China’s Labour Market: COVID-19 and Beyond

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Abstract
The Chinese labour market has recovered quickly following the sharp economic downturn caused by the COVID-19 pandemic. While widespread lockdown measures in early 2020 pushed large numbers of Chinese workers out of the labour market, successful containment of the virus allowed most of these workers to return relatively quickly. Structural factors – notably a shrinking labour force – are now likely to be the dominant drivers of developments in the Chinese labour market. In the short term, policymakers are considering changes to the retirement age to boost labour supply. In the longer term, the focus of reforms is increasing labour productivity and reducing labour market frictions.

Background
As Australia’s largest trading partner, China’s economic trajectory affects demand for Australian goods and services. Understanding conditions in China’s labour market strengthens our understanding of the Chinese economy. It also informs our expectations of economic policy in China, as employment outcomes are a key focus of Chinese policymakers.

China’s labour markets have changed dramatically since the founding of the People’s Republic of China in 1949. In the 1950s, the system for registering households – hukou – was expanded into one that divided the population into a rural and an urban workforce, and tied those workforces to particular regions. Urban workers were allocated what was essentially a job for life in a state-owned enterprise (SOE), an arrangement colloquially known as the ‘iron rice bowl’. Rural workers were assigned land to farm, first in collectives and then individually through the household responsibility system.

Reforms throughout the 1970s, 1980s and 1990s eased these arrangements. New policies enabled rural workers to allocate some of their labour to...
China’s rural population was purely agricultural and non-agricultural work and eventually allowed them to move into urban areas for work (Meng 2014). China’s opening up to foreign investment, reforms to SOEs and the passing of new labour laws in the 1990s led to the marketisation of labour in China, breaking the ‘iron rice bowl’ of urban workers and allowing them to migrate between cities for work. These reforms reduced labour market frictions and promoted a more efficient allocation of labour, paving the way for the private sector to become the dominant employer in China and driving urbanisation (Graph 1).

While many aspects of China’s labour market today are similar to labour markets in other economies, this history has left institutional legacies that have resulted in some unique features that affect both China’s labour market itself and its measurement. One such feature is the existence of a large workforce of domestic migrants. These workers – who work and live in one region but hold hukou (rural household registration) in another – now make up around one-third of China’s total labour force and around half of China’s urban labour force. The term ‘migrant workers’ includes both people who hold rural hukou but who live and work in urban areas (rural-urban migrants) and people who hold urban hukou in one city but live and work in another (urban-urban migrants). [1]

Another point of difference is that some official labour market statistics, most notably the surveyed unemployment rate, only capture people living in urban areas (including migrant workers). When China’s rural population was purely an agricultural workforce allocated land to farm, they could be assumed to have guaranteed employment, making the measurement of rural labour market outcomes redundant. Rural residents can now engage in non-agricultural work, and can seek and lose employment – meaning they cannot be assumed to have guaranteed employment. Yet residents of rural areas are not captured by the monthly labour force survey, leaving this part of China’s labour market largely unmeasured.

The interaction of these factors can distort statistics generated by the monthly labour market survey. If a rural-urban migrant loses their job and remains in an urban area, they will be captured by the monthly labour force survey and recorded as unemployed. However, if they return to a rural area on losing their job, they would no longer be captured in the survey and this would manifest as a reduction in the urban labour force. While the impact of this distortion will diminish as China becomes more urbanised, it is a significant consideration for understanding labour market data today. While not explored in this article, the reclassification of rural areas as urban areas can also affect labour market and urbanisation statistics (Berkelmans and Wang 2012).

**COVID-19 greatly affected the labour market, but the recovery was swift**

China’s GDP fell by 9 per cent in the March quarter of 2020 – the largest quarterly decline in decades – as authorities shut down large parts of the economy in an effort to contain the spread of COVID-19. By February, urban employment (which includes migrant workers) had declined by around 16 per cent (70 million) from its pre-COVID-19 level. [2] In addition, average hours worked among those still employed fell sharply. Together, this suggests that total urban hours worked declined by more than 30 per cent between December 2019 and February 2020 – a larger fall than implied by indicators of economic activity (Graph 2).

