Rural Economies
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# Varying impacts of Covid-19 across Queensland Regions

Professor John Rolfe

*CQUniversity / Rural Economies Centre of Excellence*

Covid-19 may be truly the wind that blows no good for any of Australia's regions. Apart from the loss of human life and adverse health and social impacts, all regions have negative economic consequences. The speed and depth of the impacts, and the ongoing government responses to them, are unprecedented. Yet the impacts and outlooks vary across regions, as I discuss here with particular reference to the Queensland economy.

The economic impacts are occurring through several forces, including:

- Direct effects of government controls, which are limiting business operations
- Reductions in customer demand
- Flow-on effects through the economy.

There are some sectors most affected by these pressures:

- The direct effects of government controls are particularly impacting on Tourism, Hospitality, Arts & Entertainment, and Personal Services sectors. These are sectors requiring substantial travel and interpersonal contact, often involving small businesses.
- Reductions in customer demand are immediately impacting on Hospitality, Arts & Entertainment, Personal Services, and most Retail sectors. There are some increases in demand for supermarkets and liquor stores.
- Flow on effects into other sectors of the economy are beginning. For example, some health services are impacted by both shortages in supplies and reductions in demand, while reduced mobility and reductions in spending are reducing activity across the retail and services sectors.
- There are also some impacts on supply chains across all major sectors. However, most businesses are adapting to shortages in inputs rather than being forced to close.

Given this background, it is important to realise that the slowdown is not a shutdown. The sectors that have been most badly affected to date (tourism, airlines, hospitality, arts & entertainment and personal services) are together only about 20% of the economy. Some major sectors such as Agriculture, Mining and Construction have experienced limited impacts to date. In Queensland, Government accounts for about one in ten jobs, with 250,000 full-time equivalent positions out of a total workforce of about 2.5 million, and these are continuing. Government programs fill spending gaps by lowering taxes and charges and boosting support spending. Together with other stabilisers such as the floating Australian dollar and changes to interest rates, most of the economy continues to function.

The size of the economic impacts across regional areas will vary. In general, areas of the economy with greater exposure to tourism and recreation will be more badly affected than those that are not. The economic effects of this crisis are unusual though in that the controls from government are relatively uniform across the economy, at least within a state. This allows some reasonably generic assumptions to be made about the initial impacts.

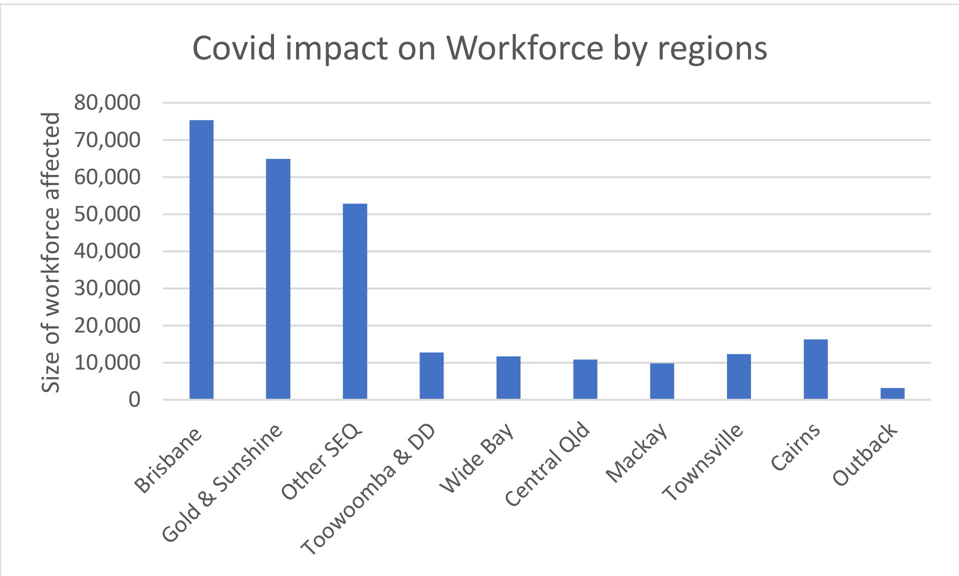
In this exercise, I source 2016 Australian Census data by key regional areas of Queensland for occupation by industry to estimate total workforce for major sectors (this includes both employed and self-employed). I also estimate the average income per workforce member from the same source. This identifies variations in workforce and income across the 19 major sectors of the economy as classified by the Australian Bureau of Statistics.

