

CHAPTER 2

The economic transformations in China and Australia

KEY MESSAGES

The Australia–China economic relationship is entering a new phase, shaped by the big changes now underway in both economies, which are seeing the services sector and innovation emerge as larger drivers of growth.

The Chinese economy is in the midst of a major transformation after decades of rapid heavy industrial growth. It is now shifting towards the services sector and advanced manufacturing, industries that will be crucial in sustaining China’s progression to a high-income economy. At the same time, China’s large and increasingly wealthy middle class will drive massive growth in consumer spending in the coming years.

- To support this transformation, China must prioritise supply-side reforms that allow inefficient industries to shrink and more dynamic and innovative sectors to grow. This will require financial market reforms to improve the efficiency of investment, more private sector involvement in a number of state-dominated sectors and supporting the manufacturing sector to move up the global value chain.
- China’s transformation will have profound implications for Australia and the rest of the world as rising demand from China’s huge middle class creates vast new export markets in areas from financial services to food. Likewise, China’s transition towards a more open capital account will continue to reshape the global investment landscape, as Chinese savers look for investment opportunities abroad and foreign investment expands into new sectors of China’s economy.

In Australia, the end of the mining investment boom and steep commodity price falls have also necessitated structural change towards broader drivers of growth, especially given competitive pressures in the region. This has sharpened the policy focus on lifting Australia’s productivity, especially in the large services sector, which experienced a relative decline against international benchmarks over the past decade.

- A better productivity performance will be crucial for Australia to capture a share of emerging export markets and support higher living standards. Among other things, this will require removing protection for less productive firms, greater competition in sheltered services industries and facilitating cost-effective investment in new infrastructure, including by attracting further Chinese investment.

While the Australia–China relationship will continue to be underpinned by the traditional areas of complementarity including commodity trade, new areas for trade, investment and broader cooperation are emerging. Besides the growing prominence of the services sector in both economies, this also reflects the broader shift towards innovation-driven growth, which will require highly-skilled workforces capable of developing and absorbing new technologies.

The Australia–China economic relationship is entering a new phase, shaped by the very big changes that are now taking place in both economies. While the dynamic of these changes is difficult to predict exactly, some things are clear.

In China, the structure of the economy is shifting towards the services sector and higher-value manufacturing, and these new drivers of growth will be crucial in sustaining China's progress beyond middle income. Household consumption is becoming a more important source of demand, underpinned by rising wages and incomes.

China's economic transformation will have far-reaching implications for the world, given China now accounts for about one-sixth of global output and global income, and has a fast-growing middle class that is projected to reach 630 million people by 2022 (World Bank 2016; Barton 2013). As Chinese consumers demand an increasingly broad range of goods and services, vast new export markets will open up in areas such as professional services, health and aged care, and agricultural products.

For China, the development of more advanced manufacturing industries will allow its export sector to move up the global value chain, while stronger transport and infrastructure connectivity with the region can support demand for China's traditional manufacturing exports.

Meanwhile, China's ongoing financial sector reforms and capital account liberalisation will continue to recast the global investment landscape over the next decade. According to World Bank projections, China's share of global investment flows could increase dramatically over the next two decades, as China's domestic rates of investment moderate and its huge pool of domestic savings looks offshore for broader investment opportunities (World Bank 2013).

China's economic trajectory over the coming decade may not be smooth. A change of the kind to which Chinese policymakers have committed is unprecedented, and managing the economy's transformation presents a range of difficult challenges for policymakers. Among other things, China must push ahead with supply-side structural reforms that facilitate industrial restructuring, allowing outdated firms and industries to exit and encouraging new and innovative firms to flourish. Further financial market reform will be crucial to this shift, by allowing more productive businesses in emerging sectors to secure finance for investment. Facilitating more private sector involvement within industries currently dominated by state-owned enterprises (SOEs) — such as energy, utilities, transport and banking — will be similarly important.

After decades of economic growth driven by increasing the number of workers and the amount of capital, these supply-side structural reforms will be necessary to promote greater efficiency and achieve sustained increases in multifactor productivity, and therefore incomes, over the next decade.

Much as in the past decade, the Chinese economy will continue to have a large influence on Australia's economic prospects in the coming decade.

Australia capitalised on the China-led increase in global commodity demand in the last decade, thanks to an abundance of economically proven mineral reserves, a globally competitive mining industry and policy settings that facilitated a large-scale expansion of the resources industry.

However, Australia's income growth has now slowed, partly as a result of China's economic transformation towards less resource-intensive growth. In the next decade, Australia will need to broaden its export base beyond mining by tapping into the fast-growing market for consumer and commercial services that is currently emerging in China and across the region, while cementing its position as a reliable, low-cost supplier of a broad range of energy and industrial commodities.

Succeeding in these new markets for services in the region will not be easy. Australia will face fierce competition from service suppliers globally, without the natural and geographic advantages it possesses in minerals production. Australia will need to reinvigorate its economic reform agenda to help drive innovation and productivity, particularly in Australia's large services sector where productivity lags behind the global frontier in many cases. Improving product market efficiency throughout the services sector, including by strengthening and extending competition policy, will be essential if Australia is to expand its service exports and maintain prosperity in the next decade.

For both China and Australia, driving internal economic reform will also require engaging further with the rest of the world. In China's case, this means allowing the Chinese economy to become more closely integrated with global financial markets as a way of improving the allocation of capital internally, and opening up its expanding services sector to greater foreign trade, investment and technologies.

For Australia, increasing contestability in currently sheltered service and infrastructure markets will help attract a wider range of Chinese and other foreign investment. As a relatively small, open economy, this will be critical in financing new infrastructure and Australia's broader investment needs.

In both Australia and China, the services sector is becoming a larger driver of growth, especially in professional service areas and in the information economy, where new technologies are fundamentally changing the way business is being done across the world (Box 2.1).

BOX 2.1: THE GLOBAL RISE OF THE INNOVATION ECONOMY

China and Australia, like the rest of the world, are looking towards innovation and the information economy as key drivers of investment and growth in the coming decade.

Rapidly emerging disruptive technologies are reshaping the way consumers and businesses interact, including through the advent of the sharing economy, the growing capacity to collect and analyse 'big data' and through the shift towards knowledge-based capital (KBC).

KBC includes investment in digital information (software and data), innovative property (patents, copyrights, trademarks and designs) and organisation-specific competencies (brand equity, training and organisational capital). The OECD estimates that investment in KBC now represents almost half of all investment in the United States and other advanced economies (OECD 2013b).

KBC will be a key factor in spurring new sources of growth, by allowing firms and organisations to prosper in a competitive global economy and create high-wage employment. This is particularly relevant for Australia and China as they look to replace the traditional sources of export growth over the past decade. As the OECD notes: 'KBC allows countries and firms to upgrade their comparative advantage by positioning themselves in high value-added industries, activities and market segments'. New, innovative firms are also becoming the main drivers of employment creation, with 'high-growth' firms accounting for up to half of all jobs growth even though they only account for around 5 per cent of all businesses (OECD 2012).

That said, the rise of KBC is creating new challenges for policymakers and businesses, not least the difficulties involved in measuring economic activity associated with KBC. For example, the rise of KBC has made a country's intellectual property regime even more important, a point highlighted in Australia's recent Review of Competition Policy.

KBC businesses are already driving massive innovation in the Australia–China relationship through innovative delivery of goods and financial services via e-commerce that is leapfrogging old barriers to economic integration. What we see so far is just the tip of the iceberg (see Chapter 3).

Both countries are rightly focused on fostering an innovative business climate that supports new and dynamic firms to expand and create employment. Their leaderships opened a new dialogue about their countries' innovation strategies in April this year. As part of this, policymakers must ensure that local workforces have the skills and capabilities to tap into the latest technologies and business practices developed abroad. But there are deeper trends driving the global environment in which information and big data businesses are reshaping the world economy and international business, and these trends will need to be on their agenda for cooperation over the coming decade.

Although merchandise trade — including in commodities — will remain a foundation, the China–Australia economic relationship will increasingly be defined by each country's transition towards more services- and innovation-based economies, and the bilateral collaborations that can help bring this about.

This will mean greater trade in services, but also a broadening of people-to-people engagement to share technologies, business practices and institutional know-how as each country navigates its reform challenges. These areas for greater business and government collaboration are discussed in following chapters.

