a common body of evidence for assessing their progress. Starting with the indicators of reform explored in this study, we plan to develop a corresponding dashboard for gauging the external realization of China's reform agenda.

2. Demonstrate Support for Reform

It is valuable for foreign leaders to demonstrate an understanding of China's reform challenges, the efforts being made to tackle them, and the external consequences. Governments and firms in advanced economies have decades of experience wrestling with the adjustment challenges China is encountering as it moves into a new reform era, including rising operating costs, calls for protectionism, opposition to environmental policy enforcement, and myriad other obstacles in the political economy of policy reform. Many bilateral and multilateral programs of capacity building are in place, but some have lost momentum as reform stalled in China over the past decade and need to be reinvigorated. As noted, there are disagreements among advanced economies about the details of reform: supporting reform in China will require restraint and balance in terms of what is essential and what is arguable, and considerable patience as well. In China, as in the United States and Europe, some opponents of marketization are concerned with reducing the focus on growth and income as the ultimate measure of social welfare in general, not with advanced economy or state capitalist models. It will be important to distinguish among these different motives.

3. Focus on a Domestic Response

Given China's mixed political and international security signals, there will be a powerful temptation to view China's reform-driven economic strength as a threat, and to respond by focusing on external power and influence. Foreign policy must certainly evolve in light of China's domestic reforms, taking account of the likely future size and structure of the economy, China's resource needs and hence its interaction with supplier nations around the world, and the spillovers from the way that the Chinese political system responds to internal security threats such as religious fundamentalism. But a China that works through the reform process, sustains 6% growth out to 2020 and beyond, demonstrates to other countries an ability to adjust politically and economically, and creates the conditions for real innovation today will affect advanced-economy employment and wage levels, financial returns and stability, and every other facet of economic life – as much as the rise of the U.S. economy shocked Europeans a century ago. An effective response must start with national competitiveness.

Advanced and emerging nations alike need to strive to remain competitive. After adjustment, a more competitive China will emerge. Reforms will include policy changes that respond to long-standing requests from China's business and trading partners for financial account liberalization, two-way investment opening, a more level playing field for internal competition, and the withdrawal of government from much of its intervention in the economy. Nations have often defined their past China policies in terms of what China needs to do differently, or what they will do at their borders to manage integration with China. Looking ahead, the policies of other nations toward China must begin at home, with better enabling environments to keep pace with China's productivity gains.

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4. Include a Multilateral Element

While competitiveness begins at home, in today's global economy it often ends abroad. For instance, China's central and provincial governments are likely to retain a larger share in corporate ownership than is typical in the OECD economies through 2020 and beyond. Competition policy concerns will arise abroad from that tendency, and multilateral rules for responding will be important to avoid a confusing mix of unilateral countermeasures. In areas such as competition, which lack robust international organizations and norms to guide behavior, the need to build new regimes is likely to be enhanced by an expanding Chinese weight in the international system. Economies, especially incumbent leaders, should prepare to help facilitate such undertakings in a way that involves Chinese participation without excluding Beijing or conceding to Chinese views, but rather maintains confidence in the market-economy principles that have worked in the past.

China should want to embrace multilateral approaches in most cases, because responding to multiple strategies to accommodate its ongoing globalization will prove difficult and ineffective. Chinese officials have noted that they hope the template for a U.S.-China bilateral investment treaty now under negotiation can serve as a bridge to a broader, more multilateral effort to manage cross-border investment issues. The efficiency and innovation gains of information and communications technologies will also require a multilateral response if they are to avoid being depleted by mounting concerns about personal and sovereign information security risks. In the post-World War II era, many concerns about regulation in the international context could be handled with a "club" approach among OECD economies, all of which shared democratic political systems and a commitment to liberal market economics. Even though members often differed in their approaches to implementation and enforcement, common interests carried the day. China's combination of size and stated reservations about accepting the prevailing norms – Beijing often argues that it was not at the table when rules were set and hence cannot be expected to embrace them – means that new norms may be required. Developing these in an appropriately multilateral manner should also ensure that other players do not feel similarly left out of the process in the future.

5. Stop Negotiating for What Beijing Is Already Doing

A typical negotiation with China has become a set piece in recent years, with China's partners asking for market access, intellectual property rights protection, and a litany of other policy reforms and Beijing asking what it will receive in return. It is clear from the *Decisions* that China understands that the negotiating agenda reflects not only the interest of its foreign partners but also its own self-interest. A generation ago, Premier Zhu Rongji drew the same conclusion about the trade agenda of the 1980s and 1990s. Lowering tariff barriers, converting a jumble of import quotas to tariffs or phasing them out, abolishing most export licenses, standardizing trade terms for all nations in the WTO, giving foreign goods national treatment once they cleared customs, and agreeing to multilateral dispute settlement mechanisms: these were not concessions that represented Chinese sacrifices, but improvements in China's commercial governance that would improve the economy and deliver welfare gains to the Chinese people. Even the interest group Zhu was most often accused of selling short – farmers – was a major beneficiary of China's choice to integrate with the rules of the WTO.

The same reality applies today to China's unfinished reform business, the remaining aspects of globalization and economic modernization that will ensure that its next 35 years will be as impressive as the past 35. China's post-1978 and WTO accession reforms were undertaken because they were good for China. The to-do list in the *Decisions* is no different. China must push ahead with this agenda with or without foreign negotiators waiting at the door. Of course, an international agreement provides a politician with a handy explanation for special interests when they complain about lost privileges, and nations will continue to find the negotiating table a wellspring of motivation. Tactically, this is fine. But strategically, little negotiating is left to be done: China knows that if it reforms, then its economic prospects are greater, and the odds of a foreign retreat from globalization to a fallback position of reciprocity are reduced. To the extent that the reform program falls short, China's potential will erode accordingly, with foreign partners disinclined to maintain unlimited one-way trade and investment market access to close the gap. That is a blind alley China's leaders have worked for four decades to avoid. This generation, led by Xi Jinping, has demonstrated awareness of that hard truth, tabled a program to respond to it, and gotten to work to keep China on the avenue to growth rather than a cul-de-sac.

> The economic reform track Xi is taking in pursuit of growth entails significant devolution of authority over economic activity to regulators empowered to conduct pro-competitive missions.

NOTES

CHAPTER 1

1. Takeoff period estimates are based on real growth rate data from the 2014 World Bank World Development Indicators (updated July 22, 2014) at http://data.worldbank.org/data-catalog/world-development-indicators. Also see the Annual Principal Figures of Taiwanese National Accounts from the National Statistics Bureau of Taiwan Statistical database (updated May, 23, 2015) at http://61.60.106.82/pxweb/Dialog/statfile1L.asp.
2. There are different definitions of the poverty line and hence the number who surpassed it.
3. Former World Bank Chief Economist Lin Yifu describes China's growth as miraculous, while pointing to its latecomer status and ability to tap the "advantages of backwardness" in technology (Justin Yifu Lin, *Demystifying the Chinese Economy*, Cambridge: Cambridge University Press, 2012). Barry Naughton says China's growth is explained by structural and transitional factors – rapid growth of inputs and the switch from socialism to market mechanisms – as well as a return to traditional entrepreneurial roots (Barry Naughton, *The Chinese Economy: Transition and Growth*, Cambridge, MA: MIT Press, 2007). Huang Yasheng points to 1980's laissez-faire expansion but argues growth from the 1990s forward was limited to large-scale infrastructural and urban investment projects and state-led capitalism (Yasheng Huang, *Capitalism with Chinese Characteristics: Entrepreneurship and the State*, Cambridge: Cambridge University Press, 2008, p. 286.) Preeminent Chinese economist Wu Jinglian emphasizes Beijing's pragmatic willingness to update its mission and better regulate itself with democratic accountability in practice if not in name to regulate market participants (Jinglian Wu, *Understanding and Interpreting Chinese Economic Reform*, Mason, OH: Thomson/South-Western, 2005, p. 433-40.)
4. *Weidong Wen: Deng Xiaoping and the Proposal of the Term "Reform and Opening up*," CCCPC Party Literature Research Office, Beijing, published May 16, 2013. http://www.wxyjs.org.cn/ddwxzzs/wzjx/2013n3/201305/t20130516_139302.htm
5. This figure and all dollar and renminbi figures in this study are stated in 2013 dollars, or renminbi, or both, unless otherwise noted. Given inflation, the purchasing power of the nominal value of GDP reported for China – or any country in 1978 is not accurate. China's nominal reported GDP of $217 billion (RMB 364.5 billion) in 1978 equates to $352 billion in 2013 dollars.
6. World Bank, *World Development Indicators*, updated July 2014. http://data.worldbank.org/data-catalog/world-development-indicators
7. For an accessible review, see Barry Naughton's *The Chinese Economy: Transition and Growth* (Cambridge, MA: MIT Press, 2007), especially Chapter 3 on "The Socialist Era."
8. Dwight H. Perkins and Thomas G. Rawski, "Forecasting China's Economic Growth to 2025." In Loren Brandt and Thomas G. Rawski, eds., *China's Great Economic Transformation*. New York: Cambridge University Press, 2008.

CHAPTER 2

1. Daniel H. Rosen, *Economic Decision-Making with Chinese Characteristics*, Rhodium Group, March 19, 2014. http://rhg.com/articles/economic-decision-making-with-chinese-characteristics
2. CCP Politburo, *Explanatory Notes for the "Decision of the CCCPC on Some Major Issues Concerning Comprehensively Deepening the Reform*," Beijing, 2014. English translation available at http://www.china.org.cn/chinese/2014-01/16/content_31215162_3.htm
3. Barry Naughton, "After the Third Plenum: Economic Reform Revival Moves toward Implementation," *Hoover Institute China Leadership Monitor* 43. http://media.hoover.org/sites/default/files/documents/CLM43BN.pdf
4. "China Voice: China Sharpens 'Sword of Damocles' in Anti-graft War," Xinhua News, June 15, 2014. http://news.xinhuanet.com/english/china/2014-06/15/c_133408873.htm
5. "Xi Jinping Held the Communist Party Politburo Standing Committee Meeting and Gave Speech," Xinhua News, April 25, 2013. http://news.xinhuanet.com/politics/2013-04/25/c_115546301.htm
6. "Li Keqiang Held the State Council Regular Meeting," Xinhua News, May 6, 2013. http://news.xinhuanet.com/fortune/2013-05/06/c_115659678.htm
7. RAND Corporation, "Interpreting China's Grand Strategy," Research Brief RB-61. http://www.rand.org/pubs/research_briefs/RB61/index1.html
8. Guy de Jonquières, "The Problematic Politics of China's Economic Reform Plans," European Center for International Political Economy Policy Brief No. 5 (2014). http://www.ecipe.org/media/publication_pdfs/PB05.pdf
9. See, for example, John Williamson's chapter "In Search of a Manual for Technopols." John Williamson, *The Political Economy of Policy Reform*, Washington, D.C.: Peterson Institute for International Economics, 1994, p. 9-49.
10. CCP Politburo, "Documents of the Third Plenary Session," *Foreign Languages Press*, Jan. 23, 2014, Beijing, p. 86. http://www.china.org.cn/arts/2014-01/23/content_31283015.htm
11. Of all eight government functions, "market order" is the most in flux as a concept, used differently by ministers and the prime minister even in mid-2014. We discuss this further later.
12. This comes close to sounding like the systems of checks and balances employed in democracies. However, the explanation of this objective, in Decision 35, makes clear that for now these checks are by senior units of the Party over subsidiary ones.
13. "Xi Jinping Held the Third Meeting of the Central Comprehensively Deepen Reform Small Leading Group," Xinhua News, June 6, 2014. http://news.xinhuanet.com/politics/2014-06/06/c_1111024486.htm. "People's Supreme Court Releases Key Parts of the 4th Five Year Plan Reform," Xinhua News, July 9, 2014. http://news.xinhuanet.com/legal/2014-07/09/c_126730952.htm.
14. Organisation for Economic Co-operation and Development (OECD), *Regulatory Policy and Governance: Supporting Economic Growth and Serving the Public Interest*, Paris, France, 2011. http://www.oecd.org/gov/regulatory-policy/regulatorypolicyandgovernancesupportingeconomicgrowthandservingthepublicinterest.htm