Urban employment and average hours rebounded strongly in March as authorities began to lift restrictions. The recovery then continued more gradually and reached pre-COVID-19 levels around June 2020. By December 2020, employment had...
recovered to be consistent with its pre-pandemic trajectory.

Despite the large fall in urban employment, the surveyed urban unemployment rate increased only moderately, as the vast majority of urban workers who lost jobs during the COVID-19 downturn left the urban labour force. The limited response in the unemployment rate could be because workers left the urban labour force entirely (because they were not looking for work or were unable to begin work if offered a job) or they were no longer captured by the monthly labour market survey due to a change in their residential area or both. China’s urban surveyed unemployment rate rose from 5.2 per cent in December 2019 to a high of 6.2 per cent in February 2020, and has fallen since to be around its pre-COVID-19 level (Graph 3). This relatively small rise in the unemployment rate, combined with the large fall in employment, suggests a sharp fall in the urban participation rate. New urban employment – the number of gross new jobs created in urban areas and one of two key metrics used by the Chinese Government to assess the health of the urban labour market – fell by more than half in early 2020.

Migrant workers accounted for most of the fall in the urban labour force (Graph 4). This is because migrant workers are concentrated in industries that were hit most heavily by the lockdowns, particularly in services such as retail and hospitality (Wang 2020). In addition, many migrants who returned to their hometowns for Chinese New Year were stranded there when movement restrictions were imposed; this may have hampered their ability to search for work if laid off and almost certainly would have limited their ability to begin work if offered employment in the city where they usually live. In this case, only after these migrants began to return to cities were they able to re-enter the urban labour force and their joblessness could be recognised as unemployment. While the vast majority of migrant workers who stopped working out-of-province early in 2020 had returned by June 2020, a small proportion still have not.

Given the data limitations, it is harder to assess how the pandemic affected labour markets in rural areas than in urban areas. As in cities and towns, rural neighbourhoods were locked down at the height of
the initial wave of infections, with very limited movement permitted. A survey of rural residents in mid February 2020 found that non-farm economic activity had virtually ceased, either because employers had closed or because of challenges with transport to work.\(^3\) A follow-up survey in April, when many restrictions had been lifted, suggested only a slow resumption of activity and employment in rural areas (Wang et al 2021). Per capita household income from wages fell more sharply in the first quarter of 2020 for rural residents than for urban residents; in part, this may reflect falls in income for temporary migrant workers (those who have been in cities for less than six months) who are classified as rural residents (Graph 5). It is also possible that the return of those migrants from cities greatly increased the pool of available workers in rural areas, leading to more competition for scarce jobs and putting downward pressure on wages. As many migrants returned to cities over the remainder of 2020, rural wages income recovered strongly.

**COVID-19 impacted China’s economy in a unique way**

The fall in Chinese employment was sharper than in major advanced economies in 2020 and the recovery was swifter (Graph 6). The sharper fall reflects that China’s lockdowns were more quickly and strictly imposed than in other economies and that the government’s economic response did not include the kind of wage subsidies designed to preserve firm–employee relationships that some other governments pursued. The more rapid recovery largely reflects that virus containment measures were ultimately successful in containing COVID-19 more quickly than in other economies. Mass testing and restrictions based largely on individual health-risk status (a system administered by mobile applications) has meant that subsequent outbreaks have been contained relatively quickly and with minimal economic disruption (IMF 2021).

The fact that widespread lockdowns were relatively short-lived may have resulted in their lasting effects being less pervasive in China than elsewhere. Another factor assisting this could be the high informal (non-contractual) share in Chinese employment (particularly among migrant workers), which increases the labour market’s flexibility, making it relatively simple for employers both to lay off workers and to hire again. The effective containment effort led to the industrial sector rebounding quickly once lockdowns were lifted. Firms were able to implement distancing strategies to protect workers while resuming business. Manufacturing also benefited from booming global demand for consumer goods, particularly because manufacturers in China were able to resume production at the same time manufacturers in other economies were entering lockdowns (Graph 7). This supported employment in manufacturing to the