This chapter sets the economic context for the rest of the Report. It begins with a summary of China's rise and impact on the global economy over the past few decades, with the next section focusing on China's influence on commodity markets and Australia. It first examines the economic transition that is now occurring in China and the implications for Australia and the rest of the world. This includes a discussion of the key economic reforms that will be required in both countries to help sustain economic growth and prosperity over the next decade.

China's rise and its impact on the world economy

China's economic transformation since 1978 has been remarkable. At the commencement of the reform period, China's GDP per capita was less than 5 per cent of the United States' (The Conference Board 2015). According to World Bank Development Indicators, since 1978, China's economy has grown in size by an annual average rate of around 10 per cent and is now almost 30 times larger than it was in 1978 (World Bank 2016). This reflects a substantial increase in labour productivity, which has risen from 3 per cent of the US level in 1978 to more than 20 per cent now (The Conference Board 2015).

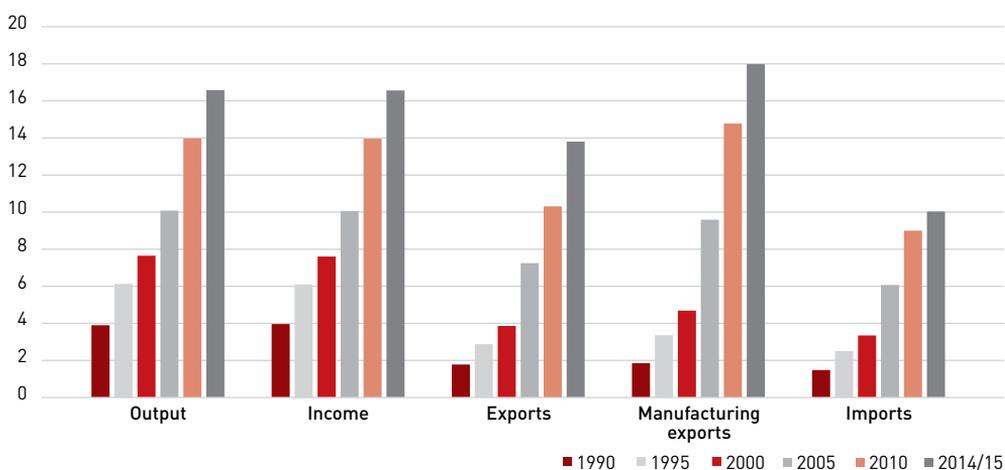
This performance has resulted in China rapidly catching up to higher-income economies, which, combined with a huge population, has seen China's share of global output and income rise from less than 5 per cent in 1990 to 17 per cent today (Figure 2.1).

While unique in scale, China's economic convergence broadly matches the previous experience of other Asian economies such as Japan and South Korea. Indeed, the principle factors behind China's success are similar to those that have driven economic convergence elsewhere in Asia. These include very high rates of physical capital accumulation and mass mobilisation of labour towards an export-oriented manufacturing sector, supported by ongoing improvements in human capital and technological catch-up.

The scale and speed of China's economic rise over the past four decades also reflects the size and demographic profile of China's population, which saw the working-age population grow significantly faster than the overall population. This coincided with the mass movement of rural surplus labour from the low productivity agricultural sector to higher productivity industrial and service sectors.

China's export-oriented growth model has underpinned a large and rapid expansion in its international trade and integration with global markets since 1978.

Figure 2.1: China's share of the global economic aggregates

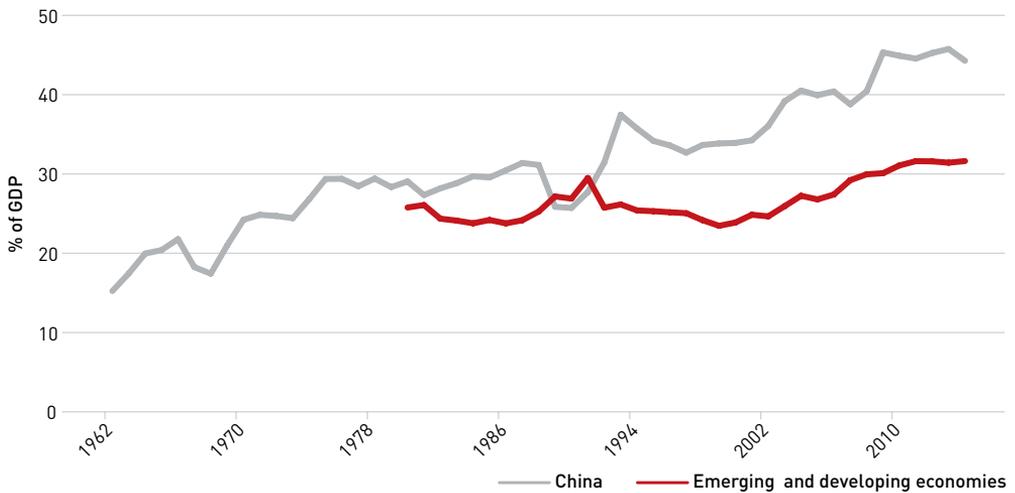


*Note: Exports and imports figures are merchandise only.
Source: World Bank 2016; WTO 2016a.*

In the past 15 years alone, China's exports have expanded more than 10-fold, facilitated by accession to the WTO in 2001. Having surpassed both the United States and Germany, China is now the world's largest exporter by value, accounting for 12 per cent of global merchandise trade (Figure 2.1).

Greater international openness allowed China to absorb foreign technologies and know-how, driving improved productivity across the broader economy. A more open economy also increased competitive forces domestically, promoting efficiency and innovation in trade-exposed sectors.

Figure 2.2: Investment as a share of GDP



Source: World Bank 2016.

Since the mid-1990s, China's rapid economic convergence has reflected very large investments in physical capital. China commenced the reform period with relatively low capital per worker, allowing for initially large labour productivity gains and high returns on investment. Growth in the capital stock is estimated to have averaged 10 per cent annually from the 1980s, accounting for significantly more than half of GDP growth over this time (Wu 2014).

These trends have resulted in China's investment as a share of GDP reaching very high levels, both historically and even compared with other emerging economies (Figure 2.2).

China's elevated rates of investment have been supported by government policies that have incentivised property development and infrastructure investment, and expansions in manufacturing capacity. This includes the structure of the financial system, which has channelled subsidised capital from savers to large private and state-owned enterprises, and an exchange rate regime in previous decades that encouraged exports over domestic spending. China's very high rates of investment have been supported by very high rates of national saving (Box 2.2).

The impact of China's rise on global commodity markets and Australia

It is not just the rapid growth and transformation of the Chinese economy that has affected opportunities globally; it is also the sheer scale of China's impact that has mattered to the world economy.

The unprecedented scale of China's industrialisation has resulted in China's consumption of metals, other raw materials and energy expanding massively over recent decades. China is now the world's largest user of a range of industrial and energy commodities including steel, copper and coal (Figure 2.4).

BOX 2.2: CHINA'S HIGH RATES OF NATIONAL SAVING

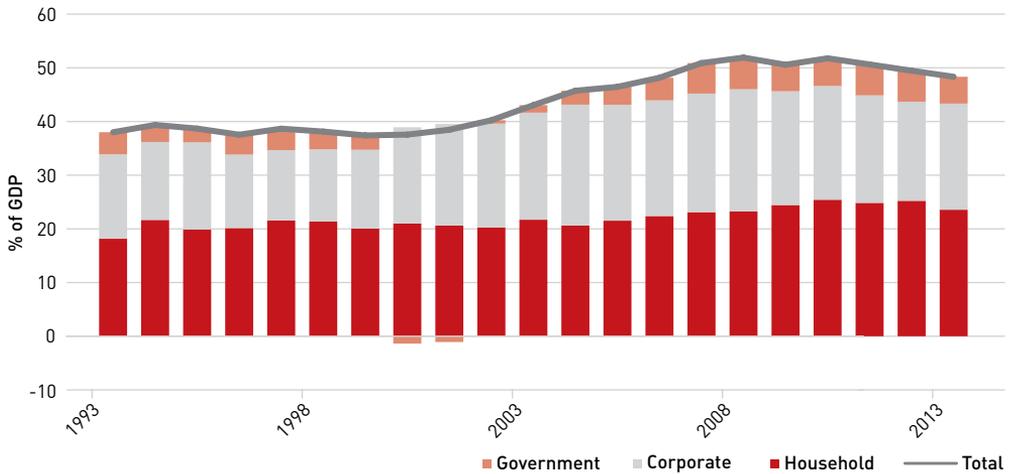
China's vast stock of savings, together with its capital account controls, has played an important role in high rates of investment. Saving as a share of GDP rose from less than 40 per cent in the 1980s to a peak of 50 per cent in the late 2000s. While the national saving rate has eased in the past few years to around 48 per cent, it remains very high by historical and international standards (Figure 2.3).

