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OVERVIEW



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Executive summary

- *Main findings*
- *Key recommendations*

Main findings

Following three decades of unprecedented growth underpinned by deep structural reforms, China continues to catch up with the OECD economies, albeit more gradually. The working-age population is declining and the relaxation of the one-child policy will not slow ageing much. Growth will remain driven largely by investment but will require a reacceleration in productivity. China's transition is multifaceted – from rural to urban, public to private, investment to consumption and manufacturing to services – and will require unwavering commitment to structural reforms. The Third Plenum in late 2013 set out the associated roadmap, ahead of the start of the 13th Five-Year Plan (2016-20).

Reforms for more sustainable growth. Imbalances in the property and some heavy industry sectors have started to unwind and while risks remain, they appear to be manageable. The property market price correction is likely to continue until the inventory overhang is worked off and more affordable prices broaden the group of home-buyers. State-owned enterprises enjoy implicit government guarantees and easy access to cheap credit, which make it hard to reduce excess capacity and deter the construction of new overcapacity. Rapid bank and non-bank credit growth has fuelled financial stability concerns. Maturity mismatches on- and off-balance sheet imply liquidity risks. Sub-national government debt entails fiscal risks, even though land reserves and other assets provide a buffer.

Fostering inclusive urbanisation and services as drivers of growth. Urbanisation has taken place on a massive scale but still has some way to go in China. The foreseen migration of 100 million rural residents to cities by 2020, the extension of public services and social security to 100 million migrants already living in cities and the renovation of shanty-town housing for another 100 million urban citizens, will boost economy-wide growth and productivity. The share of services in value added has now overtaken that of manufacturing and will rise further as China becomes richer and urbanisation proceeds. However, productivity in the service sector is held down by the fact that the playing field is not level for all firms.

Providing the right skills to all. Growth will increasingly depend on the quality of human capital and innovation. The knowledge taught and skills nurtured at school do not sufficiently match labour market needs. Workplace training-based vocational education arrangements are woefully inadequate. Moreover, while the resources devoted to research increase rapidly, innovations are not being used to the full. Spending on education is comparable to that in some other BRIICS economies, but lower than in OECD countries. Average starting salaries of teachers do not compare favourably with other professions and earning prospects are bleak. Education inequalities are stark, stemming first and foremost from the urban-rural divide and secondly from social stratification.

Boosting agricultural productivity and enabling further rural development. Living standards in rural China remain far below those in urban areas. In the agricultural sector, average farm size is very small, limiting the potential for mechanisation and economies of scale in production. Many smallholder farmers have difficulty accessing finance and there is scope for improvements in farmer education and technical assistance. China's arable land per capita is low relative to other countries and the sustainability of farming is threatened by the overuse of chemical fertilisers, poor water efficiency and degradation of grassland. Rural residents aspiring to move to cities continue to face policy impediments. For those who remain in rural areas, social welfare coverage is incomplete and health services lag significantly behind those in urban China.

Key recommendations

Three overarching priorities to keep up and improve the quality of growth in China are:

- Strengthen market mechanisms and ensure adherence to the rule of law.
- Enhance skill provision from early childhood through to adult learning.
- Grant farmers greater land-use rights, and make them more enforceable and easier to trade.

Reforms for more sustainable growth

- Continue to pursue stated emission targets, including by implementing a national carbon emission trading scheme, phasing out subsidies to carbon-intensive producers and boosting investment in renewables.
- Phase out implicit government guarantees enjoyed by state-owned enterprises, so that all firms compete on a level playing field with regard to finance, regulation, taxation and public procurement.
- Continue to gradually liberalise deposit interest rates while enhancing financial stability through measures such as provisioning for actual bad loan exposures, including off-balance sheet loans.
- Increase fiscal transparency and sustainability including by permanently prohibiting local government investment vehicles from taking on new debt.

Fostering urbanisation and services as drivers of growth

- Extend public service provision and social security coverage to all migrant workers. Make social security benefits portable across the country.
- Reduce state ownership in commercially-oriented service industries such as retailing, hotels, restaurants and construction. Open up more sectors to private investment.

Providing the right skills to all

- Boost public spending on education, including by increasing teacher compensation to improve education quality. Ensure equal opportunities for disadvantaged children.
- Establish a countrywide workplace training-based vocational education system; enhance career guidance and better disseminate information on jobs.
- Evaluate universities and university staff more on the quality of academic output. Promote research autonomy, merit-based promotion and stronger intellectual property rights to attract and retain world-class researchers.
- Open up public schools to all children of internal migrants, or, where such schools are not available, provide vouchers to enable them to attend private schools.

Boosting agricultural productivity and enabling further rural development

- Give certificates to all rural households detailing their land-use rights and improve enforceability.
- Establish exchange platforms for the transfer of operation rights for rural farmland and collectively-owned construction land.
- Implement and enforce unit pricing of water for agricultural users and better water allocation mechanisms to encourage demand management and investment in water-saving technology.
- Expand the coverage of rural social welfare payments.

Assessment and recommendations

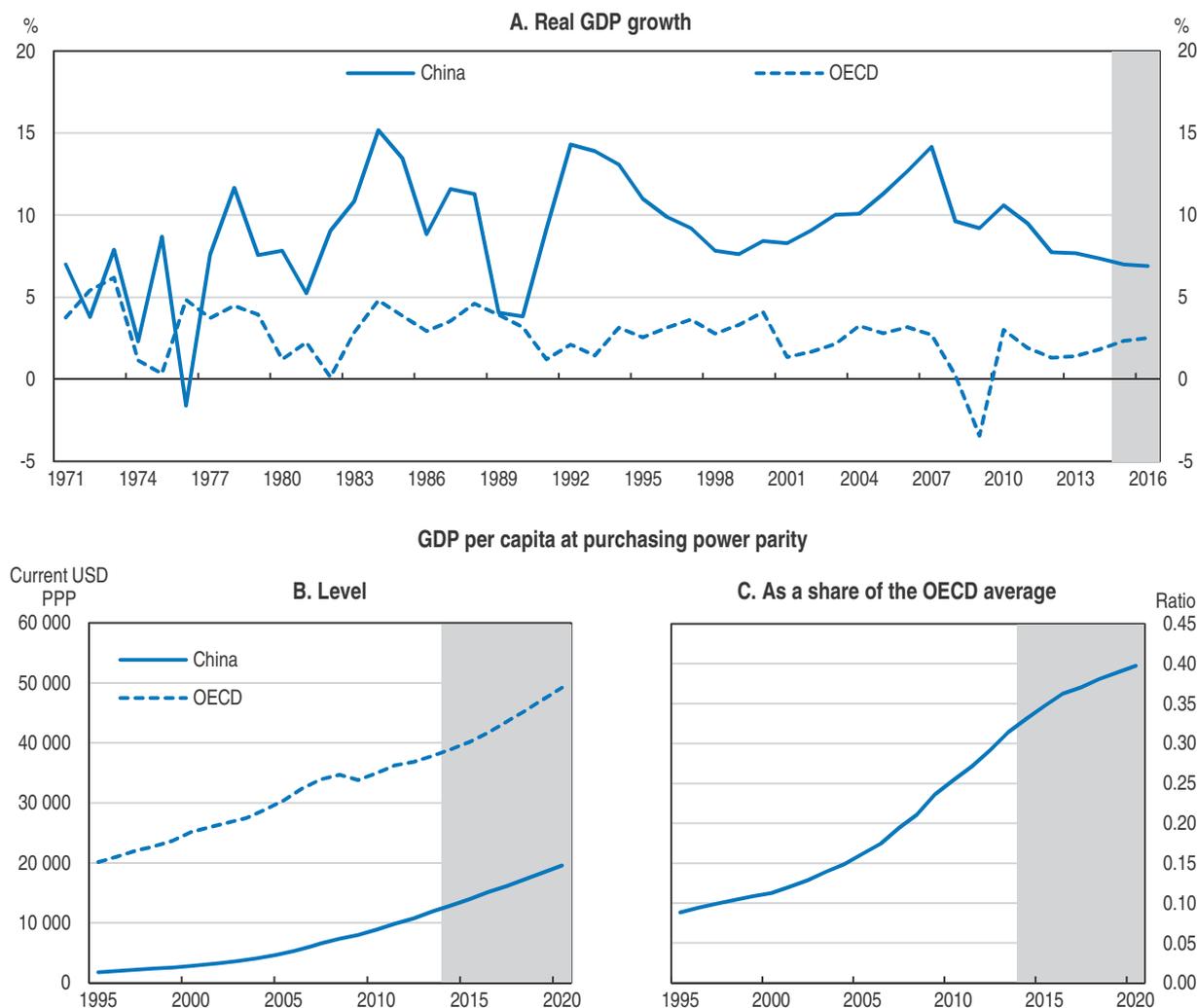
- *Avoiding a sharp slowdown*
- *Paving the way for sustainable and inclusive growth over the longer run*

Following three decades of extraordinary economic development, China is shifting to a lower but still rapid and likely more sustainable growth path – the “New Normal” (Figure 1). It is projected to continue to catch up with the most advanced economies, albeit more gradually, and seems to be on course to come close to achieving its goal of doubling GDP per capita between 2010 and 2020, by which time China could be considered a “moderately prosperous society”. In this context, the authorities are willing to forgo some growth in the short run to ensure greater stability over the longer run, with a wider spread of the benefits of growth across society and less stress on a highly polluted environment.

The reform agenda set out at the Third Plenum in November 2013 emphasises strengthening market mechanisms and promoting innovation (Annex A1), and the Fourth Plenum the importance of the rule of law. Implementation of the envisaged reforms will help overcome existing economic imbalances, notably in the housing market and in heavy industry. Over the longer run, it will make growth more resilient, more inclusive and greener. It will also limit the risk of an abrupt deceleration, which would have major negative spillover effects on the global economy. This report highlights some of the key challenges faced by China and proposes policy measures to promote more sustainable and inclusive growth:

- An orderly unwinding of imbalances is underway, risks are manageable and an abrupt slowdown can be avoided. The price correction in the housing market could bring down vacancy rates by making housing more affordable. Restructuring in industries plagued by excess capacity can only be successful if implicit guarantees to state-owned enterprises (SOEs) are removed so that all firms compete on a level playing field with regard to finance, regulation, taxation and public procurement. Strengthening market mechanisms would make for a more efficient allocation of capital and for greener growth.
- Urbanisation and service sector development will be key drivers of growth. The migration of 100 million rural residents to cities by 2020, the extension of public services and social security to 100 million migrants already living in cities and the renovation of shanty-town housing for another 100 million urban citizens, will boost economy-wide growth and productivity. Since 2013, services have accounted for a larger share of GDP than manufacturing. More sectors, notably in services, should open up to private investment to boost productivity.
- Reforms of the education and training system, from early childhood through to adult learning, should continue so as to provide the right skills to all and meet the demands of a rapidly transforming economy. Promoting equal opportunities will help build the human capital needed for a knowledge-based economy.
- Land resources need to be reallocated within the agricultural sector to boost productivity and rural incomes. At the same time, shifts to off-farm employment should be facilitated and rural social welfare systems need to provide broader coverage for rural households.
- Rural land efficiency should be raised by market-based pricing of water and fertiliser and improved technical education of farmers.

Figure 1. **Trend growth is declining but still high, with GDP per capita set to almost double during the 2010s**



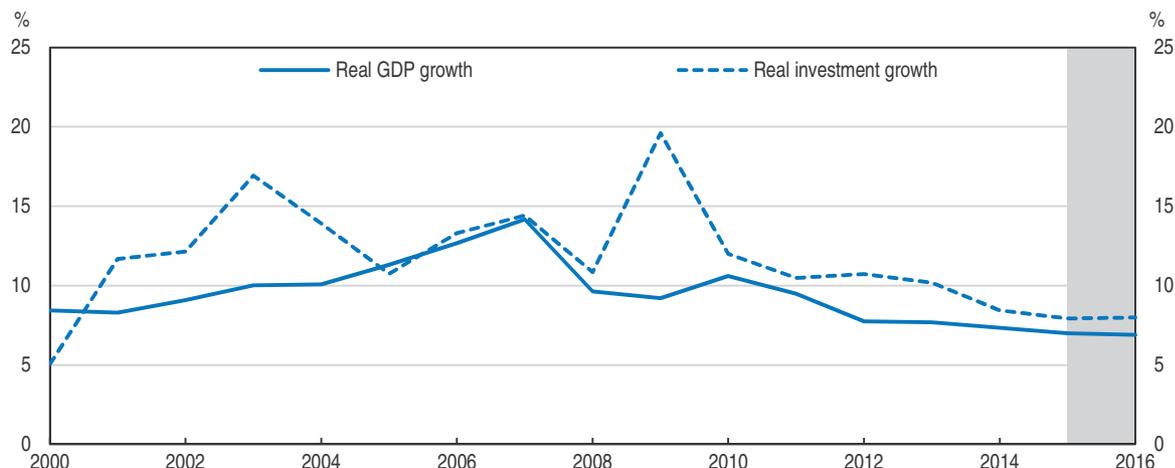
Note: The shaded areas indicate forecasts.

Source: World Bank World Development Indicators database; OECD Economic Outlook 96 Database, OECD Long-term Baseline projections 96, National Bureau of Statistics.

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Avoiding a sharp slowdown

China's GDP growth reached 7.4% in 2014, close to the target of around 7.5%, even though for the first time in years, the target was not exceeded. Still, growth has been slowing, as has investment (Figure 2). This has partly reflected the lagged impact of earlier measures to restrain credit and the housing market boom. It may also signal a more deep-seated deceleration following an exceptionally long spell of very rapid growth (Pritchett and Summers, 2014). The pace of structural reforms will continue to influence short-term outcomes, the challenge being to keep up sufficient momentum to reduce imbalances while avoiding overly abrupt adjustments that might trigger a crisis. Another major policy target is job creation. Despite slower growth, around 13 million urban jobs were created both in 2013 and in 2014. This was helped by the ongoing rise in the share in value added of the relatively labour-intensive services sector.

Figure 2. **Growth has slowed as investment has weakened**

Note: Investment is gross fixed capital formation. The shaded area indicates forecasts. 2014 figures for investment are also forecasts.
Source: OECD Economic Outlook 96 Database.

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Growth is projected to remain moderate in 2015-16 by recent historical standards (Table 1), although still high in international comparison. It is set to edge down to the official target of “around” 7% in 2015 as imbalances in the property and some heavy industry sectors unwind. Non-food inflation is likely to remain subdued as prices of industrial products and inputs continue to decline. With relatively weak domestic demand and export prospects, the current account surplus is projected to widen to 2.5% of GDP by 2016. China is benefitting considerably from the sharp fall in the prices of oil, iron ore and other imported commodities in 2014. Indeed, the State Information Centre estimates that every 10% fall in the price of oil and four other commodities has added almost 0.2 percentage point to GDP and subtracted 0.3 and 0.6 percentage point from consumer and producer price inflation, respectively. In a similar vein, the People’s Bank of China’s computable general equilibrium model suggests that a 10% fall in oil prices in 2015 would raise GDP by just over 0.1% while lowering the CPI by around 0.25 percentage point.

Risks are mostly on the downside, and a sharper-than-projected slowdown of the Chinese economy would have global spillovers both directly through trade and investment channels but possibly also via confidence effects. As regards growth in China, investment might slow down more than foreseen, for example if stimulus measures fail to counterbalance the effects of the property market correction, shrinking excess capacity and the anti-corruption campaign. Consumption may also surprise on the downside if a cooling property market were to damp housing-related spending more than projected, or if housing prices were to fall sharply. A stronger US dollar may adversely impact export competitiveness as long as the renminbi remains closely linked to it. Another downside risk relates to potential disorderly defaults among corporate issuers, in particular in sectors with excess capacity, or of trust products and local government investment vehicles owing to the real estate market correction. However, a stronger-than-expected global recovery would boost exports, investment and growth. So would further declines in oil and other commodity prices.

Table 1. **Macroeconomic indicators and projections**

	2008	2009	2010	2011	2012	2013	2014	2015	2016
	% change								
Real GDP	9.6	9.2	10.4	9.3	7.7	7.7	7.4	7.0	6.9
Exports of goods and services ¹	8.5	-10.1	27.6	9.0	5.3	8.6	5.4	5.5	6.0
Imports of goods and services ¹	4.0	4.5	20.6	10.2	6.3	10.7	7.1	7.5	5.9
GDP deflator	7.8	-0.6	6.6	7.8	4.8	2.2	0.8	0.9	1.3
Consumer price index	5.9	-0.7	3.2	5.5	2.6	2.6	2.1	1.8	2.0
Terms of trade	-5.5	8.8	-9.6	-3.4	2.8	1.3	2.7	2.6	0.2
	% of GDP								
Fiscal balance									
Overall ²	1.0	-0.5	0.1	0.5	0.0	-0.3	-0.5	-1.2	-1.5
Headline ³	-0.1	-2.8	-2.5	-1.8	-1.5	-2.0	-1.8	-2.3	
Current account balance	9.3	4.9	4.0	1.9	2.5	1.9	2.1	2.3	2.5
<i>Memorandum items:</i>									
	Billion USD								
Foreign exchange reserves, end-year	1 946	2 399	2 847	3 181	3 312	3 821	3 843		
	% change								
Housing prices deflated by the CPI ⁴	6.5	1.5	9.8	4.2	-0.7	5.9	2.6		
Total employment	0.3	0.3	0.4	0.4	0.4	0.4	0.4		
Urban employment	3.7	3.8	4.1	3.5	3.3	3.1	2.8		
	Level								
Nationwide Gini coefficient for household disposable income	0.49	0.49	0.48	0.48	0.47	0.47	0.47		

Notes: 2015-16 figures are OECD forecasts.

1. OECD estimates.

2. The overall fiscal balance encompasses the balances of all four budget accounts (general account, government managed funds, social security funds and the state-owned capital management account).

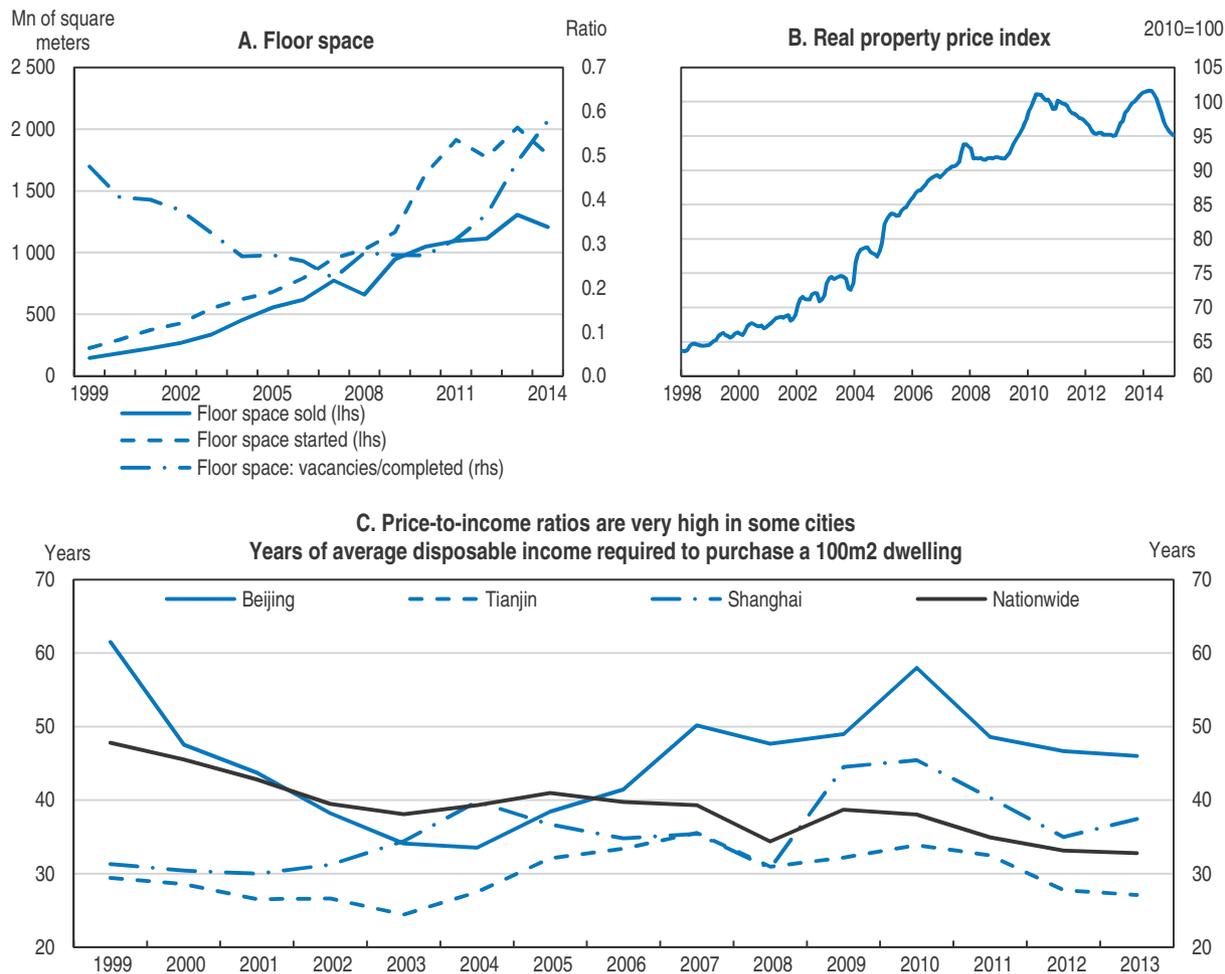
3. The headline fiscal balance is the official balance defined as the difference between the three items i) general budget revenue, ii) revenue from the central stabilisation fund and iii) sub-national budget adjustment on the revenue side and the three items iv) general budget spending, v) replenishment of the central stabilisation fund and vi) repayment of principal on sub-national debt on the spending side. The 2015 figure is the official deficit target.