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**Graph 5**

China – Income from Wages*

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>2016</td>
<td>0.5%</td>
<td>0.3%</td>
</tr>
<tr>
<td>2017</td>
<td>0.8%</td>
<td>0.5%</td>
</tr>
<tr>
<td>2018</td>
<td>1.2%</td>
<td>0.8%</td>
</tr>
<tr>
<td>2019</td>
<td>1.5%</td>
<td>1.0%</td>
</tr>
<tr>
<td>2020</td>
<td>1.8%</td>
<td>1.2%</td>
</tr>
<tr>
<td>2021</td>
<td>2.1%</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

* Per capita, quarterly growth
* Seasonally adjusted by the RBA

**Graph 6**

**Employment**

<table>
<thead>
<tr>
<th>Country</th>
<th>Change from December 2019, cumulative contributions</th>
</tr>
</thead>
<tbody>
<tr>
<td>China (urban)*</td>
<td>-10.0%</td>
</tr>
<tr>
<td>Japan</td>
<td>-15.0%</td>
</tr>
<tr>
<td>South Korea</td>
<td>-20.0%</td>
</tr>
</tbody>
</table>

* Authors’ estimates based on statements by NBS officials and published unemployment rate; for China, the level of employment is generally linearly interpolated in months when no data is available.

Sources: CEIC Data, RBA
point that employers in coastal provinces have reported difficulty recruiting workers (Liu 2021).

More closely mirroring outcomes in other economies, China’s services activity, which depends much more on human contact than manufacturing, was slower to recover. The number of migrant workers, who make up a large share of employment in services sectors, remains below its pre-pandemic level (Liu 2021). Eastern provinces, where demand for labour in factories was particularly strong, saw the biggest fall in the number of migrant workers leaving to work elsewhere (National Bureau of Statistics 2021a). So, while industrial employment expanded in 2020 for the first time since 2012, annual growth of services employment slowed sharply.

With COVID-19 contained and businesses able to resume operation, authorities made labour market stability a key policy priority. Unlike in advanced economies, where many governments provided income support directly to households to support them through lockdowns, containment of COVID-19 allowed Chinese authorities to support household incomes indirectly, mainly by trying to keep firms in business. Key measures to support firms included easing cost pressures (including taxes and fees) and providing access to concessional loans (IMF 2021). The focus has particularly been on micro and small businesses, which are large employers of service sector workers. The government has also provided job-seeking assistance for specific groups affected by the pandemic, including new university graduates and migrant workers (State Council of the People’s Republic of China 2021).

Despite the strong rebound, total employment in China remained below its pre-pandemic level by the end of 2020. Rather than being driven by cyclical factors, this largely reflects a key long-run trend: China’s working-age population has now been falling for several years, limiting the size of the labour force available for employment. Other long-run trends were again present in 2020 – for example, rural employment has been falling for around two decades (and as a share of total employment since the 1960s) (Graph 8). The promise of higher wages in the cities has driven migration to urban areas and into the higher-productivity industrial and services sectors.

Looking forward, demographic changes are presenting challenges for policymakers

With China’s economy now largely recovered from COVID-19, policymakers have increasingly turned their attention to long-run, structural considerations. Core among these is that China’s ageing population and shrinking labour force present significant labour market challenges. The release of the 2020 national census results in May this year renewed the focus on demographics.

Once a key driver of the Chinese economy, population growth has slowed in recent decades (Graph 9). The main reason is a declining birth rate;
between a baby boom in the mid 1960s and the start of the 1980s the birth rate halved, and has since halved again. While policy constraints have played a role, notably the ‘one-child’ policy initiated in the 1980s, the falling birth rate is also the result of changing preferences for smaller families as living standards improved and the cost of raising children increased (Cai 2018; Lim and Cowling 2016). This shift in preferences – which has also been seen in other economies, albeit usually at a higher level of GDP per capita – means that China’s population is considered likely to peak within the next decade irrespective of the recent relaxation of restrictions on births (discussed in more detail below).\textsuperscript{4}

Combined with very limited immigration, the falling birth rate has gradually reduced the pool of potential workers for China’s labour force. The working-age population peaked in 2013 at just over one billion. This headline number masks some underlying disparities – for example, the working-age population in urban areas has continued to rise due to ongoing internal migration and urbanisation, but peaked in rural areas in the mid 1990s. A declining pool of workers and a gradual rise in the share of the population that depend on them will increasingly weigh on development in rural areas and the capacity of governments to raise enough revenue to fund increasing social security obligations.

