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STEPPING UP THE PACE OF REFORM AND FOSTERING GREENER AND MORE INCLUSIVE GROWTH IN CHINA

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PREFACE

China’s new leadership has signalled that it is time to step up the pace of reform, building on the remarkable economic and social achievements to date while recognising the pressing need for deep structural changes. Indeed, far-reaching reforms are necessary for continuing to raise living standards and well-being, even as China is poised to become the world’s largest economy by around 2016.

These structural reforms straddle numerous policy areas, and in many of them OECD experience is relevant, notwithstanding the unique scale and specific features of China’s challenges. This year’s brochure builds on previous editions and focuses on key policy challenges for China, drawing on the extensive analysis presented in our new 2013 Economic Survey of China and recent work on global value chains, innovation, green growth, compact cities and food security. In particular:

- Global value chains: our new analysis, carried out in cooperation with the World Trade Organisation, enables us to reassess the magnitude of trade flows and imbalances on a value-added, rather than gross basis. It shows that China must continue to upgrade its industrial and services sectors as costs and wages rise and competition from other low-cost economies intensifies.

- Green cities: the OECD experience on compact cities, which allow to reap agglomeration gains but where congestion is held in check and the air and water are clean, provides guidance on the pricing of scarce energy and other resources and on the design of sufficiently ambitious environmental standards.

- Inclusive urbanisation: better social integration of internal migrants and their children in the cities where they work is key for urbanisation to remain an engine of social and human development, not only economic growth. It is also important for inequalities to subside and for consumption to become a more potent driver of growth in China. More flexible and fairer land acquisition and use rights are essential, including to enhance agricultural productivity and food security.

- Ageing: like most OECD societies, China is facing a considerable demographic shift that calls for continued pension and health care reforms to offer greater protection to citizens while keeping costs in check. This challenge is being addressed in many different ways among OECD member and partner countries.

Other areas of OECD expertise are also relevant for China. To name just a few, the combat against corruption, which undermines social cohesion and support for reforms; reform of state-owned enterprise, where improved corporate governance can serve to promote more equitable growth; and taxation, where modernising the value added tax is a priority.

Progress is being made on many of these fronts, both the ones covered in this brochure and the other areas mentioned above, following up on the orientations spelt out at the 18th Party Congress last November, the policy package to address inequality announced last month by the State Council and other recent policy initiatives.

The OECD will continue to contribute to designing and implementing “better policies for better lives” in China, building on the Chinese authorities’ resolve to foster greener and more inclusive growth.

ANGEL GURRÍA
OECD SECRETARY-GENERAL
MARCH 2013
EXECUTIVE SUMMARY

China has become the world’s largest manufacturer and exporter, and plays a key role in global value chains. However, exports based on processing and assembly tend to embody limited Chinese value added. Over the long haul, as costs and wages continue to rise and competition from other low-cost economies intensifies, China’s comparative advantage in such activities may erode. Therefore, other segments of the value chain must be upgraded, both upstream and downstream. At the same time, increasing environmental and resource constraints also require upgrading production processes and adopting greener technologies.

Upstream, China now has the world’s largest pool of researchers and spends vast resources on R&D. However, its enormous scientific and innovative potential could deliver more high-quality patents and greater productivity gains if restrictive regulations and red tape were eased, and if the playing field faced by private entrants in sectors dominated by state-owned firms became more level. Improving relations between industry and science is also important. So is keeping the doors open to foreign firms, which bring capital and technology, and stimulate Chinese firms to improve their competitiveness.

In recent years, China has considerably reduced energy use per unit of GDP. Environmental targets and instruments of various sorts have been introduced to contain emissions. Renewables and nuclear have been given a big push. Even so, air quality generally remains very poor, not least because of reliance on coal. Decisive progress requires improved pricing of energy to better reflect production costs and externalities. Higher taxation of environmental “bads” will help finance investments in green infrastructure and reduce congestion in fast-growing cities.

Urbanisation has been and will remain a powerful driver of growth and social change, by boosting productivity and domestic demand, but needs to become greener and more inclusive. Good public transport is key for both purposes. Urban water supply problems can be addressed by pricing water more effectively. Rural migrants living in cities should have access to basic social services – including health care, education for their children and pensions. Besides, for urbanisation to proceed efficiently and equitably, the rules governing the conversion of agricultural land need to be relaxed, and farmers’ land-use rights enhanced and better protected.

