The Choices We Make:

The Economic Future of Tasmania

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Summary

The COVID-19 pandemic, with its associated economic shockwaves, represents an unprecedented challenge to the world economy. The economic impact is unlike anything seen since the Great Depression, 90 years ago—an impact which, in Australia, has been echoed at both national and sub-national levels. In this research paper, we consider what the next stage of Tasmania's economic development could look like, and how Tasmania can recover and reconstruct after this pandemic.

In response to COVID-19, it was necessary to shut down large sections of the economy to stop infection and protect public health. This resulted in an unprecedented drop-off in production. In Australia and Tasmania, however, businesses and households will not simply 'regain confidence' and drive a full recovery themselves. Indeed, Tasmania's proactive and protective fiscal response indicates that the state government already understands that major support from government is necessary. As a proportion of the state's gross state product (GSP), Tasmania committed the largest amount of funding, relative to GSP, of any state—3.7%, as of August (Morrison, 2020). Meanwhile, extremely low borrowing costs mean that there is no reason for the state government not to undertake a more proactive role in the economy than it has done historically, even if that means higher state deficits.

However, a short-term, counter-cyclic approach does not adequately respond to the full scope of the challenge. The underlying working machinery of the economy is not in good order. COVID-19 has highlighted our existing vulnerabilities and created new ones, and it has also limited the scope of the private sector to respond. In addition, the future trajectory of the crisis remains unclear, meaning that depressed private expenditure, both here and overseas, will hold back the economy for some time. This, in turn, will cause sustained damage to many Australian industries.

Now, societies around the world are trying to move from an acute emergency response to a rebuilding stage — although the stubborn persistence of the virus is still constraining that transition in many countries. The state government in Tasmania will clearly be required to play a hands-on, leading role in job creation, investment and income generation for years to come, and it will need to borrow to do so. This fact should not be feared, but *celebrated*: large deficits are the flipside of the public investment that will be required to undertake Tasmania's reconstruction. It will be necessary to mobilise economic resources, to meet human needs and to get Tasmanians working again—especially if the intention is to build a more resilient and diverse economy than the one that existed before COVID-19.

The Tasmanian economy will not have the same shape, as it recovers, as it did before the pandemic. Tasmania can and must think differently about what is possible. Our purpose in this research paper is to add momentum to Tasmania's conversation about its economic, and social, future. As a result of COVID-19, Tasmania could push itself forward into the next stage of its economic development, or it could, alternatively, spiral into a depression, scarring lives and communities. It cannot afford that. Tasmanians, moreover, deserve far better.

We make the following recommendations:

- The Tasmanian Government must make a direct, substantial and focused investment in public housing. This will support the construction sector, address Tasmania's housing affordability challenge and enable the Tasmanian Government to directly contribute to better longer-term social and economic outcomes.
- 2. Expansion of the health, aged and disability care sectors must be expedited as a matter of urgency. This expansion should take place in the public sector.
- 3. Backsourcing (that is, returning outsourced public sector functions to direct provision by government) should be expedited wherever possible, for reasons of cost, accountability and quality. This will also provide the state government with another direct lever to improve wages and conditions across the economy, particularly for women.
- 4. There are several strategic industries in which the government should conditionally co-invest. While measures will vary for individual industries, the general principles are that co-investment should occur in a way that involves strong consultation with workers and the community, and that seeks to maximise social, environmental and longer-term benefits. The especially promising industries we have identified for pro-active government support and co-investment include:
 - a. general manufacturing
 - b. sustainable energy and manufacturing
 - c. renewable electricity exports
 - d. tourism and hospitality
 - e. arts and entertainment
 - f. food production

- g. higher education.
- 5. Tasmania should not replicate the mistake that the Commonwealth is making in withdrawing effective stimulus dangerously quickly. Over the medium term, there should be no slippage on public sector employment growth, wage increases or conditions. Not only are the services delivered by the public sector more vital than ever, but the purchasing power of public sector workers is also required in the real economy, while the cost of finance for government will remain at historically low levels for some time to come.