15. See, for instance, Ian Bremmer, *The End of the Free Market: Who Wins the War between States and Corporations?,* New York: Portfolio, 2010.
16. Nicholas R. Lardy, *Markets over Mao: The Rise of Private Business in China*. Washington, DC: Peterson Institute for International Economics, 2014. http://bookstore.piie.com/book-store/6932.html
17. "Li Keqiang Hosted a Meeting on Encouraging Private Investment," State Council, April 23, 2014. http://www.gov.cn/guowuyuan/2014-04/23/content_2665259.htm
18. Ministry of Commerce, *Notice of the Ministry of Commerce on Printing and Distributing "Key Points on Regulating Market Order"*, Beijing, 2014. http://www.mofcom.gov.cn/article/h/redht/201402/20140200489690.shtml
19. "Correctly Allow the Market and the Government to Push Forward Sustained and Healthy Economic and Social Development," *People*, May 28, 2014. http://politics.people.com.cn/n/2014/0528/c1024-25072746.html
20. John Williamson, *The Political Economy of Policy Reform*, p. 20.
21. Yang Yao, "The Local Growth Hoax Ruining China's Bigger Picture," National School of Development. http://en.nsd.edu.cn/article.asp?articleid=7370
22. Daniel H. Rosen and Beibei Bao, *China's Fiscal and Tax Reforms: A Critical Move on the Chessboard*, Rhodium Group, 2014. http://rhg.com/notes/chinas-fiscal-and-tax-reforms-a-critical-move-on-the-chessboard
23. The picture is, of course, more complicated and varies by locality; this characterization well reflects the cycle of counterproductive land sales to close budget gaps and drive GDP stats that is so problematic in many places today. One can argue that many budget gaps arise more from corruption than the adequacy of central transfers, and certainly central reluctance to send more money without greater control is often reasonable. For an outstanding analysis, see Wang Xiao and Richard Herd, *The System of Revenue Sharing and Fiscal Transfers in China*, OECD Economics Department Working Papers, February 27, 2013 (http://dx.doi.org/10.1787/5k4bwnwtmx0r-en).
24. "The focus of budget review will be extended from fiscal balance and deficit scale to expenditure budget and fiscal policies." CCCPC, *Decision of the CCCPC on Some Major Issues Concerning Comprehensively Deepening the Reform*, Beijing, 2014. http://news.xinhuanet.com/politics/2013-11/15/c_118164235.htm English translation available at http://www.china.org.cn/chinese/2014-01/17/content_31226494_3.htm
25. "Guo Youming Was Criticized for Incomprehensive Sense of Political Achievement," *iFeng News*, December 12, 2013. http://news.ifeng.com/shendu/zgxwzk/detail_2013_12/27/32540604_0.shtml
26. "(Authorized Release) Notice Regarding the Work on Improving Local Party Leadership Performance Evaluation," Xinhua News, December 9, 2013, Beijing. http://news.xinhuanet.com/politics/2013-12/09/c_118484433.htm
27. Amy Qin, "Outburst by Prominent Party Official Reverberates Online," *New York Times*, March 12, 2014. http://sinosphere.blogs.nytimes.com/2014/03/12/outburst-by-prominent-party-official-reverberates-online/?_php=true&_type=blogs&_r=0
28. Simon Rabinovitch, "China Gives Local Governments Go-ahead to Roll over Debt," *Financial Times*, January 2, 2014. http://www.ft.com/intl/cms/s/0/055e48f8-7371-11e3-a0c0-00144feabdc0.html#axzz32GJCSzTk
29. State Council, *Circulation of the State Council on Deepening Economic Reform*, Beijing, 2014. http://gks.mof.gov.cn/redianzhuanti/guozaiguanli/difangzhengfuzhaiquan/201405/t20140521_1082114.html
30. Ministry of Finance, *A Profound Change Related to State Governance Modernization*. http://www.mof.gov.cn/zhengwuxinxi/caizhengxinwen/201407/t20140704_1108534.html
31. See Rosen and Bao, *China's Fiscal and Tax Reforms* for an expanded discussion of this move.
32. "Finance Minister Explains Tax Reform," *People's Daily*, July 6, 2014. http://news.xinhuanet.com/fortune/2014-07/06/c_1111474358.htm
33. The new budget law was released on September 1, 2014. Government of China, *Decisions of the National People's Congress Standing Committee on Revising the "People's Republic of China Budget Law,"* Beijing, 2014. http://www.gov.cn/zhengce/2014-09/01/content_2743208.htm
34. See International Monetary Fund (IMF), *People's Republic of China,* IMF Country Report No. 14/235, 26–27. https://www.imf.org/external/pubs/ft/scr/2014/cr14235.pdf
35. "Key Reform Decision Settles Market-Government Relationship," Xinhua News, November 16, 2013. http://china.org.cn/china/third_plenary_session/2013-11/16/content_30619848.htm
36. National Bureau of Statistics via CEIC China Premium Database.
37. We have improved the translation here from the official English version, which reads "unified, open, competitive and orderly." In either case, the meaning of "orderly" does not correspond to a clear concept in advanced market economies and is a source of concern among pro-reform analysts.
38. The Chinese is better translated as "improper competition," which has a slightly more illegal undertone, but the two words are used interchangeably in Chinese.
39. While the *Decisions* anticipates clarifying sectors where the government should remain, it calls for price reforms in sectors presently shielded from normally set prices, including water, oil, natural gas, electricity, transportation, and communication – while describing the government's pricing role as covering "important public utilities, public-welfare services and network-based natural monopolies."
40. Susan Ning and Yin Ranran, "Formal Establishment of Anti-Monopoly Commission Office within MOFCOM Approved," *China Law Insight*, June 17, 2011. http://www.chinalawinsight.com/2011/06/articles/corporate/antitrust-competition/formal-establishment-of-antimonopoly-commission-office-within-mofcom-approved/
41. "NDRC Expected to Retain Key Antimonopoly Role amid Revamp," *South China Morning Post*, March 3, 2014. http://www.scmp.com/business/economy/article/1439305/ndrc-expected-retain-key-antimonopoly-role-amid-revamp
42. China Law & Practice, *The NDRC's Antitrust Ascendance*, January/February 2014. http://www.chinalawandpractice.com/Article/3297997/The-NDRCs-antitrust-ascendance.html. Note, however, that some analysts believe the State Council would be reluctant to see this authority concentrated in a single ministry-level agency because it may be harder to maintain the pro-competitive emphasis if authority is not broken up among three. See http://scholarship.shu.edu/cgi/viewcontent.cgi?article=1466&context=student_scholarship.
43. "12 Bureaus Started to Eliminate Regional Block and Industrial Monopoly," Chinese Government, December 10, 2013. http://www.gov.cn/gzdt/2013-12/10/content_2545710.htm
44. "Interview with Xu Kunlin: Expand Anti-monopoly Workforce, Focus on Public Welfare," *Chinanews*, March 24, 2014. http://finance.chinanews.com/cj/2014/03-24/5984944.shtml
45. National Development and Reform Commission, *Regulation on the Handling of Complaints of Price Related Violations*, Beijing, 2014. http://www.sdpc.gov.cn/zcfb/zcfbl/201401/t20140121_576444.html