China’s demographic transition has begun, and the old-age dependency ratio is on course to rise dramatically over the coming decades. In this light, the one-child policy could be relaxed, and further reforms of the pension and health care systems are in order, building on the impressive progress achieved in recent years. Pension arrangements remain overly fragmented and the current, low retirement age needs to increase. The health care sector needs rebalancing from hospitals to primary care. Catastrophic and chronic diseases continue to push people into poverty, as health insurance coverage remains modest. To ease labour market mobility and for equity reasons, the portability of social insurance rights more generally should improve.

China has made major progress on food security, with a sharp drop in the share of the population affected by undernourishment. However, access to sufficient food remains a struggle for many households, especially among the poorest in rural areas. Moreover, rising living standards entail growing demands for water-intensive food. New varieties of seeds, new technologies and easier rules for land use and transfers, and a stronger integration of domestic and international agro-food markets are therefore all required. Subsidisation of agricultural inputs should be replaced gradually by direct, flat payments. More broadly, efforts to improve infrastructure and access to basic public services in the rural areas, where most of the poor live, should be further stepped up.
1. FOSTERING INDUSTRIAL UPGRADING IN CHINA

Over the past decade, China has become the world’s largest manufacturer and exporter. Moreover, its share of value added resulting from global value chains (GVCs) rose faster than in any other economy, and now equals that in the United States. However, in some areas such as processing and assembly, China’s exports embody little value added in China (for example, in the case of some emblematic high-tech electronic handheld devices). In the long run, with increases in costs and wages and growing competition from other low-cost economies, China may see its comparative advantage in such activities erode.

Accordingly, other segments of the value chain have to be upgraded: upstream activities such as R&D, design, manufacturing key parts and components; and downstream activities such as marketing, branding, customer service. This will complement China’s strong manufacturing capabilities, boost productivity and add value. Moreover, increasing environmental and resources constraints require upgrading production processes and adopting greener technologies. The need for upgrading is highlighted in the 12th Five Year Plan, which calls for enhancing the competitiveness of industry, including services, build new and strategic industries, further increase energy efficiency and improve the environment.

China’s integration into GVCs has been essential for raising the technology and skill intensity of its exports. By hosting the production of multinational firms, China tapped into cutting-edge technology that was not available domestically. Indeed, China’s exports of knowledge-intensive services, which are important to the upstream and downstream activities within value chains, had increased to nearly 10% of the world total by 2010.

At the same time, China is developing new strengths. Out of the seven strategic industries targeted in the 12th Five Year Plan, three explicitly involve energy and the environment; namely, new energy, energy conservation and environmental protection, and clean-energy vehicles. China has already made headway in these areas, particularly in wind and solar energy: in 2011, around 40% of all solar cells or panels and 44% of new capacity in wind energy installed worldwide were produced in China.
China’s upgrading differs from that experienced by other Asian economies. With a vast and fast-expanding domestic market, Chinese firms participating in foreign multinational enterprises’ value chains can also apply the knowledge acquired from their GVC activities to the development of new capabilities in the domestic market. This, in turn, supports their upgrading in GVCs. For the same reason, China can attract production by multinational enterprises (MNEs) possessing the latest technologies, entailing opportunities for knowledge spillovers. Moreover, the resulting competition between MNEs and domestic firms also encourages Chinese firms to invest in innovation.

Further upgrading by China will require a policy environment that is conducive to structural change and innovation (see also Section 2). As economies move up the value chain, a growing share of the value added created through trade involves services embodied in manufacturing products. Indeed, in China this share rose from 25% in 1995 to 35% by 2009. Thus, bolstering service sector performance is key. For instance, low transport costs, high telecommunications density and small interest rate spreads are important for export performance in sectors such as apparel, electronics and motor vehicles.

A second challenge relates to foreign trade and investment. Import competition encourages firms to raise productivity and improve quality, and invest in innovation. This is crucial in the context of GVCs. China’s success in international markets now depends as much on the capacity to import efficient inputs as on the capacity to export. In addition, because China is at the end of the value chain in many activities and has a high level of processing trade, barriers put in place upstream (affecting the suppliers of China) or downstream (faced by Chinese exporters) are very damaging. Indeed, since ad-valorem tariffs are paid on the gross value of goods, effective protection is higher for producers who add a small value at the end of the chain but pay the tariff on the full value of the goods (including the previous tariffs paid).

