

Labour market snapshot #91 August (1) 2022

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Labour supply and COVID-19

Key points

- During 2022 COVID-19 is having an appreciable impact on labour supply. From January to June on average 3.8 per cent of usual hours of work by employed persons were lost due to workers' 'own illness, injury or sick leave', compared to 2.0 per cent during 2017-19.
- Losses are slightly larger for females than males as 2022 has progressed, larger for younger workers than older age groups, and have varied somewhat across states.
- The impact of lost hours from COVID-19 on GDP depends on factors such as the extent to which employers are able to substitute for workers who are ill, scope for customers to substitute between suppliers and the extent of supply-chain spill-overs due to production being disrupted by illness.
- It seems important to give time to considering immediate and long-term consequences of COVID-19 on labour supply, the well-being of workers who become ill, and labour reallocation.

Introduction

The health and economic consequences of the removal of almost all restrictions intended to reduce the spread of COVID-19 (and the absence of any major countervailing public health campaign) are daily becoming more apparent. Leading the way in revealing impacts on the labour market, and again

demonstrating its versatility as a data source, is the ABS Labour Force Survey (LFS).

On this occasion, the contribution of the LFS is via identifying employed persons who worked less hours than they usually would for reason of 'Own illness or injury/Sick leave'. By comparing these data for 2022 with previous years, we can get a feel for the impact COVID-19 on absence from work.

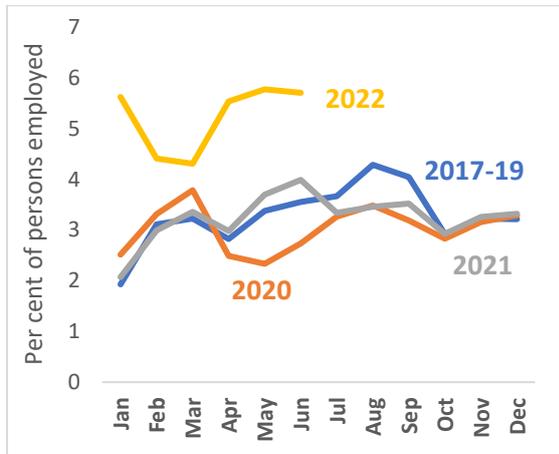
[Taking a step back, the LFS includes questions for persons who are employed on: (i) hours usually worked per week; and (ii) actual hours worked in the survey reference week. Persons whose actual hours were less than usual hours are asked to identify the main reason, with options including 'Own illness or injury/Sick leave'.]

The overall story

Chart 1 shows the proportion of employed persons who worked less hours than usual due to own illness, injury or sick leave by month – so far in 2022 and on average in 2017-19.

From January to June, on average in 2017-19, 3.0 per cent of employed persons worked less hours than usual due to illness etc. In 2022 this proportion is 5.2 per cent.

Chart 1: Persons employed who worked less hours than usual due to illness, injury or sick leave, By month, 2017-19 to 2022



A headcount measure however overstates the impact of illness on hours of labour supply. As well as the proportion of workers affected by illness, the impact on labour supply will depend on the extent to which workers who are ill need to reduce their hours of work.

Suppose, for example, that the workers whose actual hours were less than usual due to illness in 2022 are representative of the rest of the workforce, and that on average they work one-half of their usual hours when ill. Then the impact on labour supply would be to reduce hours worked by one-half of the proportion of workers who are ill (that is, 2.6 per cent instead of 5.2 per cent).

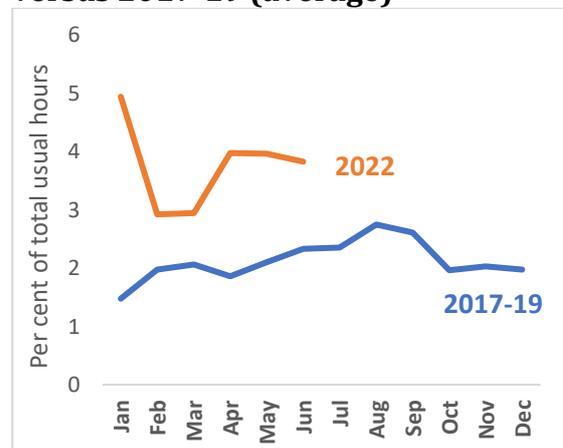
¹ More precisely, there are two steps. First, for each category of actual hours reported by employed persons who worked less than usual hours, it is assumed that had they not been ill, those persons would have worked the same distribution of hours as employed persons in that and all higher hours categories. For example, for employed persons who worked zero hours, it is assumed had they not been ill, they would

To capture more precisely the effect of illness on labour supply, Chart 2a therefore shows **the proportion of total usual hours lost** due to 'Own illness or injury/Sick leave' by month: in 2022 and on average in 2017-19.

Total usual hours are calculated as the sum of actual hours worked and hours lost to illness. Hours lost to illness are calculated based on the distribution of actual hours worked.¹

Chart 2a shows that from January to June, on average in 2017-19, 2.0 per cent of total usual hours were lost due to illness etc. In 2022 this has been 3.8 per cent. That is, the average monthly loss in the proportion of hours worked due to COVID-19 is 1.8 pts.