Introduction

The COVID-19 pandemic, with its associated economic shockwaves, represents an unprecedented challenge to the world economy. This has been echoed at both national and sub-national levels, and Tasmania, as an isolated, trade-exposed, services-concentrated economy, is especially vulnerable.

In response to the pandemic, Australia deliberately—and sensibly—shut down large sections of the economy to stop infection and protect public health. This process focused on customer-facing sectors and those that involved the movement of people (and, potentially, contagion). In turn, these conditions resulted in an unprecedented economic crisis—although we note that countries that did not shut down as completely or effectively, such as the United States and Sweden, experienced both health *and* economic crises more severe than what Australia experienced. The Australian policy response facilitated a quick drop-off in production and work, to save lives (Pennington & Stanford, 2020).

Gross Domestic Product (GDP) dropped almost 10% from the December quarter peak to the June quarter trough (author's calculations from ABS, 2020a, table 1). This contraction would have been more severe but for the Commonwealth and state governments' strong fiscal response. Their response reflected awareness that, notwithstanding traditional rhetoric, businesses and households will not simply 'regain confidence' and drive a full recovery themselves. Furthermore, the short-term, counter-cyclic approach typically adopted in response to a recession does not reflect the scope of the challenge. The underlying working machinery of the economy was not in good order even before COVID-19: wages, business investment and productivity growth were all stagnant for years before the pandemic. COVID-19, however, has highlighted our existing vulnerabilities and created new ones, and limited the scope of the private sector to respond.

The private sector is too shocked and damaged to lead recovery. With profound uncertainty about what comes next, business activity will not propel itself back to health. In addition, households will have neither the income nor the confidence to foster a consumer-led rebound. The future trajectory of the crisis also remains unclear, meaning that depressed private expenditure, both here and overseas, will remain a feature of the economy for some time. This, in turn, will cause sustained damage to many Australian industries (including two to which Tasmania is particularly exposed, tourism and higher education).

There is a silver lining, however. Crises invite us to think differently about what is possible. We can see more clearly what was not working before the crisis became acute, and we can reinvent a vision of what—and who—our economy is for. Our purpose in this research paper is to add momentum to Tasmania's conversation about its economic and social future.

In the context of a deep, protracted economic shock such as the COVID-19 crisis, articles of economic and governance faith are called into question. Across the political spectrum, there is an acknowledgement—whether explicit or tacit—that Australian policy and service delivery structures were not prepared for a crisis like the COVID-19 pandemic. Importantly, this exposes the fundamental arbitrariness and ideological underpinnings of the way our economic policy making has been conducted. Rules of policy making regarded as sacrosanct in 'good times' have been rightly cast aside. Consider, for example, the Commonwealth Government's deficit spending in the 2020–21 budget, the highest ever outside of wartime.

Meanwhile, neither the Tasmanian Government nor the opposition party is giving top priority to the government's budget position—surplus or deficit—at a time when the tangible economy, composed of people, housing, food and health, is in such a fragile position. This, as already mentioned, is also true of the Commonwealth Government; however, the most recent federal budget is focusing its stimulus on tax cuts, which disproportionately benefit high-income earners, and hence are less effective in spurring new spending and production.

Principles of public sector austerity are questionable at the best of times. Austerity produces negative macroeconomic impacts that spill across the economy, including downward pressure on wages (in the private sector) and suppressed purchasing power (in the real economy). But under circumstances of macroeconomic crisis—like now—austerity is disastrous.

More than other state governments, the Tasmanian Government should be congratulated for its proactive stance in the face of the crisis. As a proportion of the state's GSP, Tasmania has committed the largest amount of funding of any state—3.7% as of August (Morrison, 2020). The macroeconomic effects of this spending will have been boosted by multiplier effects as the additional spending circulates through the Tasmanian economy, giving rise to still more spending; this multiplier would have been higher yet if a greater proportion of state support had been directed to households, rather than business. This substantial emergency response will

¹ We note some important initiatives targeted at households, such as the provision of a level of income support for migrants who were excluded from federal JobKeeper and JobSeeker measures.

necessarily feed into a second phase of long-term planning and reconstruction. Indeed, the Premier's Economic and Social Recovery Advisory Council (PESRAC) concedes that the Tasmanian economy will not have the same shape as it as it did before the pandemic—and that structural support will be needed as this change takes place (PESRAC, 2020).