A host of other factors play a major role, including the dominance of state-owned enterprises, investment in education (notably vocational), government support for platforms and infrastructure that enable firms to engage in global networks, and intellectual property rights. Much progress has been achieved in most of these areas in recent years, but further reforms are needed.

Last but not least, the development of environmental goods and services industries will be helped most by increasing tax and regulatory incentives for green growth and by making polluters pay (see OECD, 2013).

**Selected Policy Recommendations**

- Encourage the establishment of new privately-owned companies in areas such as electricity distribution, telecommunication and airlines – which are currently dominated by large state-controlled enterprises.
- Reduce restrictions on foreign investment in services, notably telecommunications.
- Continue to move to market-determined interest rates for banks; enhance access to risk capital for smaller enterprises.
- Strengthen the business operating environment by reducing the time taken to register a new business.
- Reduce inequalities in access to upper-secondary education across regions and within urban areas. Allow all children to attend upper-secondary school in their place of residence and lift regional quotas for university admission.
- Strengthen intellectual property rights enforcement by raising awareness of laws and increasing penalties for infringement to ensure adequate protection to domestic and foreign innovators.
- Increase environmental levies and move towards a system of pollution taxes. Tighten standards for motor vehicle emissions and fuel quality.
2. Innovation and New Industrialisation Waves

Since the mid-1980s, China’s science, technology and innovation system has changed rapidly, from centrally planned science-based R&D towards firm-centred market-based innovation. Gross expenditure on research and development more than doubled over 2005-10 to $162 billion. By 2010, it was second only to the United States and accounted for 1.8% of GDP. Business expenditure on R&D, at 72% of total R&D spending, slightly exceeded the OECD median, and firms’ self-funded R&D accounted for 93% thereof. China also has the world’s largest pool of researchers. The share of science and technology occupations in total employment is still below the median of BRICS economies but is on the rise, as the tertiary attainment rate has improved rapidly for the younger cohorts.

China’s science, technology and innovation performance

International comparison

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Note: The values shown in the figure are the normalised index of performance relative to the median values in the OECD area (index median = 100) and to the median values of BRICS countries.


In terms of innovation outputs, however, progress is more uneven. The number of triadic patents is still quite low; China’s revealed technology advantage has increased in ICT over the past decade, but declined in bio and green technologies. While business funds 11% of academic research, industry and science relationships remain underdeveloped. Public funding allocation has not always followed best practice and has been skewed to favour particular initiatives or outcomes. Innovative entrepreneurial activities remain constrained by restrictive regulations and administrative burdens that deter entry of new firms and hinder competition, notwithstanding the improvements witnessed in recent years. The dominance of state-owned enterprises, especially in network sectors – such as telecom, transport and electricity – tends to reduce pressures to innovate. China’s ICT infrastructure has developed fast but, in per capita terms, ICT use and e-government readiness are still low.
The Medium- and Long-term Plan for S&T Development 2006-20 (MLP) maps out China’s transformation into an innovation-driven economy. The 12th Five-Year Plan for S&T Development (2011-15) plays a central role in implementing the MLP. It also promotes the development of strategic and emerging industries (including technologies to address climate change), together with a new wave of industrial policies in support of these industries and related technological innovation. The 18th Chinese Communist Party Congress held in November 2012 placed the implementation of the innovation-driven development strategy and strategic adjustment of the economic structure at the core of overall national social and economic development. This further underlines the importance of innovation as a driver for development in China, including as regards industry competitiveness.

While China’s “open door” policy since the 1980s has helped it access foreign capital and technologies, create knowledge-intensive activities and move up global value chains, it has also increased reliance on foreign technologies. Although Chinese firms are active R&D performers and R&D contractors, their innovation output and capability remain weak. Furthermore, rising labour costs in China, competition from lower-income countries and the possible repatriation of manufacturing activities to certain OECD countries will weigh on Chinese industry’s competitiveness based on cost-advantage. This adds urgency to the need to move up quickly on the global value chains (see Section 1), which requires enhancing the innovation capability of Chinese firms. However, the policy measures used to date have produced limited results in terms of fostering firms’ capability and giving incentives to innovate, as investment in R&D and innovation by firms have largely been driven by government policy and targets rather than by firms’ own initiatives.