The household sector has made a significant contribution to higher rates of national saving, reflecting a growing working-age population with an increasing capacity to save. Incomplete domestic financial markets and restricted access to foreign financial assets have also encouraged high household saving rates, as has the limited state provision of social security and health insurance.

Corporate saving has also made a large contribution to China's high rates of national saving. A flexible dividend policy has allowed SOEs to retain and then reinvest most of their profits, rather than distributing dividends to the state. Financial underdevelopment has also made it difficult for the private sector, especially small businesses, to access intermediated financing, inducing higher saving rates in that sector.

Planned reforms to financial markets (including interest rates) and to the regulation of SOEs, as well as the broader provision of social infrastructure, should support higher household consumption and corresponding declines in household and corporate saving rates. Likewise, China's ageing population is likely to play a part in reducing saving rates, as an increasing share of China's adult population moves into retirement age and begins to draw down savings.

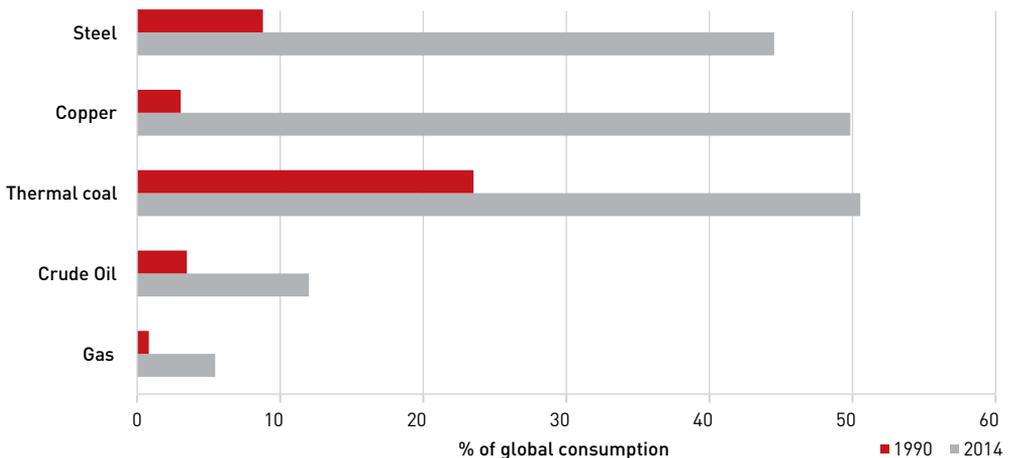
Figure 2.3: National saving by sector



Source: China National Bureau of Statistics 2015.

China’s growth in steel consumption has been particularly dramatic over the past two decades, driven by rising investment in steel-intensive buildings and infrastructure, as well as large expansions in the manufacturing sector. China is now the largest steel consumer, accounting for 45 per cent of global steel usage in 2015 (World Steel Association 2015). China’s increasing steel requirements necessitated a massive expansion in its steel industry, which is estimated to have produced over 800 million tonnes of crude steel in 2015 – more than six times as much as it did in 2000 (Figure 2.5).

Figure 2.4: China’s share of global commodity consumption

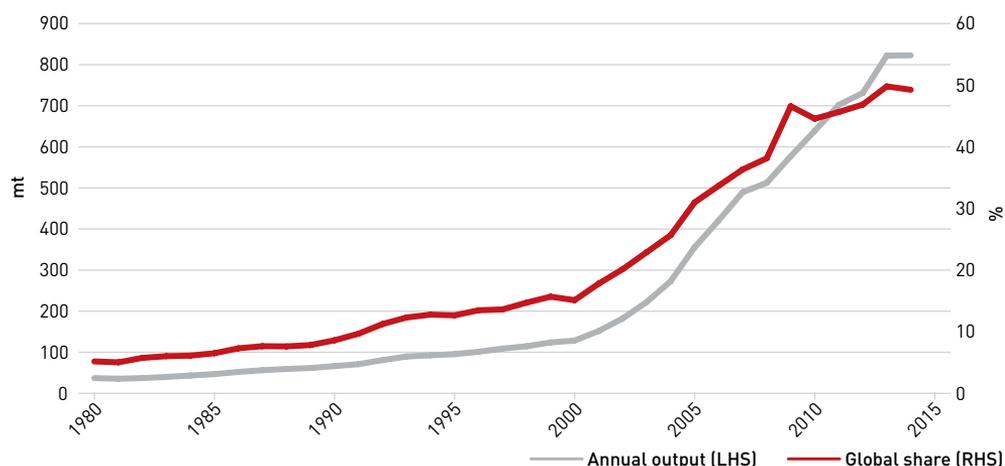


Source: World Steel Association 2015; World Bank 2015; BP 2016.

China's increasing production of steel has had flow-on effects to its demand for the raw ingredients used in steelmaking, namely iron ore and metallurgical coal. Most notably, China's share of world iron ore consumption rose from 14 per cent in 2000 to an estimated 65 per cent in 2015.

While having large quantities of its own resources, China has become increasingly reliant on imported inputs as strong commodity demand has drawn in lower-cost, higher-quality commodities from abroad. Trade dependency continues to rise as commodity prices fall, and the share of imported industrial inputs in domestic consumption is at an all-time high.

Figure 2.5: China's steel production



Source: World Steel Association 2015.

Responding to the sharp rise in global commodity prices and growth in China's demand for raw materials, Australia's mining industry invested heavily in new export capacity over the past decade (Figure 2.6). This investment was initially concentrated in the iron ore and coal sectors, but was followed by an even larger investment in liquefied natural gas (LNG) capacity, which will make Australia the largest exporter of LNG within a few years. At its height in 2013, the mining industry's share of private investment in Australia reached one-third, more than triple the typical historical share.

There was a lag in the response of investment and capacity to rising prices because of its gestation period. But as this new capacity came on line, Australia's export volumes of these products almost doubled compared to the previous decade. In the iron ore market, Australia now accounts for almost one-third of global production and one-half of seaborne trade, significantly higher than a decade ago.

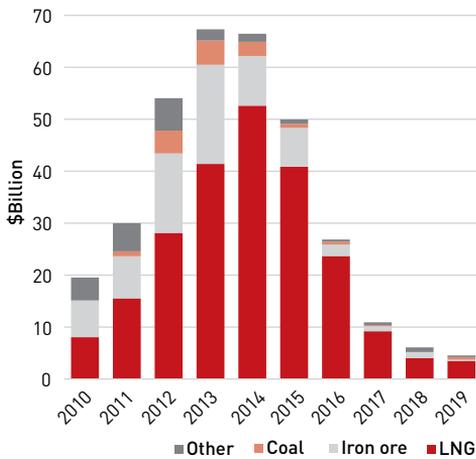
Almost all of Australia's additional iron ore supply has been absorbed by China, with Australia increasing its share of Chinese imports to over 60 per cent as less efficient global supply has been displaced, including within China itself. Australia's share of China's coal imports has also increased, from around 10 per cent in 2009 to around one-third now (Figure 2.7).

By 2018, the mining industry's capital stock will be almost four times larger than it was in 2004, a massive investment in new capacity that will underpin Australia's mining exports for decades to come.

Extensive reserves of iron ore, coal and other commodities meant that Australia was well positioned from the outset to benefit from China’s rising commodity demand. But the mere existence of these natural resources did not guarantee Australia’s success. Instead, Australia owes its success to the competitiveness of its mining industry as well as the flexibility of the wider economy that allowed resources to be efficiently reallocated to expand the minerals sector.