4. The housing prices are estimated using the property price index of 70 cities for 2008-10, then the simple average of the property price index of newly constructed residential housing of 70 cities for 2011-14.

Source: OECD forecasts and estimates based on the OECD *Economic Outlook 96* and CEIC databases.

The property market is undergoing a correction

An unwinding of property market imbalances is underway and the measures taken to address local excesses should be sufficient to keep systemic risk at bay. The pace of real estate development has been frantic, not least in smaller cities: a 2014 survey by the Development Research Centre for City and Small Town Reform under the National Development and Reform Commission (NDRC) shows that 90% of the 191 surveyed prefecture-level cities are building new districts, which are up to almost eight times as large as the existing urban area. Policy measures have been taken to restrain demand and overall real estate investment – which accounts for about 19% of total fixed investment – has slowed. So have sales and investment in upstream industries such as cement, steel, flat glass and construction materials. Concomitantly, property-related lending, which makes up around one fifth of new loans, has slackened. Falling sales volumes and high inventories are driving property prices down in small cities, although demand has remained robust in megacities. Vacancy rates are increasing (Figure 3).

Figure 3. **The property market is cooling**

Note: Panel B: Housing prices are estimated using the property price index of 70 cities for 1998-10, and the simple average of the property price index of newly constructed residential housing of 70 cities from 2011 onwards. The CPI is used as a deflator.

Source: CEIC database.

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More recently, measures have been taken to limit the speed of the housing market correction. Home purchase restrictions are gradually being abolished: of the 46 cities that introduced them, only a handful continue the practice. Also, minimum mortgage lending rates were cut and conditions for second-house buyers became less restrictive.

However, the price correction ought to continue until the inventory overhang is worked off. More affordable prices will broaden the group of potential home-buyers and bring demand and supply into balance. In the process, some developers will face liquidity or even solvency problems, with knock-on effects on the financial sector. Slower property sales also reduce land development, and hence sub-national government revenues. A faster-than- envisaged property market correction could lead to sporadic defaults, but the stringent regulations governing housing investment offer protection against systemic risk. Households are not heavily indebted at below a third of GDP and the rapid rise in indebtedness is related to the pent-up demand stemming from the desire to own a home, which became possible only in the 1990s. Loan-to-value ratios are modest at 70% for

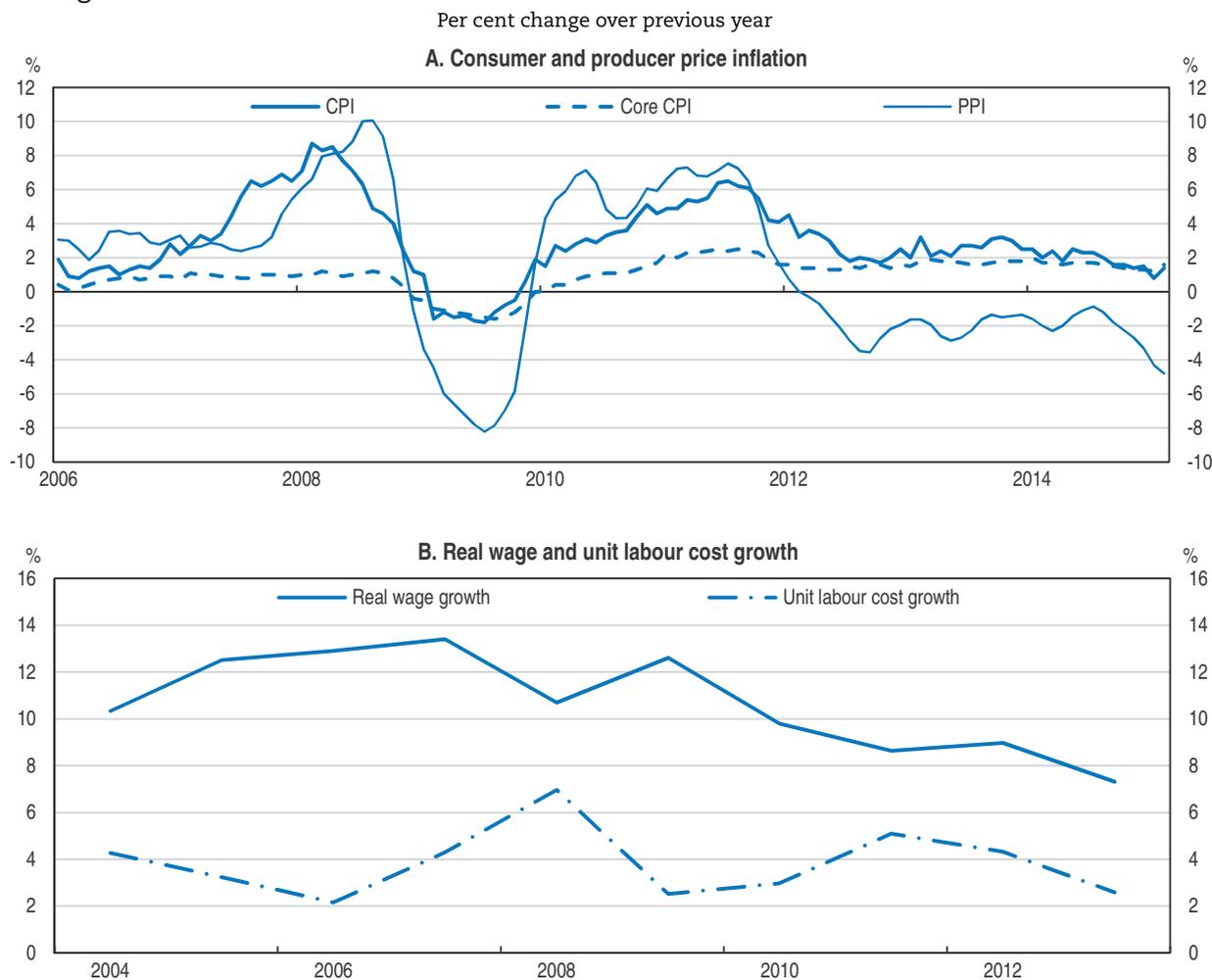
first-time home-buyers and housing cannot be collateralised for consumption purposes. Falling housing prices are also unlikely to lead to fire sales as housing sales are subject to income taxes within the first five years. Banking sector exposure is within a quarter of total loans and still strong wage growth keeps credit risk low. Developers may experience refinancing problems and smaller ones may default, which may trigger spillovers to financial institutions in some regions. Liquidity problems and increasing risk of default may lead to consolidation in the sector, where the biggest players record high growth notwithstanding falling sales volumes and values country-wide.

A number of industries suffer from excess capacity

Excess capacity has been plaguing various industrial sectors, weighing on profitability and on capital spending in steel, cement, aluminium, flat glass and, downstream, electrical and railway equipment. Firms, including many SOEs, are driving down prices to secure market share at home and abroad. Falling prices of industrial products and inputs have kept core inflation subdued (Figure 4), notwithstanding labour shortages and resulting strong wage growth.

Rationalisation of existing capacity is warranted given fierce price competition, environmental damage and inefficiencies in many industries. The NDRC has long called for avoiding “blind” investment and redundant construction in steel mills, copper smelters and electrolytic aluminium. In 2013, the State Council took action more directly issuing guidelines to close down or merge high-cost production facilities across the country so as to reap economies of scale and restore profitability. Fewer steel mills now operate in Hebei and several aluminium smelters have been selected for closure in Guangxi and Guizhou. Rationalisation will help check greenhouse gas emissions, which tripled in two decades to reach 28% of global emissions in 2013 (Global Carbon Project, 2014). Smelters are also a significant source of air pollution. Estimates suggest that outdoor air pollution caused 1.3 million premature deaths in 2010, highlighting the pressing need to continue curbing pollution-intensive industry (OECD, 2014a). However, even as sizeable capacity is being phased out in some areas, massive new capacity is being built in others, for instance in the case of aluminium smelters in the four coal-rich Western provinces of Gansu, Ningxia, Qinghai and Xinjiang. While the relocation of energy-intensive industries is based on a better exploitation of comparative advantages and new facilities are typically more modern and cleaner, their proliferation works against the efforts to reduce excess capacity.

A more level playing field for enterprises would make for a more market-based rationalisation of excess capacity. An effective corporate governance system – that affects the environment for access to capital, the allocation of resources between competing ends and the monitoring of investments once they are in place – is essential to China’s ambitions to boost the role of the capital market in optimising resource allocation. Stricter enforcement of environmental standards across the board would halt excessive and environmentally destructive competition among private firms. Private firms reportedly pollute more than their state-owned counterparts, in particular in the cement, steel and flat glass industries. This partly reflects greater investment in environmental protection by state-owned firms in recent years (Zhang, 2013). In contrast, private firms economised on such spending to cut costs and remain competitive. A gradual removal of subsidies and harder budget constraints for SOEs would be conducive to a market-driven and orderly rationalisation of excess capacity and deter building new overcapacity. Diversifying SOE ownership and board composition would introduce more checks and balances and

Figure 4. **Inflation has been subdued but unit labour costs have continued to increase**

Note: Core CPI excludes food and energy. Real wages are for urban employees. Unit labour costs are for the overall economy.
Source: National Bureau of Statistics.

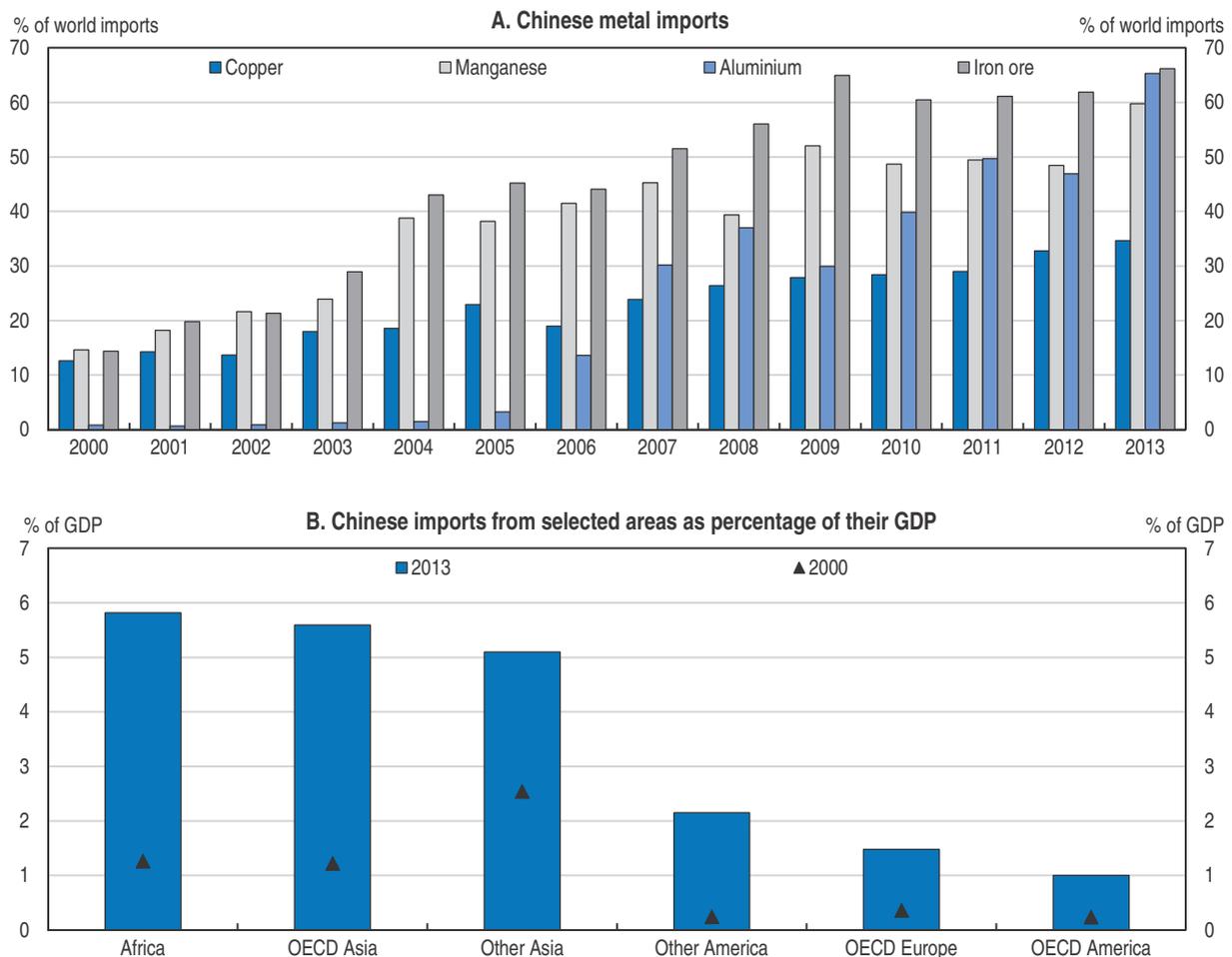
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encourage market-based decisions. Professional managers at SOEs with incentive schemes comparable to those in the private sector would likely enhance efficiency and boost profitability (OECD, 2009). Subjecting SOEs to the same rate-of-return and dividend policies as private firms could also help avoid building up excess capacity.

China's slowdown affects commodity-producing economies

The slowdown of the Chinese economy has contributed to the end of the so-called "commodity super cycle". Adjustment in heavy industries implies lower imports of iron ore, coking coal, manganese ore and bauxite, affecting a range of countries as diverse as Australia, Brazil, Gabon, Myanmar and South Africa. However, Chinese demand for iron ore, which accounts for two thirds of the global market, will be held up somewhat by new railway construction. China also imports over 60% of the world production of manganese ore (Figure 5), which is used in steel making. China further imports nearly half of the world's copper output, but the announced huge investment in China's national grid is expected to support Chinese demand.

Figure 5. China's commodity appetite has driven many countries' exports



Source: UN Comtrade database.

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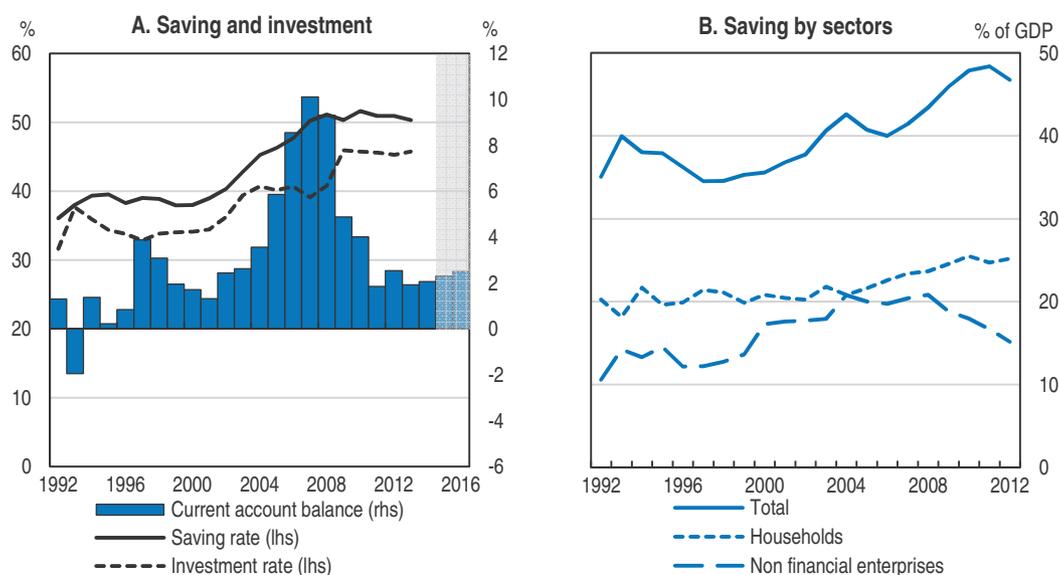
Slackening demand for minerals will also affect energy imports as metal smelting and pressing, chemicals and non-metal mineral manufacturing together account for a third of China's electricity consumption. Thermal coal exporters such as Australia, Indonesia or South Africa will likely be affected as high energy-intensity industries close down old facilities, build new ones closer to energy-rich areas inland or abroad and as higher environmental standards related to ash and sulphur content take effect. They will also be impacted by the recently imposed tariffs on coal imports and by the gradual rise in the share of nuclear and renewable energy.

While coal continues to dominate China's energy mix, investment in cleaner sources of energy has risen steeply. In 2013, China invested more in renewable energy than all European countries combined and it has committed to increase the non-fossil fuel share of energy to 20% by 2030 (Frankfurt School-UNEP Centre, 2014). This comes amid broader commitments to reduce CO₂ emissions per unit of GDP by 40-45% between 2005 and 2020 and for total emissions to peak by around 2030.

Progress with rebalancing is mixed

The rebalancing of growth from investment to consumption has been a gradual process. The national saving rate has fallen by around 1½ percentage points since its 2010 peak (Figure 6.A). Household saving remained stable at around 25% of GDP but corporate saving declined from around 20% at the start of the global crisis to around 15% by 2012 (Figure 6.B). The share of consumption is expected to rise as the population ages and healthcare and elderly care spending increase. Rising incomes and improvements in the social safety net should work in the same direction. So may the relaxation of the one-child

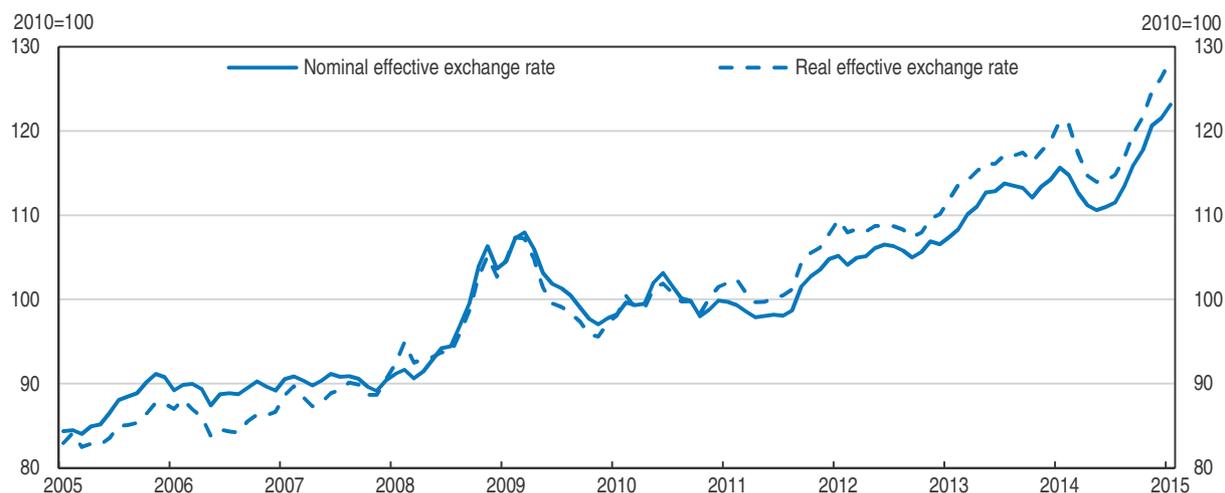
Figure 6. **The current account surplus has shrunk considerably**



Note: The shaded area indicates forecasts. National saving in Panel A is calculated as the difference between GDP and consumption in the World Bank WDI database while in Panel B it comes from the Flow-of-Funds accounts compiled by the National Bureau of Statistics.
Source: CEIC database, World Bank World Development Indicators database and for the forecasts OECD Economic Outlook 96 Database.