The Tasmanian Government now needs to go beyond stimulus; it should focus on *reconstruction*. This should be understood in the same vein as the post-World War II reconstruction that modernised the Australian economy and produced the broadbased prosperity of the middle class. The state government will be required to play a hands-on, leading role in job creation, investment and income generation, and it will need to borrow to do so. This fact should not be feared but celebrated; borrowing is the flipside of the public investments that will be necessary to lead this reconstruction. And in the medium term, economic growth will lessen the importance of the debt, relative to Tasmania's income and revenue.

Major public investments will be necessary to mobilise economic resources, to meet human needs and to get Tasmanians working again—especially if the intention is to build a more resilient and diverse economy than the one that existed before COVID-19. To that end, Tasmania needs a new vision for achieving job creation, incomes and growth in the aftermath of the pandemic. Naturally, we will also want this reconstruction to address the critical failures of the business-led economy that were painfully evident before the pandemic: underutilisation, precarity, inequality and climate change (Pennington & Stanford, 2020). Tasmania has the opportunity—and the incentive—to advance forward into a new chapter in its economic development. The alternative is stagnation and even wider inequity.

One major question, therefore, is: What measures are available to the Tasmanian Government itself? PESRAC (2020) describes restoring demand as its top priority, although it does not articulate how the public sector will lead that demand response. However, at this stage, the public sector is providing the most important and reliable support to overall demand (or purchasing power) in the economy. Expressed in more formal economic terms, GDP (or in the case of Tasmania, Gross State Product, or GSP) is equal to the sum of:

- consumer spending, plus
- private sector investment, plus
- government spending (both on current services and public investment), plus
- net exports.²

² In the case of state accounts, exports includes sales to other Australian states as well international .

With consumer spending and business investment and confidence heavily impacted by the pandemic, the only practical source of economic resilience and growth is increased direct government spending. Government spending, if it is well targeted, can also produce long-term improvements for private sector productivity and growth: by stimulating overall purchasing power, enhancing confidence, and providing valuable inputs (from infrastructure to trained workers) for private sector activity.

Unfortunately, COVID-19 will not be the last global pandemic, nor will it be the last economic crisis. We hope, however, that this will be the last time that the ideology of austerity holds back society's ability to withstand a sudden and severe economic shock. Governments around the world have unequivocally demonstrated that when the need arises, they are fully able to mobilise societal resources to address social needs. Traditional arguments that government spending is constrained by the need to balance budgets or reduce debt or even by a shortage of available funds have all been proven false.

In the future, Australians will be less likely to accept deliberately under-resourced public services. In this paper, we stress that resilience is now built into our public institutions. Now that Australians—and Tasmanians—have clearly seen the possibility of broader government intervention, we need to incorporate the idea of a stronger, better resourced, more resilient public sector into our political economy.

Australia's outsize contribution to climate change is another immediate crisis that is also amenable to publicly driven solutions. Tasmania's enormous renewable energy endowment, which it is already capitalising upon, is an important building block in our national response to the existential challenge of climate change.

In this research paper, we consider the impacts—health, social and economic—of the COVID-19 crisis on Tasmania, and we review the shape and strength of Tasmania's economy. We identify some strategic sectors that are interconnected, through the Tasmanian economy, both to exports and to Tasmania's future economic strength in ways that makes their recovery and expansion critical; and we propose some ways that the state government could intervene to support these sectors. We then discuss the labour and social standards that recovery must engender if it is to be durable and equitable. We discuss why austerity—or reducing the footprint of government in the face of the crisis—would be self-defeating. Finally, we conclude by reiterating the important role that the state government must play in fostering Tasmania's economic future; and outlining several policy recommendations to achieve the aim of 'building back better'.