Figure 2.6: Mining investment in Australia

Panel A: By commodity type



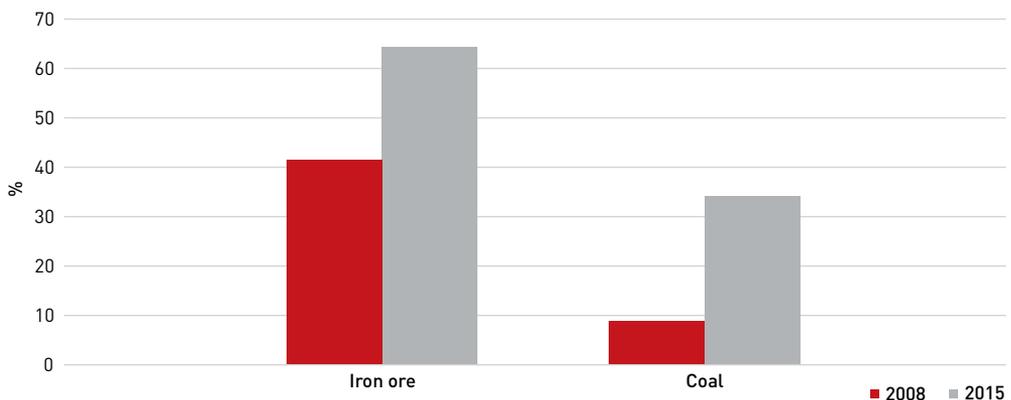
Panel B: Share of total private investment



Sources: Government of Australia 2014.

Australia’s well-established macroeconomic policy frameworks, including a floating exchange rate, played an important role in accommodating the expansion in Australia’s mining capacity with limited disruptions to the broader economy. Along with a sufficiently flexible labour market, these settings helped inflation expectations to remain anchored when the terms of trade rose sharply, avoiding many of the macroeconomic difficulties that arose in previous terms of trade booms in Australia (Gruen 2011).

Figure 2.7: Australia’s share of Chinese commodity imports



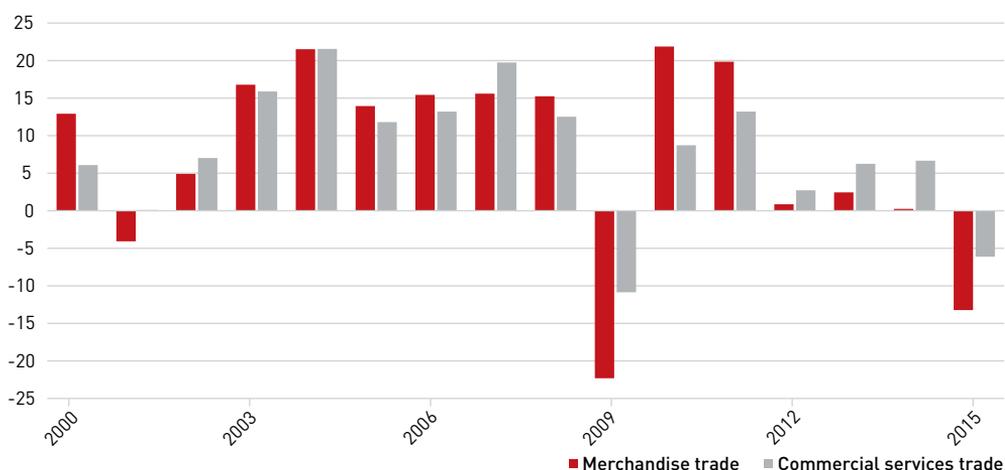
Source: China National Bureau of Statistics 2015.

China's economic transformation to new drivers of growth

After almost four decades of rapid growth, the Chinese economy is undergoing a major transformation, brought about by a combination of internal and external economic forces.

On the external front, substantially slower growth in international trade has seen a corresponding moderation in demand for China's traditional, labour-intensive manufactured exports in recent years (Figure 2.8). This slowdown partly reflects China's already significant market share in some global manufacturing segments, as well as a more fundamental shift in global trade towards information and services, consistent with the rise of e-commerce globally.

Figure 2.8: Growth in global trade



Source: WTO 2016a.

Domestically, as wages and incomes rise, household consumption is emerging as a more important driver of economic activity. At the same time, China's growth drivers in recent decades — investment in physical capital and labour-intensive manufactured exports — are slowing. The lower growth in investment in these sectors reflects oversupply in the property market and the excess capacity that has emerged across segments of the manufacturing sector, and the lower profitability in these sectors.

Demographic forces and labour market dynamics are also playing their part in China's shift away from factor-driven growth towards more balanced growth. After growing strongly for nearly four decades, China's working-age population is now shrinking, which is directly reducing China's growth potential via lower growth in the labour force.

China's ageing population has implications that go beyond the impact on aggregate economic growth. For example, there will be an extra 110 million people aged over 65 by 2030, which will increase the demand for aged-care services and put pressure on China's still developing social safety net.

In the labour market, the slower growth in the labour force and shrinking pool of surplus rural labour is contributing to higher wages. Higher wages combined with a significant appreciation of the real exchange rate over the previous decade is helping to shift the composition of

demand from exports and investment towards consumption. This is being supported by a shift in economic resources towards consumers, illustrated by the uptick in the wage and household sector shares of GDP in recent years (Figure 2.9).

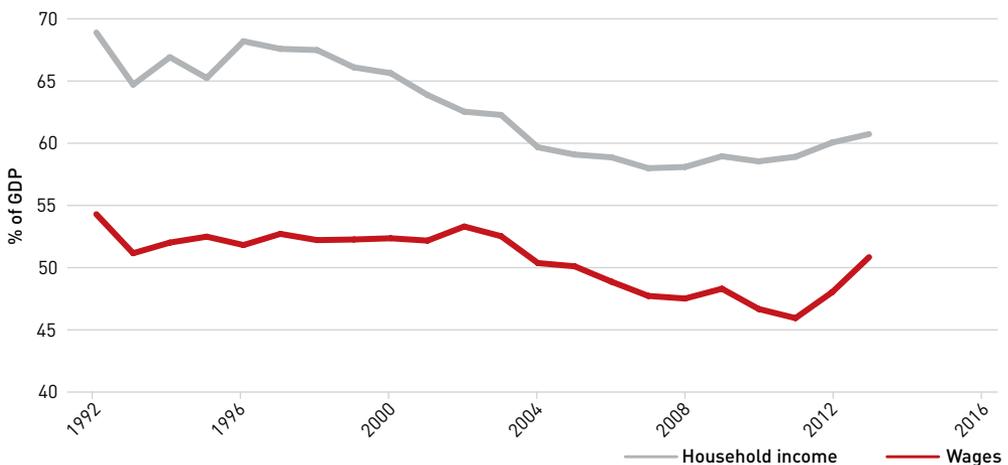
Similarly, consumption expenditure has now overtaken investment spending as the main contributor to economic growth. While this partly reflects slower growth in investment in recent years, the contribution from household consumption also rose in 2015 (Figure 2.10).

Within consumption, the shift towards services, as well as discretionary goods, is occurring as Chinese households become wealthier. This changing pattern of demand is giving rise to faster employment growth in the services sector. Over the past two years, employment in China's services sector has grown strongly and now accounts for a little more than 40 per cent of employment across the economy, up from 30 per cent a decade ago (WTO 2016).

The appreciation of China's real exchange rate is also encouraging employment creation in China's non-traded services sectors, which ultimately will be at the expense of employment in China's export-oriented sectors. This dynamic is consistent with the experience of other emerging economies such as Japan in the 1970s and 1980s where increases in the real exchange rate reinforced a shift towards domestically oriented industries such as education, health and financial services (Dorrucci et al 2013).

While investment as a share of GDP has fallen in recent years, and may fall further, China's transformation towards services, higher-end manufacturing and the digital economy will still involve substantial new investment in these growing industries. For example, China's entry into new, higher-technology manufactured segments will require large-scale investment in plant, equipment and human capital, as illustrated by the recent plan to establish a semiconductor industry in China.