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Figure 7. **The effective exchange rate has been appreciating**



Note: Broad effective exchange rate indices, based on 61 partner countries; the real effective exchange rate is computed using the consumer price index as a deflator.

Source: Bank for International Settlements.

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policy (see below). Offsetting forces include the anti-corruption campaign and restrictions on public consumption.

While the saving rate declined, the investment rate held steady at very high levels. As a result, the current account surplus fell to long-time lows, at around 2% of GDP (Figure 6.A). In 2014, decelerating investment and sluggish consumption, partly as a result of reduced housing-related spending, held back imports. Export growth also weakened even as the effective exchange rate underwent a sizeable swing (Figure 7). Over the next two years, the current account surplus is set to hover in the range of 2.3-2.5% of GDP.

Monetary policy is supporting an orderly slowdown and is gradually becoming more market-based

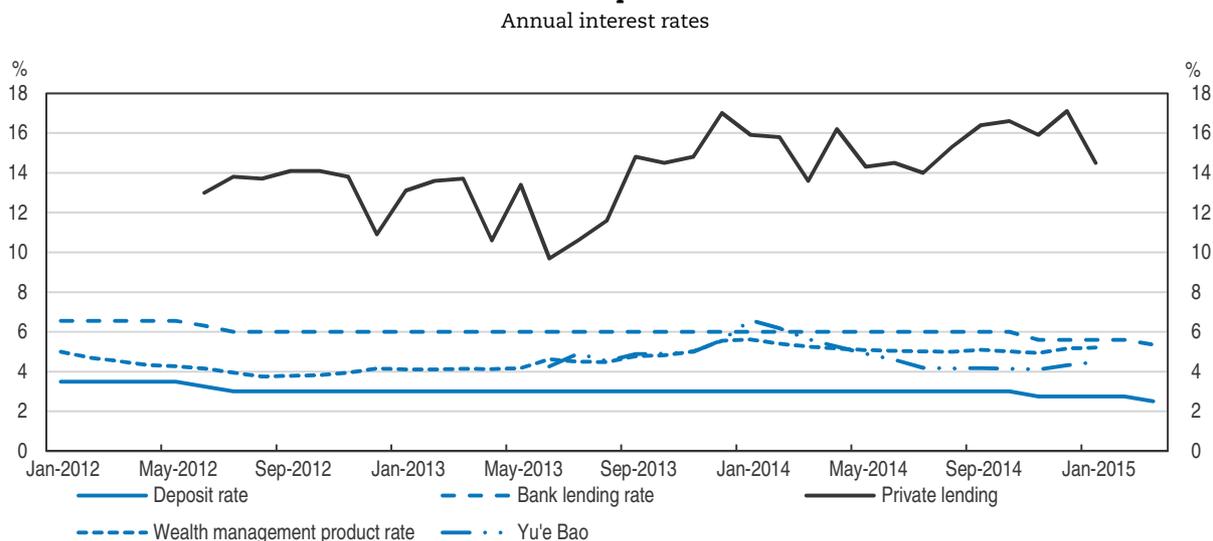
Monetary policy has appropriately been supporting economic activity as growth has slowed, using a variety of levers. The People's Bank of China (PBoC) has cut reserve requirement ratios in steps since 2014, selectively for some categories of lenders or borrowers (notably small businesses and rural areas) and across the board in early 2015. It also reduced the policy rate for small businesses and subsequently for all borrowers. Deposit interest rates were also cut sequentially and the upward flexibility of the deposit rate increased. Those measures had only limited impact, however, given banks' general reluctance to lend to small businesses, which are considered riskier. Small firms' access to credit would be enhanced if they were subject to more rigorous reporting and disclosure requirements. The central bank also introduced pledged supplementary lending in 2014, which is a facility for targeted lending. The China Development Bank, for instance, is to disburse CNY 1 trillion for shanty-town projects over the course of three years. Pledged supplementary lending has collateral requirements, which should help limit moral hazard and improve the effectiveness of lending.

The active use of unconventional tools – such as targeted cuts in the reserve requirement ratio – is related to the fact that monetary transmission through interest rates is not very effective, which in turn reflects that borrowers are mostly SOEs or sub-national governments – entities that are less sensitive to interest rates. Thus, moving to a more efficient allocation of credit through market-based interest rates needs to go hand-in-hand with hardening budget constraints for these borrowers. The ongoing interest rate liberalisation, while a positive step towards market-based interest rates, has widened credit spreads for private businesses, but not for SOEs and other public borrowers, which continue to enjoy implicit guarantees. Owing to implicit guarantees to public borrowers, private businesses – especially smaller ones – are rationed out of the formal market and have to resort to retained earnings or informal borrowing to finance their activities.

Deposit rates are still controlled and only limited upward flexibility is allowed, but they are to be liberalised over time. This will push up the whole spectrum of interest rates, as deposit rates are well below market-clearing levels. Alternative savings instruments that have emerged in the past few years as a result of grassroots interest rate liberalisation provide substantially higher returns (Figure 8). With fuller domestic interest rate deregulation, the PBoC will need to anchor the short end of a market-based yield curve, by shifting the operating instrument of monetary policy from the money supply or multiple interest rates to a single benchmark short-term interest rate. In addition, competition among banks for deposits will intensify, which may force some less efficient banks out of the market. Therefore, prudential regulation should be strengthened prior to this last step in the interest-rate liberalisation sequence. In particular, a deposit insurance system is

necessary and is to be introduced in 2015, which will help avoid systemic risk stemming from bank runs. To complement this, an exit mechanism for financial institutions ought to be established (Pardee Center, 2014). Improved corporate governance standards in financial institutions will also help. To limit the impact of liberalisation on bank margins, the ceiling on long-term deposits could be increased before lifting the deposit ceiling altogether.

Figure 8. **Money market funds and wealth management products are more attractive than deposits**



Note: The deposit rate is the rate paid to households for one-year deposits; the bank lending rate is also for one year; the private lending rate refers to the monthly average of private lending rates in Wenzhou; the wealth management product rate is expressed as the weighted average rate of return of the underlying assets; the Yu'e Bao money market fund interest rate is a monthly average of the daily observations.

Source: CEIC database.

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Full interest rate liberalisation needs to be preceded by greater exchange rate flexibility to help the economy absorb shocks. Since March 2014, the exchange rate has been allowed to fluctuate up to 2% above and below a fixing rate against the US dollar set by the PBoC every day. This widened trading range may curb speculative activity and marks further progress toward capital account convertibility and the internationalisation of the currency. In the transition from a daily fixing mechanism to a market-based exchange rate system, a trade-weighted basket peg can help to anchor expectations and damp output fluctuations (Yoshino et al., 2014). Malaysia, for instance, switched from a dollar peg to a trade-weighted basket peg in 2005, which helped the central bank achieve currency stability.

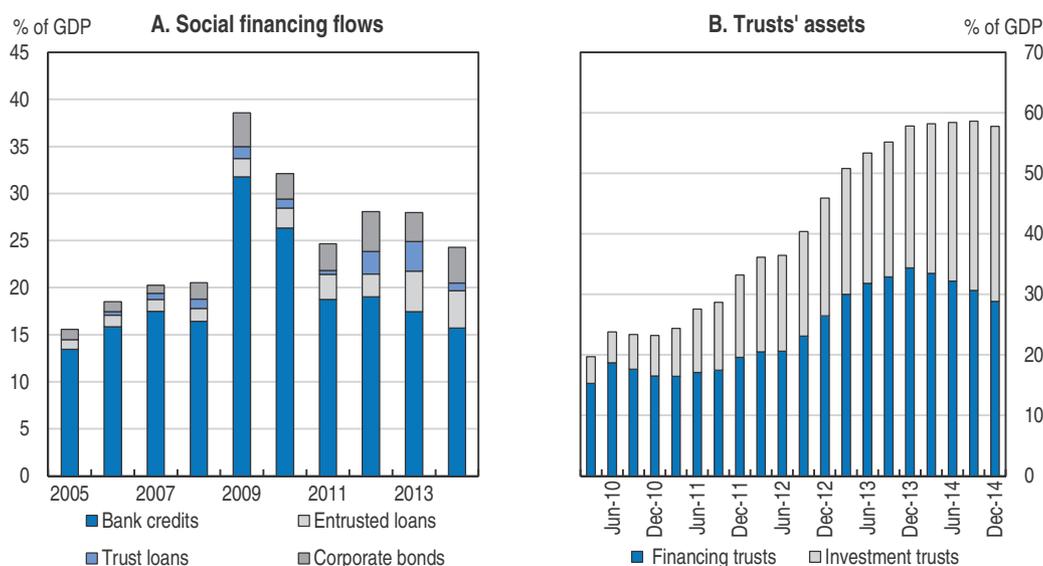
A more flexible currency is also a prerequisite to opening up the capital account. At present, foreigners can access China's capital markets through various routes, such as the Qualified Foreign Institutional Investor scheme. Central banks, renminbi clearing banks, other participating banks, sovereign wealth funds and foreign insurance companies can be granted access to the onshore interbank market, although with quotas. More recently, many foreign monetary authorities have signed foreign exchange swaps with the PBoC. In the Shanghai Free Trade Zone – launched in 2013 as a laboratory for reforms, including capital account liberalisation – free trade accounts were announced in mid-2014, allowing

free cross-border transfers of funds. As the Chinese economy remains attractive for investors and as funding costs can be lower for private firms abroad, capital inflows are expected to continue. Capital outflows could also be substantial insofar as households venture overseas to obtain higher returns than those on domestic bank deposits.

Rapid credit growth has raised financial stability concerns

Bank credit and even more so other forms of lending by non-bank financial institutions (NBFI) have soared in recent years, raising concerns about financial stability (Bank for International Settlements, 2014; International Monetary Fund, 2014). Caps on bank deposit rates led investors to search for higher-yielding assets at the same time as bank lending was constrained by the regulated loan-to-deposit ratio. As a result, lending outside the traditional banking sector surged. This provided firms with increased access to finance, with banks often using NBFI products and third-party institutions as tools for regulatory arbitrage. The rate of return on NBFI products, which are less regulated, has tended to exceed the bank deposit rate, partly reflecting the riskier profile of the underlying loans (Figure 8). The rapid growth in NBFI credit in the past few years has raised financial risks. However, authorities implemented a range of measures in 2014 that damped the growth in such activity (Figure 9), reducing the threat of financial instability from this source.

Figure 9. **Lending growth has been very rapid**



Source: CEIC and China Trustee Association.

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NBFI instruments come in many different forms. One is internet-based money market fund products, such as Yu'e Bao, which pool funds to invest in negotiable bank deposits and some other types of liquid assets that are low risk and offer higher interest rates than regular bank deposits. Households can readily invest in most of these products. A second type consists of wealth management products (WMPs), which are short-term deposit-like instruments with a CNY 50 000 minimum threshold that generally offer no explicit guarantee of the principal. In addition, the forthcoming deposit insurance scheme is

unlikely to cover such products. WMPs are issued by banks, although there is a restriction on the volume that each bank can issue. Funds are then channelled to an NBFIs that invests them in a range of assets including loans, listed equities and bonds. These institutions include trust companies (Figure 9.B) and securities companies. Banks usually dictate how the funds are invested, although regulations require that 35% at most of the WMP funds can be invested in loans.

WMPs are often used to fund Local Government Investment Vehicles (LGIVs), which are established to finance public real estate and infrastructure projects (see below). LGIVs have accumulated a massive amount of debt in recent years reaching 7% of GDP in 2013, a large share of which might be non-performing without fiscal subsidies and special accounting practices (Zhang et al., 2013). WMPs have also been commonly used to fund real estate projects that face restricted access to bank finance due to government concerns about housing overinvestment. The lending rates offered to these institutions are unlikely to fully reflect the risk of failure, as there is a long-standing perception that the government would bail out any firms that are at risk of defaulting. The potential for corporate defaults may have become more tangible lately as the authorities seek to liberalise financial markets and ensure that risk is adequately reflected in market prices. The first default of a LGIV was disclosed by Qilu Bank in Shandong Province in 2013. In March 2014, the first onshore corporate bond default occurred for Shanghai Chaori Solar Energy Science and Technology Company, a solar power firm suffering from overcapacity. Nevertheless, the subsequent bail-out of bondholders by an asset management firm with close links to the government suggests that implicit government guarantees for Chinese corporates may still exist.

Banks are not required to hold reserves or capital provisions against WMPs, as they are off balance sheet. Although there is no legal obligation for banks to repay the principal in the event of a loan default, past episodes have highlighted that they come under substantial pressure to do so. With continued growth in the stock of lending underpinned by WMPs, a sudden increase in the scale of defaults in the underlying loans may place pressure on the capital reserves of some banks. However, the largest banks in China are well capitalised, lowering the financial risks of such a scenario. In addition, along with regulations that have curbed the growth in WMPs, the government has responded to the risks by reiterating that investors should bear the ultimate liability when investing in WMP products.

Although banks have had a growing inclination to invest themselves in trust assets funded by WMPs, recent regulatory changes have sought to reduce the associated financial risks. While banks were limited in their ability to hold such assets directly, they were establishing interbank structures to that end. One of the simplest arrangements was when a bank purchased trust beneficiary rights (TBRs) from another bank, with the funds then channelled through a trust company to a corporate borrower. The purchasing bank could include the loan as a “financial asset held under repurchase agreement”, which required relatively limited capital coverage. Through such regulatory arbitrage, banks were funding loans to riskier sectors. Furthermore, banks were financing this activity by borrowing short term and investing in long-term assets, heightening maturity mismatch risk. The China Banking Regulatory Commission introduced regulations in 2013 to make the links between banks and trust companies more transparent. However, this led banks to strengthen ties with securities companies in the NBFIs sector. More important may have been the recent joint publication of *Document 127* by the PBoC, the State Administration of Foreign

Exchange and the three financial regulators that substantially increased the capital coverage required for TBRs.

The primary motivation behind the growth in various NBFIs products is the ability for riskier borrowers to obtain credit and for investors to earn higher returns. Consequently, further progress in liberalising bank interest rates will be key to contain growth in poorly provisioned off-balance sheet lending. The financial risks of WMPs would also be reduced if banks were required to make capital provisions against their stock of WMP issuance, at least while the expectation endures that banks guarantee the principal for WMP assets.

Overall, maturity mismatches on- and off-balance sheet imply liquidity risks, which call for the provision of sufficient, but not excessive, liquidity to avoid the reversal of deleveraging. Gradual deposit interest rate liberalisation should continue. Risk needs to be better reflected in the price of funding. Orderly defaults of failing borrowers would sharpen risk perceptions and lead to more efficient resource allocation without endangering financial stability.

More transparent budget management and balanced fiscal relations would reduce fiscal risk

Fiscal policy is set to remain slightly expansionary – in line with limited overall slack and growth close to potential. Recent fiscal measures to support growth include accelerated infrastructure and social housing investment, and tax breaks for SMEs. The budget deficit is projected to increase somewhat in 2015-16, and so will overall total gross public debt. The increase in debt will be partly driven by sub-national bond issues to finance urbanisation. If growth slows more than expected, additional stimulus may be imparted, which could be readily financed given the current fiscal space.

More specifically, while China's officially reported public debt at around 20% of GDP is not particularly high, debt at sub-national levels approaches 30% of GDP (Table 2) and is not recorded in government accounts, as documented in the previous *OECD Economic Survey of China* (OECD, 2013a). Data on sub-national debt are collected by the National Audit Office, which distinguishes between debt with direct repayment obligation, guaranteed debt and other implicit or contingent debt, part of which may involve a repayment obligation for the state. Financing platforms and government entities are the biggest debtors (Figure 10.A). Data on sub-national government debt, however, are not released on a regular basis. Even assuming that governments at all levels will be liable for all guaranteed and contingent debt, total public debt would have been around 52% of GDP as of mid-2013 – a manageable level. However, new official sub-national debt estimates to be released by spring 2015 may be substantially higher.

Table 2. Overall government debt is not particularly high

Debt in % of 2013 GDP at mid-2013

	Central government	Provinces	Prefectures	Counties	Townships	Total
Full repayment responsibility	16.7	3.0	8.2	6.7	0.5	35.2
Guaranteed debt	0.4	2.7	1.3	0.6	0.0	5.0
Contingent liabilities	3.9	3.2	2.9	1.3	0.1	11.3
Total	21.1	8.8	12.4	8.6	0.6	51.5

Note: Debt is classified into three categories: i) debt with full repayment responsibility, ii) guaranteed debt and iii) debt for which the sub-national governments may be partially liable.

Source: National Audit Office reports.

Sub-national debt has been an issue since the 1994 inter-governmental fiscal system reform, which delegated a large part of spending responsibilities to sub-national governments without assigning sufficient revenue sources to finance them (OECD, 2006; Wang and Herd, 2013). State Council Opinion 2015/71 on Reforming and Improving the Central-Local Fiscal Transfer System aims at addressing the mismatch by making the fiscal transfer system more transparent and increasing the share of general transfers so that sub-central governments can allocate funds more efficiently.