Innovation policies also need to help address the social and economic challenges facing China, notably environmental degradation, ageing as well as poverty and income disparity across Chinese regions. This will require broadening the government’s focus, beyond technological innovation in high-technology sectors, to all types of innovation, including services innovation and so-called frugal innovation, to develop affordable products and services using local resources and to address local needs.

**Selected policy recommendations**

- Adopt a more market-based approach to encouraging innovation by firms and industrial development more broadly. Policy measures, including economic, industrial, taxation and procurement policies, should provide a level playing field for Chinese and foreign enterprises in China to invest in R&D and innovation.

- Improve framework conditions for innovation, in particular for innovative start-ups, by reducing constraints and administrative burdens and improving financing for innovative small and medium-sized enterprises, as well as improving other support tools, such as public technology service platforms and technology transfer services.

- Rethink the role of government and markets in the transition to an innovation-driven economy, notably with respect to industrial policy and investments in new technologies and the creation of new industrial sectors.

- Improve co-ordination among government agencies, shift the emphasis from reaching targets to outcomes and impacts, and enhance the evaluation of policies and programmes.

- Embrace a broader concept of innovation by shifting away from the sole focus on technological innovation in high-technology sectors; and by strengthening attention on the potential of innovation, including frugal innovation, to cater to the needs of the Chinese population including those with low incomes and in rural areas.

- Deepen the reform of the S&T system by clarifying the status of different types of public research institutions, e.g. those for basic research, research for social welfare and public services, and those for technology development and commercial use, and optimising their management and operational mechanisms accordingly, while ensuring stable funding for not-for-profit research institutions.

- Strengthen the incentives for S&T personnel to engage in entrepreneurial activities and encourage the commercialisation of public research.
3. ENERGY AND SUSTAINABLE DEVELOPMENT

China cut energy use per unit of GDP by 19% between 2006 and 2010 and aims at a further 16% reduction during the 12th Five Year Plan period. Quantitative targets for the reduction of emissions of local air pollutants are in place, and progress has been made in achieving them for sulphur dioxide, if not for particulates. For the 12th Plan, targets for emissions of nitrogen oxides are being applied for the first time to power plants, even as fuel economy and emissions standards for motor vehicles are tightened — including most recently in Beijing. Monitoring of air pollutants has been widened and results are being made available more transparently. In order to reduce dependence on fossil fuels, the expansion of renewables is being pursued vigorously, notably wind power, which has gained prominence alongside hydro. Nuclear generation, too, is rising fast, though recent safety concerns may slow down the roll-out of new plants. Nevertheless, China’s strong economic performance, even with major improvements in energy efficiency, has meant rising demand for energy, much of which has been met by the most widely available source, coal.

Despite improved energy efficiency and lower sulphur dioxide emissions, air quality remains dismal in most urban areas. Nationwide, annual average pollution via small air-borne particles is more than three times the World Health Organisation’s ceilings and it is much higher still in a number of places. This form of air pollution is now estimated to be the fourth largest source of premature deaths in China.

China has adopted a multipronged approach to energy and environmental sustainability. For energy efficiency and some of the pollutant emissions, standards and financial incentives similar to those used elsewhere have worked well. They are complemented by campaigns to shut down smaller, less efficient, more highly polluting facilities and by including energy efficiency in performance evaluation criteria for responsible officials. There is ample room, however, for market-based prices and energy taxation to play a greater role.
Not all transfers of experience have been easy: it has proven difficult to replicate in China the success elsewhere of sulphur dioxide emissions trading, for instance. Even so, pilot schemes for carbon emissions trading are underway. A joint study drawing lessons from the European Union’s ETS shows that a national scheme for the power sector may be feasible in China (see IEA, 2012a). Alternatively, the case for a carbon tax is strong.