How the Shutdown Hit Tasmania

Tasmania, like the rest of Australia, was hit hard and fast by the economic effects of COVID-19. This is because the Commonwealth and state governments quickly and prudently acted to contain the spread of the virus through a three-tiered set of suppression measures (each with its own impacts on economic activity):

- physical distancing and hygiene (impacting communal economic activity, such as hospitality)
- 2. travel restrictions within Australia (impacting tourism and trade)
- 3. border controls (again, impacting tourism, including international tourism, as well as international students).

Relative to most other jurisdictions, Tasmania was successful in its health response. This meant that Tasmania was able to lift many health restrictions faster than most jurisdictions; and the successful effort is a credit to both Tasmanians and the state government. (There are considerable restrictions still in place, although at time of writing there are no known active cases of COVID-19 in the state). On the economic front, as well, the Tasmanian Government acted decisively, putting in place a significant government stimulus program to partially mitigate the economic impacts of the virus.

If there is an economic pay-off from Tasmania's public health success, it will only become visible if, and when, the reduced spread of COVID-19 allows for a more complete reopening of economic activity. That, in turn, depends on success in reducing infections in other states and trading partners (a goal that has not yet been achieved).

We can interpret the impacts of COVID-19 by considering them chronologically: a series of events giving rise to a negative economic feedback loop of depressed supply and demand that will reverberate through the economy for years. The initial health shock was transmitted by policy, community and international responses into an economic supply shock, as businesses shuttered operations and cross-border trade became increasingly fraught. In turn, incomes and expenditure dropped as workers lost hours, or lost employment altogether, thereby generating a demand shock which continues to be felt acutely. Business investment, already weak prior to COVID-19, is expected to remain suppressed for at least a year (Reserve Bank of Australia, 2020).

The federal government's JobKeeper and JobSeeker payments, along with the Coronavirus Supplement, have mitigated some of these impacts, but these measures

are being rolled back, and not all jobs will return. There are also significant groups of workers—including young people (working in short-term, casual jobs) and migrants—who were never covered by JobKeeper, and who lost work and income as a result.

McKinsey & Company (2020) notes that the present crisis has accelerated some long-term economic trends, such as pressures on bricks-and-mortar retail trade. That said, there are certain sectors of the economy, some of them central to the Tasmanian economy (for example, hospitality), which can only operate in bricks-and-mortar premises.

Remarkably, the empirical evidence in Australia has been that profitability in most sectors is at record highs (ABS, 2020a), with profit margins supported by the JobKeeper Payment (Hutchens, 2020). The job-shedding that has been experienced is due to an absence of consumer demand, not primarily to business losses.

Thus far, the downturn in employment in Tasmania reached its lowest point in May (see Figure 1), and the employment recovery since then has been assisted by the government response. That said, the jobs that were lost early in the crisis were mainly (but not wholly) part-time—affecting some of the more vulnerable workers in the economy, many of them women and young people. Since then, the number of full-time jobs has remained stagnant, meaning that any recovery has occurred within part-time jobs. In other words, while the number of jobs overall has rebounded, many full-time jobs have been replaced with part-time jobs (see Figure 2). Essentially, the *quality* of jobs in Tasmania has declined because of the crisis.

From the pre-pandemic peak (in February 2020) to the trough of the crisis (May 2020), the number of employed persons in Tasmania declined by 8.1%—over 21,000 jobs. Over the same period, Australia's employment declined by 5.5% (author's calculations from ABS, 2020b, table 23). So Tasmania's labour market was hit relatively harder in the initial shutdowns.

Underutilisation—the combination of unemployment and underemployment—peaked at 21.9% in April. As of September it was still at 18.3%, well above its level prior to COVID-19. Unemployment has actually continued to rise, reaching 7.6% in September—the second highest in the nation after Queensland, and the highest since the start of the crisis, rising 1.3 percentage points over the last month. And these figures do not include displaced workers who have simply given up looking for work altogether.