46. Ministry of Commerce, *Interim Regulation on the Application Standards for Simple Cases of Concentrations Between Business Operators*, Beijing, 2014. http://fldj.mofcom.gov.cn/article/ztxx/201402/20140200487001.shtml
47. Covington & Burling LLP, *Chinese Antitrust Regulator Issues Rules Regarding "Simple" Transactions*, China Practice E-Alert, February 20, 2014. http://www.cov.com/files/Publication/6c8ba58b-2f50-4a18-a4e1-09b926ee7695/Presentation/PublicationAttachment/872facef-1cb6-4392-a746-0ad3a1146916/Chinese_Antitrust_Regulator_Issues_Rules_Regarding_Simple_Transactions.pdf
48. Lester Ross and Kenneth Zhou, *SAIC Announces Beginning of Revision Process to Anti-Unfair Competition Law*, WilmerHale, March 28, 2014. http://www.wilmerhale.com/pages/publicationsandnewsdetail.aspx?NewsPubId=17179871952
49. The connection is made to Article 5 of the U.S. FTC Act, which has been anathema to many businesses in recent years, as an inspiration for what SAIC seeks. See http://www.cravath.com/files/Uploads/Documents/Publications/3233999_1.pdf on the FTC Act.
50. "China says to punish Audi, Chrysler for monopoly behavior," Reuters, August 6, 2014. http://www.reuters.com/article/2014/08/06/us-china-autos-antitrust-investigation-idUSKBN0G604J20140806
51. http://m.jonesday.com/antitrust-alert-china-medical-technology-merger-decision-reflects-increased-use-of-econometrics-and-unique-behavioral-remedies-02-11-2014/ Other cases, involving criminal allegations of bribery and not just competition laws, are also targeting pricing behavior by multinational companies around intellectual property, especially in the pharmaceutical industry.
52. Wei Tan, *SOEs and Competition Policy in China*, Competition Policy International Asia Column. https://www.competitionpolicyinternational.com/assets/Columns/cpi-asia-antitrust-column-tanFINAL.pdf
53. Shengxia Song, "SOE Ownership to Reform," *Global Times*, December 20, 2013. http://www.globaltimes.cn/content/833174.shtml#.UzRRg6hdWak
54. See IMF, *People's Republic of China,* IMF Country Report No. 13/211, July 2013, Article IV Staff Report, 23–24. https://www.imf.org/external/pubs/ft/scr/2013/cr13211.pdf
55. OECD, *A New Database of Financial Reforms*, Paris, France, 2008. https://www.imf.org/external/pubs/ft/wp/2008/wp08266.pdf
56. As noted, this was previously referred to as the capital account in international accounting.
57. Jesus Gonzalez-Garcia and Francesco Grigoli, "State-owned Banks and Fiscal Discipline," *IMF Working Paper* 13/206. http://www.imf.org/external/pubs/ft/wp/2013/wp13206.pdf
58. Lardy, *Markets over Mao,* 32.
59. "Improve the Multi-layer Capital Market System, Promote Reform toward a Registration-based Stock-issuing System, Promote Equity Financing through Diverse Channels, Develop and Regulate the Bond Market, and Increase the Proportion of Direct Financing." CCCPC, *Decision of the CCCPC on Some Major Issues Concerning Comprehensively Deepening the Reform.*
60. Financial Stability Board, *2013 IMN Survey of National Progress in the Implementation of G20/FSB Recommendations*. http://www.financialstabilityboard.org/implementation_monitoring/china_2013.pdf
61. People's Bank of China, *China Monetary Policy Execution Report 2014 Second Quarter*, Beijing, 2014. http://www.pbc.gov.cn/image_public/UserFiles/goutongjiaoliu/upload/ile/2014%E5%B9%B4%E7%AC%AC%E4%BA%8C%E5%AD%A3%E5%BA%A6%E4%B8%AD%E5%9B%BD%E8%B4%A7%E5%B8%81%E6%94%BF%E7%AD%96%E6%89%A7%E8%A1%8C%E6%8A%A5%E5%91%8A.pdf
62. China Securities Regulatory Commission, *CCP Central Committee Approved CSRC's Plan for Its Internal Organizational Structural Changes*, February 21, 2014. http://www.csrc.gov.cn/pub/newsite/zjhxwfb/xwdd/201402/t20140221_244163.html
63. China Securities Regulatory Commission, *Interim Regulatory Measures for Private Equity Funds*, Beijing, 2014. http://www.csrc.gov.cn/pub/zjhpublic/zjh/201408/P020140822492061875501.pdf
64. "Plan for Deposit Insurance May Be Published by the End of the Year", *Sina*, August 27, 2014. http://finance.sina.com.cn/china/jrxw/20140827/133620136171.shtml
65. "More Than 20 People Are Involved in CIRC's Personnel Change", *China Stock*, March 20, 2014. http://news.cnstock.com/news/sns_jr/201403/2954229.htm
66. State Council, *Opinions of the State Council on Accelerating Modern Insurance Services*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-08/13/content_8977.htm
67. By 2020, insurance depth (insurance premium income/GDP) is to reach 5% and insurance density (insurance premium income/population) is to reach 3500 yuan/person.
68. Financial Stability Board, *2013 IMN Survey of National Progress in the Implementation of G20/FSB Recommendations*, p. 20. http://www.financialstabilityboard.org/implementation_monitoring/china_2013.pdf
69. Ibid., p. 24.
70. China Securities Regulatory Commission, *Opinions about Pushing Forward Reform of Initial Public Offering System*, Beijing, 2013. http://www.csrc.gov.cn/pub/zjhpublicofxm/tb_7142/201312/t20131204_239167.htm
71. "CSRC to Reopen IPO Next Year," *21st Century Business Herald*, November 30, 2013.
72. These were Guangdong Xinbao Electrical Appliances and Zhejiang Wolwo Bio-Pharmaceutical; the latter of which – along with another firm – would suspend trading by the end of the month under accusations of pricing irregularities.
73. "China's World-Beating IPOs Get Help from the Regulators," Bloomberg, March 30, 2014. http://www.bloomberg.com/news/2014-03-30/china-s-world-beating-ipos-get-a-little-help-from-the-regulators.html
74. "CSRC Approved 11 IPO Aapplications", Reuters, August 19, 2014. http://cn.reuters.com/article/chinaNews/idCNKBS0GJ0YK20140819?sp=true
75. "No Timetable for T+0 Model: CSRC Official," Xinhua News, March 5, 2014. http://news.xinhuanet.com/english/china/2014-03/05/c_133162668.htm
76. A useful summary of these issues is available at http://blogs.piie.com/china/?p=1093.
77. The Measures (2007) are available at http://asianbondsonline.adb.org/china/documents/Pilot_Rules_on_the_Issuance_of_Corporate_Bonds.txt
78. See transcript of CSRC press conference at http://www.csrc.gov.cn/pub/csrc_en//newsfacts/PressConference/201404/t20140429_248032.html
79. Standard & Poors, *2011 Annual Global Corporate Default Study and Rating Transitions*. https://www.standardandpoors.com/ratings/articles/en/us/?articleType=HTML&assetID=1245330814766
80. Yong Xu and Pete Sweeney, "Chinese Construction Firm Gets Funds, Avoids Landmark Bond Default: Sources," Reuters, July 23, 2014. http://www.reuters.com/article/2014/07/23/us-china-bonds-huatong-idUSKBN0FS0JV20140723

81. Wang Lu, "5 Local AMC Approved," *Economic Daily*, July 31, 2014. http://paper.ce.cn/jjrb/html/2014-07/31/content_210413.htm
82. "Li Keqiang Hosted Standing Meeting of the State Council," Xinhua News, July 23, 2014. http://news.xinhuanet.com/politics/2014-07/23/c_1111768523.htm
83. General Office of the State Council, *Instructive Opinion of the General Office of the State Council on Using Mutiple Methods to Reduce High Borrowing Cost of Enterprises*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-08/14/content_8983.htm
84. "China Steps Towards Market-Based Interest Rates," *Wall Street Journal*, December 8, 2013. http://online.wsj.com/news/articles/SB100014240527 02304744304579245692059412548
85. "China Signals Volatility in Money Markets Will Persist: Economy," Bloomberg, February 9, 2014. http://www.businessweek.com/news/2014-02-09/china-signals-volatility-in-money-markets-will-persist-economy
86. David Barboza, "High-interest Web Banks on the Rise in China," *New York Times*, March 2, 2014. http://www.nytimes.com/2014/03/03/business/international/web-banks-offering-high-interest-rates-rise-in-china.html
87. Neil Couch and Alexandra Stevenson, "The Unlikely Ascent of Jack Ma, Alibaba's Founder," *New York Times*, May 7, 2014. http://www.nytimes.com/2014/05/08/technology/the-unlikely-ascent-of-jack-ma-alibabas-founder.html?hpw&rref=business
88. "China's Banks Must Evolve or Perish," Xinhua News, January 27, 2014. http://news.xinhuanet.com/english/china/2014-01/27/c_126065997.htm
89. Qun Zhou, "Petty Foreign Exchange Deposit Rate Liberalized within Whole Shanghai," *Caixin*, June 26, 2014. http://finance.caixin.com/2014-06-26/100695746.html
90. "Carefully Proceed Interest Rate Marketization," *Yicai*, August 15, 2014. http://www.yicai.com/news/2014/08/4008163.html
91. "Preparation Is Almost Done for Introducing a Deposit Insurance System," *China Stock*, August 9, 2014. http://news.xinhuanet.com/finance/2014-08/09/c_126851158.htm
92. "Zhou Xiaochuan Reaffirms to Liberalize Interest Rate in Two Years," *The Paper*, July 10, 2014. http://www.thepaper.cn/newsDetail_forward_1255226
93. People's Bank of China, *PBC Public Announcement [2014] No. 5*, Beijing, 2014. http://www.pbc.gov.cn/publish/english/955/2014/20140317160839706274217/20140317160839706274217_.html
94. Xiaochuan Zhou, "Comprehensively Deepen Opening and Reform in the Fianancial Sector," *People's Daily*, November 28, 2013. http://politics.people.com.cn/n/2013/1128/c1001-23682142.html
95. See, for instance, the latest renminbi clearing house agreement as of this writing, between PBOC and the Bank of England, at http://www.pbc.gov.cn/publish/english/955/2014/20140408160759574897611/20140408160759574897611_.html.
96. State Administration of Foreign Exchange, *Notice of the People's Bank of China on Inter-Bank Foreign Exchange Trade Market Price Regulatio*n, Beijing, 2014. http://www.safe.gov.cn/wps/portal/!ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gPZxdnX293QwMLE09nA09Pr0BXLy8P-QyNPI6B8pFm8s7ujh4m5jwFQ3t3AwNPEyd_PwznQ0MDTmIDucJB9-PWD5A1wAEcDfT-P_NxU_YLcCIMsE0dFABRy5RE!/dl3/d3/L0lDU0lKSWdra0EhIS9JTlJBQUlpQ2dBek15cUEhL1lCSlAxTkMxTktfMjd3ISEvN19IQ0RDTUtHMTA4VTVDMElBVTNDTTc3MzBTN-Q!!/?PC_7_HCDCMKG108U5C0IAU3CM7730S5000000_WCM_CONTEXT=/wps/wcm/connect/safe_web_store/safe_web/zcfg/whscyrmb-hn/hj/node_zcfg_hj_store/c4e56c804494ad3f84f6dcf85aefd566
97. Deng Zhang, "PBOC Will Exit from Daily Foreign Exchange Market Intervention," *WallStreetCN*, August 8, 2014. http://wallstreetcn.com/node/103697
98. In a PBOC press release dated March 11, 2013, Zhou Xiaochuan says that while there is a difference of opinion about renminbi exchange rate trends, analysts looking at the current account balance are correct. He also notes that he understands why analysts use the comm trade balance as a guide, as it is released monthly, unlike the current account data, which is released quarterly. The full release is available on the bank's website at http://www.pbc.gov.cn/publish/goutongjiaoliu/524/2014/20140311120919964302085/20140311120919964302085_.html.
99. An expanding current account surplus or deficit is assumed to be predictive of future balance of payments problems; hence, this variable is often used as the anchor for estimated of currency disequilibrium.
100. Kevin Yao, "Risk-averse China Seen Pushing Back Plans to Free Yuan," Reuters, August 6, 2014. http://uk.reuters.com/article/2014/08/06/uk-china-economy-reform-idUKKBN0G62F520140806
101. A definitive review of openness across countries is available in the IMF's AREAER Report (2012), pp. 71–79, and China coverage, pp. 600–650. OECD, *Exchange Arrangements and Exchange Restrictions*, Paris, France, 2012. http://www.imf.org/external/pubs/nft/2012/eaer/ar2012.pdf
102. Definitive review of openness is available in IMF's AREAER Report (2012), pp. 600–650. OECD, *Exchange Arrangements and Exchange Restrictions*, Paris, France, 2012. http://www.imf.org/external/pubs/nft/2012/eaer/ar2012.pdf
103. National Development and Reform Commission, *Overseas Investment Project Approval and Registration Administrative Method*, Beijing, 2014. http://www.ndrc.gov.cn/fzgggz/wzly/zcfg/wzzcjwtz/201404/W020140410574664082783.pdf
104. Ibid.
105. "Fujian Pingtan Implements Negative List of Foreign Investment," Xinhua News, June 3, 2014. http://news.xinhuanet.com/fortune/2014-06/03/c_1110972603.htm
106. State Administration of Foreign Exchange, *Notice of the State Administration of Foreign Exchange on Publishing "Cross-Border Foreign Exchange Guarantee Administrative Rules"*, Beijing, May 19, 2014. http://www.safe.gov.cn/wps/portal/!ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os-3gPZxdnX293QwMLE09nA09Pr0BXLy8PQyNPI6B8pFm8s7ujh4m5jwFQ3t3AwNPEyd_PwznQ0MDTmIDucJB9-PWD5A1wAEcDfT-P_NxU_YLcCIMsE0dFABRy5RE!/dl3/d3/L0lDU0lKSWdra0EhIS9JTlJBQUlpQ2dBek15cUEhL1lCSlAxTkMxTktfMjd3ISEvN19IQ0RDTUtHMTA4VTVDMElBVTNDTTc3MzBTNQ!!/?PC_7_HCDCMKG108U5C0IAU3CM7730S5000000_WCM_CONTEXT=/wps/wcm/connect/safe_web_store/safe_web/zcfg/zbxmwhgl/jwtzwhgl/node_zcfg_zbxm_kjzwzw_store/541cb280440df0f48451c783c4343806
107. IMF, *The Liberalization and Management of Capital Flows: An Institutional View*, p. 11. http://www.imf.org/external/np/pp/eng/2012/111412.pdf
108. Daniel Rosen, *Behind the Open Door*. Washington, DC: Peterson Institute for International Economics, 1999. http://bookstore.piie.com/book-store/23.html
109. General Office of the State Council*, Circular of the General Office of the State Council on the Establishment of Security Review System Regarding Merger and Acquisition of Domestic Enterprises by Foreign Investors*, Beijing. http://www.fdi.gov.cn/1800000121_39_57_0_7.html
110. General Office of the State Council, *Several Opinions of General Office of the State Council on Supporting Stable Growth of Foreign Trade*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-05/15/content_8812.htm