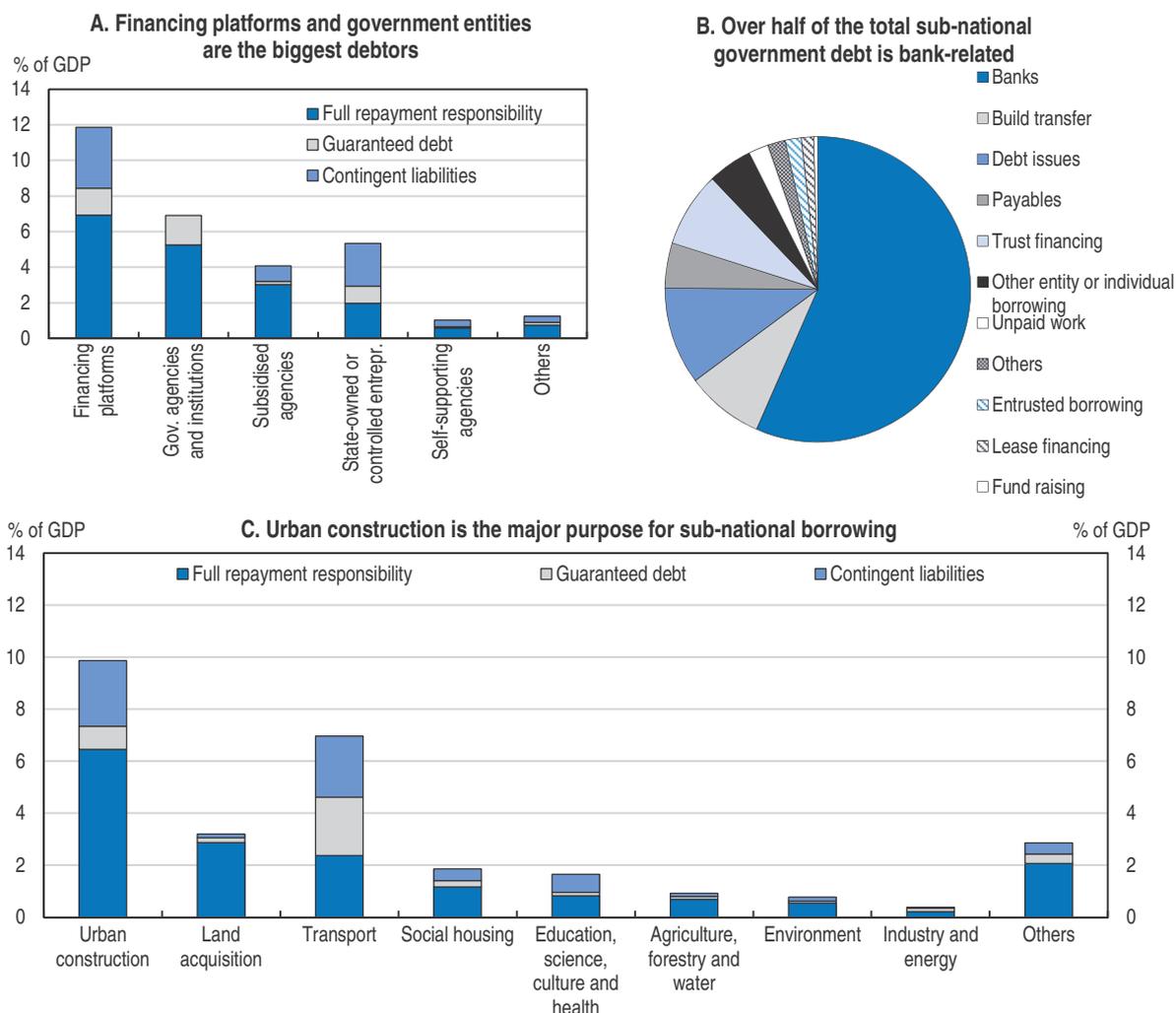
Against this backdrop, the Budget Law was amended in August 2014, with effect from 2015. It now allows provincial-level governments to issue debt subject to approval by the People's Congress and only up to a ceiling (so far, the central government occasionally issued bonds on behalf of selected sub-central governments and a few pilot municipal bond issues had been allowed). This will make it possible to replace expensive, shorter-term bank or trust debt (Figure 10.B) by cheaper, longer-term sub-national government debt. The revision of the Budget Law will also enhance transparency, in that it requires publishing all four budget accounts (general budget, fund budget, social security budget and SOE accounts). Moreover, the revision effectively abolishes the requirement for sub-national budgets to be balanced every single year, introducing a rolling multi-year framework, thereby reducing pro-cyclicality (and State Council Opinion 2015/3 on Medium-term Fiscal Planning stresses the role of accurate forecasting of macroeconomic variables in this framework). Furthermore, the ways to tackle existing sub-national debt have been specified. State Council Opinion 2014/43 on Strengthening Local Government Debt Management requires the handling of debt by type: for instance, debt related to general expenditures will be classified under the general budget account, and debt related to specific projects under the fund account.

A particularly risky type of sub-national government debt is related to build-transfer schemes. On average, build-transfer schemes account for 8% of sub-national government debt (Figure 10.B), but their share is much higher in a number of poorer provinces, reaching nearly 30% in Guizhou. Build-transfer schemes mimic the widely used build-operate-transfer model that involves the private sector in the construction of infrastructure and transfers the assets to the government 20-30 years later, but they lack the middle phase. Build-transfer schemes require a non-government party to build a project relying on its own financing and only two to three years after the project is finished, it is transferred to the government, which repays the project within a couple of years. The rate of return is typically around 20%, well above the 8-12% of build-operate-transfer projects, so it is attractive for SOEs or large private firms with a good reputation that can raise cheap funds. High costs, short repayment periods and lack of operation experience make this type of debt risky in comparison with other debt types even though the underlying project may serve as collateral.

Land reserves and other assets such as infrastructure provide a buffer against fiscal risk stemming from sub-national debt. The rapid accumulation of sub-national debt was made possible by the continuous acquisition of new land for development. Land reserves serve as collateral for borrowing and land sales generate revenue to service the debt. At present land reserves at hand in the biggest 34 cities cover roughly 40% of country-wide sub-national debt, implying that total land reserves should cover a much higher percentage. The ongoing property-market correction, however, may affect sub-national governments' ability to repay their debt. Indeed, so far land-related revenues, in particular land transfer income, made up around a third of sub-national government revenue on average, and much more in some areas (Figure 11).

Figure 10. **Sub-national debt has taken many forms**

Sub-national debt at mid-2013



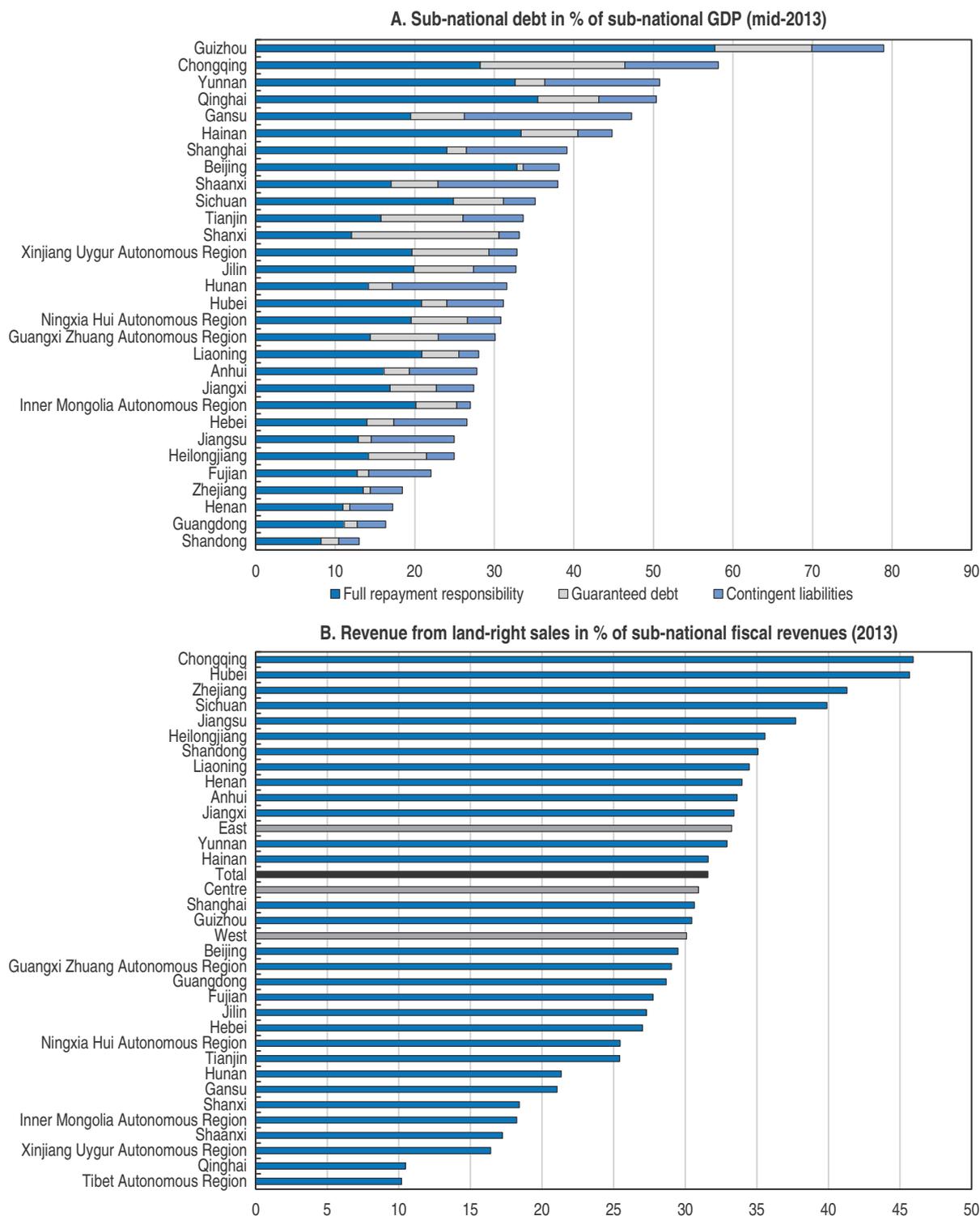
Note: Sub-national debt is classified into three categories i) debt with full repayment responsibility, ii) guaranteed debt and iii) debt for which the sub-national governments may be partially liable. Debt expressed as a percentage of GDP is based on 2013 GDP.

Source: National Audit Office.

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Although the bulk of sub-national debt is used for infrastructure and urbanisation projects (Figure 10.C), some may not generate any cash flow. Also, the extent of indebtedness varies widely across sub-central governments, some of which are heavily indebted. Improving budget management will help address the ensuing fiscal risks. Income and debt repayments by LGIVs ought to be integrated into the budget to discourage inefficient investment projects. Viable projects should still be financed – as sub-national investment is a major driver of urbanisation and growth – but through bonds. Adding debt to the indicators used to evaluate sub-national government officials' performance should reduce incentives to borrow unwisely. However, as long as mismatches between sub-national expenditure mandates and revenues endure, sub-national debt problems are likely to persist. Moreover, planned reforms such as the extension of social security coverage or other spending measures related to urbanisation will impose a large additional fiscal burden.

Figure 11. **The local debt burden varies and so does reliance on land-right sales**



Note: Sub-national fiscal revenue in Panel B is defined as the sum of general budget account revenue and fund account revenue.

Source: Sub-national Audit Office and Finance Bureau websites.

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Main recommendations to make growth more stable and reduce risks

- Continue to pursue stated emission targets, including by implementing a national carbon emission trading scheme, phasing out subsidies to carbon-intensive producers and boosting investment in renewables.
- Phase out implicit government guarantees enjoyed by state-owned enterprises, so that all firms compete on a level playing field with regard to finance, regulation, taxation and public procurement.
- Continue to gradually liberalise deposit interest rates while enhancing financial stability through measures such as provisioning for actual bad loan exposures, including off-balance sheet loans.
- Increase fiscal transparency and sustainability including by permanently prohibiting local government investment vehicles from taking on new debt.

Paving the way for sustainable and inclusive growth over the longer run

The economy's transition to a more moderate but still rapid cruising speed amid population ageing calls for the removal of distortions that inhibit sound growth, and specifically for greater reliance on market-based pricing, opening up off-limit industries to private and foreign firms and a more level playing field for non-state-owned market players. Thus, reforms in the areas of price mechanisms and market entry feature prominently in the authorities' structural reform agenda (Annex A1). Going forward, the major challenge is to make factor markets more efficient via greater market access and more market-based pricing mechanisms.

The role of market forces differs greatly across the economy. While market principles seem more potent in product than in factor markets, there is room to improve the way market forces operate in both. Distortions in factor markets often resulted from government intervention to address market failures during the transition from a centrally-planned to a market-based economy and act as subsidies, raising corporate profits and export competitiveness. The prices of capital, land and energy do not reflect the true social and environmental cost of production, making for a widespread misallocation of resources. Misallocation has been exacerbated by local authorities' growth-seeking behaviour as they competed to offer low-cost or free land, cheap credit, tax concessions and other subsidies to attract investment.

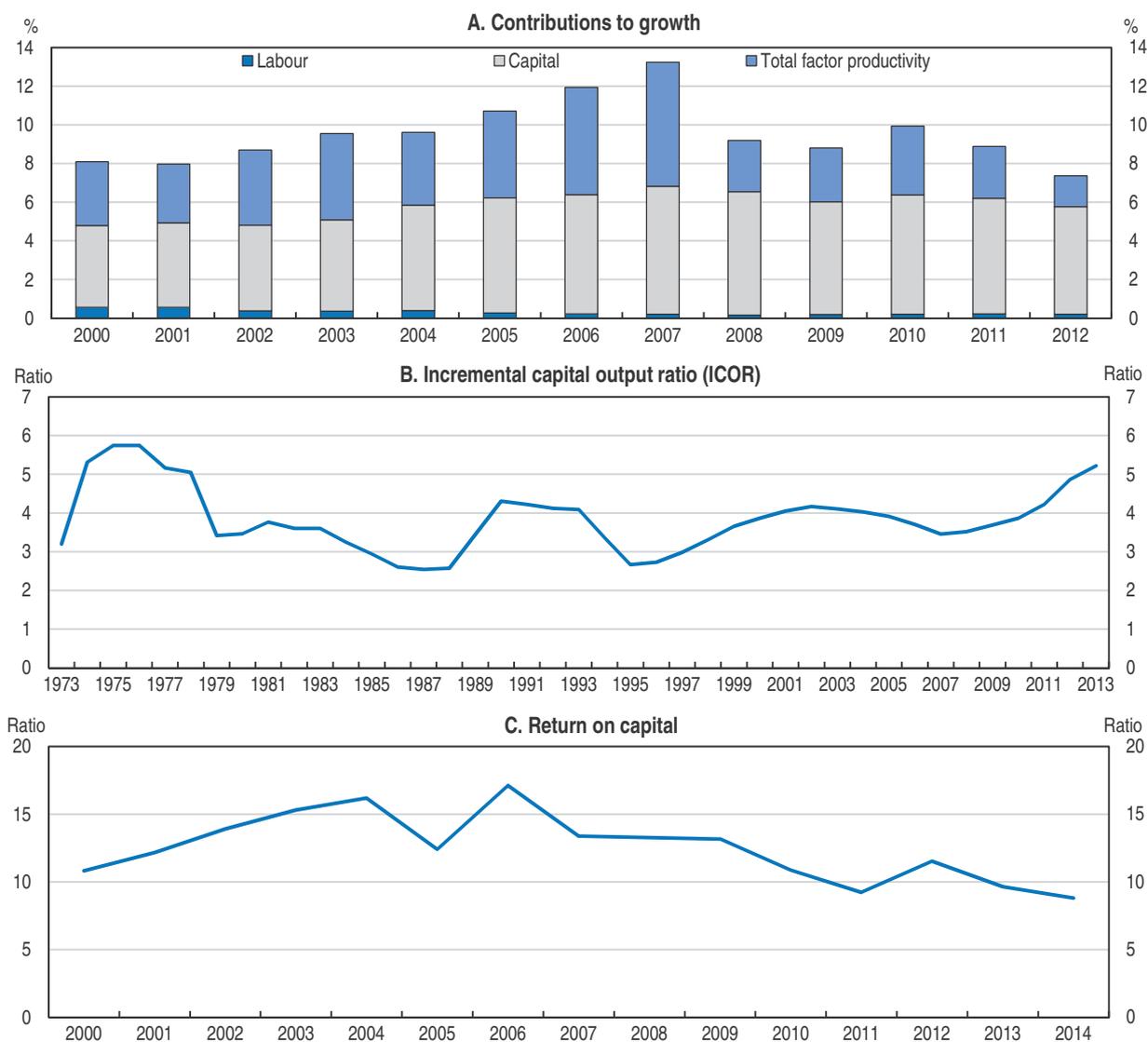
Cheap energy has led to the massive development of energy-intensive industries – where China does not have a comparative advantage as it is a net importer of coal and oil (IEA, 2013) – and has given energy-intensive products a competitive edge in global markets. Numerous measures have been taken in recent years to move energy prices towards market levels. Oil prices have been linked to international prices, though with a lag and greater downward than upward flexibility. More recently, natural gas prices have been indexed to crude oil benchmarks. However, at the sub-national level, there are scores of subsidy programmes for gas-fired power plants and renewable energy. They aim to encourage cleaner energy sources but also to keep energy prices low, which is a major source of local competitiveness.

For a long time, GDP growth was the indicator of local officials' performance. The Chinese economy has, however, moved a long way from a planned economy (Chinese Academy of Sciences, 2013). Local officials' performance is now also assessed based on environmental, social and sub-national debt indicators.

Capital accumulation drives growth amid population ageing and decelerating productivity

Growth has long been propelled by very high rates of investment in China, and even more so since the onset of the global financial crisis (Figure 6.A). Capital accumulation's contribution to overall GDP growth has even increased in recent years while that of total factor productivity (TFP) withered (Figure 12.A) (Wu, 2014). Given the still relatively low level of capital stock in per capita terms (Koen et al., 2013), investment in infrastructure and more advanced machinery is still very much needed.

Figure 12. **Capital continues to be the major driver of growth but returns on capital have decreased**



Note: Capital efficiency is measured by the incremental capital-output ratio (ICOR). The ICOR is the amount of capital needed per extra unit of output, expressed as a ratio. It is calculated as a ratio of the investment rate and the change in GDP and is expressed as a five-year moving average. The return on capital is calculated as the capital share of income divided by the capital-output ratio accounting for the difference between GDP and capital goods inflation and depreciation.

Source: Authors' calculations based on the Asian Productivity Organisation's Productivity Database and the OECD Economic Outlook 96 Database.

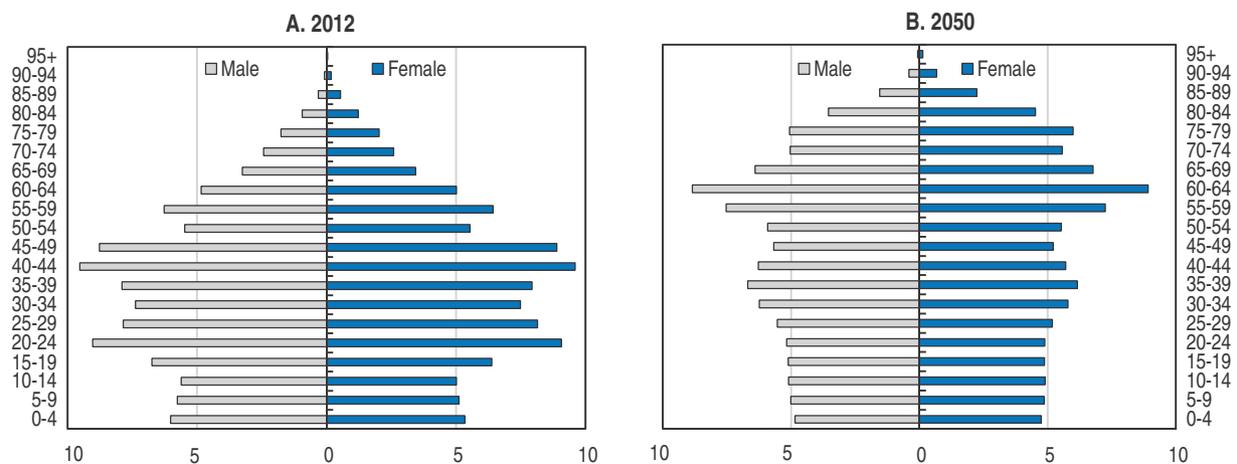
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Capital efficiency appears to have fallen recently (Figure 12.B), but the rate of return on capital is still high (Figure 12.C). The incremental capital-output ratio has increased in recent years, implying that more capital is needed to produce an extra unit of output. Underlying this development is a rising share of real estate in overall investment that is less conducive to growth than, say, the introduction of new technology or the expansion of infrastructure. Also, infrastructure tends to have a long gestation period and the large investments made during the recent crisis as part of the stimulus programme (OECD, 2010) may take some time to bear fruit.

Rapid population ageing will be a drag on growth as it will reduce the national saving rate that supported high investment rates and growth in recent years. Consequently potential output growth will decline, raising the risk of China falling into a “middle-income trap” (Koen et al., 2013). Ageing will also exert growing pressures on public finances. China’s rise to middle-income status was accelerated by a demographic transition, as the mortality rate dropped faster than the birth rate and the share of the working age group in the total population increased. However, due to the one-child policy and to some extent as a by-product of the increase in education attainment and living standards, fertility rates dropped sharply and the share of the working-age population started to decline early in the 2010s. The old-age dependency ratio is set to rise as the number of years in retirement increases (Figure 13). This will coincide with a falling child dependency ratio, however. Old-age dependency ratios vary enormously across provinces, with the oldest ones in line with the United States or Korea, and the youngest ones closer to India (Figure 14).