My goal is to predict how those workforce and income numbers will be impacted by the controls for Covid-19, identifying the extent to which regional variations can be expected. To do this I make some assumptions about the impacts of direct controls and lower demand on key economic sectors, as follows:

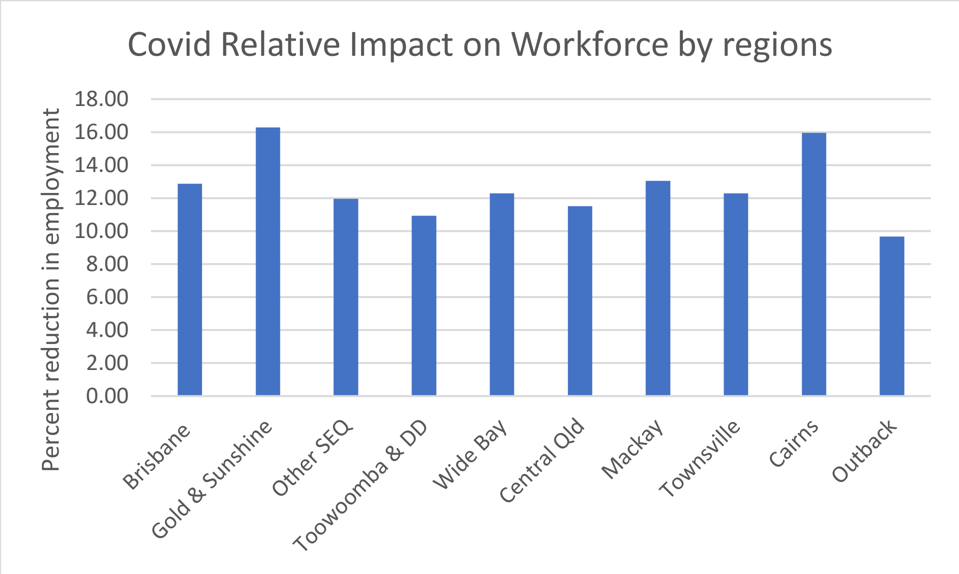
- No change in Agriculture, Mining, Manufacturing, Utilities and Construction
- 33.3% reduction in Retail Trade (but no reduction in Food retail), but no reduction in Wholesale Trade
- 80% reduction in Accommodation and Food Services
- 75% reduction in the airlines component of Transport, Postal & Warehousing
- 10% reduction in Information, Media and Telecommunications
- 10% reduction in Rental, Hiring and Real Estate Services
- 80% reduction Arts & Recreation services
- 66.7% reduction in Other services (essentially personal services)
- No change in other professional and service sectors.

These assumptions are applied equally across regions in Queensland. Essentially they provide a rough guide to the immediate impacts of controls, but do not include flow-on effects of a general slowdown. The analysis identifies that the direct controls would reduce the workforce by about 13% of the workforce, although the the JobKeeper and other programs will substantially limit the extent to which these actually occur.