111. See the interactive FEERs tracker at the Peterson Institute, reflecting the careful work of William Cline, at http://www.iie.com/interact/feers/map.html
112. There is a long-standing debate over whether FDI and trade are substitutes or compliments. Empirical data vary but generally show that FDI stimulates export growth from countries. See L. Fontagné, "Foreign Direct Investment and International Trade: Complements or Substitutes?" OECD Science, Technology and Industry Working Papers, 1999/03, OECD Publishing. http://dx.doi.org/10.1787/788565713012
113. "Talks on IT Products at a Critical Point – EU Calls on China to Withdraw Excessive Requests for Exclusions," *European Commission*, November 21, 2013. http://trade.ec.europa.eu/doclib/press/index.cfm?id=990
114. Procurement Center for the Central Government Institute, *Notice on Information Contract Supply Mandatory Energy-saving*, Beijing, 2014. http://www.zycg.cn/article/show/242846
115. See article 27 of the revised Company Law available at http://www.fdi.gov.cn/1800000121_39_4814_0_7.html; National People's Congress, *People's Republic of China Company Law (2013 Revision)*, Beijing, 2013. http://www.fdi.gov.cn/1800000121_23_71637_0_7.html
116. Based on meetings with MOFCOM officials, Beijing, July 2014.
117. "Minister of Commerce Answers Questions on Commercial Development and Opening Up," *People*, March 7, 2014. http://live.people.com.cn/note.php?id=7140306141221_ctdzb_001
118. Zhou Qiang, President, Supreme People's Court, *Report on the Work of the Supreme People's Court*, Beijing, 2014. http://www.chinacourt.org/article/detail/2014/05/id/1290169.shtml
119. For details on these circulars, see http://www.hoganlovells.com/files/Publication/aa8faa93-3cd0-4794-8561-14f49ed5e3ec/Presentation/PublicationAttachment/02529efd-222a-4c41-97e3-485157f087aa/SHALIB01-%231091563-v6-Client_Alert_-_Financial_Reforms_for_the_Shanghai_(Pilot)_Fre.pdf
120. General Administration of Customs, *Customs Regulation Reform Is Expanded Nationwide from the Shanghai Free Trade Zone Starting Yesterday*, Beijing, 2014. http://www.customs.gov.cn/publish/portal0/tab1/info718900.htm
121. Matthew Zito, Camille Chen, and Rainy Yao, "Shanghai FTZ Revised Negative List Introduces Targeted FDI Reforms," *China Griefing*. http://www.china-briefing.com/news/2014/07/03/shanghai-ftz-revised-negative-list-introduces-targeted-fdi-reforms.html
122. Sun Li, "Pingtan Pilot Zone Releases Negative List," *China Daily*, June 5, 2014. http://fujian.chinadaily.com.cn/2014-06/05/content_17565017.htm
123. "Chengdu Joins Shanghai & Pingtan in Adopting a Negative List for Foreign Investment," *China Briefing,* August 14, 2014. http://www.china-briefing.com/news/2014/08/14/chengdu-joins-shanghai-pingtan-adopting-negative-list-foreign-investment.html
124. State Council, *Opinion on Further Improving M&A Market Environment*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-03/24/content_8721.htm
125. National Development and Reform Commission, *Foreign Investment Projects Approval and Registration Administrative Measure*, Beijing, 2014. http://www.sdpc.gov.cn/zcfb/zcfbl/201405/W020140521337699046281.pdf
126. "Ministry of Commerce: Outbound Investment of China's Real Estate Industry Grew by 53.3% in the First Half of the Year," Sina News, August 8, 2014. http://finance.sina.com.cn/china/20140808/132619954664.shtml
127. State Administration of Foreign Exchange*, State Administration of Foreign Exchange Further Improves Administration on Corss-Border Foreign Exchange Gurantee*, Beijing, 2014. http://www.safe.gov.cn/wps/portal/!ut/p/c5/04_SB8K8xLLM9MSSzPy8xBz9CP0os3gPZxdnX293QwML-7zALA09P02Bnr1BvI2c_E_1wkA6zeGd3Rw8Tcx8DAwsTdwMDTxMnfz8P50BDA09jiLwBDuBooO_nkZ-bql-QnZ3m6KioCACk6Xh-/dl3/d3/L2dJQSEvUUt3QS9ZQnZ3LzZfSENEQ01LRzEwODRJQzBJSUpRRUpKSDEySTI!/?WCM_GLOBAL_CONTEXT=/wps/wcm/connect/safe_web_store/safe_web/whxw/ywfb/node_news_ywfb_store/13582980440e02ad85cbc783c4343806
128. Prior to 2009, the yuan could only be used inside China; subsequently, however, China has slowly developed an offshore RMB market, which means that RMB can be held outside China and flow across China's borders – in both directions – to make investments or pay for goods and services.
129. This varies by jurisdiction. In the United States, for example, banks can only trade for their clients on exchanges or clearing houses that have been approved by the CFTC, so U.S. banks cannot trade for their clients, only for their proprietary trading business.
130. People's Bank of China, *PBC Notice on Establishing a Centralized Clearing Mechanism for OTC Financial Derivative and Launching Centralized Clearing of RMB Interest Rate Swap*, Beijing, 2014. http://www.pbc.gov.cn/publish/english/955/2014/20140408162107938969555/20140408162107938969555_.html
131. Richard Grams and Allan Goldner, "China Lowers Market Entry Barriers for Foreign-Invested Telecommunications Businesses Established in Shanghai Free Trade Zone," Benesch Friedlander Coplan & Aronoff LLP. http://www.lexology.com/library/detail.aspx?g=fa2df956-e59c-442c-a209-e654aa7350ea
132. Ministry of Commerce, Department of Foreign Investment Administration, *Notice of National Health and Family Planning Commission and Ministry of Commerce on Piloting Foreign Capital Wholly Owned Hospitals*, Beijing, 2014. http://wzs.mofcom.gov.cn/article/n/201408/20140800711993.shtml
133. European Union Chamber of Commerce in China, *European Business in China Position Paper 2014/2015*, 2014. http://www.europeanchamber.com.cn/en/publications-position-paper
134. U.S. Chamber of Commerce, *Competing Interests in China's Competition Law Enforcement: China's Anti-Monopoly Law Application and the Role of Industrial Policy*, 2014. https://www.uschamber.com/report/competing-interests-chinas-competition-law-enforcement-chinas-anti-monopoly-law-application
135. The phenomenon – *guojin mintui* – is well captured in the wiki: http://en.wikipedia.org/wiki/Guo_jin_min_tui. On the internal debates see Matt Ferchen, "Whose China Model Is It Anyway? The Contentious Search for Consensus," http://www.academia.edu/3877799/_Whose_China_Model_Is_It_Anyway_DRAFT_.
136. "Xi Jinping: State-owned Enterprises Will Be Strengthened Rather Than Weakened," *Jiefang Daily*, March 3, 2014. http://news.cnpc.com.cn/system/2014/03/07/001475272.shtml
137. See Rosen and Hanemann's various work on China's FDI in the United States and Europe, available at http://rhg.com/topics/cross-border-investment.
138. State Assets Supervision and Administration Commission (SASAC) Chairman Li Rongrong's 2006 definition. http://www.gov.cn/jrzg/2006-12/18/content_472256.htm; see also http://www.chinadaily.com.cn/china/2006-12/19/content_762056.htm; seven sectors related to national security and at the "commanding heights" (vital arteries) of the economy should have absolute state control: armaments, power generation and distribution, oil and petrochemicals, telecommunications, coal, civil aviation, and shipping.