Figure 13. **The population is ageing rapidly**

Population structure in 2012 and 2050



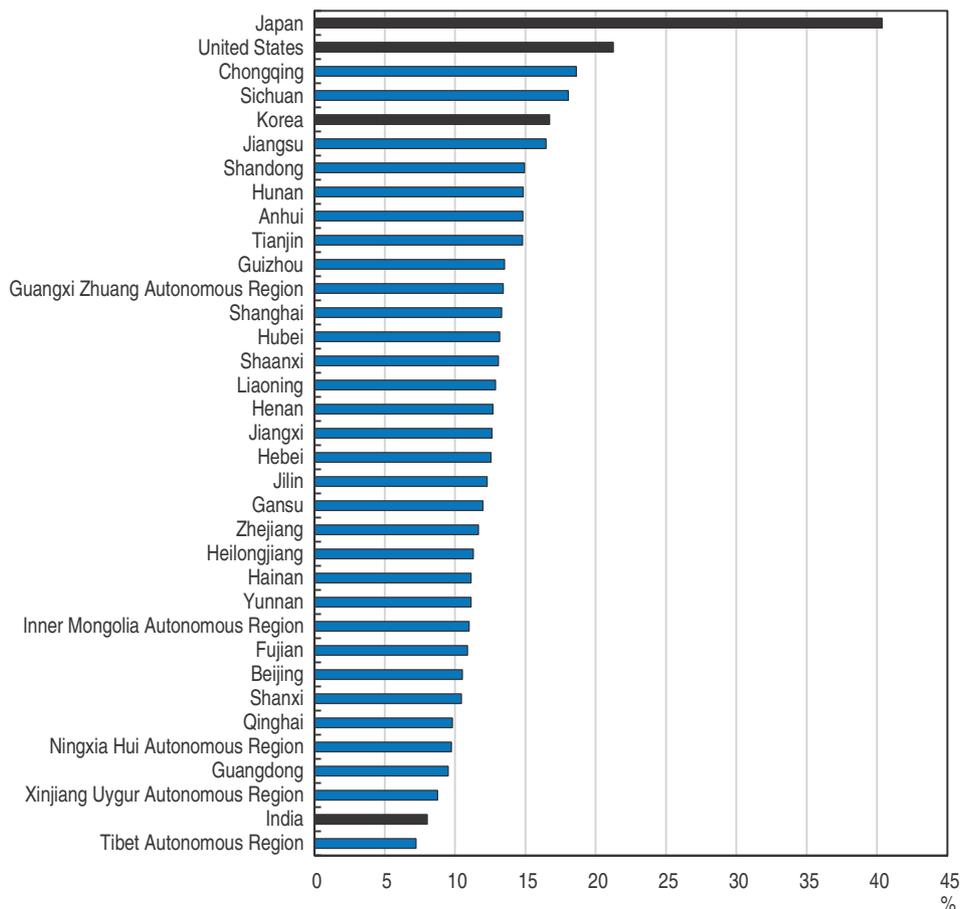
Source: CEIC and United Nations Department of Economic and Social Affairs: *World Population Prospects: The 2012 Revision*.

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Ageing will be slowed only to a limited extent by the recent incremental relaxation of the one-child policy. Until recently only minorities, singleton couples and, in some areas (26 out of 31 provinces), families with the first child being a girl could have a second one. Recently, a further relaxation was announced allowing a second child if at least one of the parents is a single child. As most urban couples of child-bearing age are singletons, they are already allowed to have two children. Moreover, many provinces already allowed a second child if one of the parents is a singleton. As a result, less than 9% of the eligible

Figure 14. **Old-age dependency varies greatly across provinces**

The ratio of population above 65 to 15-64, 2012



Source: CEIC database, World Bank *World Development Indicators* database and OECD historical Population Data and projections.

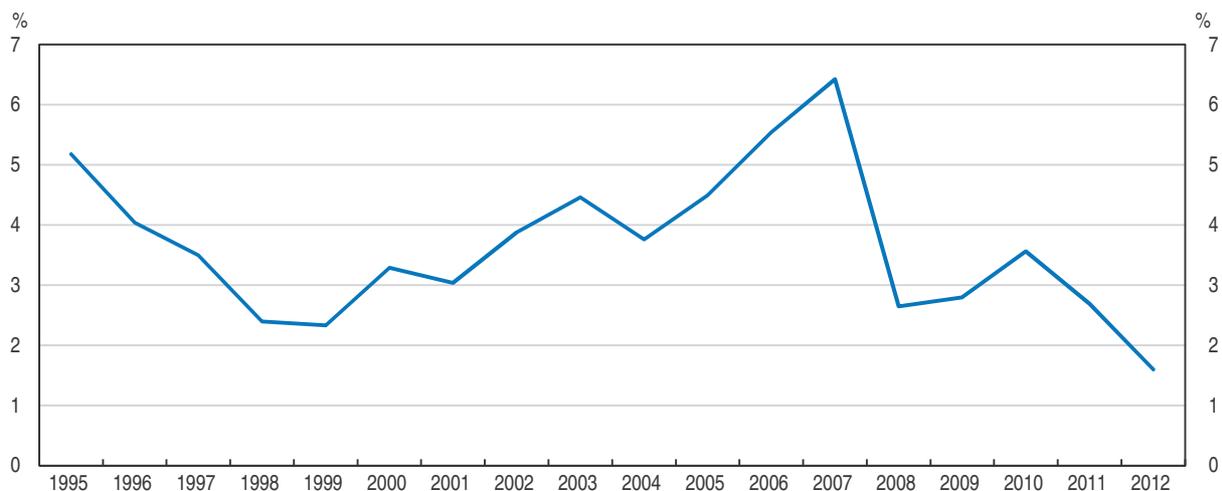
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couples had applied to have a second child by end-2014. The very low application rate may also be related to additional conditions: in Beijing for example, the first child must be above four, the mother above 28 and at least one of the parents must hold a local urban residence permit or *hukou*. Therefore, the change is likely to increase the number of births by only one fifth. Experience in two-child policy regions shows that fertility rates declined like in the rest of the country, although a two-child policy can improve the gender balance.

Population ageing will also exert upward pressure on labour costs. At the same time, it will tend to bring down the household saving rate. The latter had been pushed up considerably by the one-child policy, in a context where by custom and by law children are to support their retired parents: fewer children reduced the financial and in-kind transfers to the retirees, leading them to save more when working (Choukhmane et al., 2014). Insofar as the elderly tend to save less, ageing will push down the overall household saving rate. The working population may also save less as they need to support larger cohorts of elderly family members, although this might be offset by a diminishing readiness on the part of the younger generations to do so.

The TFP deceleration (Figure 15) is worrying as it is the growth in productivity that matters most for competitiveness and growth over the longer run. The TFP deceleration indicates a less efficient use of production factors. Indeed, very high investment rates have led to decreasing capital efficiency. This process is likely to have been aggravated by the large-scale investment stimuli during the global financial crisis. Boosting TFP is particularly important in China, as population ageing will reduce the saving rate and the high investment rates that have been the major engine of growth. China fares relatively well in TFP and labour productivity levels, both in manufacturing and services, compared with the other BRIICS economies, even though the gap with the United States is still sizeable (Figure 16).

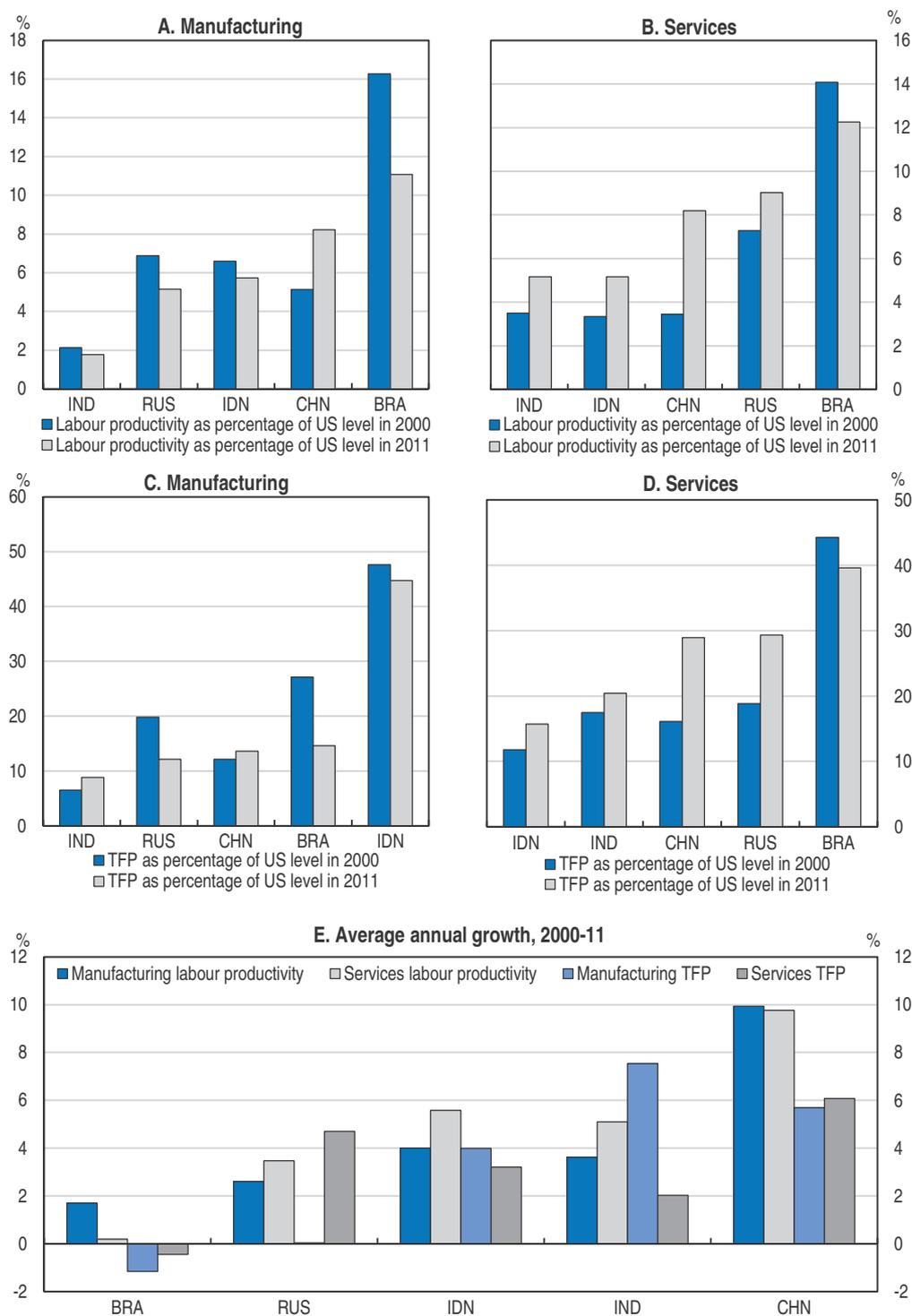
Figure 15. **TFP has decelerated recently**
Total factor productivity growth



Source: Asian Productivity Organisation Productivity Database.

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Productivity gains are being held back inter alia by constraints on the labour market and on innovation. Although China still has surplus labour, discrimination against migrant workers in the provision of public services inhibits a better utilisation of labour resources and is driving up wages in the coastal regions. Higher wage costs can only be afforded if the economic environment is sufficiently conducive to innovation and the development of more sophisticated skills required for the production of higher value-added goods and services. As China builds indigenous innovation capacity, the activities it undertakes as part of global value chains (GVCs) will evolve. At present, China's high-technology exports still rely heavily on imported intermediate inputs. China's share of world trade is much lower in value added terms than in volume terms, reflecting its position in GVCs as an assembler (OECD, 2013c). Nevertheless, with the development of human capital and innovation capacity over the past decade (see below), China is becoming a more important supplier of value-added to other countries' production. Policies to support China's further upgrading in GVCs are generally consistent with policies fostering enterprise-led innovation. In this context, strengthening the enforcement of the intellectual property right framework, encouraging further business R&D spending and encouraging competition in some sectors that are currently dominated by SOEs will be important.

Figure 16. **Productivity has been catching up faster in China than in other BRICS economies**

Note: Labour productivity is defined by value added per employee (in 2002 US dollars) and TFP as the residual value added after accounting for labour and capital. All variables are in real terms and converted to US dollars at annual average exchange rates. The base year is 2002. TFP is estimated with sectoral data for 14 manufacturing and 18 services sectors classified according to the International Standard Industrial Classification Revision 3. Aggregate TFP for manufacturing and services is weighted by value added. For methodological details, see Molnar and Chalaux (2015). Comparable data for South Africa were not available, but comparisons for selected manufacturing sectors suggest productivity levels for South Africa are at the lower end among the BRICS.

Source: Authors' estimations using the UNIDO Industrial Statistics and the World Input-Output Database.

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In sum, growth has benefited from the demographic dividend in past decades but will henceforth be driven more by the reform dividend (Lu and Cai, 2014). Further relaxing family planning policies, raising labour participation rates – including through increasing the retirement age (Herd et al., 2010), enhancing the quality of human capital by training and boosting productivity through various reform measures that allow a more prominent role for the market to allocate resources can jointly add one to two percentage points to GDP growth over the next half century.

Urbanisation will continue to drive productivity

Given that around half of the population still lives in rural areas, further productivity gains can be achieved through continued migration to cities, which host more productive urban jobs. At the same time, technological change and industrial upgrading in some sectors should result in resources shifting from less to more productive industries. The transition to an increasingly market-based economy will work in the same direction. Decomposition of labour productivity gains into those from shifts among sectors and those from increases in productivity in individual sectors sheds light on these ongoing trends (Molnar and Chalaux, 2015). Productivity gains resulting from the movement of labour from less to more productive sectors (the so-called “shift effect”) explain about 2 percentage points of annual labour productivity growth in the past decade, pointing to a better allocation of labour. Within-sector productivity gains have also been sizeable thanks, to a large extent, to China’s strategy of tapping global knowledge through inward foreign direct investment (Girma et al., 2014). A certain level of concentration of foreign firms in an industry cluster, however, is necessary to bring about such productivity-boosting effects of FDI.

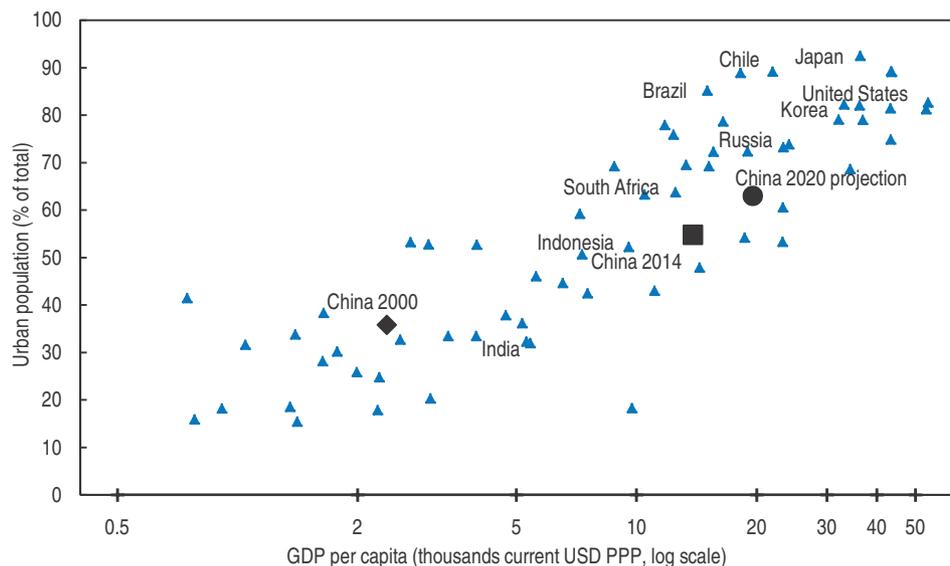
A new Urbanisation Plan was released in early 2014 focusing on human-centred and environment-friendly urbanisation (CCP and State Council, 2014). Urbanisation is an important way to boost domestic demand through consumption and investment in urban construction, public service utilities and housing (World Bank and Development Research Center, 2014). At the end of 2014, permanent urban residents accounted for close to 55% of China’s total population, as against over 60% on average for countries with similar per capita income (Figure 17). Registered urban residents, who hold a *hukou* under China’s household registration system, accounted for only 36% of the total population in 2013. The number of rural migrant workers stood at 274 million – 20% of the country’s total population in 2014. The extension of public services and social security to 100 million of these migrants not yet covered will boost consumption and economy-wide productivity. Likewise, the renovation of shanty-towns housing another 100 million urban residents will support growth.

The Plan targets an urbanisation ratio of 60% by 2020, with the share of residents with urban registration increasing to 45%. This is to be achieved by continued easing of restrictions on obtaining urban residential status in third and fourth-tier cities and removing them altogether in towns and small cities.

Access to public services is key to unleashing the consumption potential of internal migrants, but, along with the expansion of urban infrastructure, it will entail large costs. Those will need to be financed by giving sub-national governments greater taxing power, through larger transfers from the central government and via sub-central bond issues (see above).

Figure 17. **China is under-urbanised**

All countries with populations over 15 million, latest year available



Source: World Bank World Development Indicators Database; National Bureau of Statistics; OECD (2013a).

StatLink  <http://dx.doi.org/10.1787/888933198587>

A novel element of the Plan is a promise of fair compensation for land requisitioning. This requires: i) creating a land requisition mechanism to increase the transparency and accountability of local governments; ii) completing the land-ownership registration system to recognise legal rights to develop, collateralise or transfer land; and iii) gradually unifying urban and rural land markets. The Plan aims at enhancing efficiency of land development through measures such as capping urban land construction to less than 100 m² per capita, linking land acquisition to the number of rural settlers, halting new approvals for land development in megacities and charging the government for land used for its facilities.

The Plan puts the emphasis on encouraging migration to towns and small cities, where employment opportunities are not always present and which, therefore, are not the major destinations for potential migrants. Subsidised training programmes will be offered to migrants and a nationwide website will be created to help match migrants with prospective employers. Migration restrictions continue to be stringent in megacities, where it is difficult for people without higher education, formal employment and a track record of social security payments to obtain a *hukou*.

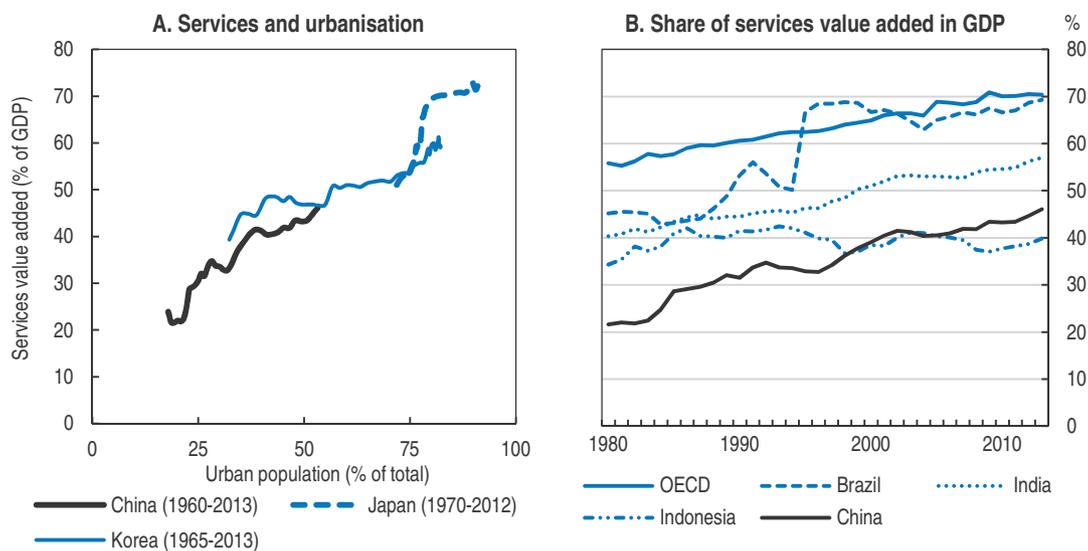
Excessive focus on small cities may result in more “ghost towns” with facilities but without residents. Moreover, without job creation, public service provision and social security coverage, the urbanisation drive may exacerbate property market imbalances. Urban construction work needs to take into account present and future demand for housing.