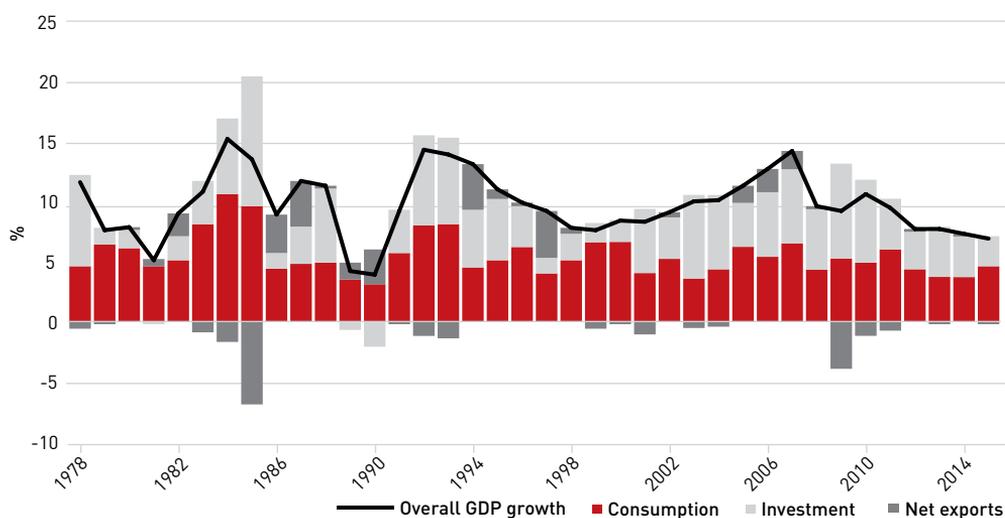
Figure 2.9: Wages and household disposable income



Source: China National Bureau of Statistics 2015.

The types of assets attracting investment are also likely to evolve as China's industry becomes more advanced. This reflects the greater need for investment in innovation and information technology as Chinese industry develops, in line with the global trend towards knowledge-based capital (OECD 2013b). For China, this means a greater proportion of investment is likely to be directed towards intangible assets, such as digital information, computer software and research and development to support China's progression into higher-technology manufacturing (Box 2.3).

Figure 2.10: Contributions to China's GDP growth



Source: China National Bureau of Statistics 2015.

That is not to say that investment in traditional forms of physical capital will not remain essential in supporting China's continued urbanisation and raising the quality of life in urban centres. This includes further investment in public transport networks and urban amenities, which in many cities remain underdeveloped. Notwithstanding the current areas of oversupply, continued urbanisation will also require substantial new investment in residential and commercial building over the coming decade.

Reforms to assist China's economic transformation

To sustain economic growth in the next decade, China's policy environment will need to support the shift in activity towards the services sector, higher-tech manufacturing and energy transformation to address environmental challenges. It will also need to allow economic resources to shift towards these more innovative and fast-growing sectors of the economy.

This focus on lifting multifactor productivity recognises that the long period of factor-driven growth China has experienced over the past 40 years can no longer be sustained. This reflects falling rates of return and the build-up of excess capacity in significant parts of the industrial sector, a shrinking working-age population as well as broader quality of life considerations, including reducing the pollution-intensity of growth. In this context, China's economic performance over the coming decade will depend in large part on whether China can improve upon the limited growth in multifactor productivity achieved since 2007 (Figure 2.13).

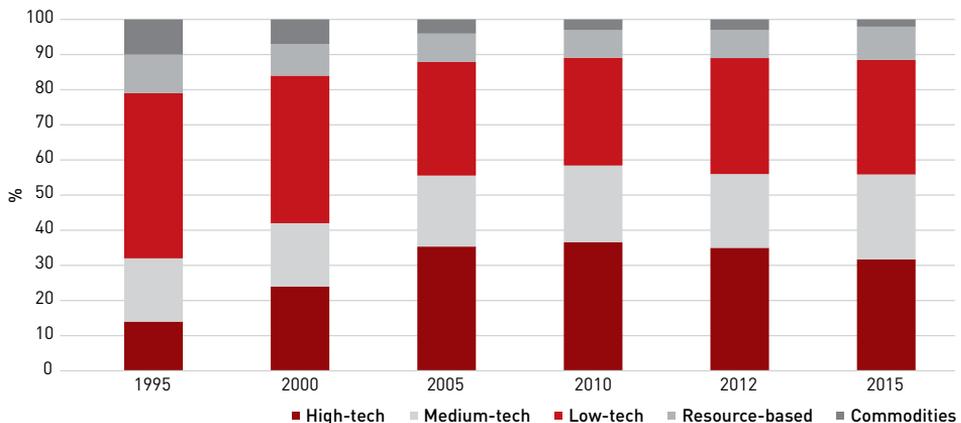
BOX 2.3: CHINA'S PROGRESSION TOWARDS HIGHER-END AND VALUE-ADDED MANUFACTURING

The pace and scale of China's rise as a manufacturing exporter has been truly remarkable. Since accession to the WTO in 2001, China's share of global manufacturing exports has grown from 5 per cent to 18 per cent, making a strong contribution to economic growth both directly and through technology spillovers to the wider economy.

However, growth in China's exports of traditional, labour-intensive manufacturing products has slowed in recent years, reflecting a range of factors — including that global markets may have reached saturation point for these products. For example, China's share of international clothing exports has remained at almost 40 per cent in recent years, having risen continuously over the previous few decades (WTO 2016).

In the next decade, China will therefore need to build upon its traditional export categories by continuing to progress into higher-technology manufacturing, following in the footsteps of countries such as Japan. This process has been underway for some time, with the share of medium- and high-tech manufacturing in China's merchandise exports now substantially higher than what it was 20 years ago (Figure 2.11).

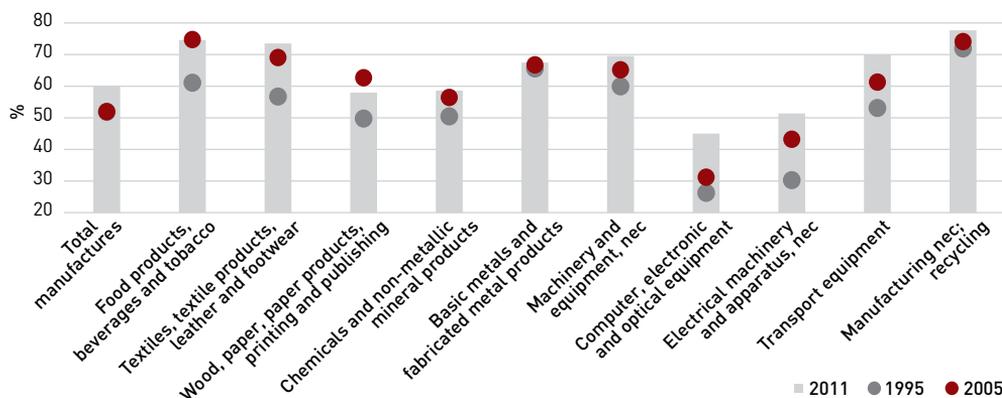
Figure 2.11: China's export mix 1995–2015



Source: OECD and United Nation's Comtrade database.

At the same time, China's manufacturing sector will need to capture a larger share of the gross value of its manufacturing exports, by moving up the value chain in line with the Made in China 2025 initiative, an official initiative aimed at promoting advanced manufacturing. This will be essential if China's export sector is to continue to make a strong contribution to economic growth over the next decade. Again, there are signs that China is already making progress in this respect, having captured a larger share in the global value chain across many manufacturing sub-categories over the past two decades (Figure 2.12). This includes particularly large increases in the domestic economy's share of the value-added of computers, electrical machinery and appliance exports.

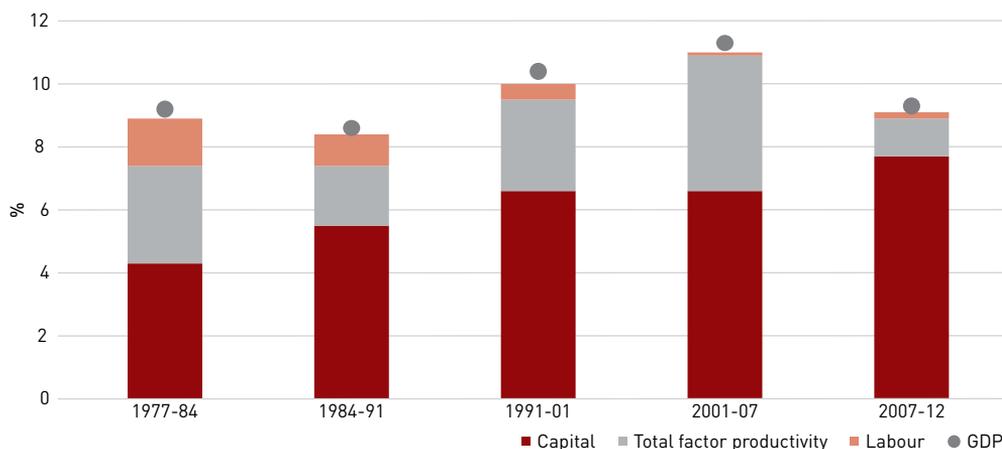
Figure 2.12: Domestic value-added share of China's gross exports



Source: WTO and OECD 2016.