139. Nine sectors regarded as the basic and pillar industries of the economy should have relatively strong state control: machinery, automobile, electronics and information, architecture and construction, iron and steel, nonferrous metals, chemical engineering, survey and design, science, and technology. http://www.gov.cn/jrzg/2006-12/18/content_472256.htm
140. Willy Lam, "Ideology, Vested Interests: Why China's Reforms Have Hit Brick Wall," CNN, November 16, 2012. http://www.cnn.com/2012/11/12/opinion/china-reforms-lam/
141. "Make Discipline Inspection 'Sword of Damocles': Anti-corruption Chief," Xinhua News, March 15, 2014. http://news.xinhuanet.com/english/china/2014-03/15/c_133188981.htm
142. "Senior COSCO Executive under Investigation," Xinhua News, November 8, 2014. http://news.xinhuanet.com/english/china/2013-11/08/c_132870882.htm
143. See, for instance, Discipline Commission Chairman Wang Qishan berating the Jilin Party Secretary. http://sinosphere.blogs.nytimes.com/2014/03/12/outburst-by-prominent-party-official-reverberates-online/
144. "Audit Shows Mismanagement at SOEs, 190 Punished," Xinhua News, June 20, 2014. http://news.xinhuanet.com/english/china/2014-06/20/c_133423685.htm
145. On June 13, 2014, Xi Jinping led the sixth meeting of the Finance and Economics Leadership Small Group on energy security and appeared for the first time as chairman of the group. This is another step in Xi's consolidating power – previously, the chairman of the Finance and Economic Small Group has traditionally been the premier. http://china.dwnews.com/news/2014-06-13/59478352.html
146. While dividend payout ratios can vary greatly, payout ratios at OECD firms are often above 50% of income in dividends.
147. Nicholas Borst, *SOE Dividends and Economic Rebalancing,* Washington, D.C.: Peterson Institute of International Economics, 2012. http://blogs.piie.com/china/?p=1258
148. Ministry of Finance, *Notice on Further Increasing the Percentage of Turned Over Returns of Central Enterprises' State-owned Capital Profits*, Beijing, 2014. http://qys.mof.gov.cn/zhengwuxinxi/zhengcefabu/201405/t20140506_1075478.html
149. The Ministry of Finance supervises 8 central SOEs in addition to the 113 under SASAC.
150. National Development and Reform Commission, *Notice of National Development and Reform Commission on Publishing First Group of Projects in Infrastructure Facilities and Other Industries Which Social Capitals Are Encouraged to Invest On*, Beijing, 2014. http://www.sdpc.gov.cn/gzdt/201405/t20140521_612323.html
151. Ibid.
152. "Xinhua Insight: China Taps Corporate Investment to Fuel Growth," Xinhua News, April 2014. http://news.xinhuanet.com/english/china/2014-04/24/c_126426290.htm
153. See statement from MIIT: http://www.miit.gov.cn/n11293472/n11293877/n15789052/n15789084/15793279.html
154. Jing Wu, "State Grid Invites Private Investors to Build Charging Stations for E-Cars," *Caixin*, March 14, 2014. http://english.caixin.com/2014-03-14/100651682.html
155. Lucy Hornby, "Chinese Nuclear Group Aims to Raise $2.6bn in Shanghai IPO," *Financial Times,* May 5, 2014. http://www.ft.com/cms/s/0/c57c1ffa-d43a-11e3-bf4e-00144feabdc0.html
156. Weiyi Lim, "Sinopec Sinks as Jefferies Says China SOE Reform Bets Misplaced," Bloomberg, February 21, 2014. http://www.bloomberg.com/news/2014-02-21/sinopec-sinks-as-jefferies-says-china-soe-reform-bets-misplaced.html
157. Yvonne Lee, "Sinopec to Cut Capital Spending 4.2%," *Wall Street Journal*, March 23, 2014. http://online.wsj.com/news/articles/SB10001424052702303725404579456922541787420
158. "CNOOC Eyes Private Capital for Expansion," Xinhua News, April 3, 2014. http://news.xinhuanet.com/english/china/2014-04/03/c_133236892.htm
159. Hxiaodi Hua and Xiaohui Zhao, "State-owned Assets Supervision and Administration Commission Launched 'Four Reforms' Test including Six Central Enterprises," Xinhua News, July 15, 2014. http://news.xinhuanet.com/fortune/2014-07/15/c_1111630185.htm
160. Bihua Ye, "Guangzhou Comprehensively Deepens State-Owned Enterprise Reform Mixed Ownership Will Exceed 70% in 2017," *21st Century Business Herald*. http://finance.ifeng.com/a/20140819/12950319_0.shtml
161. OECD, *Competitive Neutrality: Maintaining a Level Playing Field between Public and Private Business*. http://www.oecd.org/daf/ca/corporategovernanceofstate-ownedenterprises/50302961.pdf
162. Shuhe Huang, "State-owned Enterprises Reform Is Deepening," *Qiushi Magazine* 3, 2014. http://www.sasac.gov.cn/n1180/n1566/n1881407/n1881422/15687932.html
163. National People's Congress, *Decision of Standing Committee of the National People's Congress on Modifying People's Republic of China's Budget Law*. http://www.gov.cn/zhengce/2014-09/01/content_2743208.htm
164. State Council Information Office, "Establish Trust, Punish Dishonesty" Press Conference, Beijing 2014. http://www.scio.gov.cn/xwfbh/qyxwfbh/Document/1360353/1360353.htm
165. "Audit shows mismanagement at SOEs, 190 punished." Xinhua News, June 20, 2014. http://news.xinhuanet.com/english/china/2014-06/20/c_133423685.htm
166. Procurement Center for the Central Government Institute, *Notice on Information Contract Supply Mandatory Energy-saving Product*, Beijing, 2014. http://www.zycg.cn/article/show/242846
167. "Xi Jinping: State-owned Enterprises Will Be Strengthened Rather Than Weakened," *Jiefang Daily*.
168. "China Focus: China to Diversify SOE Shareholding," Xinhua News, December 19, 2013. http://news.xinhuanet.com/english/china/2013-12/19/c_132981455.htm
169. Currently, there is a roughly defined positive list for private participation, generated by the *Several Opinions of State Council on Encouraging and Guiding Healthy Development of Private Investment*," No. 13 (2010) promulgated by the State Council in 2005 and again in 2010 (known as the "new 36 clauses for the non-state-owned economy"). Available at http://www.gov.cn/zwgk/2010-05/13/content_1605218.htm
170. World Bank and Development Research Center of the State Council, *Urban China: Towards Efficient, Inclusive, and Sustainable Urbanization,* Washington, D.C.: World Bank, 2014. http://www.worldbank.org/content/dam/Worldbank/document/EAP/China/WEB-Urban-China.pdf
171. See the Landesa China Survey for detail on exploitation of farmers. http://www.landesa.org/china-survey-6/
172. World Bank and Development Research Center of the State Council*, Urban China*, p. 44.

173. "Beijing Farmers Are Unwilling to Give up Rural Hukou," *People*, August 19, 2014. http://finance.people.com.cn/n/2014/0819/c1004-25491550.html
174. "Official of Ministry of Land and Resources: Public Searching on Real Estate Registration Information Will Be Available in 2017," *Securities Times*, August 27, 2014. http://kuaixun.stcn.com/2014/0827/11674958.shtml
175. "Fujian Plans to Finish Leased Agricultural Land Lease Registration," *Xiamen Daily*, August 18, 2014. http://www.chinanews.com/gn/2014/08-18/6504501.shtml
176. Major Tian, "The Role of Land Sales in Local Government Financing in China," CKGSB Knowledge. http://knowledge.ckgsb.edu.cn/2014/09/03/policy-and-law/the-role-of-land-sales-in-local-government-financing-in-china/
177. "Agricultural Bank Introduced Administrative Methods on Rural Land Leased Operational Rights Mortgage Credit," Xinhua News, August 21, 2014. http://news.xinhuanet.com/fortune/2014-08/21/c_126901136.htm
178. "Domestic demand is the fundamental impetus for China's development, and the greatest potential for expanding domestic demand lies in urbanization," according to the National New-type Urbanization Plan (2014–2020). "Authorized Release: National New-Type Urbanization Plan (2014–2020), Xinhua, Beijing, March 16, 2014. http://news.xinhuanet.com/politics/2014-03/16/c_119791251.htm
179. State Council, *Opinions of the State Council on Proceeding Hukou Reform*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-07/30/content_8944.htm
180. "China Focus: China drafting Beijing-Tianjin-Hebei development plan," Xinhua News, May 28, 2014, http://news.xinhuanet.com/english/china/2014-05/28/c_133368651.htm
181. State Council, *Opinions of the State Council on Proceeding Hukou Reform*.
182. In August 2013, Qingdao piloted small cities relaxing their *luohu* policy by allowing migrants with legal and stable job and residence (including rental) and their family to apply for *hukou*. In September 2013, Jiaxing Xiuzhou pilot county implemented the point-based *luohu* system, where *hukous* are allocated according to points. Some provinces released plans that are awaiting implementation.
183. "Migrant Workers Have to Look at Three Criteria to Acquire a Qingdao Hukou," *Shandong Business Daily,* March 28, 2014. http://sd.people.com.cn/n/2014/0328/c166192-20879169.html
184. "Jiangsu Province's New-style Urbanization and Urban-rural Integrated Development," Xinhua News, May 26, 2014. http://js.xhby.net/system/2014/05/26/021036950.shtml
185. Documentation by the China Labor Bulletin in Hong Kong is available at http://www.clb.org.hk/en/content/employment-discrimination-china.
186. "China's Social Security System," *China Labour Bulletin*, August 8, 2014. http://www.clb.org.hk/en/content/china%E2%80%99s-social-security-system
187. Guy de Jonquières, "The Problematic Politics of China's Economic Reform Plans."
188. Standing Committee of Guangdong Provincial People's Congress, *Regulations on Guangdong Province Enterprise Collective Bargaining and Collective Contract (Draft)*, Guangdong, 2013. http://www.rd.gd.cn/rdgzxgnr/flcazjyj/201310/t20131011_136865.html
189. Lardy, *Markets over Mao*, p. 139.
190. Sean Sylvia, Yaojiang Shi, Hao Xue, Xin Tian, Huan Wang, Qingmei Liu, Alexis Medina, and Scott Rozelle, "Survey Using Incognito Standardized Patients Shows Poor Quality Care in China's Rural Clinics," *Health Policy and Planning* (2014). doi: 10.1093/heapol/czu014
191. Shannon Tiezzi, "No, China's Not Privatizing Health Care," *The Diplomat*, December 3, 2013. http://thediplomat.com/2013/12/no-chinas-not-privatizing-health-care/
192. Ministry of Human Resources and Social Security, *Notice of the Ministry of Human Resources and Social Security about 2014 National University Graduates Employment Work*, Beijing, 2014. http://www.mohrss.gov.cn/gkml/xxgk/201403/t20140303_125216.htm
193. Linxiu Zhang, Eli Pollak, Ross Darwin, Matthew Boswell, and Scott Rozelle, "Are Elite University Graduates Aiding China's Transition to an Innovation-based Economy? Results from a Career Choices Survey among Would-be Innovators in China and the United States," *Asia-Pacific Journal of Accounting & Economics* 20, no. 1 (2013): p. 58-69.
194. Beijing Municipal Commission of Education, *Announcement of Beijing Municipal Commission of Education about Soliciting Public Comments on "2014–2016 High School Entrance Examination and High School Admission Reform Structural Plan" (Draft) and "2014–2016 University Entrance Examination and University Admission Reform Structural Plan" (Draft)*, Beijing, 2013. http://www.bjedu.gov.cn/publish/portal0/tab67/info28951.htm
195. State Council, *Implementation Opinions of the State Council on Deepening Reform of the Examination and Admission System*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-09/04/content_9065.htm
196. "Shanghai and Zhejiang Release Gaokao Reform Pilot Plans; Gaokao Is No Longer 'One Test Determines Your Life,'" *People*, September 20, 2014. http://bj.people.com.cn/n/2014/0920/c82841-22375934.html
197. Beijing Municipal Commission of Education, *Opinion of the Beijing Municipal Commission of Education on 2014 Mandatory Education Period Admission Work*, Beijing, 2014. http://www.bjedu.gov.cn/publish/portal27/tab1654/info37238.htm
198. State Administration for Industry & Commerce, *July 2014 National Market Entity Development Report*, Beijing, 2014. http://www.saic.gov.cn/zwgk/tjzl/zhtj/xxzx/201408/P020140808392129075357.pdf. A Peterson Institute blog also comments on the data, though citing a lower number for new business: http://blogs.piie.com/china/?p=4033.
199. State Council, *Notice of the State Council on 2014 National Regular Universities Graduates Employment and Entrepreneurship Work*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-05/13/content_8802.htm
200. Ibid.
201. Ministry of Human Resources and Social Security, *Notice of the Ministry of Human Resources and Social Security on 2014 National University Graduates Employment Work*, Beijing, 2014. http://www.mohrss.gov.cn/gkml/xxgk/201403/t20140303_125216.htm
202. State Council, *Notice of the State Council on 2014 National Regular Universities Graduates Employment and Entrepreneurship Work*.
203. State Council, *Decisions of the State Council on Speeding up Development of Modern Vocational Training*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-06/22/content_8901.htm
204. Department of Human Resources and Social Security of Shaanxi Province, *Province-wide Human Resources and Social Security Work Conference Is Held in Xi'an*, January 15, 2014. http://www.shaanxihrss.gov.cn/admin/pub_newsshow.asp?id=1007691&chid=100079
205. On June 1, 2014, MOHRSS published the 2013 human resource and social security development statistics annual yearbook, 164 million people now participate in unemployment insurance, up 12 million from the previous year. This is roughly 20% of the labor force (National Bureau of Statistics via CEIC China Premium Database). http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/shizhengyaowen/201405/t20140528_131110.htm