Chart 2a: Hours lost due to illness, injury and sick leave, By month, 2022 versus 2017-19 (average)



have had the same distribution of hours as actual hours worked by all employed persons (that is, the same distribution across the categories for zero hours, 1-9 hours, 10-19 hours etc). Based on this assumption a total amount of hours lost for each hours category is calculated. Second, the hours lost by each category are summed to obtain a measure of total hours lost for all employed persons.

Chart 2b shows that, by comparison, in 2020 and 2021 there was pretty much the same proportion of hours lost due to illness etc. as in 2017-19.

Chart 2b: Hours lost due to illness, injury and sick leave, By month, 2020 and 2021 versus 2017-19 (average)



What does this mean for GDP?

Different conclusions can be drawn on what this means for output.

At one extreme it could be assumed that hours of work lost to illness etc. cause a permanent loss of GDP compared to if those workers had not been absent. For example, if a café has to close because its staff are ill, and its customers do not substitute elsewhere, or a garage closes its repair service and delays appointments due to mechanics being ill, the output that would have been produced at those times cannot ever be made up. Moreover, workers being away ill may have effects beyond the businesses directly affected. For example, if the garage is not able to repair the plumber's truck which has broken down, the plumber's output may

also be reduced due to being off the road for longer.

At the other extreme it could be assumed that hours of work lost due to illness have no permanent impact on output. For example, the garage may open on the weekend to catch up on appointments, the plumber may be able to temporarily substitute work that can be done at home for work on jobs, or the café may be able to keep operating by bringing in other staff or family members.

Overall, the effect on output from workers being absent due to illness is likely to depend on: (i) the ease with which suppliers can substitute for workers who are ill or make up for lost output; (ii) the scope for customers to substitute to new suppliers (and for those suppliers to expand supply); and (iii) the extent to which there are supply-chain spillovers associated from disruption to production due to workers being ill.

Impacts on GDP will be proportionate to the assumed impact on output of hours lost due to illness etc. If hours lost have no consequences for output, there is no effect on GDP. If there is a 1-to-1 effect of hours lost due to illness on output, it would imply a loss of annual GDP of 0.9 per cent in the first 6 months of 2022. Large enough to ponder whether doing more to convince people to wear masks might be worthwhile.

Impact of illness by demographics and location

Chart 3 shows the difference in the proportion of employed persons working less hours than usual due to illness etc. between 2022 and 2017-19, separately for females and males.

For example, the observations for January show that the proportion of employed persons working less hours than usual due to illness in 2022 was about 3.7 percentage points higher for both females and males than in 2017-19.

The extra impact of illness in 2022 is initially similar for both groups, but as the year has gone on has become larger for females than males.

Chart 3: Difference in proportion of employed persons working less hours due to illness, injury or sickness, 2022 minus 2017-19, By gender

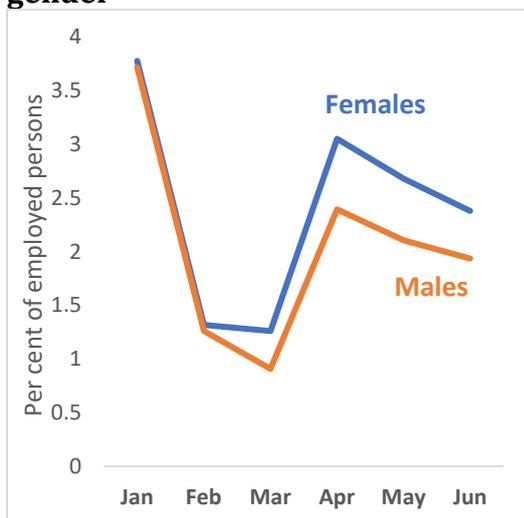
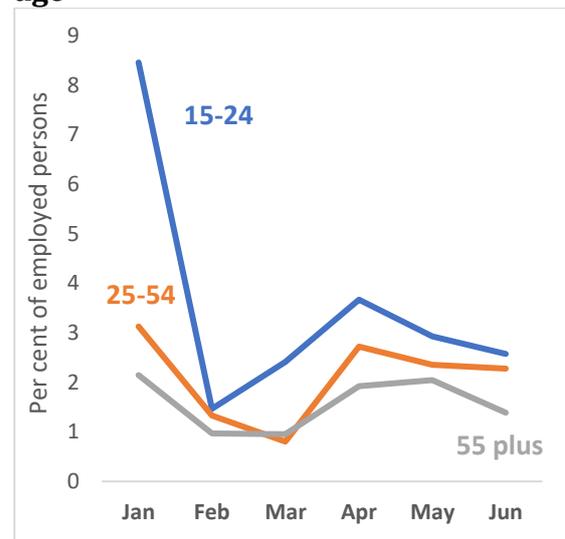


Chart 4 shows the same measure of difference in the impact of illness etc. on absence from work by age. Young people have been especially affected by COVID-19 during 2022. Most notably, in

January the proportion of persons aged 15 to 24 years working less hours than usual due to illness was 8.5 percentage points higher than in the same month in 2017-19, compared to 3.1 and 2.1 percentage points respectively for those aged 25 to 54 and 55 plus years. In later months, the younger population has continued to have a larger increase in the proportion absent from work due to illness, but the difference from older age groups is smaller.