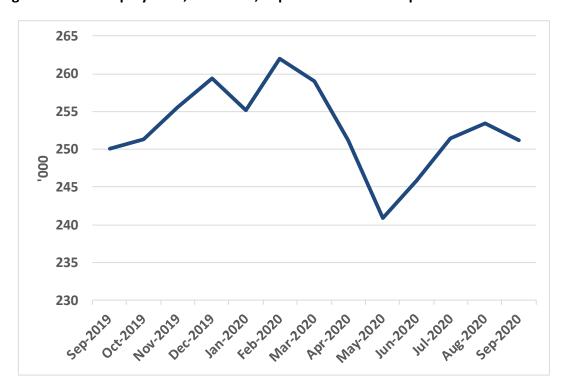
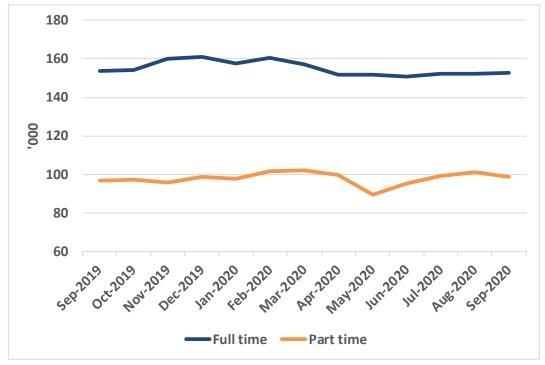


Figure 1. Total Employment, Tasmania, September 2019 to September 2020.

Source: ABS (2020b), table 23.





Source: ABS (2020b), table 23.

Tasmania will not be lifted out of the economic quagmire of COVID-19 by a 'snapback' in private sector expenditure. No economy could be. In addition, leading into the COVID-19 crisis, Tasmania depended to a notable extent on external sources of demand—such as tourism (and tourism-related hospitality) and international education—for its continued growth. These sources of demand will likely remain weak for years to come.

This can be seen in Figure 3, showing the change in total employment by industry from February to May 2020. The hospitality sector was hit the hardest, accounting for more than one-third of all jobs lost in Tasmania in that initial period of shutdown (7700 workers; ABS, 2020c). Several other industries, including export-dependent ones, lost between 1000 and 2000 jobs.

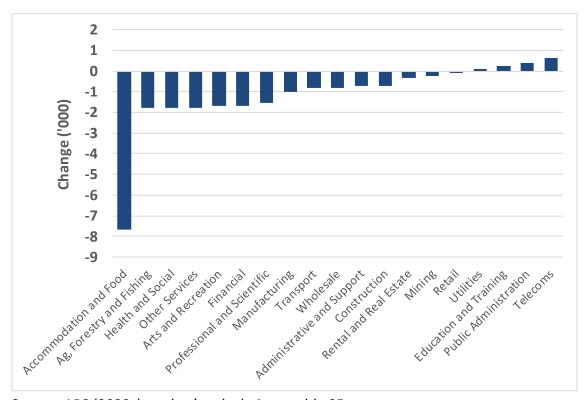


Figure 3. Employment by Industry, Tasmania, Change from February to May 2020.

Source: ABS (2020c), author's calculations, table 05.

The Tasmanian Government's PESRAC delivered its Interim Report in July 2020. The report includes several sensible, if unambitious, suggestions, some of which the Tasmanian Government is already working on. However, it fails to fully acknowledge the extent of the crisis and, therefore, the full role that government will be required to play in order to rebuild demand in the face of this economic downturn (even for the sake of the business sector).

While PESRAC (2020) comments on how prevalent casual and part-time work has been in Tasmania (which we discuss further in the next section), it makes no recommendations on the need to tackle insecure work and build permanent jobs. Any sustained and durable economic recovery in the context of COVID-19 will need to reduce precarity in the labour market. Expanding direct, high-quality, public sector employment helps in this regard – including by pressing private sector employers to improve their own wages and conditions to attract candidates. This will also support consumer demand (through the expansion of public sector wages), which will, in turn, provide private firms with the income and confidence they need to employ people. While PESRAC (2020) identifies the importance of work that has traditionally been seen as public sector work in recovering from the economic crisis, it does not draw a clear connection between the need for these services and the role of the public sector in employing people to provide them.