206. "Ma Jiantang: Speed Up Establishment, Improve Quality and Efficiency, and Upgrading of the Monitor System," Xinhua News, December 23, 2013. http://news.xinhuanet.com/politics/2013-12/23/c_118675281.htm
207. State Council, *Notice of the State Council Approving the National Development and Reform Commission and Several Other Ministries' Several Opinions on Deepening Income Distribution System Reform*, Beijing, 2013. http://www.gov.cn/zwgk/2013-02/05/content_2327531.htm
208. Anhui Federation of Trade Unions, *Notice on Establishment of Anhui Province Workers Rights Legal Counsel*, Anhui, 2014. http://www.ahghw.org/sitefiles/services/cms/page.aspx?s=1&n=100&c=47350
209. Xiamen Municipal Government, *Notice of the Xiamen Municipal Government on Improving Enterprise Wages Collective Bargaining Work*, Xiamen, 2014. http://www.xm.gov.cn/zwgk/flfg/sfwj/201402/t20140217_826738.htm
210. All China Federation of Trade Unions, "Henan Province Enterprise Wages Collectively Bargaining Regulations Implemented Beginning Today," January 2, 2014. http://www.acftu.net/template/10001/file.jsp?cid=803&aid=88830
211. Beijing Union*, Beijing Wage Collective Bargaining Law Legislative Work Small Leading Group Convenes for Research Meeting*, January 23, 2014. http://www.bjzgh.gov.cn/article/1/26919
212. Ministry of Human Resources and Social Security, *Ministry of Human Resources Holds 2014 First Quarter Press Conference*, April 25, 2014. http://www.mohrss.gov.cn/SYrlzyhshbzb/dongtaixinwen/jiaoliuhudong/zaixianzhibo/201404/t20140425_129123.htm
213. Weifang City Bureau of Human Resources and Social Security, *Our City's Program on Strengthening of Monitor System to Avoid Enterprise Delaying and Refusing to Pay Wages is Expanding to the Province*, January 27, 2014. http://www.sdwfhrss.gov.cn/channels/ch00032/201401/366925e2-ba4a-44e4-95de-cf84f73a770a.htm
214. Ministry of Human Resources and Social Security, *2014 Second Quarter Human Resources and Social Security Work Progress and Future Work Plan*, Beijing, 2014. http://www.mohrss.gov.cn/gkml/xxgk/201408/t20140812_138224.htm
215. "Wuhan Small-and-Micro Enterprises Will Enjoy Big Tax Cut," *Wuhan Morning News*, May 13, 2014. http://hb.people.com.cn/n/2014/0513/c194063-21194692.html
216. State Council, *Opinions of the State Council on Continuing to Support Small-and-Micro Enterprises Healthy Development*, Beijing, 2014. http://www.gov.cn/zwgk/2012-04/26/content_2123937.htm
217. State Council, *Notice of the State Council on Deepening Income Distribution System Reform Key Work Delegation*, Beijing, 2013. http://www.gov.cn/zwgk/2013-02/08/content_2330309.htm
218. Ministry of Finance, *Notice on Further Increasing Central Enterprises State-owned Capital Gains Remittance Ratio,* Beijing, 2014. http://qys.mof.gov.cn/zhengwuxinxi/zhengcefabu/201405/t20140506_1075478.html
219. State Council, *Opinions of the State Council on Establishing Unified Urban and Rural Residents Basic Pension System,* Beijing, 2014. http://www.gov.cn/zwgk/2014-02/26/content_2621907.htm
220. People's Government of Guangdong Province, *Notice of the People's Government of Guangdong Province on Issuing of the 'Guangdong Province Urban and Rural Residents Social Pension Implementation Measures,'"* Guangdong, 2014. http://zwgk.gd.gov.cn/006939748/201309/t20130929_407371.html People's Government of Anhui, *Anhui Province Anqing City Urban and Rural Residents Social Pension Implementation Measures,* Anhui, 2014. http://www.aqdz.gov.cn/include/web_content.php?id=2616
221. China Insurance Regulatory Commission, *Guiding Opinions of the China Insurance Regulatory Commission on Launching Elders House-for-Pension Pilot,* Beijing, 2014. http://www.circ.gov.cn/web/site0/tab5168/info3918962.htm
222. State Council, *Several Opinions of the State Council on Speeding up Development of the Modern Insurance Sector,* Beijing, 2014. http://www.gov.cn/zhengce/content/2014-08/13/content_8977.htm
223. State Council, *Notice of the State Council on Deepening Medical and Health Care System Reform 2014 Key Work Goals,* Beijing, 2014. http://www.gov.cn/zhengce/content/2014-05/28/content_8832.htm
224. Xutao Pan and Jing Xu, "Focus in on Regional Healthcare Reform New Policies: No Long Sell Medicines for Hospital Profit, Hospital Head Elected," *People*, September 8, 2014. http://www.chinanews.com/gn/2014/09-08/6570320.shtml
225. "Ministry of Health: Private Hospital Beds to Reach 20% of Total Number of Hospital Beds in 2015," *Chinanews*, September 17, 2012. http://finance.chinanews.com/jk/2012/09-17/4188646.shtml
226. State Council, *Notice of the State Council on Deepening Medical and Health Care System Reform 2014 Key Work Goals*.
227. Ibid.
228. Yaping Yuan, "Zhejiang Wenzhou First Pilots: Social Capital to Establish Hospitals, Release Industry Vitality," *People*, October 31, 2013. http://cpc.people.com.cn/n/2013/1031/c83083-23384845.html
229. Ibid.
230. "A Foshan Grade Three Hospital Pilots Ownership Reform, Channel in Social Capital," *China.com*, February 18, 2014. http://local.china.com.cn/2014-02/18/content_31511092.htm
231. State Council, *Opinions of the State Council on Pushing Forward Household Registration System Reform,* Beijing, 2014. http://www.gov.cn/zhengce/content/2014-07/30/content_8944.htm
232. For example, in August 2013, Qingdao launched a pilot in small cities relaxing their household registration policy by allowing migrants with legal and stable job and residence (including rental) and their family to apply for household registration. People's Government of Qingdao, *Several Measures on Implementing Qingdao 2013 6th Document on Improving Cultivation of Small Cities Work,* Qingdao, 2014. http://www.qingdao.gov.cn/n172/n68422/n26981869/130929100900047051.html
233. Shandong Bureau of Human Resources and Social Security, *Notice on Issuing "Shandong Province Employment and Rural Migrant Workers Work 2014 Key Goals",* Shandong, 2014. http://www.sdhrss.gov.cn/cm/download.aspx?id=396CE1EE2AF3438A
234. People's Government of Jiangsu, *Jiangsu Province New Rural and Urban Development Unification Plan (2014–2020),* Jiangsu, 2014. http://www.njdpc.gov.cn/jcck/ztzl/201406/P020140613617233326058.doc
235. Jianguo Sheng, "More Than 0.2 Million Families in Hebei Plan to Have a Second Baby",*Yanzhao Dushi*, June 18, 2014. http://hebei.ifeng.com/news/fengguanyanzhao/detail_2014_06/18/2450418_0.shtml
236. Mingzhu Yin and Wenting Zhang, "In H1 17 thousand from Shandong applied for second child permit", *Qilu*, July 25, 2014. http://news.iqilu.com/shandong/yuanchuang/2014/0725/2078711.shtml