Chart 4: Difference in proportion of employed persons working less hours due to illness, injury or sickness, 2022 minus 2017-19, By age



Charts 5a and 5b show the same measure of the difference in the proportion of employed persons working less hours than usual due to illness etc. between 2022 and 2017-19 by state.

Differences for Victoria, NSW and Queensland – shown in Chart 5a – are at the same level and have the same monthly pattern.

Differences for SA, WA and Tasmania – shown in Chart 5b – are quite different.

SA and Tasmania had peak levels of absence due to COVID-19 in April. WA, which had virtually no extra absence from work due to illness in January, since then has seen a progressive rise in the proportion of employed persons away from work due to illness etc.

Chart 5a: Difference in proportion of employed persons working less hours due to illness, injury or sickness, 2022 minus 2017-19, By state

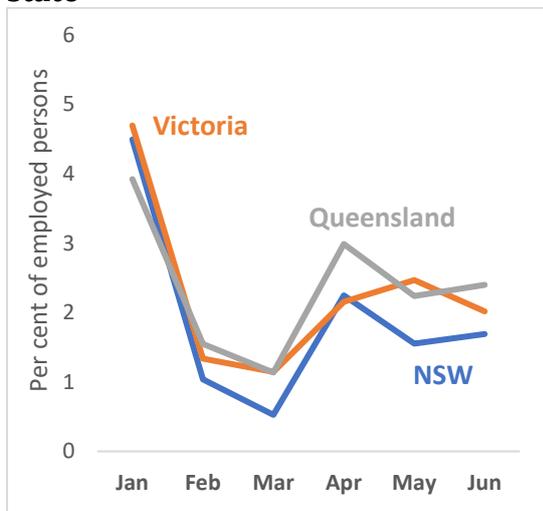
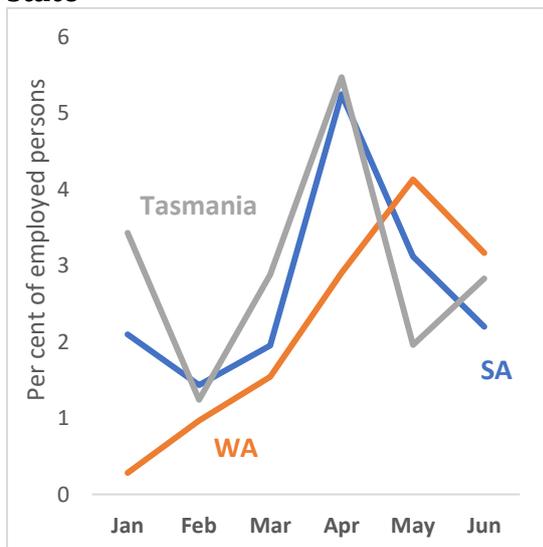


Chart 5b: Difference in proportion of employed persons working less hours due to illness, injury or sickness, 2022 minus 2017-19, By state



Extra consequences to think about

Various labour market-related consequences of illness due to COVID-19 can be identified:

1] Loss of labour supply

At present the impact of COVID-19 on aggregate labour supply is mainly due to the short-term effects of people being away from work at the time they contract the virus. The length and extent of that short-term effect on labour supply will depend on what happens to the rate of new infections over time.

As time goes on, with an increasing proportion of the population having contracted COVID-19, long COVID may also affect labour supply. At the moment, there seems uncertainty about the incidence and distribution of severity of long COVID. But its incidence would have only to be a fraction of some estimates made so far for it to have a noticeable effect on labour supply.

2] Welfare implications for individuals affected

Workers who have periods of absence due to COVID-19 can have a loss of income during their period of illness – for example, for workers who do not have or who have exhausted their sick leave. This problem becomes greater for workers who are absent for longer amounts of time, such as if they contract long COVID. Longer-term scarring effects on labour market outcomes are also likely to occur for workers who experience job loss and an extended period out of work due to illness.

3] Labour reallocation

The need to direct more resources towards healthcare due to higher numbers of people being infected with COVID-19 and requiring treatment (and potentially in the longer-term to deal with more cases of long COVID) raises the question of how to achieve that reallocation, especially at a time when the labour market is so tight.

As well, should employers come to believe that elevated levels of absence due to workers being ill with COVID-19 will persist for some time, it may be that they will seek to adapt by hiring a larger workforce. For example, a café which usually has 5 wait staff working each week, finding that on average one is away ill each week, might seek to adapt by hiring an extra employee for that role.

Data

- Charts 1 and 3: ABS, Labour Force Australia, Table 1 and EM2a.
- Charts 2a and 2b: ABS, Labour Force Australia, EM2a; ABS, Labour Force Australia – Detailed, EM1a.
- Chart 4: ABS, Labour Force Australia, EM2a; ABS, Labour Force Australia – Detailed, Table 01.
- Charts 5a and 5b: ABS, Labour Force Australia, Table 12 and EM2b.