In sum, the PESRAC report not only fails to grapple with the scope of both the challenge and opportunity that COVID-19 presents to Tasmania economically and socially, but also shows scant evidence of having engaged with worker and community groups. If PESRAC's recommendations in its upcoming Final Report are to adequately address the situation for regular Tasmanians, this must happen.

In contrast to the serious dip in overall employment described above, the public sector (including all levels of government) has been a source of stability and resilience during this crisis. Unlike the private sector, where short-run market demand drives employment, the public sector can maintain employment in the face of economic headwinds. Although there was some reduction in total public sector employment in Tasmania from February to August (3100 jobs at all levels of government, a peak-to-trough drop of 5.7%; see Figure 4), this was small relative to overall job losses. It is likely that many of these public sector job losses were in the university sector.

However, none of those public sector job losses were economically necessary. Indeed, by failing to preserve jobs and, indeed, to hire workers at this time, governments at all levels in Australia have allowed the recession to be deeper than necessary.

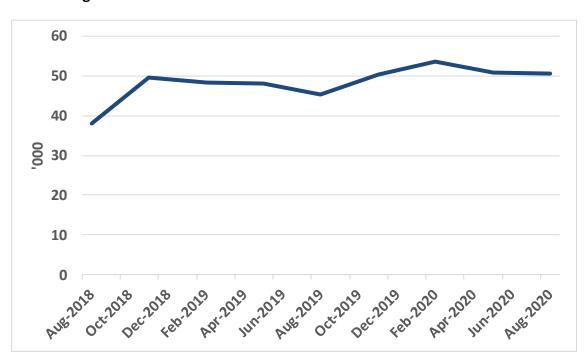


Figure 4. Public Sector Employment (All Levels of Government), Tasmania, August 2018 to August 2020.

Source: ABS (2020c), table 26a.

The macroeconomic importance of public sector work at the state level is reinforced by the weakness of the Commonwealth response on this front. While the federal 2020–21 budget racks up a huge deficit, it does so largely through tax cuts, which disproportionately flow to the wealthy. The wealthy, in turn, have the greatest propensity to save rather than spend any additional income, muting any stimulatory effect.

There is no economic reason that these tax cuts will create jobs for Australian workers; this is quintessential 'trickle-down economics'. To kickstart the state economy, the Tasmanian Government must do as much as it can to support demand directly.

A Profile of Tasmania's Economy Today

Tasmania's economy today has unique strengths, and is more diverse than it has been in the past. However, COVID-19 has highlighted its continued structural weaknesses. For example, the travel restrictions associated with the pandemic have hit Tasmania's reliance on income from outside the state (through tourism and international education) hard. Tasmania is also, unfortunately, characterised by high unemployment, precarious and part-time employment, and poorer levels of education than many other jurisdictions. Much of this is due to a legacy of political and policy decisions that were made outside Tasmania, and that have unduly affected the state.

There has been a certain level of political acceptance that, given its geography, Tasmania should not expect the same level of wealth and amenity as mainland metropolitan areas. This in turn has the effect of a self-fulfilling prophecy—it is an impediment to Tasmania's success and growth in failing to attract skilled workers from other states who are offered greater income and amenity elsewhere.

But there is no reason to set expectations low: the COVID-19 crisis has already demonstrated that, by mobilising public resources through concerted government action, many 'unfortunate facts of life'—the extent of poverty among the unemployed, for instance—can quite readily change. For this to happen, governments must feel that they are under sufficient political pressure to move boldly. Although the example just given (unemployment benefits) is a federal responsibility, other determinants of social wellbeing, such as social housing, lie squarely within the remit of the state government.

Economic growth was already relatively stagnant in Australia since the 2019–20 bushfires prior to the pandemic. The national economy was already experiencing a notable slowdown, with high labour underutilisation and historically weak wages growth. Over the last decade, until 2018, Tasmania lagged behind Australia in terms of economic growth. Beginning in 2019, though, Tasmania began to buck the national trend, recording the fastest growth of any state (3.6% expansion in GSP), whereas Australia's growth in 2019 decelerated notably (see Figure 5).