237. Liyan Qi, "Baby Boom or Economy Bust: Stern Warnings about China's Falling Fertility Rate," *Wall Street Journal*, September 2, 2014. http://blogs.wsj.com/chinarealtime/2014/09/02/baby-boom-or-economy-bust-stern-warnings-about-chinas-falling-fertility-rate/
238. Yu Xie and Xiang Zhou, "Income Inequality in Today's China," *Proceedings of the National Academy of Sciences of the United States* 11, No. 19 (2014): p. 6928–33. http://www.pnas.org/content/111/19/6928.abstract
239. Xiao Wang and Richard Herd, "The System of Revenue Sharing and Fiscal Transfers in China," *OECD Economics Department Working Paper* No.1030. http://www.oecd-ilibrary.org/economics/the-system-of-revenue-sharing-and-fiscal-transfers-in-china_5k4bwnwtmx0r-en
240. World Bank, *Seizing the Opportunity of Green Development in China in* China 2030, Washington, D.C., 2013. http://www.worldbank.org/content/dam/Worldbank/document/SR3--229-292.pdf
241. Forty-eight percent of 365 foreign companies that replied to the American Chamber of Commerce in Beijing's annual survey, which covers businesses in China's northern cities, said concerns over air quality were turning senior executives away. http://www.reuters.com/article/2014/03/19/us-china-pollution-survey-idUSBREA2I0KU20140319; and http://www.bloomberg.com/news/2014-04-07/china-s-smog-splits-families-as-toxic-pollution-extracts-costs.html
242. Christina Larson, "China's Soil Woes in Sharper Focus," *Science*, April 18, 2014. http://news.sciencemag.org/asiapacific/2014/04/chinas-soil-woes-sharper-focus
243. "China's Underground Water Quality Worsens: Report," Xinhua News, April 22, 2014. http://news.xinhuanet.com/english/china/2014-04/22/c_126421022.htm
244. For 2005, see http://earthobservatory.nasa.gov/IOTD/view.php?id=5292; for today, see http://www.scmp.com/news/china/article/1434700/china-smog-threatens-agriculture-nuclear-fallout-conditions-warn.
245. *Ministry of Environmental Protection,* "The State Council Issues Action Plan on Prevention and Control of Air Pollution Introducing Ten Measures to Improve Air Quality," September 12, 2013. http://english.mep.gov.cn/News_service/infocus/201309/t20130924_260707.htm and http://cleanairinitiative.org/portal/node/12066
246. Amy Weinfurter, "Five Years of Measuring Transparency in China: What Progress Has Been Made?" Environmental Performance Index. http://epi.yale.edu/case-study/five-years-measuring-transparency-china-what-progress-has-been-made
247. "Demolition of 18 Cement Plants in Hebei Starts," *Global Cement,* December 18, 2013. http://www.globalcement.com/news/item/2166-demolition-of-18-cement-plants-in-hebei-starts
248. "Hebei Tears Down 19 Steel Furnaces to Curb Air Pollution," *CCTV*, February 24, 2014. http://english.cntv.cn/program/china24/20140224/100351.shtml
249. David Stanway, "China's War on Smog Will Be Won or Lost in Polluted Hebei," Reuters, March 30, 2014. http://www.reuters.com/article/2014/03/30/us-china-pollution-hebei-idUSBREA2T0KX20140330
250. "Comprehensively Deepening Reform Going Strong: Hebei Reversing Direction," *People*, June 16, 2014. http://politics.people.com.cn/n/2014/0616/c1001-25152832.html
251. Lily Kuo, "China's New Megalopolis Would Be Bigger Than Uruguay and More Populous Than Germany," *Quartz*, April 12, 2014. http://qz.com/198337/chinas-new-megalopolis-would-be-bigger-than-uruguay-and-more-populous-than-germany/
252. "China Unveils Landmark Urbanization Plan," Xinhua News, March 16, 2014. http://news.xinhuanet.com/english/china/2014-03/16/c_133190495.htm
253. National Bureau of Statistics via CEIC China Premium Database.
254. National Development and Reform Commission, *Circulation on Restraining Over-capability Production and Standardizing Enterprise Production*, Beijing, 2014. http://www.ndrc.gov.cn/gzdt/201408/t20140821_622832.html
255. General Office of the State Council, *Opinion of the General Office of the State Council on Facilitating Stable Development of Coal Industry*, Beijing, 2013. http://www.gov.cn/zwgk/2013-11/28/content_2536862.htm
256. The U.S.-China Business Council offers a useful English language overview of the priorities and organization of efforts at http://www.uschina.org/sites/default/files/USCBC%20Summary%20of%20PRC%20Energy%20and%20Environment%20Priorities%20in%202014_1.pdf.
257. Ministry of Environmental Protection, *Regulations on Prevention and Control of Pollution by Scaled Livestock and Poultry Breeding Industry Officially Enforced*, Beijing, 2014. http://english.mep.gov.cn/News_service/infocus/201401/t20140115_266435.htm
258. "CNPC and Sinopec Crossed the Red Line Several Times", *Huaxia Daily*, February 15, 2014. http://finance.sina.com.cn/chanjing/gsnews/20140215/000818219043.shtml
259. "China to Raise Natural Gas Prices," Xinhua News, August 12, 2014. http://news.xinhuanet.com/english/china/2014-08/12/c_126863237.htm
260. "China Takes Reduction of CO_2 Emission as a Criterion in the Government Official Promotion System," Xinhua News, August 15, 2014. http://news.xinhuanet.com/fortune/2014-08/15/c_1112099596.htm
261. "Cancel GDP Assessment: The First Step to Reshape Idea of Political Achievement," Xinhua News, August 21, 2014. http://news.xinhuanet.com/fortune/2014-08/21/c_1112178547.htm
262. Speech at APEC: http://gy.china-embassy.org/eng/zgyw/t1087044.htm
263. State Council, *Report on the Work of the Government, by Li Keqiang*, Beijing, 2014. http://online.wsj.com/public/resources/documents/2014GovtWorkReport_Eng.pdf
264. NDRC report on 2013 national economic and social development plan implementation results and 2014 national economic and social development plan draft, also presented at NPC. http://politics.people.com.cn/n/2014/0316/c1001-24645112.html
265. "China Issues Emergency Order to Freeze New Cement Glass," Reuters, August 8, 2014. http://in.reuters.com/article/2014/08/08/china-industry-overcapacity-idINL4N0QE3DH20140808
266. "Behind the Curtain of the Slow Coal Resources Tax Reform," *China Business*, July 31, 2014. http://finance.eastmoney.com/news/1350,20140731406959588.html
267. "Air Quality of China Dropped in July," Xinhua News, August 19, 2014. http://news.xinhuanet.com/local/2014-08/19/c_1112140277.htm
268. See OECD Secretary-General Angel Gurría's presentation of this framework at http://www.oecd.org/innovation/round-table-on-societies-and-the-imperative-of-innovation.htm.
269. State Council, *Opinions on Key Goals of Deepening Economic Reform in 2014*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-05/20/content_8818.htm

270. "NDRC, IP and China's Plans for 2014," *China IPR*, May 26, 2014. http://chinaipr.com/2014/05/26/ndrc-ip-and-chinas-plans-for-2014/
271. "Li Keqiang Hosted Standing Meeting of the State Council", Xinhua News, August 20, 2014. http://news.xinhuanet.com/politics/2014-08/20/c_1112161335.htm
272. National Leading Group of the Fight Against IPR Infringement and Counterfeiting, *Notice on Publicizing the Case Information of Administrative Punishment on IPR Infringement and Counterfeiting*, Beijing, 2014. http://www.gov.cn/zwgk/2014-02/19/content_2612388.htm "Huawei/InterDigital Appeal Affirms Shenzhen Lower Court on Standards Essential Patent," *China IPR*, October 29, 2013. http://chinaipr.com/2013/10/29/huaweiinterdigital-appeal-affirms-shenzhen-lower-court-on-standards-essential-patent/
273. See U.S. Chamber of Commerce, *Competing Interests in China's Competition Law Enforcement,* pp. 67–68. http://image.uschamber.com/lib/feed13797d6c06/m/1/AML+FINAL+090514+EMBARGOED.pdf
274. State Intellectual Property Office, *"Plan of Establishing IPR Court" Has Been Approved*," June 11, 2014. http://www.sipo.gov.cn/yw/2014/201406/t20140611_963710.html
275. State Council, *Implementation Rules on PRC's Trademark Law*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-04/30/content_8792.htm
276. "PRC-Trademark Law Implementing Regulations Issued," *China IPR*, May 6, 2014. http://chinaipr2.files.wordpress.com/2014/05/sips-memo-prc-implementing-regulations-trademark-law-5-6-14.pdf
277. See Mark Cohen's valuable ChinaIPR blog at http://chinaipr.com/2014/05/30/open-sesame-for-open-access. CAS's policy statement is available at http://english.cas.cn/Ne/CASE/201405/P020140516548023313654.pdf.
278. "Xi Jinping: Brainstorm and Make Efforts on Reforms," Xinhua News, August 18, 2014. http://news.xinhuanet.com/politics/2014-08/18/c_1112126269.htm
279. State Council, *Resolution of the State Council on Accelerating Modern Vocational Education*, Beijing, 2014. http://www.gov.cn/zhengce/content/2014-06/22/content_8901.htm
280. "Xi Jinping Leads Internet Security Group," Xinhua News, February 27, 2014. http://news.xinhuanet.com/english/china/2014-02/27/c_133148273.htm
281. Daniel H. Rosen and Beibei Bao, *Eight Guardian Warriors: PRISM and Its Implications for US Business in China*, Rhodium Group. http://rhg.com/notes/eight-guardian-warriors-prism-and-its-implications-for-us-businesses-in-china-2
282. Adrian Wan, "Chinese Academy of Social Sciences Is "Infiltrated by Foreign Forces": Anti-graft Official," *South China Morning Post*, June 15, 2014. http://www.scmp.com/news/china/article/1533020/chinese-academy-social-sciences-infiltrated-foreign-forces-anti-graft
283. See EU Chamber at http://www.europeanchamber.com.cn/en/press-releases/2145 and U.S. Chamber at http://image.uschamber.com/lib/feed13797d6c06/m/1/AML+FINAL+090514+EMBARGOED.pdf.
284. Jingzhou Tao, "The Chinese Authorities Are Ignoring Li's Call for Fairness," *Financial Times*, August 31, 2014. http://www.ft.com/intl/cms/s/0/170f1536-2f9c-11e4-83e4-00144feabdc0.html#axzz3CqNa9k9r
285. Xianliang Ren, "Promoting the Formation of Objective and Rational Environment on New Online Media", *Qiushi*, June 10, 2014. http://theory.people.com.cn/n/2014/0610/c143843-25127903.html
286. Paul Mozur, "China to Spend $5 Billion on Microchip Industry," *Wall Street Journal*, December 19, 2013. http://online.wsj.com/news/articles/SB10001424052702304773104579267921476354460
287. Wu Jin, "China Will Invest 120 Bln in Integrated Circuits," China.org.cn, April 26, 2014. http://www.china.org.cn/business/2014-04/26/content_32204710.htm
288. "News Analysis: Windows Ban May Open Door for China's Domestic OS," Xinhua News, May 25, 2014. http://news.xinhuanet.com/english/indepth/2014-05/25/c_133359877.htm. Procurement Center for the Central Government Institute, *Notice on Information Contract Supply Mandatory Energy-saving Product*, Beijing, 2014. http://www.zycg.cn/article/show/242846
289. Indices of global innovation offer comparative rankings, and China performs poorly given its size and the resources directed to R&D. https://www.globalinnovationindex.org/content.aspx?page=data-analysis

CHAPTER 3

1. Calculated at purchasing power parity (PPP) valuation.
2. There will be important impacts beyond the trade and finance channels as well, for instance, on the flow of professionals, students, and tourists in and out of China.
3. Thilo Hanemann and Dan Rosen, "Chinese Investment 2.0," *Wall Street Journal*, April 17, 2013. http://online.wsj.com/news/articles/SB10001424127887324789504578381531147301230?mg=reno64-wsj
4. Total labor force is composed of people age 15 and older who meet the International Labor Organization (ILO) definition of economically active population: all people who supply labor for the production of goods and services during a specified period. It includes both the employed and the unemployed. Data from World Bank, *World Development Indicators*, April 2014. http://data.worldbank.org/products/wdi
5. When the dust settled and other factors such as technological change were separated out, economists would later conclude that some 2–2.4 million U.S. manufacturing jobs were displaced by Chinese imports in these years. Of course, if they had not been displaced by China, the next-most competitive emerging manufacturer may well have done so. See Daron Acemoglu, David Autor, David Dorn, Gordon H. Hanson, and Brendan Price, "Import Competition and the Great U.S. Employment Sag of the 2000s," *NBER Working Paper No. 20395*, issued in August 2014 (http://www.nber.org/papers/w20395#fromrss).
6. GDP valued at PPP share of world total.
7. Daniel H. Rosen, Ligang Liu, and Lawrence Dwight, "Financial Fallout," *China Business Review* 25, no. 2 (March-April 1998): p. 44–47.
8. Barry Naughton, *The Chinese Economy: Transitions and Growth* (Cambridge, MA: The MIT Press, 2007), p. 105.
9. In 2007, world iron ore imports were 883 Mt while China's iron ore imports were 383 million tons. China's production of iron ore that year was 701 Mt (but the ore content of China's iron ore has been declining), making global comparisons difficult. Global statistics of iron ore are not measured directly in international databases.
10. Data for Chinese domestic consumption are not available. Domestic consumption is estimated using the following formula for apparent domestic consumption: production + imports – exports + beginning stocks – ending stocks.