Policymakers are exploring options to boost labour supply …

In responding to these demographic pressures, authorities have begun discussing a range of options to boost labour supply. In the short term, authorities have announced changes to the retirement age that are expected to offset some of the decline in labour supply. Policymakers have also announced a phased rise in the statutory retirement ages, which have remained at 60 years for men and 50–55 years for women for more than seven decades. These are low retirement ages by international standards (Wang 2021). As noted by Roberts and Russell (2019), a scenario in which the retirement age were to equalise across the sexes and gradually increase from 60 to 65 between 2021 and 2035 would result in a boost to the working-age population (Graph 10). However, without a change to the trajectory of fertility rates, the working-age population would begin to decline again in the mid 2030s and by 2045 would be back at 2021 levels. An upside scenario that incorporates both increases in the retirement age and a birth rate that rises to 2.1 births per woman (considered necessary for replacement) would see China’s working-age population stabilise, oscillating between 93 per cent and 105 per cent of its 2020 level over the remainder of the century.

Policymakers are also considering measures designed to increase birth rates, remove frictions to internal migration and keep people in the workforce for longer. While authorities recently announced a three-child policy, consensus among

Graph 9
China – Population Growth

Graph 10
China – Working-age Population

Sources: CEIC Data; RBA
policymakers is that this policy alone is unlikely to materially raise China’s birth rate (Chen et al 2021; Xinhua 2021a). When China relaxed its one-child policy to a two-child policy between 2013 and 2015, the impact on birth rates was muted. In a 2019 survey, more than half of Chinese parents cited increased economic burden and lack of childcare as barriers to having a second child (Xinhua 2021a). Policymakers have announced plans to focus on reducing the economic burden of raising children by increasing the supply of affordable childcare, improving prenatal and infant healthcare and providing direct government payments to parents of second and third children (Xinhua 2021b). As demonstrated by Roberts and Russel (2019), in a scenario where such policies were successful in raising the birth rate to the 2.1 replacement level, working-age population would still decline until around 2050 (Graph 10).

Currently, policymakers appear unlikely to embrace immigration as a means of materially boosting the size of the labour force. The 2020 census showed that just 0.1 per cent of people residing in Mainland China were from other parts of the world and almost 40 per cent of those came from Macao, Hong Kong and Taiwan (National Bureau of Statistics 2021b). Naturalisation is rare. While data on naturalised citizens from the 2020 census has not yet been released, data from the 2010 census showed just 1,448 of China’s over 1.3 billion citizens were naturalised (National Bureau of Statistics 2010). This seems unlikely to change significantly. Draft regulations circulated in early 2020 that would have opened more pathways to permanent residency for foreigners were met with concern from the general public, and authorities committed to absorb public opinions and amend the regulations before issuing them (Xinhua 2020).

... and other reforms may boost labour productivity

A range of other policy reforms already underway could help increase labour productivity, mitigating some of the impact of a shrinking labour force. Increased rural-urban migration, facilitated by relaxation of China’s hukou system, has been a significant driver of increases in productivity in China for a number of decades by reallocating labour from agriculture to higher-productivity sectors (Cai 2018). While China has already reaped large productivity gains from this reallocation, official statistics show a quarter of its workforce remains employed in the primary sector (Graph 11). While some estimates suggest the true figure is perhaps as much as 10 percentage points lower, this would still be higher than the average for high-income economies (under 3 per cent) and other economies in the region including South Korea (5 per cent) and Malaysia (10 per cent) (Cai, Guo and Wang 2016; World Bank 2021). This suggests there is still some scope for China to further increase productivity through rural-urban migration.

In addition, productivity differs between provinces and within different parts of the non-agricultural economy (Cai 2018; World Bank 2020). This suggests that increased urban-urban migration that allows labour reallocation within sectors could also boost overall labour productivity. Frictions to urban-urban migration in China remain and policymakers have flagged reforms that could address these (National Development and Reform Commission 2021).