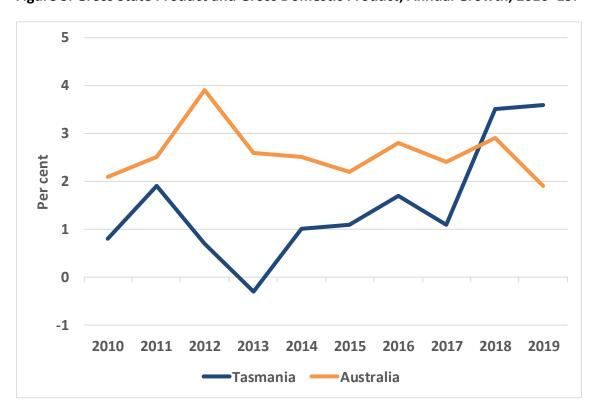


Figure 5. Gross State Product and Gross Domestic Product, Annual Growth, 2010–19.

Source: ABS (2019a), tables 7 and 10.

Notwithstanding Tasmania's recent economic progress, Tasmania's GSP per capita remains the lowest of any Australian jurisdiction (see Figure 6). At approximately \$60,000 per year in 2018–19, it is slightly behind South Australia (\$62,000) and lags behind other Australian jurisdictions. Keep in mind that a high GSP per capita is not necessarily reflective of a better standard of living: for example, high GSP per capita in Western Australia and the Northern Territory largely reflects resource extraction undertaken by largely foreign-owned companies, many of the benefits of which do not flow to local residents. Nevertheless, Tasmania's relatively underdeveloped economy does reflect historic underinvestment in the state's industries and services. This only partly reflects Tasmania's geographic isolation; more often it was a result of decisions made elsewhere. Tasmanians deserve, and should demand, better.



Figure 6. Gross State Product per Capita, Thousands of Dollars, 2018–19.

Source: ABS (2019a), table 1.

Government constitutes a larger proportion of Tasmania's economy than is the case for Australia as a whole. General government consumption in 2018–19 (the most recently available figures) was 24.5% of GSP; the comparable figure for Australia was 19.1%. The state and local government sector was 15.8%, whereas the relevant figure for Australia was 11.1% (see Figure 7). This reflects the relatively greater importance of public services in Tasmania's overall economy; this strong public-sector footprint is an asset for the state as it works to rebuild after COVID-19.

At 64%, household consumption also made up a greater proportion of Tasmania's GSP than for Australia's GDP. Likewise, in 2018–19, retail trade contributed a greater proportion of Tasmania's GSP (5.6%) than was the case for Australia's GDP (3.9%; ABS, 2019a). This suggests that—in a recession where household consumption is damaged through impacts on business confidence and employment and, in turn, consumer confidence and demand—Tasmania will feel the impacts disproportionately.

Exports (15.8% of GSP) and business investment (9.5% of GDP) were both lower as a proportion of Tasmania's economy than was true of the Australian economy as a whole. Note that these figures date from prior to COVID-19; they will have decreased further due to the crisis.

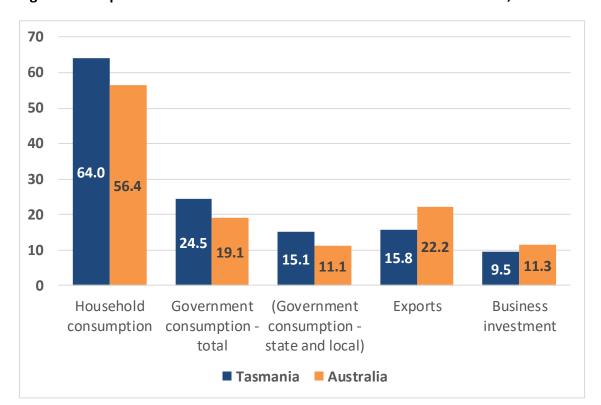


Figure 7. Components of Gross State Product and Gross Domestic Product, 2018–19.