11. Four trillion in 2008 RMB valued in USD at the official Chinese 2008 exchange rate from the Chinese State Administration of Foreign Exchange, converted to constant 2013 US$.
12. Absolute global growth in PPP terms was less than China's expansion that year.
13. See Daniel Rosen and Beibei Bao, Washington, D.C.: CSIS, forthcoming, 2015 for a detailed assessment of uncertainties about the accuracy of China's GDP.
14. $3.5 trillion is the difference between the sum of actual annual 2011–2013 GDP in constant 2013 US$ and the sum of 2011–2013 GDP in constant 2013 US$ had China continued to grow at 10.4% per year.
15. See, for example, Dwight H. Perkins and Thomas G. Rawski, "Forecasting China's Economic Growth to 2025," in Loren Brandt and Thomas G. Rawski, eds., *China's Great Economic Transformation* (New York: Cambridge, 2008); Barry Bosworth and Susan M. Collins, "Accounting for Growth: Comparing China and India" (NBER, 2007) at www.nber.org/papers/w12943; and World Bank and Development Research Center of the State Council, *China 2030*, p. 9, Box 0.1. The IMF 2014 Article IV Consultation Staff Report includes a useful box on growth accounting on page 37, which we reference later (https://www.imf.org/external/pubs/ft/scr/2014/cr14235.pdf).
16. In some studies, researchers incorporate schooling into an "education enhanced labor contribution to growth" number, rather than "raw labor;" in others, this is reflected in higher TFP as described next.
17. Dwight H. Perkins and Thomas G. Rawski, "Forecasting China's Economic Growth to 2025." In Brandt and Rawski, eds., *China's Great Economic Transformation*. Their chapter is the inspiration for this component of the study.
18. IMF Staff estimates and calculations. IMF 2014 Article IV Consultation Staff Report, Box 10, p. 37. *People's Republic of China: IMF 2014 Article IV Consultation Staff Report*. Washington, D.C.: International Monetary Fund. https://www.imf.org/external/pubs/ft/scr/2014/cr14235.pdf
19. *China 2030: Building a Modern, Harmonious, Creative Society*. Washington, D.C.: World Bank and the Development Research Center of the State Council, P.R. China, 2013. DOI: 10.1596/978-0-8213-9545-5. License: Creative Commons Attribution CC BY 3.0. p. 9, Table 0.1. http://www.worldbank.org/content/dam/Worldbank/document/China-2030-complete.pdf
20. Perkins and Rawski, "Forecasting China's Economic Growth to 2025," p. 839, Table 20.2.
21. Xiaoqin Li, "China Center Chart of the Week: Chinese Total Factor Productivity Growth Appears to Have Flat-lined." The Conference Board: March 2014. Report Number: China-COTW-3-27-14. https://www.conference-board.org/publications/publicationdetail.cfm?publicationid=2724
22. IMF 2014 Article IV Consultation Staff Report, *People's Republic of China*, Box 11, p. 40.
23. The NDRC is planning around the need to absorb 10 million new job market entrants in 2020 and has calculated a ratio of 1.6 million jobs created per 1% of GDP growth; therefore, it concludes China needs 6% growth in 2020.
24. These results are close to IMF staff estimates of Chinese GDP growth under a failure to reform scenario, which results in 4% 2020 GDP growth. Malhar Nabar and Papa N'Diaye, "Enhancing China's Medium-Term Growth Prospects: The Path to a High-Income Economy," *IMF Working Paper*, 2013, p. 7 (http://www.imf.org/external/pubs/ft/wp/2013/wp13204.pdf). This is the only current growth accounting exercise we are aware of that elaborates estimates under such a scenario.
25. Trade as a percentage of GDP is calculated using balance of payments data (as opposed to customs data) from the Chinese State Administration of Foreign Exchange and economic data from the Chinese National Bureau of Statistics, via CEIC Data's China Premium Database.
26. Balance of payments data from the Chinese State Administration of Foreign Exchange via CEIC Data's China Premium Database.
27. As noted earlier, some analysts believe that irregular financial flows are hidden in the recent services trade deficit numbers, for instance, in the flow of tourists to Macao casinos. This is likely part of the story. However, massive growth in Chinese tourism abroad, students studying abroad, and travel for health care services are clearly observable as well, so the basic trend here is not deceiving. Nonetheless, with reform and opening of financial channels, as discussed later, a re-categorization and some volatility in the services trade figures are likely.
28. Chinese import statistics reveal that non-food commodities make up the majority of all exports to China from Poland, Thailand, Mexico, Vietnam, Indonesia, Turkey, Peru, India, Brazil, Russia, South Africa, Chile, and Colombia – the majority of emerging economies by GDP.
29. Rob Wile, "Citi: Expect Peak Coal By 2020," *Business Insider*, September 6, 2013. http://www.businessinsider.com/citi-peak-coal-in-china-is-coming-2013-9
30. For an early observation of this long-cycle trend, see Daniel H. Rosen, Scott Rozelle, and Jikan Huang, "Roots of Competitiveness: China's Evolving Agriculture Interests," Washington, D.C.: Peterson Institute Press, 2004.
31. Note that in this section, we are using stock (i.e., accumulated flows) as the measure to assess cross-border financial integration, as opposed to the trade sector, where we use annual flows (as stocks are not applicable).
32. The cross-border assets and liabilities figures used to make calculations in this paragraph are from the updated and extended "External Wealth of Nations" Dataset, 1970–2011. Philip R. Lane and Gian Maria Milesi-Ferretti. 2007. "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004," *Journal of International Economics* 73 (November), 223–50. http://www.philiplane.org/EWN.html
33. IMF Staff, "The Asian Crisis: Causes and Cures," in *IMF World Economic Outlook*. Washington, D.C.: IMF, 1998. http://www.imf.org/external/pubs/ft/fandd/1998/06/imfstaff.htm
34. Popular language sometimes uses "capital account" to refer to the "financial account," the component of a country's balance sheet that records cross-border financial flows in its balance of payments to and from the world. Throughout this report, we use "financial account," the internationally agreed-upon standard.
35. The direction and magnitude of change in net financial assets gets the most attention in the literature. Bayoumi and Onsorge (2013) address whether capital account liberalization will lead to net inflows or outflows.(Tamim Bayoumi and Franziska Ohnsorge, "Do Inflows or Outflows Dominate? Global Implications of Capital Account Liberalization in China" *IMF Working Paper No. 13/189*, 2013 (https://www.imf.org/external/pubs/ft/wp/2013/wp13189.pdf). Economists at the Hong Kong Monetary Authority (HKMA) forecast the impact of a fully liberalized financial account on two-way financial flows, China's IIP, and the returns China can hope to earn on its global investments (net investment income). The IMF's lengthy 2013 Spillover Report explores that same question in depth and with extensive modeling and tries to approximate a fuller set of reform elements. These efforts build on an even more extensive body of work analyzing the same question in the global context, in part to sort out whether financial liberalization was responsible in part for the Global Financial Crisis, and how to better advise nations to press ahead with financial opening today.
36. Our projections do not build in a change in exchange rate for the renminbi per se, but we specify our results (e.g., current account balance) to concord with full economic modeling exercises that imply moderate RMB appreciation in the years ahead if China rebalances, as opposed to a constant real exchange rate if China's reforms stall. We also do not consider changes in the market value of securities and other assets.

37. Thilo Hanemann and Daniel H. Rosen, "China Invests in Europe: Patterns, Impacts and Policy Implications," June 2012. http://rhg.com/wp-content/uploads/2012/06/RHG_ChinaInvestsInEurope_June2012.pdf
38. This is the midpoint of the projections in Daniel H. Rosen and Thilo Hanemann, "An American Open Door? Maximizing the Benefits of Chinese Foreign Direct Investment," May 2011, http://asiasociety.org/files/pdf/AnAmericanOpenDoor_FINAL.pdf. See Hanemann and Rosen, "China Invests in Europe", p. 5.
39. World Federation of Exchanges, "WFE 2013 Market Highlights." Published January 28, 2014. http://www.world-exchanges.org/files/2013_WFE_Market_Highlights.pdf
40. We are leaving out elements of the balance of payment here for simplicity. Errors and omissions can be large, but we have no logical basis to project a point of view. What is now called the capital account (what used to be called the capital account is now referred to as the financial account, remember) has been insignificant. We leave financial derivatives out of the story, on the presumption that Beijing maintains its disinclination to liberalize their use. As noted earlier, we do not include an exchange rate change assumption. Our forecasts do not specify assumptions about potential changes in the underlying values of China's global assets and liabilities.
41. Bayoumi and Ohnsorge, "Do Inflows or Outflows Dominate? Global Implications of Capital Account Liberalization in China"; Dong He, Lillian Cheung, Wenlang Zhang, and Tommy Wu, "How Would Capital Account Liberalization Affect China's Capital Flows and the Renminbi Real Exchange Rate?" *HKIMR Working Paper No. 09/2012.* http://www.hkimr.org/uploads/publication/17/ub_full_0_2_316_wp-no-09_2012-final-.pdf. Tahsin Saadi Sedik and Tao Sun, "Effects of Capital Flow Liberalization – What Is the Evidence from Recent Experiences of Emerging Market Economies?" *IMF Working Paper No. 12/275*, 2012. https://www.imf.org/external/pubs/ft/wp/2012/wp12275.pdf
42. For example, we imagine $3.6 trillion less Chinese OFDI assets in 2020 than do He et al., "How Would Capital Account Liberalization Affect China's Capital Flows…?"
43. As previously noted, our calculations do not account for potential changes in the valuation of existing assets and liabilities, which could be large in the hard-landing and crisis scenarios.

CHAPTER 4

1. For the former, see Anne Stevenson-Yang, "Gnawing the Bones in China," *Financial Times*, April 3, 2014. http://ftalphaville.ft.com/2014/04/03/1818932/gnawing-the-bones-in-china. For the latter, see Nicholas R. Lardy, *Markets over Mao: The Rise of Private Business in China.* Washington, D.C.: Peterson Institute of International Economics, 2014. http://www.iie.com/publications/opeds/oped.cfm?ResearchID=2670

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