In general, urbanisation offers opportunities for leapfrogging in low carbon infrastructure. For example, developing bus rapid transit systems is an efficient way to promote sustainable transport in smaller cities, as underlined in the previous *Economic Survey of China* (OECD, 2013a). This helps improve air quality and reduce congestion, emissions and health costs. Stricter vehicle standards and avoiding policies that favour diesel vehicles could also contribute to these objectives.

Service sector expansion is a driver of growth and employment creation

Service sector development, which is closely related to urbanisation (Figure 18.A), is set to be a major driver of growth. The share of services in value added (excluding construction and utilities, which are classified as part of the secondary sector in China) almost doubled in the past four decades. By 2013, it had overtaken the share of manufacturing. Nevertheless, compared to OECD countries and even to some BRICS economies, the service sector remains relatively small in China (Figure 18.B). Services-driven growth can be relatively inclusive and sustainable as services tend to be labour intensive and less polluting than manufacturing. Furthermore, the liberalisation of service sectors with previously high barriers to private and foreign investment – such as energy, banking and telecommunications – may boost productivity and facilitate catch-up.

Figure 18. **The share of services is still low**



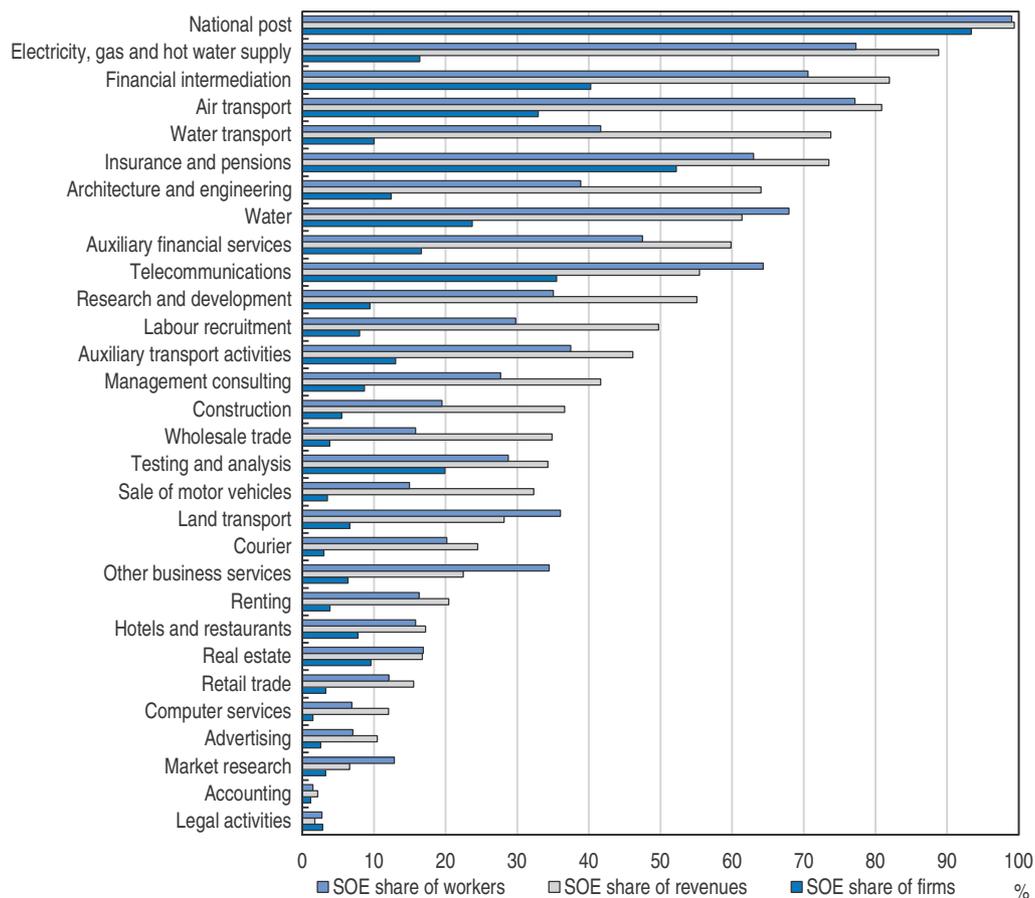
Source: World Bank World Development Indicators database.

StatLink  <http://dx.doi.org/10.1787/888933198598>

State-owned enterprises (SOEs) still dominate many service sectors, at least in terms of revenues, even in potentially competitive services like construction, and they have stakes in retail and hotel businesses (Figure 19). While central SOEs, at least in some activity areas, tend to be productive as they have experienced several rounds of cleansing and restructuring, local SOEs are the least productive among all ownership types, alongside collective firms (Molnar and Wang, 2015).

With structural and demographic transformation, and rising incomes, demand for healthcare, recreation, culture, education and commercial services is expected to rise. Adequate standards for service quality, environmental regulation and consumer protection are important in those sectors to avoid damaging competition when they open up. Competitive pressures are high in some services but relatively low in transport and hotels and restaurants (OECD, 2014b).

Figure 19. **SOEs account for a large share of revenues in sectors that should be more open to competition**



Note: Sectors are classified according to the United Nations ISIC Rev. 3 two-digit sector codes except for the following services, which are classified according to the four-digit sector codes: national post, courier services, legal activities, accounting and auditing, architecture and engineering, advertising, market research, labour recruitment, testing and analysis, and management consultancy.

Source: Authors' calculation based on the 2008 Economic Census.

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Main recommendations to foster urbanisation and services as new drivers of growth

- Extend public service provision and social security coverage to all migrant workers. Make social security benefits portable across the country.
- Reduce state ownership in commercially-oriented service industries such as retailing, hotels, restaurants and construction. Open up more sectors for private investment.

Providing the right skills to all is a prerequisite to sustainable and inclusive growth

As the share of the working-age population falls, growth will increasingly depend on the quality of human capital and on innovation. The present industry structure, based on abundant low-cost labour, needs to adjust to rising wages as labour becomes scarcer and

people continue to leave rural areas for higher-productivity jobs in cities. The increase in the cost of labour relative to that of capital will lead to more capital-intensive production, which tends to require higher skills. To adapt to the changing industry structure and achieve inclusive growth, a broad set of skills and wide general knowledge are needed, which facilitate the acquisition of new skills (OECD, 2013b).

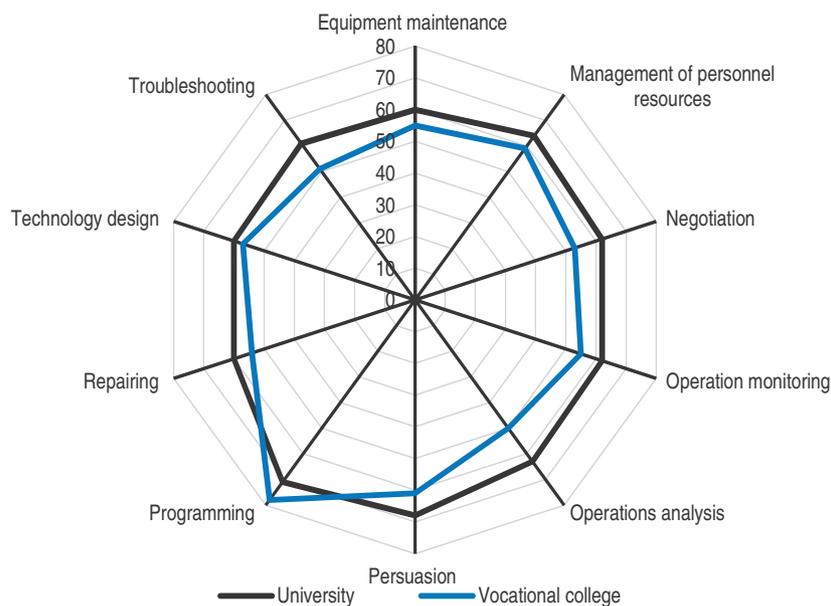
While enrolment at all levels has soared in recent decades, access to good education is not equally available for all. Education inequalities largely stem from the urban-rural divide, but also from social stratification (Yang et al., 2014). They are less driven by age, gender and regional differences. Good education should be accessible to all regardless of the place of upbringing and family background.

Skills need to be better aligned with market demand

Education attainment has improved markedly in recent years and returns to education appear high, but the knowledge taught and skills nurtured in school do not always match what is required by the market. The difference between the self-reported acquired skills at the time of graduation and the skills needed in their job six months after graduation, based on a 2013 survey of 150 000 graduates, indicates the mismatch in the graduate labour market. On this measure, the most acute deficits are in practical and soft skills and in knowledge areas needed for rapidly expanding industries such as services (Figures 20 and 21).

Figure 20. Programming as well as management and other soft skills are falling short

Percentage of graduates in the top ten skill categories with the greatest gap, 2013



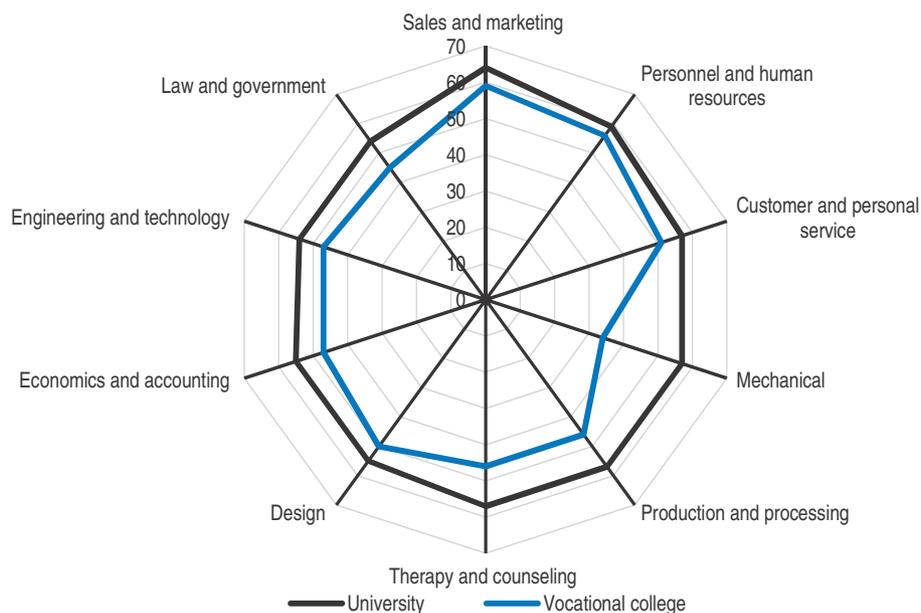
Note: University and vocational college graduates who had a job six months after graduation were asked whether the five skill categories out of 35 that are related to their job are necessary to perform their job (scale 1-7) and whether they had acquired the given skill by the time of graduation (scale 1-7). The difference between the weighted averages of the extent of necessity and the extent of acquired skills at school captures the skill gap. The ranking is based on the results for university graduates. Vocational college graduate skill shortages in the same skill categories are shown for comparison.

Source: Authors' analyses based on MyCOS survey data.

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Figure 21. Service-related training is not meeting labour market needs

Percentage of graduates reporting shortage of knowledge, top ten areas, 2013



Note: University and vocational college graduates that had a job six months after graduation were asked whether the five knowledge categories out of 28 that are related to their job are necessary to perform their job (scale 1-7) and whether they had acquired the given knowledge by the time of graduation (scale 1-7). The difference between the weighted averages of the extent of necessity and the extent of acquired knowledge at school captures the knowledge gap. The ranking is based on the results for university graduates. Vocational college graduate knowledge shortages in the same knowledge categories are shown for comparison.

Source: Authors' analyses based on MyCOS survey data.

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A systemic, workplace training-based vocational education system is needed to provide the right skills

Many jobs require vocational qualifications in China, and this is likely to remain so given that those qualifications are also in high demand in OECD countries with more advanced industry structures (OECD, 2014c). As China's industrial structure is adjusting towards that of more advanced countries, with services playing a greater role and with higher value-added manufacturing, demand for vocational skills is likely to increase further.

To meet market demand for practical skills, vocational education efforts need to be stepped up: more students should learn marketable skills, more government support should be directed to such training and it should reach out to all ages and all categories, including the unemployed, the laid-off with obsolete skills and the low-skilled. Systemic, credit-earning and quality-assured workplace training is key to effective professional education and training (OECD, 2014c). The costs of providing training that meets both production and learning goals should be shared between government and firms. Government support is warranted as the social return to developing skills needed by enterprises is high and enterprises experience skill shortages. A professional education teacher training system blending theoretical and practical skills should be encouraged and

industry experts should not be subject to the same qualification requirements as full-time career teachers. Universities should also provide more technical skills as most graduates will likely be working in applied areas and not academia.

Lifelong learning is important to acquire new skills in an ever-transforming economy

The deep structural changes that the Chinese economy is undergoing imply a continuous need to upgrade the skills of the workforce to meet market demand. Lifelong learning should therefore feature prominently in the agenda for skill development. Accordingly, the 2010-2020 Plan gives increased importance to lifelong learning. Currently, employers are encouraged to provide training to their workforce and are required to allocate an amount equivalent to 1.5% of the wage bill to that effect. Firms with high technical skill requirements and good economic performance must allocate 2.5% of wages. However, in some cities, employers allocate less than 1% of the wage bill for training. Clearer career prospects and planning, as well as wider and better education in full-time institutions could enhance firms' incentives to train their workers. Requiring repayment of training costs in the case of resignation may deter excessive job hopping.

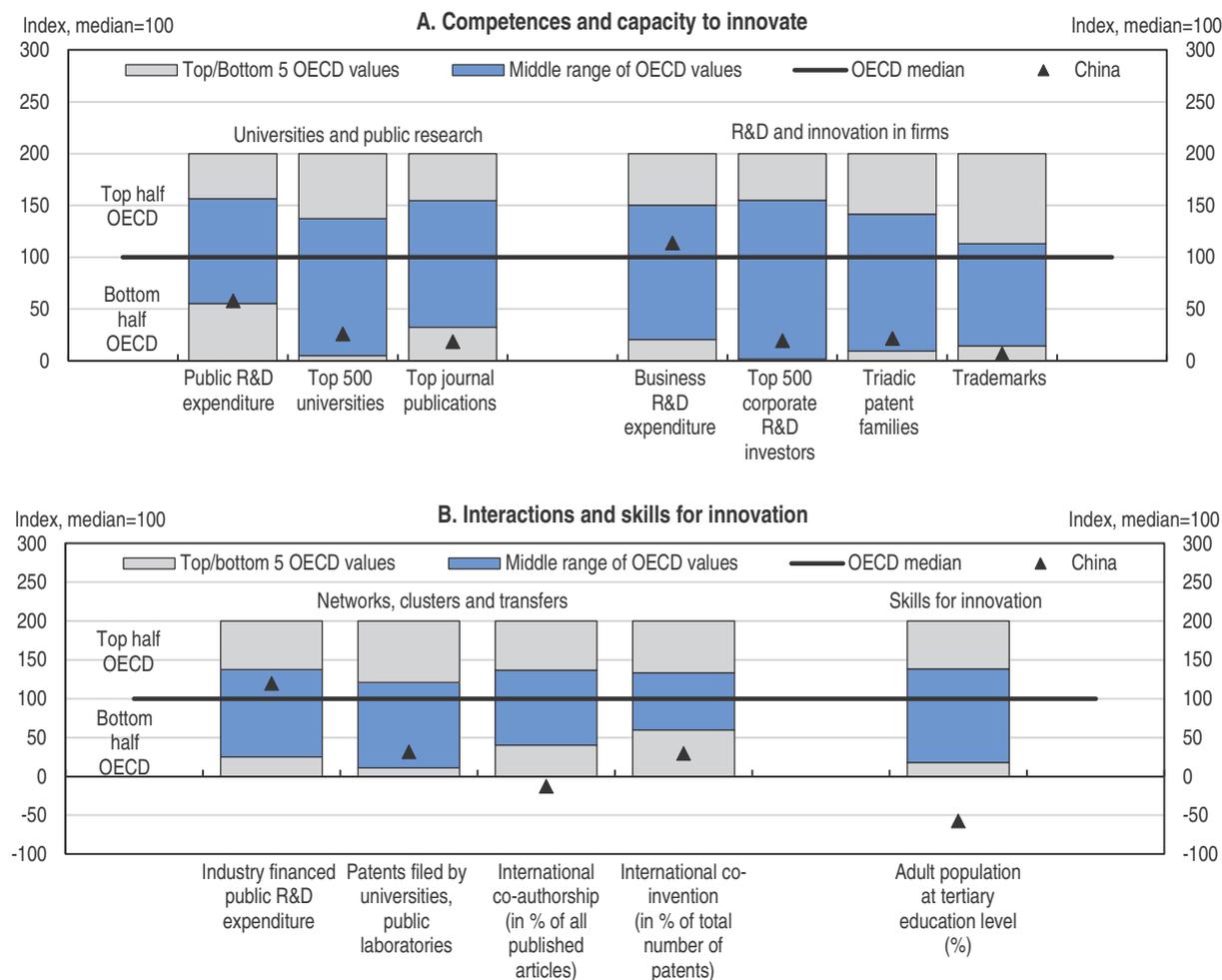
Promoting innovation as the economy becomes increasingly knowledge-based

Innovation is set to play a growing role in raising productivity and moving to a more knowledge-based economy (OECD, 2013a). R&D spending had risen to over 2% of GDP by 2013, above the EU average, and the target is 2.5% by 2020. Chinese innovation performance, however, is still weak in terms of international patenting and trademark registration (Figure 22). China generates a large volume of knowledge, with most of the world's top 20 patenting universities being in China by 2008, but patents' utilisation rate is low, at 5%, and the bulk of university research is not relevant for business (Luan et al., 2010). Furthermore, China is far behind countries at the technology frontier for patent citations (Kwon et al., 2014). A better research evaluation system at universities that strikes a balance between quantity and quality, including applicability of research, would encourage a greater focus on utilisation. More autonomy for national technology transfer centres to market patented technology could make them more effective at increasing the utilisation rate of university patents.

Although China has the world's largest pool of human resources for science and technology, the shares of tertiary graduates in general and of doctoral graduates in science and engineering in particular are still extremely low (Figure 22.B) and China needs more world-class researchers. Although in China, as in other emerging economies, concerns have been raised about the outflow of talent ("brain-drain"), cross-border labour mobility has been beneficial as it spurs innovation in Chinese high-tech firms (Liu et al., 2010), opening up a new channel of technology spillovers. The Central Office of the Talent Coordination Group observed in 2013 that 87% of science and engineering graduates do not return to China after finishing their studies abroad. Similarly, the Ministry of Education reported that between 1978 and 2005, only a quarter of the graduates returned from abroad. Given the limited success so far with reversing the brain-drain, in particular as regards top scientists, more efforts are needed in addition to financial incentives, including as regards research autonomy, merit-based promotion and stronger protection of intellectual property rights.

Figure 22. **Capacity and skills to innovate need to be strengthened**

Normalised by the size of the economy unless indicated otherwise, latest year available



Note: All indices are normalised relative to the median values in the OECD area (Index median = 100). Country values are compared to the median observed in the OECD area. China may appear out of range i.e. lower than the lowest OECD country for some indicators.

Source: OECD, *Science, Technology and Industry Outlook* (2014d).