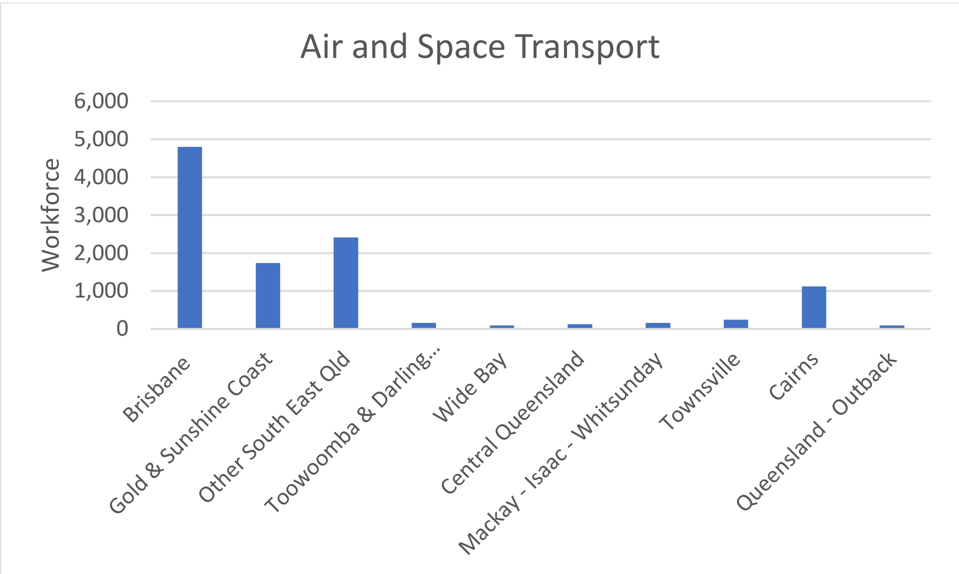
The regional distribution of those potential workforce losses in Queensland are summarised in the graph below. This identifies that the bulk of the workforce impacts will occur in south east Queensland, comprising the Brisbane, Gold & Sunshine Coast, and other South-east Queensland regions. This largely reflects the relative sizes of the different regional workforces.



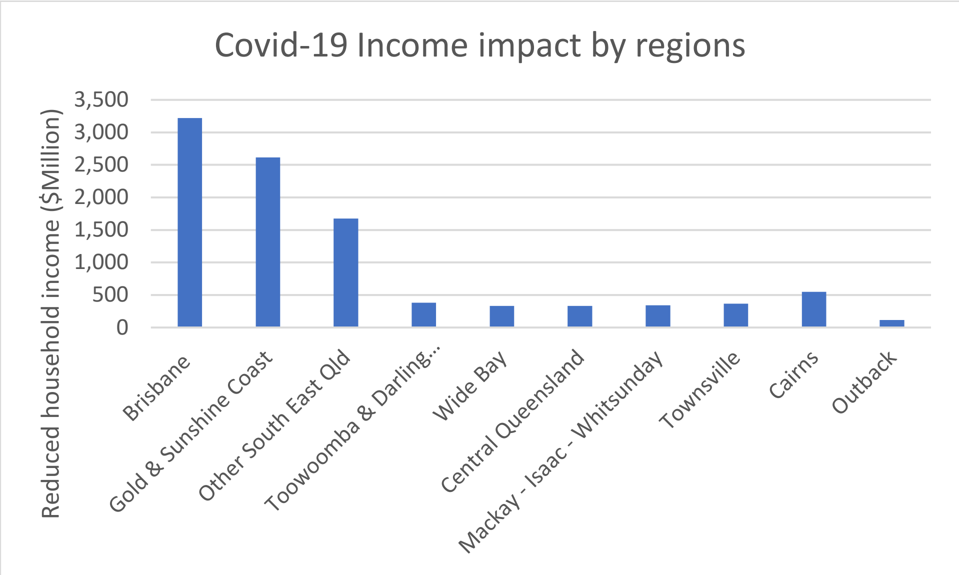
The graph below shows the same data in comparison to workforce size by region, so as to identify if there are variations in the relative impact across regions. Overall this exercise predicts a loss of 13% of the total workforce from the Covid-19 controls. The impacts are largest in the Gold/Sunshine Coast (16.3%) and Cairns (16.0%) regions, which are most highly exposed to the collapse in Tourism. Regions that have the lowest impacts are the Outback (9.7%) and the Toowoomba/Darling Downs region (10.9%).