While hukou reforms have been underway for many years and restrictions have slowly relaxed, the hukou system still links Chinese people to a particular region. Those without hukou in their city of residence (be it rural-urban migrants or urban-urban migrants) are often prohibited from purchasing property there and can struggle to access social services that are funded by provincial
governments for themselves and their dependents. This can inhibit a worker’s ability to move to other regions for work or force them to leave their children and parents behind if they do. While there is a process for Chinese people to convert their hukou from rural to urban and to move it from one region to another, this can be difficult – particularly if they wish to move to already large cities like Beijing and Shanghai. Central authorities have instructed provinces to remove or relax restrictions on hukou eligibility in smaller cities and a number of provinces are rolling out new systems designed to facilitate these transfers more efficiently (Xinhua 2019; Xinhua 2021c).

Links between the hukou registration location and provision of health care also weigh on the length of time rural-urban and urban-urban migrant workers choose to remain in the workforce. Workers face increased health care costs as they age and there is evidence that despite attempts to make health care more accessible for migrant workers, they still struggle to access health insurance cover where they work (Chen et al 2020). As such, the incentive to return to the region in which they hold hukou increases as they age. Improving their ability to access insurance cover where they work (but do not hold hukou) may make it feasible for them to work in other regions for longer. To support such changes, policymakers would also need to address how funding for these services can be reallocated as people move around the country, as many of these services are funded by provincial governments or provincial insurance schemes. While efforts have been made to improve migrant workers’ access to services over a number of years, authorities are continuing to work on improving nationwide coverage of social services and ensuring the fiscal expenditure system can support this (National Development and Reform Commission 2021).

Authorities are also targeting an increase in average education levels as a means to lift productivity and counter the effects of a falling working-age population. Education levels have gradually risen in recent years. By 2025, China’s most recent Five-Year Plan aims to raise average years of schooling of its working-age population to 11.3, from 10.8 in 2020 (National Development and Reform Commission 2021).

While an aggregate rise in education levels would help to lift productivity, there are also gains to be made from addressing disparities within China. For example, the share of rural residents with an education at senior-middle school or higher is less than half that of urban residents, and rural residents are more than twice as likely to be unschooled (Graph 12). As well as reflecting a generally lower-quality education system in rural areas, lower rates of education among the rural population may be due to greater demand for highly skilled workers in urban areas. Both factors depress productivity in rural areas and authorities are responding with a range of policies designed to improve the education services in rural areas and encourage the flow of urban professionals to rural areas (Ministry of Education, National Development and Reform Commission, and Ministry of Finance 2021; Ministry of Agriculture 2021).

**Summary**

China’s labour market has undergone profound changes over the past 70 years and it will continue to evolve in the decades to come as demographic pressures weigh and the government institutes new reforms.

The rapid recovery of China’s economy from COVID-19 lockdowns early in 2020 provided support to global growth in a year when most economies contracted. China’s large manufacturing
and construction sectors resumed production quickly once restrictions were lifted, as firms rehired migrant workers who had exited the workforce. Services sectors have been slower to recover, but are likely to resume their role as important drivers of employment growth in China once sporadic outbreaks of COVID-19 cease.

With China’s population widely expected to decline in the period ahead, policymakers are developing a series of policies to address this transition. The labour market and other economic reforms that Chinese policymakers are now considering will also have significant implications for China’s economy and, given its size, the global economy. How policymakers navigate these transitions will influence economic outcomes in China and its trading partners for decades to come.

Footnotes

[*] The authors are from Economic Group. They would like to thank Lynne Cockerell, David Norman, Ivan Roberts, Tom Rosewall, Carl Schwartz and Kate Hickie for their advice and comments on earlier drafts.

[1] Urban hukou holders rarely migrate to rural areas.

[2] The National Bureau of Statistics (NBS) does not release a time series of the monthly net change in employment; the estimate here was calculated based on statements made by NBS officials throughout 2020, with months in which data was not included in media statements linearly interpolated.

[3] The decline in national primary sector output in the first quarter of 2020 was shallower than for other parts of the economy and output swiftly regained its pre-pandemic trend once restrictions were lifted.

[4] A 2019 report by the Chinese Academy of Social Sciences, a state-sponsored think-tank, projected China’s population will peak in 2027 (Shi 2019).

References