While China's progression to a more advanced and higher-income economy will not be straightforward, the 13th Five Year Plan recognises these economic imperatives, building upon the reform strategies as set out in the Third Plenum of the 18th Party Congress in late 2013. This includes the need to support greater household spending, improve the efficiency of investment, encourage a more innovative science-led economy and expand into higher-technology manufacturing (Box 2.4).

Figure 2.13: Contribution to China's GDP growth



Source: Conference Board 2015; Wu 2014.

Most importantly, the Plan's focus on supply-side structural reforms recognises the need to encourage an expansion in China's more dynamic private sector while limiting further investment in those parts of the economy that are now experiencing over-capacity. This will encompass a broad range of reforms including opening up monopoly industries to private sector participation, reducing government involvement in a number of sectors still dominated by SOEs and improving market exit mechanisms.

Financial market reforms will also play a role in allowing more dynamic and efficient firms to expand by providing better access to finance at lower rates. This will require pushing ahead with banking sector reforms, including liberalising interest rates, as well as encouraging a greater role for non-traditional banking (including through emerging online credit providers) and direct equity financing.

BOX 2.4: CHINA'S ECONOMIC TRANSFORMATION AND THE 13TH FIVE YEAR PLAN

The 13th Five Year Plan ('the Plan') presents a roadmap for China's economic transformation towards a higher income economy. The Plan prioritises a range of areas including: improving development quality and efficiency; supply-side structural reforms; better matching supply and demand; encouraging a more innovative economy; fostering more coordinated, green and inclusive economic development; and accelerating institutional reforms to support China's continued economic development. The Plan focuses on the three economic goals of lifting household consumption, transforming industry towards services and higher value-added manufacturing, and promoting the development of an innovation- and talent-based economy.

Strengthening consumption-led growth. China will promote consumption to become a more important contributor to economic growth. This encompasses policies that promote an industry structure that better reflects demand from Chinese consumers for higher-quality products and encourages an expansion in China's consumer-oriented services industries, including health and aged care. Consistent with a greater domestic capacity to produce higher-end consumer products, Chinese consumers will be encouraged to consider switching their spending from overseas to domestic markets.

Encouraging the services sector and higher-end industry. China will lift the share of the services sector in the economy and encourage higher-end manufacturing. While aggregate demand will be adjusted appropriately, the emphasis will be on supply-side structural reforms that enable the Chinese economy to meet the Chinese people's growing material, cultural, ecological and environmental needs. Consistent with the 'Made in China 2025' initiative, the transition into higher end manufacturing will allow Chinese industry to capture a large share of value chains. To help accelerate the development of a modern service sector, these parts of the economy will be exposed to greater foreign competition. The 'Internet Plus' action plan will help to promote better and broader use of the internet, with greater access to information and better information networks facilitating the adoption of more efficient production methods and organisational structures within industry.

Fostering scientific and technological innovation. China will aim to improve multifactor productivity, underpinned by scientific and technological innovation, investment in human capital and greater entrepreneurship. Market reforms will be undertaken to ensure that research and innovation is geared towards the most valuable areas, supported by closer collaboration between researchers and industry. While absorbing and integrating foreign innovation will remain important, the Plan prioritises ways of encouraging locally generated technologies and new ideas, to help generate self-sustaining economic development.

At the same time, the Plan highlights the need to address distortions in policy and institutional arrangements and the need to promote further competition among firms in some industries as part of a generally open and contestable market system.

Capital account liberalisation can also assist, by providing another channel through which Chinese firms can access finance at market rates, while also subjecting domestic providers of finance to external competition.

Besides having the potential to improve China's efficiency of investment, capital account liberalisation can also support the shift to household consumption. As the constraints on outbound investment are loosened further, Chinese households will be able to invest in a wider range of assets with higher risk-adjusted returns. This will be reinforced by establishing market-determined interest rates and a more market-determined exchange rate, helping to reallocate income towards the household sector.

Although it is in China's longer-term interests, the transition to new drivers of growth will take time, and the pace of economic growth may moderate more than anticipated in the transitional period. Alternative growth scenarios are examined in later chapters (see Chapters 3 and 6) to consider the effect of different Chinese growth trajectories and structures on the Australia–China economic relationship. For example, China's progression into higher-tech manufacturing, which is a difficult transition in its own right, may not occur quickly enough to offset the impact of slower growth in traditional manufacturing segments. Likewise, China's concern about the environmental impact of heavy industry and the mining sector may weigh further on industrial production as new policies in these areas begin to take effect.

During this transition, China must strike the right balance between policies that support near-term growth and policies that promote the economy's longer-term growth potential.

In particular, excessively loose monetary stimulus to support short-term growth would have the potential to encourage higher borrowing and leverage in the corporate sector, which could create fragilities in the financial system and undercut longer-term reforms to improve the efficiency of investment. China should be extremely careful in managing financial risks associated with high levels of total debt, which reached 237 per cent of China's GDP in the first quarter of 2016, from 148 per cent at the end of 2007. Deleveraging is one of five top priorities for the work of the government for 2016. Deleveraging will help China achieve more sustainable growth in the longer term but can put downward pressure in the short term.

Implications of China's transition

Implications for the global economy

First and foremost, the sheer size of the Chinese economy means opportunities to do business with China will continue to expand even if aggregates rates of economic growth are lower. The IMF projects China's growth rate to remain more than twice the global average in the next few years, while its contribution to global growth will be much larger than it was 10 years ago given it is now a significantly larger share of the world economy.

But the transformation underway in the Chinese economy means that China's impact on the world economy will be very different from what it was in the last decade. The increase in per capita consumption, urbanisation and the emergence of the services economy, as well as the further liberalisation of financial markets in China's economy, will fundamentally change how China interacts with the rest of the world.

The larger role for consumer spending and the shift to a more services-based economy will provide China's trading partners with vast export opportunities in new areas of the Chinese economy. China's middle class is projected to reach 630 million people by 2022, providing a huge and expanding market for international providers of consumer goods and services, in areas spanning healthcare, education and food (Barton 2013).

China's demand for high-value foodstuffs is expected to rise dramatically over the coming decades, with the consumption of beef and other meats doubling or even tripling according to some projections (Hamshere et al 2014). While the majority of this increased food demand will be met by expanding China's domestic production, there will be significant unmet demand that international food exporters will be able to exploit.

Likewise, the opening up of China's domestic services sector will present new opportunities for foreign investors, in areas such as finance, insurance and the utilities sector.

The share of China's labour-intensive manufacturing segment is likely to decline going forward. However, building greater connectivity and infrastructure projects with Asian and European exports markets via the infrastructure investment projects associated with the One Belt, One Road (OBOR) initiative can support demand for China's traditional export categories.

The OBOR initiative can also assist in absorbing China's construction capacity (including for infrastructure), while simultaneously supporting economic and trade networks across participating economies.

BOX 2.5: THE OUTLOOK FOR CHINA'S STEEL DEMAND

Having grown strongly over the previous decade, China's apparent steel consumption fell by 3 per cent in 2014 and is estimated to have fallen by another 5 per cent in 2015. This raises the question of whether China's steel consumption has peaked or whether this weakness reflects mainly cyclical factors that will give way to further increases in China's steel consumption over the coming decade. This question will have important implications for China's large steel industry as well as iron ore producers in China and overseas.

In the past, large rises in China's steel demand were driven by construction investment and demand from the manufacturing sector, which are the main users of steel (Table 2.1).

Table 2.1: China's steel usage by purpose (percentage of total)

	2000	2010	2014
Construction	56	56	55
Machinery	15	18	19
Automobile	6	7	7
Home Appliance	3	1	1
Rail	2	1	1
Energy	7	4	5
Shipping ^[a]	3	5	2
Other	8	8	11

Source: Reproduced from Hamshere et al 2016. ^[a] Shipping is defined as the sum of the 'container' and 'shipbuilding' categories.