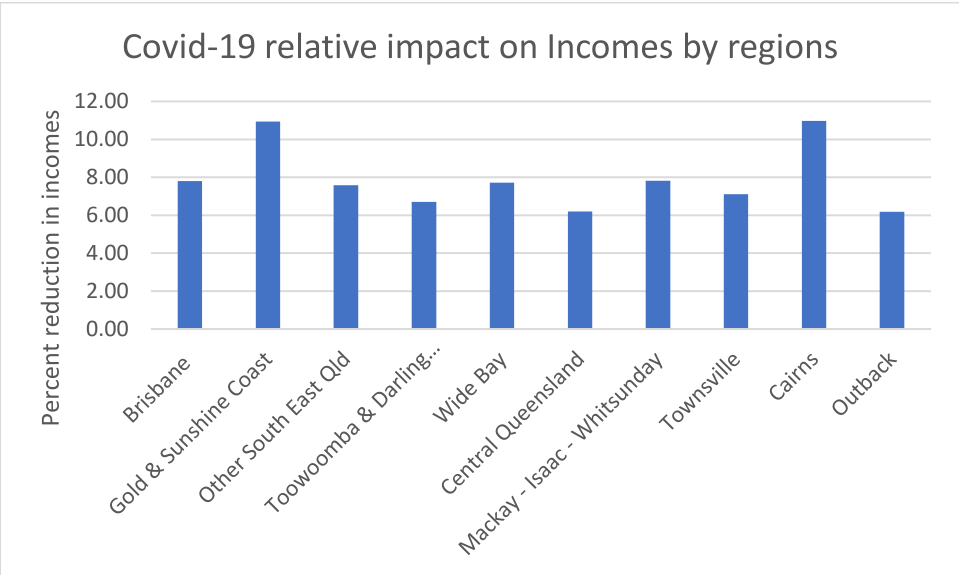

In the remaining regions, the impacts on Brisbane are proportionally larger than all other regions, apart from Mackay which includes the Whitsundays tourism region. Overall employment reduction from this simple model is predicted to be 193,000 people in south east Queensland, out of 270,000 across the entire state. While south-east Queensland has 69.8% of the State's workforce, it would have a slightly higher share (71.4%) of the losses. One reason for this is that some sectors, such as the Air component of the Transport sector, are largely concentrated in the south east (see graph below).



When the same modelling is used to predict the change in incomes, a slightly different picture emerges. Again, the largest impact is in south east Queensland. However the overall reduction in incomes at 8.3% is lower than the change in workforce at 13.2%. The smaller change in incomes is because the key sectors impacted tend to have lower renumeration levels than other sectors.




At the regional level, the largest reductions are in the Cairns (11.0) and the Gold & Sunshine Coasts regions, while the smallest reductions are in the Outback and Central Queensland regions by 6.2% each.



**Summary**

This exercise provides an initial model of how the controls for Covid-19 might impact on the regional economies in Queensland. Several key conclusions can be drawn.

First, the size of the impact is dramatic, with a projected slow down of about 13% of the workforce and 8% of incomes across the state. This includes both employed and self-employed in the workforce. However the bulk of the economy continues to function, so the effects, although dramatic, represent a slowdown rather than a shutdown of the economy. More stringent controls would have larger impacts.

Second, the exercise has not included any longer term flow-on effects in the economy, where negative effects multiply across sectors in a typical recession pattern. The size of those impacts will depend on factors such as the length of time that controls exist and the effectiveness of Government counter measures. Longer control periods, increased negative sentiment and other impacts will increase the 'hit' to the economy, as will the fallout from major slowdowns in Tourism and Education, two of our most important export industries.

Third, there are variations in impacts across regions of about 25% above and below the Queensland average.  Many regional areas (apart from Cairns) are slightly less affected than south-east Queensland. In part this is because the regions have lower incomes in the first place. This explains why South-east Queensland shares 72% of the workforce slowdown, but 76% of the income reduction.

Fourth, the modelling is likely to understate the variations, because there is an assumption or equivalent impacts by sector across regions. Yet reductions in services and retail may be more extreme in major urban centres where there are higher population densities, and reductions in accommodation and services are likely to be proportionally greater in the tourist regions than other areas. If the effects were allowed to differentiate by sectors, then it is likely that the Gold & Sunshine Coasts, Cairns and Brisbane economies have been more aversely affected than the other regions in the State.

**Looking forward**

While many regional economies may be slightly more fortunate than their urban and coastal counterparts in the short term, the longer term prognosis is grimmer. Economic disruptions generate change, and the outcomes of this disruption has some concerning trends for regional economies. Businesses are learning to supply customers remotely, while customers are embracing delivery and digital services, breaking traditions and habitual patterns. As economies rebuild post-Covid, the risks for regional areas is that local businesses can not compete effectively and that the urban-regional divide increases further.