Resolving some of China’s knottiest issues – like reducing the dominance of coal in the energy system – depends on progress in development of market institutions. Quickly ramping up supplies of domestic and imported natural gas, which is a key goal of the 12th Five Year Plan, will not be feasible without a new pricing mechanism and evolution of the regulatory approach. A joint assessment of experience elsewhere with the types of challenges China now confronts identified several avenues for progress (see IEA, 2012b). While province-level tests of a gas price formula tied to oil products are already underway, a hub-pricing mechanism could be designed for Shanghai or Guangdong, where gas from multiple domestic and imported sources are flowing into networks. In the power sector, better regulation of pricing and dispatch could unlock advances in economic efficiency and environmental performance, while addressing equity and other key social issues (OECD, 2013).

China is actively pursuing the development of nuclear power as a low-carbon, baseload energy source. Of the 64 nuclear reactors under construction in the world, 26 are in China. Following the March 2011 Fukushima Daiichi nuclear accident, China’s National Nuclear Safety Administration launched comprehensive safety reviews of the country’s nuclear power plants, and higher safety standards were prescribed for all existing nuclear plants while new, safer designs will be used for the plants that have not yet been authorised. Steps were also taken to expand the human resources of the nuclear regulator and to reinforce its independence.

**SELECTED POLICY RECOMMENDATIONS**

- Increase excise duties on gasoline and other petroleum products to bring end-user prices closer to the norm of advanced economies. Complete reforms to deregulate prices to allow full pass-through of changes in international oil prices.

- Following the conclusion of pilot schemes for market-based natural gas pricing, extend arrangements nationally and move to full market-based pricing of coal. Reform prices in the power generation sector to better reflect costs. Avoid preferential electricity pricing for selected industrial users. Experiment with the separation of transmission and distribution with a view to moving towards price deregulation.

- Ensure effective implementation of CO2 pilot emissions trading schemes. Move towards national carbon pricing, preferably by implementing a carbon tax, depending on experiences with the pilot schemes.

- Focus on measures that directly discourage motor vehicle use, including congestion charges, rather than license plate rationing, as a way to reduce associated externalities.

- Until effective national CO2 pricing is established, and the pollution levy system strengthened, continue to provide assistance to low-carbon energy investment at a level consistent with carbon reduction in other areas and environmental goals. Avoid providing more support to one type of low-carbon energy source. Address supply bottlenecks with wind and solar energy and continue to promote improved investment coordination and grid connectivity.

- Continue to improve national standards for motor vehicles and fuels, especially regarding sulphur content, by extending high standards in leading cities across the country. Gradually phase in still stronger standards in line with technological advances.

- Establish targets for a broader range of environmental objectives, including additional air and water pollutants, based on scientific and economic analysis and continue to ensure that local governments are held responsible for achieving environmental objectives. Improve national data collection and dissemination of all major pollutants including CO2 and other greenhouse gases.

- Strengthen nuclear energy safety notably by increasing regulatory capacity to keep pace with rising nuclear energy investment, by updating the regulatory framework to provide clearer accountability and by ensuring regulatory authorities have direct access to the highest levels of government.
4. URBANISATION AND SUSTAINABLE DEVELOPMENT

Urbanisation has been and will remain a powerful driver of growth and social change in China and therefore features prominently in the 12th Five Year Plan. Cities have expanded mainly via migration away from rural areas. Labour has thus been reallocated out of agriculture into higher-productivity sectors, and urban concentration has delivered agglomeration benefits. In the process, living standards have improved rapidly: close to one quarter of China’s population now lives in areas where income per head is at least as high as in Chile, Mexico or Turkey (see OECD, 2013). At the same time, the departure of unproductive workers, plus remittances from migrants, have lifted per capita income in rural areas enough to narrow the rural-urban income gap over the past decade.

Urbanisation has been progressing rapidly but remains below similarly advanced economies

Source: OECD (2013). For comparator countries, all with populations over 15 million, year 2000 observations.

While urbanisation brings considerable benefits, it also entails costs (see OECD and CDRF, 2010). One relates to congestion: the development of public transport infrastructure, while impressive, has not kept up with urbanisation. Cities also regroup numerous industries and generate more trips than rural areas, with deleterious effects on air quality. However, larger cities need not be more polluted than smaller ones. In fact, compact cities can help reduce automobile dependence and allow for more efficient energy generation and use (see OECD, 2012f), while carbon pricing, congestion charges and regulation can help address environmental concerns (see also Section 3). Also, given many Chinese cities’ acute water supply problems, pricing (switching from abstraction to consumption) and technical measures (water metering, saving, and reuse) need to play a greater role.