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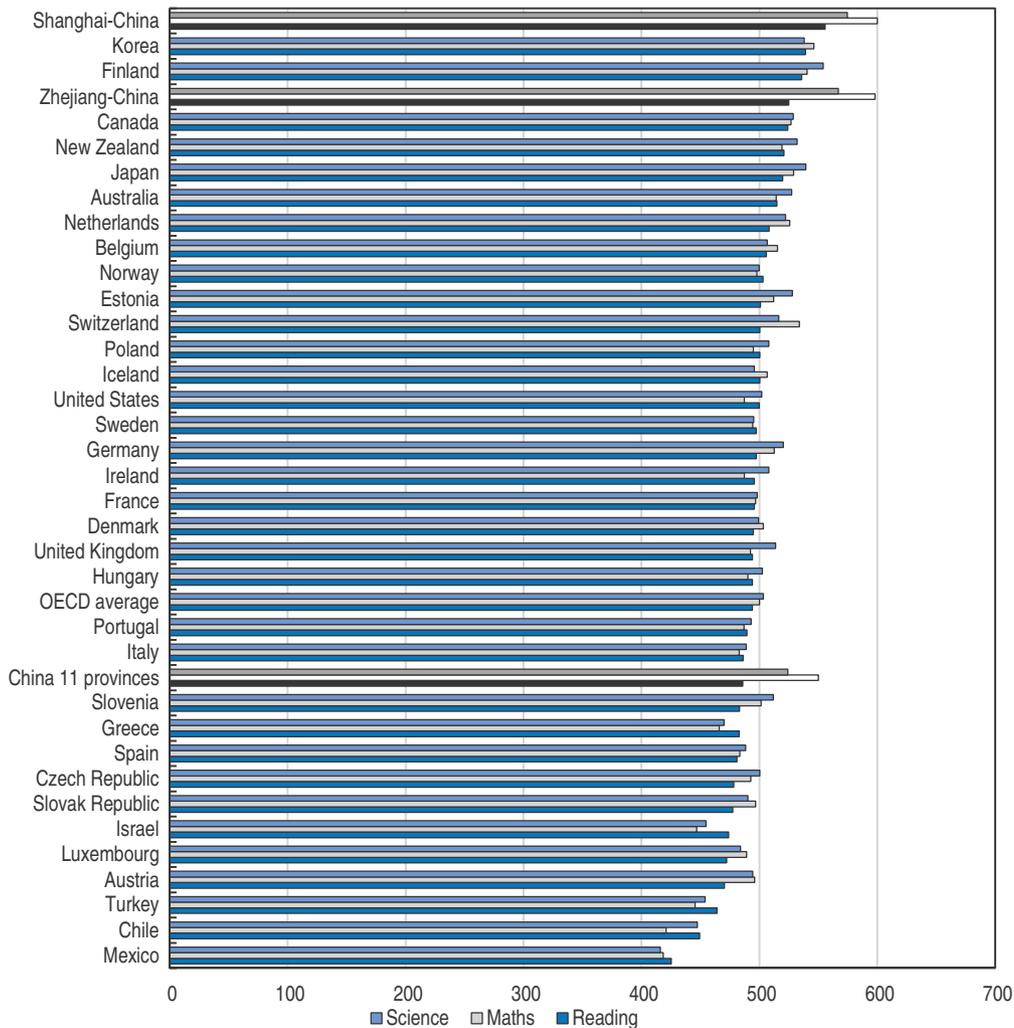
Measured quality of education is high but the system lacks funding and is overly exam-focused

The OECD's internationally comparable PISA scores measuring 15-year olds' competence in maths, reading and science have ranked Shanghai on top worldwide ever since it took part (OECD, 2014e). PISA-like trials were also carried out on a voluntary basis in 2009 for 21 003 pupils from 621 schools in 11 provinces and municipalities, where pupils performed close to the OECD average in reading and better in maths and science (Figure 23).

China's very competitive education system based on rote learning and test scores is often faulted for not sufficiently encouraging creativity and critical inquiry (Fan and Yang, 2012). Parents tend to press their offspring to get admitted to good schools. This leads to myriads of cunning techniques and keeps afloat an industry of innovators, producers and suppliers of cheating devices. Notwithstanding pupils' heavy schoolwork burden, schools do not prepare them effectively for exams to advance to higher levels. Tutoring and test

Figure 23. **Shanghai leads and 11 other provinces perform close to the OECD average in PISA-type tests**

PISA scores in reading, maths and science, 2009



Note: Countries and Chinese provinces are ranked by scores in reading. Vocational schools are included except in “Zhejiang-China” and “China 11 provinces”.

Source: OECD PISA 2009 Database and Xue (2012).

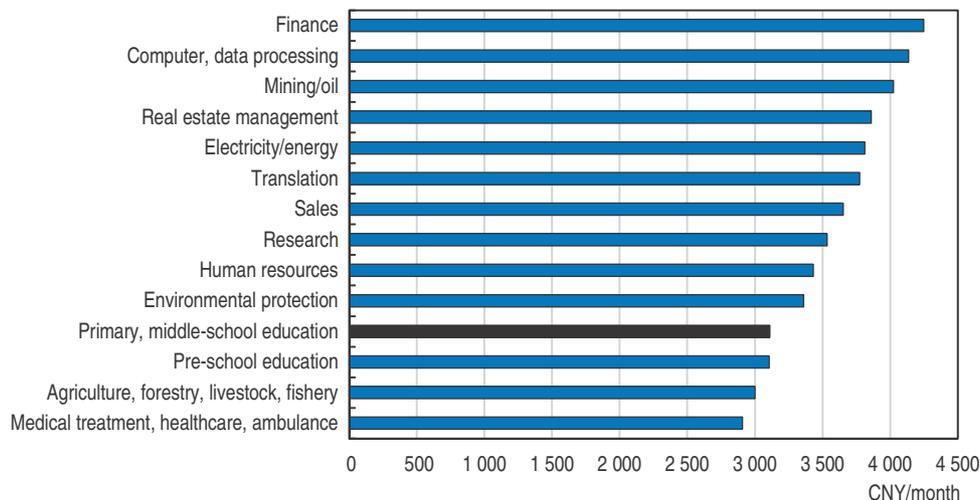
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preparation courses come extra, and are provided by a thriving private sector. Plagiarism is widespread at universities (Fang et al., 2013). Diploma mills have been producing fake degrees and certificates, causing trouble for admission committees and hiring managers.

Inadequate spending on education and low teacher salaries affect education quality. According to the International Average Salary Income Database, Chinese teachers fare worse, compared to salespeople for instance, than teachers in Finland or Korea. Notwithstanding significant salary increases in the past decades, the teaching profession should be made more attractive and more competitive through higher starting salaries (Figure 24) and better salary prospects, and competence-based advancement. Pilots are underway with reforms in some of these areas. Online education should be more widespread to make high-quality teaching materials available to a larger audience.

Figure 24. Salaries of primary and middle-school teachers are lower than in most other professions

Monthly average wages of 2013 university graduates six months after graduation



Note: Averages are based on a representative sample of 120 000 university graduates in 2013. The sectoral classification is similar to that of the Occupational Information Network in the United States, adapted to Chinese occupational circumstances and includes 51 categories for university graduates.

Source: Authors' analyses based on MyCOS survey data.

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Kindergarten education is mostly provided by private institutions and not as yet available country-wide. Although the share of children who spent three years in pre-primary education has increased by ten percentage points in three years, to 67.5% in 2013, it is still substantially lower than in OECD countries. To provide an equal start for all children, pre-school enrolment ought to be made compulsory at least for one year and universal coverage should be aimed for ahead of the 2020 target. As public facilities are not always available and private tuition fees are prohibitively expensive, poorer families could be given vouchers to enrol their child in private facilities. Greater assistance needs to be provided in populous Central provinces where most children live. Extension of programmes such as the China Development Research Foundation “Go Teach” pilot, which rotates teachers from one village to another during the school week, would increase access to pre-school education.

Inequality with respect to educational opportunities stems from various factors

The recent decisions to abolish entrance exams to primary and middle school and to allocate children by catchment area will increase opportunities for children from less wealthy backgrounds to attend good schools. Around 10% of all children of compulsory-education age are migrant children following their parents to cities, but only 83% of them have access to public or publicly-financed private institutions (Table 3). The remaining 17% should be given access to such facilities to make sure that no one bypasses compulsory education or drops out for economic reasons. Nearly a fifth of all children are left behind by migrant parents and they deserve special attention as they are at a higher risk of dropping out. Around 27% of rural children (three-quarters of which are children left behind by migrant parents) attend boarding schools. These offer better quality education than rural schools but often fail to provide daily subsistence needs, such as three meals per day.

Table 3. **Migrant children make up a sizeable share of compulsory school-age children**

Percentages	
	2013
Migrant children as a share of compulsory-school age population	9.3
Share of migrant children attending public schools	80.4
Share of migrant children attending publicly-funded private schools	3.0
Left-behind children as a share of compulsory-school age population	15.5

Source: National Bureau of Statistics (2013), *Nongmingong Jiance Diaocha Baogao, 2013* (Migrant Worker Survey Report, 2013).

General high schools of good reputation have recently had to increase their admission quotas for other districts/counties in the same prefecture, which will increase the chance of poorer students receiving good high-school education. Vocational schools are being made more attractive by allowing switching between general and vocational streams, which is likely to contribute to filling the skill gap.

Getting into a top university with bright employment prospects is not an equal chance for all as there are admission quotas for students from other provinces. Moreover, migrant students may not be allowed to sit for the *gaokao* (the university entrance exam) in their place of residence, even if they have a local *hukou*, if their parents lack formal employment or the required number of years of social security contributions. Financial support to students is below 10% of overall higher education spending and living costs in big cities may be prohibitive for students from poorer families. Family background explains very little of the wage variation across graduates, indicating that higher education is key to social mobility. To reduce inequalities in education opportunities, the central government should shoulder a higher share of education costs at all levels and boost assistance to students from disadvantaged families.

Main recommendations to provide the rights skills to all

- Boost public spending on education, including by increasing teacher compensation to improve education quality. Ensure equal opportunities for disadvantaged children.
- Establish a countrywide workplace training-based vocational education system; enhance career guidance and better disseminate information on jobs.
- Evaluate universities and university staff more on the quality of academic output. Promote research autonomy, merit-based promotion and stronger intellectual property rights to attract and retain world-class researchers.
- Open up public schools to all children of internal migrants, or where such schools are not available, provide vouchers to enable them to attend private schools.

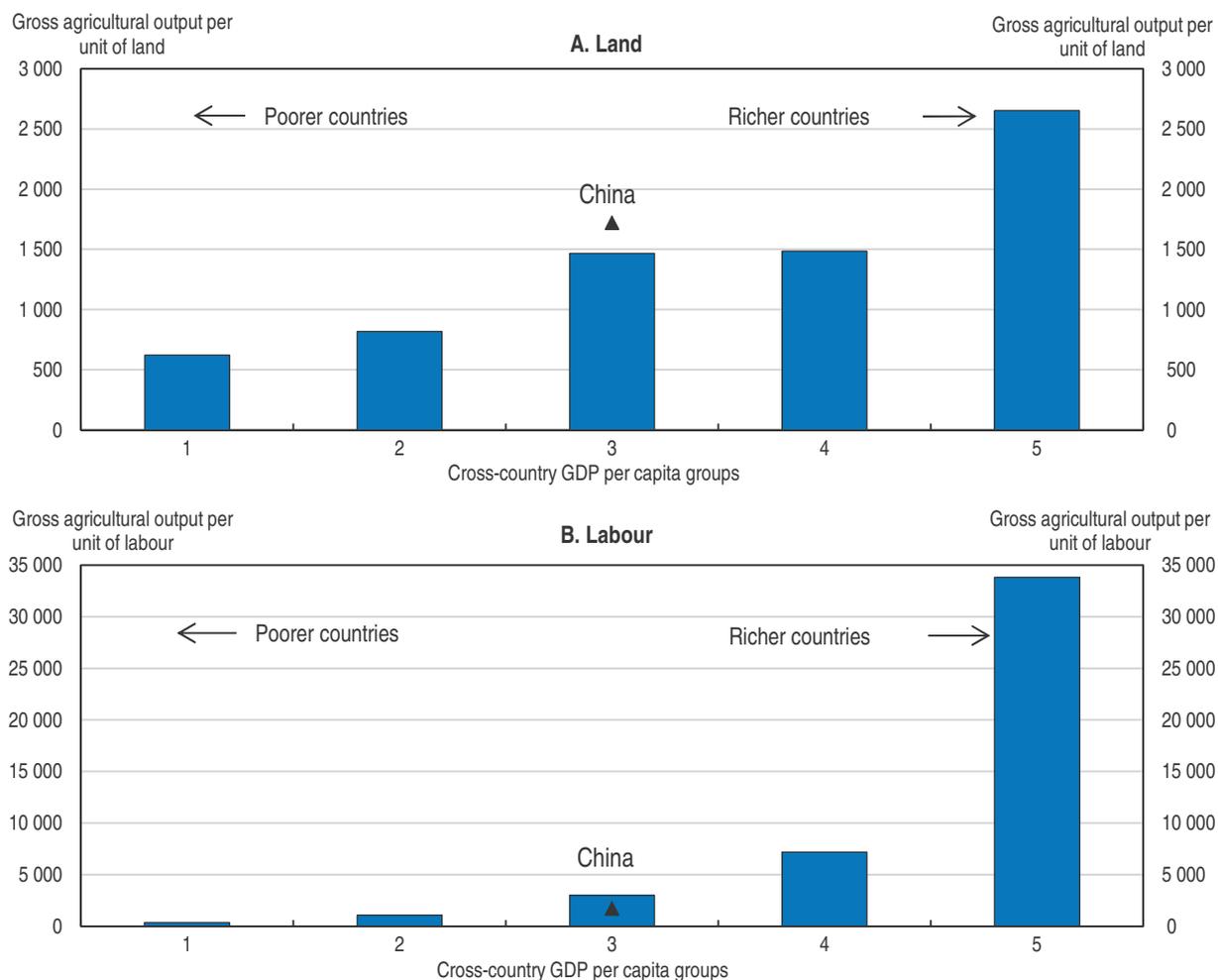
Reforms to help rural China bridge the gap with urban areas

Living standards in rural China remain far below those in urban areas. Average rural disposable income per capita is around 1/3 of that in urban areas. To narrow this gap, reforms should facilitate the reallocation of resources, promote agricultural productivity gains and provide better government services in rural China.

As countries develop, the share of agriculture in the overall economy diminishes. China is still in the relatively early stages of this adjustment process, and the government is planning on 100 million rural migrants settling in cities by 2020. This process is facilitating productivity gains in both urban and rural areas. However, it also entails challenges that necessitate continued reform efforts. Government policy regarding the rural sector should offer alternative routes for the population during this adjustment phase. Reforms that help farmers raise productivity will be particularly important. However, a sizeable share of rural citizens will seek non-farm jobs. Others still, usually the elderly or less able, struggle to adjust and will need to be supported through public welfare schemes.

Labour productivity in China's agricultural sector remains low compared with more advanced economies (Figure 25). Reforms that improve farmers' access to finance will spur productivity-enhancing farm investment and mechanisation. In addition, measures that

Figure 25. **Compared with more advanced economies, agricultural labour productivity is low**
Average level 2006-11



Note: GDP per capita groups are calculated as averages based on data for 132 countries. Gross agricultural output is measured in constant 2005 US dollar terms, the land input is the number of hectares adjusted for quality and labour is the number of economically active persons working in agriculture (Fuglie, 2012).

Source: US Department of Agriculture, authors' calculations.

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encourage the reallocation of resources to the most productive uses will be key to raising productivity in the agricultural sector as well as other parts of the economy. Rural land in China is owned by village collectives, with rights to farmland distributed to village households with a renewable contract term of 30 years. For the purposes of equality, each household has the rights to a number of plots of varying quality that may be geographically separated. As a consequence, average farm size (where a farm is defined as a continuous tract of agricultural land) in China is very low compared with other countries (Table 4). This is reinforced by constraints on trading farmland operation rights (as distinct from the contract rights that remain with the original recipient) that make it hard for farmers who wish to pursue other work to transfer operation rights to productive farmers who want to scale up production. Such constraints include poorly defined farmland contract rights and a lack of institutional structures for the trading of operation rights. Additionally, weak rule of law in some areas may result in a lack of enforcement of land rights even if households possess certificates detailing their contract rights to rural land.

Table 4. **Average farm size is small in China**

	Average farm size (hectares)
China	0.6
Vietnam	0.7
Indonesia	0.8
Japan	1.2
India	1.3
Thailand	3.2
Turkey	3.2
Colombia	25
Venezuela	60
Brazil	73
Chile	84
South Africa	288

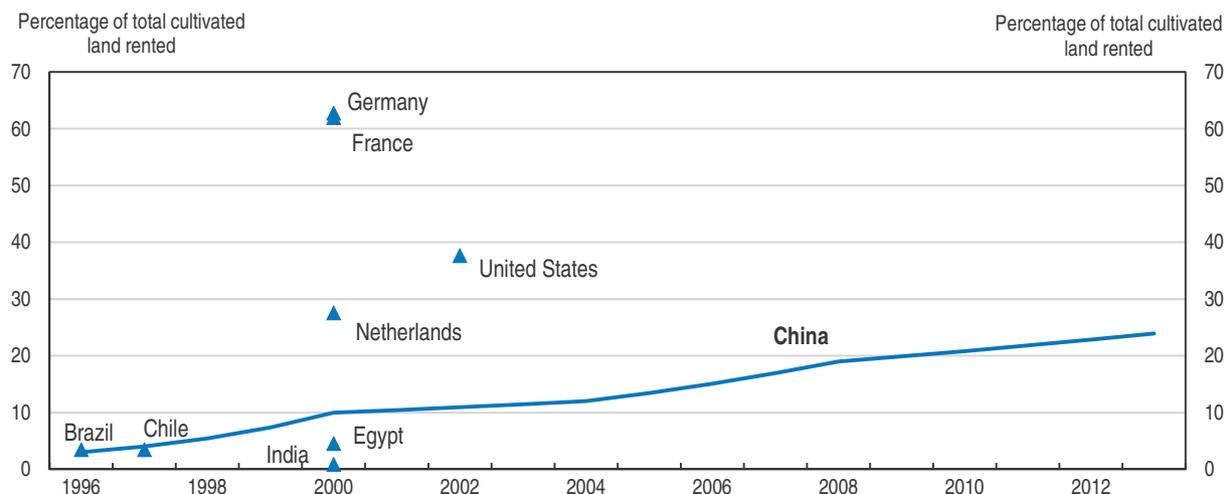
Note: Data for comparison countries are from agricultural censuses between 1996 and 2005. Data for China are for 2010. Source: 2000 FAO World Census of Agriculture, Huang et al. (2012).

With increasing encouragement from the central government and new instruments, the trading of operating rights has steadily risen over the past two decades (Figure 26). Nevertheless, the frequency of land rental in China remains below that in advanced countries.

Improving allocative efficiency will also depend on reforms to the *hukou* system. Rural workers who wish to migrate may not be able to access public services in the largest cities, despite ongoing reforms. This discourages migration, constraining the reallocation of labour as well as the potential flow of remittances to rural areas. Government infrastructure such as transport links is also important to connect those wishing to pursue off-farm work with employment opportunities.

Education and technical assistance services can improve agricultural productivity by facilitating the diffusion of new technologies and best practices in the sector. China has a considerable network of such services. However, past reforms have sought to partly privatise these programmes, causing extension agents to substitute time spent giving technical assistance with commercial activities (Lohmar et al., 2011). Improved farmer

Figure 26. **The proportion of rented farmland has increased but remains below advanced countries**



Note: The figure shows that the share of rented cultivated farmland in China increased from 3% in 1996 to around 24% in 2013. Estimates from the World Census of Agriculture highlight that China's share of rented farmland by 2013 remained below that in many developed economies taken around 2000. These included France (taken in 2000), Germany (2000), the US (2002) and the Netherlands (2000). Source: 2000 FAO World Census of Agriculture, Gao et al. (2012), State Council of the People's Republic of China.