The large contribution from the construction industry reflects the substantial steel requirements associated with China’s urbanisation, including for high-density residential and commercial buildings and for urban infrastructure such as railways, highways and bridges.

China’s increased steel consumption over recent decades has been supplied by expansions in its domestic steel industry. Over the decade to 2013, China’s domestic steel production increased almost four-fold to around 820 million tonnes. This has had flow-on effects to iron ore and metallurgical coal – the raw ingredients used by China’s steelmakers – with demand for these inputs also growing strongly. In the case of iron ore, China’s domestic supplies, while substantial, are of relatively poor grade and located in less accessible parts of the country. This has meant that China has increasingly turned to the seaborne market, including Australian supply, to accommodate its growing iron ore needs (Figure 2.14).

In recent years, the downswing in the housing market, combined with weaker conditions in China’s manufacturing sector, have both contributed to lower demand for steel. This has resulted in China’s steel consumption falling over the past two years. Steel production was flat in 2014 and fell by 2.3 per cent in 2015 despite a strong increase in steel exports.

In the nearer term, the outlook for China’s steel demand will depend in large part on the state of China’s housing market, where there is significant oversupply across a number of regions. Growth in real estate investment, which is an important driver of overall steel demand, is therefore likely to remain weak until these pockets of unsold housing are absorbed by the market.

Similarly, excess capacity in the manufacturing sector is weighing on producer prices and profitability, and this will continue to limit manufacturing-related investment, and therefore steel usage in this sector, until this excess capacity is absorbed.

Notwithstanding continued strength in infrastructure-related steel usage, these factors mean that China’s steel industry is likely to face continued challenging demand conditions in coming years. As a result, China’s demand for iron ore is also likely to grow at a significantly slower rate than in the previous decade, although there may be scope for low-cost global suppliers such as Australia and Brazil to expand their market share.

Figure 2.14: China’s steel production and iron ore imports



Source: Roberts et al 2016.

China's economic transition is also likely to result in less resource-intensive growth than in the last decade. Already, slower growth in industrial production and real estate investment has coincided with significantly slower growth in China's demand for steel and other commodities in recent years. While some of this weakness may prove to be cyclical rather than structural, the outlook for China's steel demand remains a central source of uncertainty for global steel and iron ore markets (Box 2.5).

Beyond the near term, China's steel and broader metal usage will be underpinned by a number of longer-term drivers, notwithstanding the rebalancing currently underway in the economy. These include further urbanisation, with China's urbanisation rate of just 55 per cent suggesting that the need for investment in new construction is still substantial. Likewise, China's public infrastructure remains underdeveloped in a number of areas, including urban amenities and national transport networks. With rising incomes, Chinese households will also demand a growing number of durable goods, including motor vehicles (with China's per capital vehicle usage still low by international standards) and home appliances.

There are also downside forces that could affect China's steel industry and its demand for iron ore. This includes the policy objective of consolidating the steel industry to help eliminate excess capacity and improve environmental outcomes, which is a growing focus for authorities. The potential for greater use of scrap steel could also significantly alter the outlook for China's demand for iron ore, noting that scrap usage in China remains low by international standards.

While the outlook for China's steel production and iron ore demand is highly uncertain, Australia has some of the lowest-cost iron ore producers in the world and will therefore remain a major source of China's iron ore imports in the coming decade.

Implications for the Australian economy

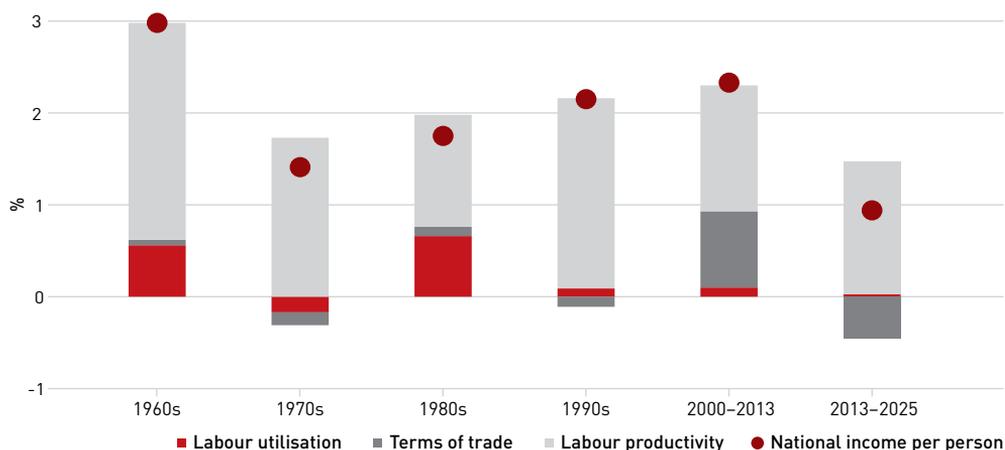
For the Australian economy, the slower growth in China's commodity demand in recent years has contributed to a more challenging global environment just as the investment phase of the mining boom has neared completion. Combined with large increases in global supplies, softer global demand has resulted in Australia's commodity export prices falling sharply in recent years. This has reduced Australia's terms of trade and growth in national income, with Australia facing the prospect of lower growth in incomes over the coming decade unless productivity growth can be lifted above historical averages (Figure 2.15).

While growth has been slow in recent years, established macroeconomic policy frameworks, including a freely floating exchange rate, have served Australia well in managing the downswing in global commodity prices, reinforcing the positive role these mechanisms played in cushioning the Australian economy from the Asian financial crisis in the late 1990s and the global financial crisis in late 2000s. Likewise, Australia's labour market, while still over-regulated in some areas, has been flexible enough to allow the necessary adjustments in real wages to take place in recent years, helping to sustain employment growth.

But Australia, like China, is now searching for new sources of growth as the old ones fade, and the structure of the Australian economy is reverting back to a more normal pattern of growth in which the services sector will again be the main driver of growth.

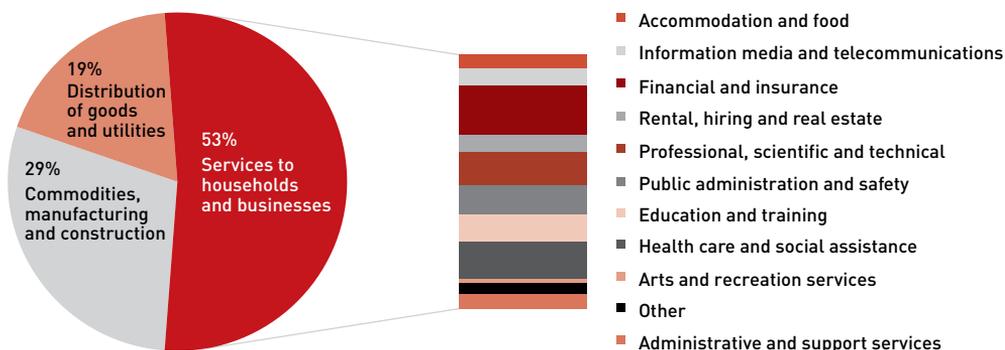
Australia’s services sector, which accounts for around three-quarters of output, comprises a diverse range of industries. This spans traditional areas such as utilities and goods distribution, services to households such as healthcare and recreation, as well as services mainly directed towards other businesses such as professional services (Figure 2.16).

Figure 2.15: Growth in Australia’s national income



Note: Growth in GNI per capita also reflects a generally small contribution from net foreign income, which is not shown.
Source: Government of Australia 2014.

Figure 2.16: Australia’s industrial composition



Source: ABS 2015a.

While it is impossible to predict exactly which industries will prosper in the coming decade, China’s transition towards a more consumer-driven economy will undoubtedly see China’s imports tilt towards services and higher-value food. The ongoing liberalisation of China’s financial markets, as well as latent demand of Chinese households and firms for a broader range of investment and credit products, will present a raft of opportunities for Australia’s financial services sector. These opportunities are discussed further in Chapter 5.

Export opportunities are likely to extend well beyond financial services. Supported by ChAFTA, there will also be opportunities for providers of other services to access the growing Chinese market in areas such as education, tourism, healthcare, accounting and legal services.

However, unlike the experience of the last decade, Australia will have no particular natural advantages in capturing these new export markets, and will face formidable competition from other advanced, service-based economies.