Demand for living space has increased with GDP per capita, though less than in other East Asian countries, reflecting the massive migration towards cities in China and migrants’ lower demand for floor space. Demand for industrial space has also risen, not least with the proliferation of development zones and industrial parks. Concomitantly, population density has declined in a number of major urban areas – often from extremely high levels. Housing investment took off in the early 1990s, as land-use rights became marketable. The sale of these rights by specialised agencies set up by the local authorities amounted to over 7% of GDP in 2010, but only a small part of this represented revenue for the local authorities. The use of the remainder often remains opaque and compensation payments for expropriated land shown in official statistics far exceed the amounts received by farmers. In any event,
local governments need to guard against the rapid build-up of off-budget debt and to diversify their revenue streams, notably via higher taxation of property holdings (Wang and Herd, 2013).

Around 275 million rural migrants lived in urban areas in 2010 – one fifth of China’s total population. Most have no official registration (hukou) in their place of residence. Hence, they do not enjoy the same social entitlements as local hukou holders, nor do their families, even if the rules governing migrants’ access to schools, health care and other social services have begun to be relaxed in a number of cities (notably in Shanghai). Progress has been more modest as to access to senior secondary school and university, where registration remains a barrier. As regards health insurance, it is very difficult for migrant families to cover their children, whose health is markedly worse (see also Section 5).

Against this backdrop, the central government has pushed for hukou reform. Modalities vary enormously across cities, but overall the uptake seems to be rather limited, owing to the associated conditions. As a result few of those who have migrated to cities have been able to change their registration status from their place of origin to their new residence. Many would anyhow choose not to do so because a change involves sacrificing potentially valuable land and given that they move to another place if favourable opportunities arise. Thus, the best way forward would be to further delink the eligibility for urban public services from the hukou status, for example by granting resident migrants a residence permit with the same rights as those of local urban hukou holders (as done in Suzhou prefecture). The cost of such a policy is declining as access to education is broadening rapidly.

Continued urbanisation is held back by rigid central planning rules governing the conversion of designated cropland into construction land, which partly reflect food security concerns (see Section 6). This will likely put pressure on land prices in the coming years and encourage illegal construction. A major change in land ownership rules in rural areas is needed to allow farmers and their collectives to obtain land-use rights enabling them to change the use of their land to construction.

**SELECTED POLICY RECOMMENDATIONS**

- Implement and closely monitor the effectiveness of the measures taken to deal with the off-budget liabilities of local government financing platforms and to prevent their further build-up.
- Abandon the annual quota for the conversion of agricultural land and the national floor on agricultural land. Replace them by a locally-determined master plan that takes into account the need to lower housing prices at the fringes of larger cities.
- Further develop subway systems in large cities, and Bus Rapid Transit systems in smaller cities.
- Ensure that a much higher proportion of the development value of agricultural land accrues to farmers. Give greater legal certainty to the property development undertaken on collectively-owned “village” land located in urban or peri-urban areas.
- Make the expenditures funded by land sales more transparent, both as far as the cost of redevelopment is concerned and with respect to the final destination of compensation payments.
- Extend the land-use rights of farmers to allow – subject to zoning and planning requirements – the sale, renting and mortgaging of their rights, which should be lengthened to 70 years to allow the development of larger farms.
- Switch from taxing land transactions to taxing land possession, while keeping the overall property tax burden broadly unchanged.
- Disconnect the provision of local services from the possession of a local hukou.
- Increase the subsidies to private schools that provide education to migrant children. Allow migrants to enroll in high schools in their place of residence instead of their place of registration.
- Allow the university entrance examination to be taken in the place of residence and abolish local quotas for entrance to university.
5. POPULATION AND AGEING

China’s population, which stood at 1354 million at the end of 2012, is still increasing but may peak in the course of the 2020s and is bound to age rapidly over the coming decades, owing to low fertility and rising life expectancy. Last year marked a demographic turning point in that the working-age population defined as the 15-59 year olds started to decline. The old-age dependency ratio (the elderly divided by the 15-64 year olds) is set to double over the next decade or so, and to rise further until around 2080, according to the most recent United Nations population projections. These demographic trends have momentous economic and social implications, notably as regards pension and health care systems. In fact, public spending in these areas already began to rise rapidly a few years ago, catching up and now exceeding the levels seen in other emerging and advanced economies. Under the aegis of the 12th Five Year Plan – whose objectives include major improvements in social safety nets, notably in rural areas – public social spending is projected to continue to rise faster than GDP.