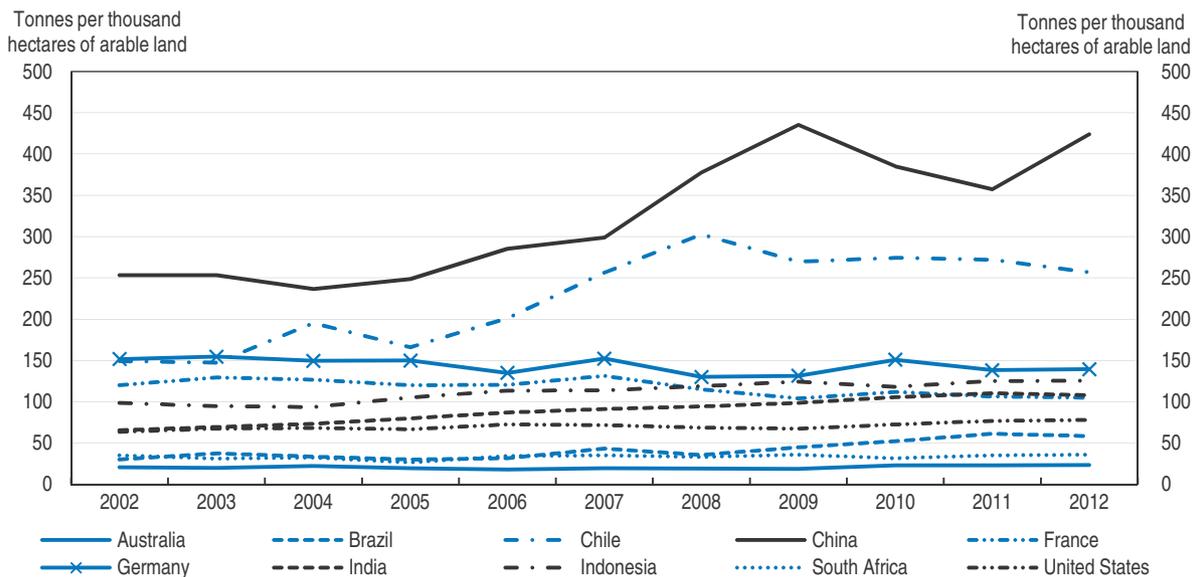
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skills and the spread of modern technologies into the food production process can help lower the risk of contamination of food products. As human capital further improves, there will also be scope for greater indigenous innovation in China's agricultural sector. Since 2000, agribusinesses have relied less on public R&D and increasingly invested in their own innovation activity. This has coincided with a seven-fold increase in the number of agricultural patents granted. In future, the authorities should ensure that government agricultural R&D does not crowd out private R&D investment.

Arable land per capita is low relative to other countries, meaning that production methods need to preserve the long run fertility of land resources. As well as supporting rural incomes, this is important for China's ability to meet its food security objectives. One farming practice that is threatening the sustainability of rural land is the overuse of chemical fertilisers, with the intensity of nitrogen fertiliser consumption around double other countries with large agricultural sectors (Figure 27). The government's efforts to encourage the use of new technologies can be expected to reduce overuse. So would reducing subsidies for fertiliser products, improving farmer education and promoting the reallocation of agricultural resources to more highly-skilled farmers. Grassland degradation is also an ongoing concern for the long run fertility of agricultural land. Grassland is vital as the feed base for livestock and plays an important function in capturing greenhouse gas emissions. Further reforms to promote the preservation of grassland include educating farmers about appropriate animal species selection and, possibly, government payments to farmers for restoring grassland areas that are linked to the associated reduction in emissions.

Efficient water use is also critical to raising China's agricultural productivity and rural living standards. Water resources are relatively scarce, especially in the North, and water efficiency is woeful in the agricultural sector owing to waste in irrigation systems, water

Figure 27. Nitrogen fertiliser is heavily overused in China



Source: FAO, authors' calculations.

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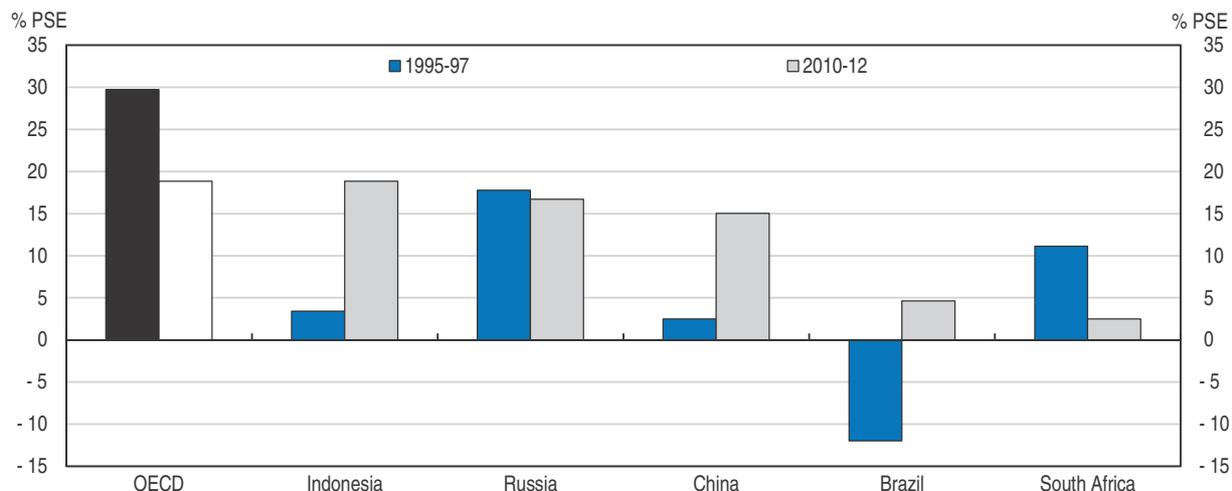
pollution and misallocation of resources among crops and locations (World Bank, 2009). This is because water is under-priced and farmers often pay an area-based water charge before irrigation. The NDRC plans to reform water pricing to encourage more efficient water use. This should be coupled with improvements in water allocation mechanisms. In addition, with wastewater discharges continuing to be a damaging source of water pollution, further government investment in rural water treatment and recycling plants will be crucial.

Raising agricultural productivity will help narrow the urban-rural divide. However, income support policies may continue to be needed for agricultural producers as the effects of productivity-enhancing reforms take time to materialise. Furthermore, such policies are important for groups that struggle to adjust during this period of rapid structural change for the rural economy. China's policy support to agricultural producers has risen significantly in recent years (Figure 28). These policies are meant to support rural incomes as well as food security and promote the mechanisation of agricultural production. However, some policies such as minimum purchase prices for grains may have adverse impacts on downstream firms. In the future, firm productivity will benefit from reforms that gradually replace minimum purchase prices for key grain crops with direct payments to farmers.

Some income support measures are specifically designed to target low-income rural citizens as rural China has a high concentration of the country's poverty-stricken families. The rural *dibao* programme is a direct payment to households equal to the difference between actual income and a determined minimum level. However, such payments only cover around 65% of the rural population that live below the poverty line, suggesting there is scope for improved coverage. There is also the *wubao* programme that aims to maintain the basic living standards of the elderly, the disabled and some children (those with no supporting family, no income and no ability to work) through the provision of in-kind

Figure 28. **China's support for agricultural producers has risen substantially**

Producer support estimate, per cent of gross farm receipts



Note: The producer support estimate (PSE) represents policy transfers to agricultural producers, measured at the farm gate. Transfers included in the PSE are composed of market price support, budgetary payments and the cost of revenue foregone by the government and other economic agents.

Source: OECD (2013d).

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services. In addition, China has introduced the New Cooperative Medical Scheme, promoting voluntary enrolment in health insurance programmes partly subsidised by the government. Such measures need to be complemented by continued investment in rural health facilities, as inequality between health services in urban and rural areas remains significant (Dai et al., 2014). Furthermore, reforms which promote the portability of health insurance benefits and eventually work towards unifying urban and rural health insurance schemes should be a focus.

Main recommendations to boost agricultural productivity and enable further rural development

- Give certificates to all rural households detailing their land-use rights and improve enforceability.
- Establish exchange platforms for the transfer of operation rights for rural farmland and collectively-owned construction land.
- Implement and enforce unit pricing of water for agricultural users and better water allocation mechanisms to encourage demand management and investment in water-saving technology.
- Expand the coverage of rural social welfare payments.

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ANNEX A1

OECD 2013 key recommendations and China's reform orientations

OECD 2013 Survey key recommendations	Third Plenum <i>decisions</i> and implementation directly related to OECD recommendations	Other relevant Third Plenum <i>decisions</i> and measures taken
Financial sector reform		
<p>Continue to move to market-determined interest rates by progressively widening the allowable margin around the regulated rate. Align the regulation of bond markets for maturities of over five years with the practices of the market for shorter maturities.</p>	<p><i>Accelerate interest-rate liberalisation.</i></p> <p>Dec-13: PBoC publishes a guideline on certificates of deposit in the interbank market.</p> <p>Mar-14: PBoC removes interest rate ceilings on smaller foreign-currency deposits in the Shanghai Free Trade Zone.</p> <p>Jun-14: PBoC removes interest rate ceilings on smaller foreign-currency deposits in banks in Shanghai.</p>	
<p>Progressively increase the quota for inward investment in equities and long-dated bonds. Allow greater use of offshore renminbi deposits in mainland China. Allow for greater exchange rate flexibility.</p>	<p><i>Improve the mechanism for market-based renminbi exchange rate formation, and accelerate the realisation of renminbi capital account convertibility. Establish a management system of foreign debt and capital flows within the framework of macroeconomic management. Build a deposit insurance system, and improve the market-based exit mechanism for financial institutions.</i></p> <p>Mar-14: Daily trading band for CNY against USD is expanded to 2% from 1%.</p> <p>Jun-14 onwards: In addition to Hong Kong, PBoC establishes offshore renminbi clearing centers in several cities around the world including Frankfurt, London, Luxembourg, Paris, Seoul and Sydney.</p> <p>Sep-13-Oct-14: Investment quotas for qualified foreign institutional investors are increased several times, from USD46.4 bn to USD64.1 bn.</p>	
Competition and innovation		
<p>Clarify rules concerning the opening up of new sectors to private investment. Strengthen the business operating environment by reducing the time taken to register a new business. Avoid promoting “national champions” in new strategic sectors.</p>	<p><i>Allow non-state-owned entities to hold shares in projects invested by state-owned capital. Allow qualified non-governmental entities to set up financial institutions such as small or medium-sized banks.</i></p> <p><i>Implement a unified market access system; all market players may enter areas not on the negative list, on an equal basis and according to law. Consider providing foreign investors national treatment subject to a negative list at the pre-entry stage so that they are not disadvantaged in the selection process. Lift limits on access for foreign investors in childcare, care for the elderly, architectural design, accounting and auditing, trade and logistics, electronic commerce and other service sectors.</i></p> <p>May-13 - Jul-14: State Council removes or delegates 395 administrative approval items to local governments from the original 1560 items.</p> <p>Dec-13: 12 government departments issue a working scheme to remove regional barriers and break industrial monopolies.</p> <p>Feb-14: Sinopec launches mixed-ownership reform to attract private capital in its sales businesses of oil products.</p> <p>Mar-14: China Banking Regulatory Commission (CBRC) approves a pilot scheme to set up five private banks.</p> <p>May-14: State-owned Assets Supervision and Administration Commission (SASAC) approves the sale of 11.3% of the equity of NavInfo to Tencent.</p> <p>Jul-14: China and the US commit to begin negative list negotiations early in 2015.</p> <p>Sep-14: 29.9% of Sinopec Sales Co. shares are sold to 25 private investors for CNY 107.1 bn.</p>	

Competition and innovation

Improve effectiveness of R&D spending by increasing the resources available to the agencies dispensing government funding and rebalance outlays towards fundamental research.

Integrate science and technology programmes and resources, and improve the mechanism for the government to extend support to basic, strategic and pioneering scientific research and generic technology research. Improve the financing conditions for small and medium-sized enterprises of science and technology.

Sep-14: Small enterprises can import advanced equipment duty free if it cannot be produced domestically.

Strengthen IPR enforcement by raising awareness of laws and increasing penalties for infringements to ensure adequate protection to domestic and foreign innovators.

Explore ways to set up intellectual property rights courts.

Nov-14: A court specialising in intellectual property rights (IPR) opens in Beijing.

Inclusive urbanisation

Allow migrants to enroll in high schools in their place of residence and university entrance examinations to be taken in the place of residence. Abolish local quotas for entrance to university.

Sep-14: State Council issues guideline on offering migrant workers and families equal access to basic public services in cities, including education, community hospitals and public housing.

Accelerate steps in the development of a modern vocational education system, deepen the co-operation between schools and enterprises, and train high-caliber workers.

Allow the transfer of credits among regular higher education institutions, vocational and adult colleges, thus broadening the channels for lifelong learning.

Disconnect the provision of local public services from local registration.

Help the eligible population to move away from agriculture and become urban residents. 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.

Improve the public service system for employment that serves both urban and rural areas equally, and build a lifelong vocational training system for workers. Improve the systems of government subsidies and student loans.

Mar-14: State Council issues a new urbanisation plan for 2014-20.

Jul-14: State Council issues a guideline on implementing *hukou* reform.

Sep-14: State Council selects 62 prefecture-level cities and counties to pilot new urbanisation reforms.

Equalise the use-rights of agricultural and urban land by extending rural leases.

Endow farmers with the rights to land transfer, and mortgage and guarantee of contracted land-use. Endow farmers with more property rights.

Encourage the transfer of contracted land-use right to big, specialised operators, family farms, farmer cooperatives and agricultural enterprises. Set up a rural property rights transfer market.

Sep-14: The 5th China Reform Leading Group (CRLG) meeting discusses rural land reform issues, including leasing contracted farmland to boost the scale of farms and granting farmers the right to possess and mortgage their shares of collective assets.

Reform the system of subsidising agriculture, and improve the agricultural insurance system.

Support large-scale and specialised operations in rural areas. Allow qualified cooperatives to receive fiscal funds, and to engage in credit co-operation.

Subject to zoning and planning requirements, ease the limits on the use of agricultural land for development, and allow farmers to sell land to developers directly and to consolidate holdings.

Ensure rural households' usufruct of their homestead. Push forward the mortgage, guarantee and transfer of farmers' residential property rights, and expand the channels for farmers to increase their property income. Set up a rural property rights transfer market.

Form a unified construction land market for both urban and rural areas. Allow rural collectively owned profit-oriented construction land to be sold, leased and appraised as shares.

Jul-14: State Council stresses the need to improve rural property and land rights registrations.

Sep-14: State Council has completed opinion seeking on a provisional property registration guideline. The government has promised a unified national property registration scheme by the end of 2014.

Intergovernmental fiscal relations

Raise the share of general intergovernmental transfers and improve the design of earmarked ones.

Improve the general transfer payments growth mechanism, and mainly increase the transfer payments to old revolutionary base areas, regions inhabited by ethnic minorities in compact communities, border areas and poverty stricken areas. Tidy up, integrate and regulate special transfer payments projects.

Mar-14: The number of earmarked transfers is reduced to 150 from 220 in 2013.

Improve the budget management system. Establish a standardised and reasonable debt management and early warning mechanism for both central and local governments.

Aug-14: National People's Congress adopts a revision to the Budget Law which clears ambiguity and allows provincial governments to issue bonds within a quota set by the State Council. These bonds must be included in the provincial budget.

Where major cities cover a relatively small geographical area, expand their boundaries to absorb surrounding counties in order to create authorities covering a metropolitan region.

Grant towns with large immigrant populations and great economic strength the right of jurisdiction in line with their population and economic size. Establish and improve a trans-regional urban development coordination mechanism.

Switch from taxing land transactions to taxing land possession, while keeping the overall property tax burden broadly unchanged.

Accelerate real estate tax legislation and push the related reform forward in a timely manner.

Environment

Improve incentives for energy conservation by raising excise duties on gasoline and fully deregulating prices. Move to full market-based pricing for natural gas and coal. Deregulate electricity prices, beginning in the generation sector, and avoid preferential electricity pricing for selected industrial users. Raise piped water prices to end-users to better reflect scarcity and encourage conservation.

Accelerate pricing reform for natural resources and their products to give full expression to their market supply and demand, the extent of resource scarcity, ecological and environmental damage costs and restoration benefits. Push ahead with pricing reforms of water, oil, natural gas, electricity, transportation, telecommunications and some other sectors while relaxing price controls in competitive areas.

Sep-14: Three government departments issue a plan to upgrade coal conservation technology and eliminate outdated capacity, and aim to lower the share of coal energy to below 62% by 2020.

Strengthen pollution price signals by increasing levies and pollution taxes. 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. Further lift standards for motor vehicle emissions as well as fuel quality.

Develop the environmental protection market, implement a trading system for energy conservation, carbon emission, waste discharge and water usage rights.

Oct-2013: State Council issues a guideline on reducing excess capacity in steel, cement, electrolytic aluminum, flat glass and shipbuilding.

Jun-13-Jun-14: Carbon trading is launched in seven pilot provinces and cities: Beijing, Tianjin, Shanghai, Chongqing, Hubei, Guangdong and Shenzhen.

Establish targets for a broader range of environmental objectives and hold local governments accountable. Improve national data collection and dissemination of all major pollutants including CO₂ and other greenhouse gases.

Establish the mechanism to monitor and give early warning to the carrying capacities of resources and the environment, and implement restrictive measures for regions where water and land resources, the environment and oceanic resources have been excessively exploited.

Dec-13: State Council issues a circular on national-level nature reserves.

Dec-13: CPC Organisation Department issues a guideline on incorporating indices related to the consumption of natural resources and environmental protection in the performance appraisal of local officials.

Apr-14: NPC adopts the revised Environmental Protection Law which emphasises the need to improve monitoring, survey and risk assessment mechanisms for the environment and health.

Chapter summaries

Chapter 1. Providing the right skills to all

China has made impressive strides in education in recent decades, even though the accumulation of human capital has lagged behind that of physical capital. Going forward, access to and quality of education will be key to sustain economic convergence with the most advanced economies and to offset the drag exerted by population ageing. This will require addressing a number of problems. Access to pre-school education is still far from universal. Migrants' children as well as rural and poor families are still at a major disadvantage at every step of the education ladder. The focus on rote learning and exams remains excessive. More bridges are needed between vocational and general education. Graduating students often struggle to find a job matching their expectations and employers do not always find the requisite skills. Despite a soaring number of Chinese patents, the quality of most patents is still low and innovation output is weak. Reforms are underway to address these problems but further progress is needed in various areas against the backdrop of rapidly evolving market demands and the development of the knowledge economy. Among the priorities are more and better oriented funding of education, giving greater opportunities to children with a socio-economic or physical disadvantage, reducing the role of after-school tutoring, focusing less on memorisation and more on creativity, enhancing the appeal of the teaching profession, improving students' information on labour market prospects, developing workplace training, making greater use of online education potential, and more effectively nurturing research and innovation.

Chapter 2. Agricultural reforms and bridging the gap for rural areas

Urbanisation will continue in China, with the government planning to grant urban residential status to an additional 100 million rural workers by 2020. While this process is transforming the urban economy, the rural economy is also undergoing substantial structural change. Government policy settings in rural areas are critical for smoothing the transition and helping bridge the gap in living standards between urban and rural China. Reforms should further enable farmers who wish to continue working in the agricultural sector to raise productivity levels. Specific measures include encouraging land transfer, promoting further rural financial development and technical assistance for farmers. At the same time, obstacles should be removed for those rural residents aspiring to move to jobs in cities where their skills can yield a higher marginal product. For those who remain in rural areas, improved social welfare systems and investment in health services are critical.

This Survey was prepared by Margit Molnar and Ben Westmore, with contributions from Chunyan Bian, Ruidong Gao, Thomas Chalaux and Clara García, under the supervision of Vincent Koen. Secretarial assistance was provided by Nadine Dufour and Mercedes Burgos.

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Further information

For further information regarding this overview, please contact:

Vincent Koen, e-mail: vincent.koen@oecd.org;

tel.: +33 1 45 24 87 79; or

Margit Molnar, e-mail: margit.molnar@oecd.org;

tel.: +33 1 45 24 89 49; or

Ben Westmore, e-mail: ben.westmore@oecd.org;

tel.: +33 1 45 24 15 85.

See also <http://www.oecd.org/eco/surveys/China>.

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