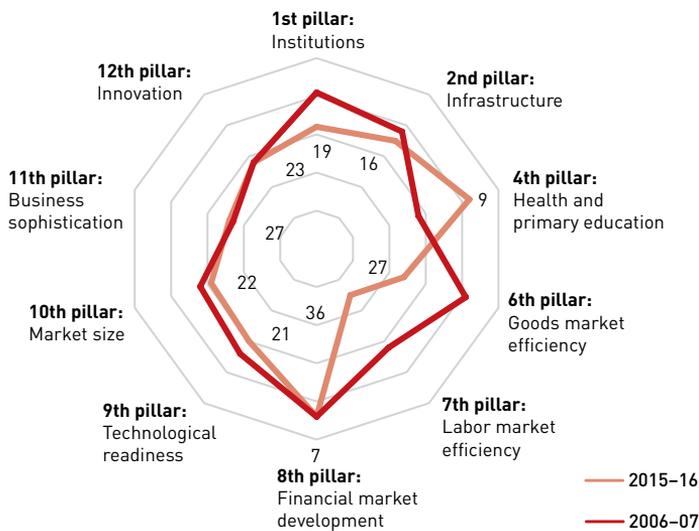
In fact, productivity in some of Australia’s service industries lags well behind the global frontier, partly reflecting a relatively poor performance over the past decade. This picture is consistent with measures of Australia’s relative international competitiveness, which also point to an underlying deterioration over the past decade (Box 2.6).

BOX 2.6: AN ASSESSMENT OF AUSTRALIA’S COMPETITIVENESS

The World Economic Forum provides a useful cross-country assessment of competitiveness based on its rating on 12 categories (or ‘Pillars’) that have been found to correlate with a country’s longer-term productivity performance (World Economic Forum 2015). These 12 Pillars include a country’s institutions, infrastructure and market efficiency, with scores in each of the 12 categories aggregated to form an overall global competitiveness index (or GCI).

Australia’s overall GCI ranking has fallen over the past decade, from 16th to 21st. While slipping across most categories, Australia’s drop in the areas related to market efficiency (in both goods and labour markets) has been starkest (Figure 2.17).

Figure 2.17: Australia’s competitiveness ranking



Note: Points further from the origin denote a higher/better ranking.
Source: World Economic Forum 2015.

In the area of goods market efficiency, the fall in Australia's ranking reflects lower scores on indicators of domestic competition, partly offset by increased scores relating to foreign competition. The lower ranking on labour market efficiency reflects increasing costs associated with redundancies and hiring, and little progress over the past decade in strengthening the link between productivity and pay outcomes in employment agreements.

Australia's ranking on infrastructure has also fallen, reflecting lower scores for road and air transport infrastructure, partly offset by increases in the quality of electricity infrastructure and a more comprehensive mobile phone network.

While the GCI is only one measure of competitiveness, these movements in Australia's GCI performance highlight some areas where reform efforts should be focused, namely in product and labour market efficiency as well as certain categories of infrastructure. In the categories in which Australia's score has improved most — health and primary education — it is important that increased public spending in these areas is allocated efficiently, to ensure that higher spending translates to better outcomes.

To compete effectively in emerging export markets, Australia will therefore need to undertake further reforms to drive productivity performance, particularly in the services sector. This will require exposing the domestic economy to increased international competition, through eliminating remaining trade barriers and addressing the relatively high regulatory burden imposed on businesses engaging in international trade, as noted in the World Bank's *Ease of Doing Business* measure for Australia.

Strengthening and extending national competition policy throughout the domestic services sector will also be needed, especially in Australia's large human-services sector, where competitive forces and consumer choice are generally lacking (Box 2.7).

BOX 2.7: REFORM PRIORITIES ACROSS AUSTRALIA'S SERVICES SECTOR

With the terms of trade returning towards historical averages, the focus of policymakers is now on improving the productivity of Australia's services sector as a way of maintaining economic growth and prosperity.

This focus reflects the large weight of the services sector in the Australian economy (more than 70 per cent of output and 80 per cent of employment) and its underperformance in key areas relative to global productivity benchmarks.

For example, Australia's Productivity Commission found that productivity in Australia's retail industry is almost 40 per cent below the United States', while researchers based at the RBA have found below-par productivity growth in the financial services, education and wholesale industries over the past decade.

Recognising this productivity challenge, the Harper Review of Competition (2015) highlighted the need to cultivate more competition in product markets, particularly across the services sector. The Review emphasised the need for policy settings to be flexible in order to allow new entrants possessing disruptive technologies or lower-cost products into

the Australian market, including in the 'sharing economy' and through online provision. As part of this, the Review identified intellectual property law as an area where policy frameworks needed to be reassessed to ensure that the existing regime is not preventing new ideas and technologies from being efficiently dispersed across the economy.

The Review also emphasised the potential for efficiency improvements in human services, including those provided by governments, such as health, education and community services. While already significant, the ageing of Australia's population means that human services are expected to become an even larger part of the economy, underlining the benefits that could accrue in these areas from increased competition and contestability as well as greater consumer choice.

Competition reform will not only help Australian businesses to compete in fiercely contested service export markets, but will also be important in achieving productivity growth across the non-traded segments of the services sector. Better productivity performance in Australia's non-traded sector will, in turn, free up resources to cope with the demands of an ageing population and to further improve living standards over the next decade.

As noted in Box 2.6, there is also room for Australia to significantly improve its infrastructure, with further investment needed in areas like transport networks to support growing urban populations. Additional public spending in these areas needs to be accompanied by a more rigorous approach for selecting projects, to avoid wasting public resources (Infrastructure Australia 2016).

As a relatively small, capital-importing economy, Australia will also need to ensure that policy settings remain supportive of foreign investment in infrastructure and other parts of the economy. China's move towards capital account liberalisation will fundamentally change the availability of funds within the international capital market. China's vast pool of savings could help underpin Australia's investment needs over the next decade, but only if the foreign investment regime and broader policy frameworks continue to make Australia an attractive destination for both direct and portfolio capital inflows. Improving infrastructure delivery for existing assets will be a priority, including through more efficient pricing in the areas of transport and water infrastructure (Infrastructure Australia 2016). Similarly, with a relatively small population, Australia needs to ensure that the local workforce has the capabilities and nimbleness to capitalise on new and emerging technologies. In part, this means building upon the emerging culture of start-up businesses and entrepreneurship, and encouraging greater commercialisation of research ideas, consistent with Australia's National Innovation and Science Agenda (Australian Government 2016).

Partners in economic transformation

For both China and Australia, the past decade saw economic prosperity reach new levels, as each economy successfully navigated the global financial crisis to extend already long periods of unbroken economic expansion.

But global economic circumstances have changed, and the sources of growth that underpinned rising incomes in the last decade will need to change also. The challenge in the next decade will therefore be to unleash new sources of growth, especially in each economy's services sector and in other areas where new technologies are rapidly emerging.

To achieve this, both countries will need to extend and deepen reform in those areas of the economy that have remained protected from domestic and international competition, which will be the main recipe for driving productivity growth and innovation.

In China, opening up domestic capital markets to the rest of the world will be crucial in supporting domestic financial market reforms to improve the allocation of capital and to underpin further increases in incomes. Reforms to reduce the role of SOEs, including those operating in the banking sector, will also be needed, as will further trade liberalisation of China's services sector. Together, these policies can assist China to rebalance towards more consumer-oriented growth, and support the economy's transformation towards the services and higher-technology manufacturing sectors.

In the economic transition, China also needs to balance the short-term goal of supporting a slowing economy with fiscal and monetary policy measures, which may contribute to the rise of total debt, and the long-term objective of achieving more balanced and sustainable growth, which will require a proper management of financial risks.

As China's capital account becomes more open, its investment links with the rest of the world are likely to grow dramatically, which has the potential to profoundly affect Australia and the rest of the world.

As a country reliant on foreign investment, Australia needs to be ready to embrace the expansion in Chinese outbound investment, including in infrastructure where Australia will need to finance new projects in areas like transportation to support growing urban populations and living standards.

More broadly, Australia will need to increase contestability across markets, including in significant parts of the services sector that are currently protected from domestic and international competition. Foreign participation will be important to success in this endeavour. Among other things, this will involve extending reform in areas such as competition policy and labour market regulation and breaking down remaining barriers to international trade.

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