Social spending by the national government has grown sharply in China

Source: OECD (2013). Most recent available comparable data for the other countries.

In the face of an ageing and increasingly urban population, many initiatives have been taken in recent years to reform pension arrangements in China (see Herd et al., 2010a). These are very segmented, with different regimes for the rural, urban and public sectors, as well as within each of them. In addition, a complementary private pension system is emerging, though it is still small. The segmentation of the basic pension system raises issues of efficiency, in that labour mobility is impeded, and fairness, to the extent work experience in one sector is not recognised for pension purposes after the individual moves to another sector. Some of the recent reforms have in fact added to the existing fragmentation, while other reforms, notably those providing for greater geographical pooling, have only partly been implemented so far. Another challenge is that under current rules, while retirement age is very low, effective replacement rates are fairly modest and are projected to decline further (see OECD, 2012c). This may be politically difficult to sustain in a rapidly ageing society, where the elderly live less and less with their descendants. A third challenge pertains to the distribution of the fiscal costs: with an
ageing countryside, the present arrangements imply that much of the additional burden would be shouldered at sub-national levels by local governments with insufficient resources.

Public spending on health care has increased considerably in recent years, not least as a result of reforms to expand health insurance coverage, which exceeds 95% of the population by now, and of progress in reducing the share of privately-financed health spending including out-of-pocket payments (see OECD, 2012b). Even so, a number of challenges remain to improve the efficiency and equity of China’s health system and to keep the foreseeable increases in health outlays under control (see Herd et al., 2010b). Shortcomings are evident notably with respect to non-communicable diseases, mental health, diabetes, and various risk factors, including tobacco, poor diets and contaminated food, counterfeit drugs, and environmental threats (see Section 3). The number of doctors has risen fast but incumbent doctors are often insufficiently qualified. Attracting skilled doctors in primary care is difficult due to low salaries and poor career prospects. Hospitals have been absorbing an unduly large share of resources. Hospital budgets and their doctors’ pay are partly based on the pharmaceuticals they prescribe and sell, whose prices are regulated and involve considerable cross-subsidisation. Catastrophic but also chronic illnesses continue to push people into poverty, especially in the poorer regions, given limited risk pooling at the national level. A new set of ambitious reforms was announced in 2009 and has begun to be implemented, aiming at universal, safe, affordable and effective basic health care by 2020. They involve investment in medical infrastructure, generalising coverage, more focus on prevention, a new essential drugs system and far-reaching reorganisation, including hospital reform.

**SELECTED POLICY RECOMMENDATIONS**

- Further relax the one-child policy, notably in urban areas.
- Lift the retirement age incrementally, possibly in line with rising life expectancy, as is the case in some OECD countries.
- Gradually consolidate the various pension regimes. Even if different schemes for different categories of workers (employees and self-employed notably) are to persist, each should be unified over time, first provincially and then nationally, phasing out the distinction between rural and urban residents.
- Shift more of the cost of rural pensions to the central government.
- Harmonise benefits across different health insurance schemes while promoting administrative efficiency, including by expanding the use of electronic health records.
- Build on the ongoing expansion of urban community health centres to make sure primary care plays a greater role, notably in prevention and in treating chronic diseases that don’t require a hospital visit.
- Push ahead with the reforms of hospital management to reduce unnecessary admissions and ensure a greater focus on service quality but also to improve accounting. Change prescription patterns and pay systems within hospitals that link doctors’ income to prescribing activity.
- Ensure adequate (re)training and pay to encourage health care workers to choose career paths that match social needs.
- Improve migrants’ pension and health care coverage and the portability of social insurance in general.
- Develop an integrated policy framework for aged and long-term care and encourage local pilots.
6. FOOD SECURITY

China has made major progress on food security: the number of undernourished fell from 254 million in 1990-92 to 158 million in 2010, 73% of the worldwide drop. In the process, the incidence of undernourishment almost halved, from 21.4% to 11.5%. Other indicators monitored by the FAO, such as the proportion of children stunted, underweight or affected by wasting, fell by 50-70%. This progress has been achieved through better access to food and improved food availability. Indeed, in real per capita terms, urban incomes rose more than five-fold and rural incomes more than three-fold over the past two decades. As a result, poverty incidence at the World Bank’s poverty line of $1.25 per person per day fell from 60% to about 13%. Meanwhile, food availability per person doubled and protein supply per person was up by more than one-third. Food insecurity is increasingly concentrated among the poorest in rural areas, often members of small-scale farm households.

Food security has improved considerably in China

Even so, the total number of undernourished in China remains large, at almost one-fifth of the world’s total. Moreover, almost 20% of the population still suffers from “food inadequacy” (which includes not only the chronically undernourished, but also those who may not always have access to sufficient food). As well, the availability of proteins of animal origin per capita remains relatively low. At the same time, China is facing a growing problem of resource scarcity, in particular of water and arable land. With higher incomes, diets will continue to improve, and demand for water-intensive food, such as meat and dairy, will increase. The government has fixed a red line of 120 million ha of arable land as a minimum to secure self-sufficiency in grain production, but this objective competes with growing demands for land for urbanisation and infrastructure development. Land productivity in China is very high, but at the cost of high input use, in particular fertilisers. Agriculture has thus become one of the most-water polluting sectors. Further increases in yields will demand new varieties of seeds, new technologies and
more equal access to them across regions and various types of farms. Easing the rules governing land use and transfer will provide considerable help too, by facilitating the consolidation of scattered parcels (OECD, 2013).

Against this backdrop, China’s major policy objectives related to agriculture, farmers and the countryside include: raising grain production capacity to sustain 95% self-sufficiency; boosting rural household income; improving food safety; enhancing environmental protection; increasing agricultural competitiveness; and improving social and technical infrastructure in rural areas. The 12th Five Year Plan (2011-15) aims at rebalancing growth, which has been heavily driven by exports and investment in urban and coastal areas, by improving rural incomes and welfare (OECD, 2011).

OECD Producer Support Estimates show, however, that China’s policies to boost agricultural production and farmer incomes entail growing costs for consumers and taxpayers. The amount of transfers from consumers (when domestic prices for agricultural commodities are set above international levels) has been trending up since the late 1990s though it has fluctuated widely, reflecting volatile international markets. Budgetary transfers for producers have also increased, albeit more steadily. They are provided via input subsidies for agricultural chemicals, in particular fertilisers, improved seeds and agricultural machinery and, more and more, through direct payments at a flat rate per unit of land. The support provided through these two channels to gross farm revenue has risen rapidly, approaching the OECD average. The total cost of support provided to China’s agriculture measured by the OECD’s Total Support Estimate stood at 2.3% of GDP in 2008-10, far above the 0.9% OECD average and higher than in Russia, Brazil, South Africa and Ukraine (OECD, 2011).

**Selected Policy Recommendations**

- Focus on access to food through economy-wide policies. Further step up the efforts to improve rural infrastructure and access to basic public services such as education, health care, pension systems and social security for the rural areas, where the vast majority of the poor live.

- Complete the conversion of input subsidies into direct payments and, ultimately, into strategic public investments. Gradually replace input subsidies by direct payments paid at a flat rate per unit of land, with no requirement to purchase a given input or to produce a specific commodity. This would help decrease interference with producers’ decisions and enhance farmers’ incomes more effectively, thus easing their access to food. Over time, consider shifting from decoupled direct payments to strategic investments.

- Improve agricultural innovation systems. To ease resource constraints and improve long-term productivity, further strengthen research and development, technology adoption and transfer, education, and farm training and advisory services.

- Diversify sources of food through stronger integration of domestic and international agro-food markets. With large monetary reserves and continued significant current account surpluses, China can buy food on international markets. Progressively narrow the scope of grains covered by the 95% self-sufficiency objective. For example, while maize used for human consumption could be still covered, maize used for industrial processing and for feed could be partly excluded. Increased maize imports would ease the shift of land to other, more productive uses, including for urbanisation and infrastructure development.

- Enhance the development of the land market. Land conversion remains a major source of social conflicts in rural areas. To ease such conflicts, land conversion from agricultural to other uses should be based on market prices for land, which would allow farmers to accumulate initial capital to establish a non-agricultural activity in rural areas or to facilitate their migration to urban areas.
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