Source: ABS (2019a), author's calculations from tables 7 and 10.

Notes: 1. Totals do not sum to 100%, since various components of GSP/GDP are excluded from these summary statistics. 2. 'Government consumption—state and local' is a subset of 'Government consumption—total'.

Taken together, these data provide us with some guidance about how the state government can best support economic recovery. It should target household consumption, by boosting wage incomes generally, and expanding high-quality, direct public sector employment. Business investment will follow from rebounding consumer expenditure. Note that businesses cannot be expected to invest, and thereby lead a recovery, in an environment marked by both depressed household consumption and exports.

Tasmania faces the demographic challenges associated with an aging population, and its age profile skews older than for Australia as a whole. Still, over the last few years, Tasmania has also become a destination for younger people—both returning Tasmanians, and others attracted by lifestyle features such as Tasmania's natural endowment and its arts and culture scene. This is a bright spot for Tasmania's future, and policy makers should capitalise on it.

Tasmania's labour market is more precarious than Australia's as a whole. For almost all of the past decade, the Tasmanian unemployment rate exceeded Australia's—an

average of 0.8 percentage points higher (author's calculations from ABS, 2020b, table 23; see Figure 8).

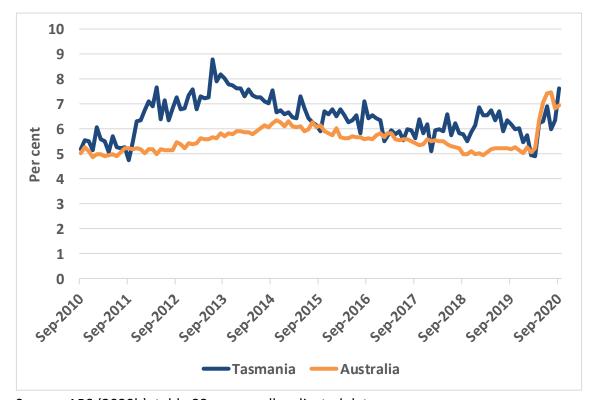


Figure 8. Unemployment Rate, Tasmania and Australia, 2010 to 2020.

Source: ABS (2020b), table 23; seasonally adjusted data.

In September 2020, 32.1% of employed Australians were employed part-time, while the comparable figure for Tasmania was 39.2% (ABS, 2020b, author's calculations from table 12). Again, this is an enduring disadvantage: well before COVID-19, a significantly larger proportion of Tasmanians than Australians is employed part-time. There are also higher levels of underemployment (that is, employed people who wish to work more hours than they can find). Over the last 10 years, the underemployment rate in Tasmania has been, on average, 2% higher than for Australia as a whole.

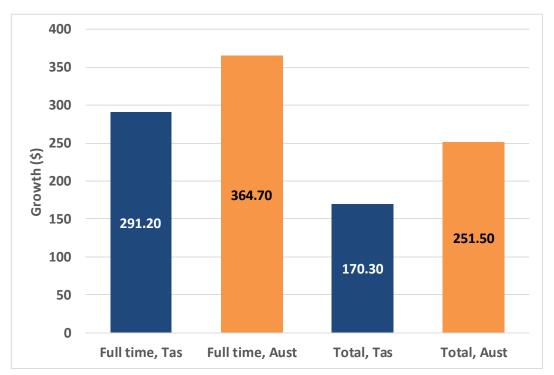
The highest share of casual employment in any Australian jurisdiction was in Tasmania, at 28.3% of total employment in 2019; the comparable Australian figure was 24.4% (ABS, 2019b; author's calculations from table 1b.3). In practice, this means that any government income support that selectively excludes some or all causal workers (such as JobKeeper's exclusion of casuals with less than one year's tenure) will impact Tasmania disproportionately. By definition, casual workers do not have access to paid sick leave. Tasmania was therefore very lucky that the elevated risk of employees infected by COVID-19 having to work simply to make ends meet did not result in a more widespread outbreak. This is especially the case given that paid pandemic leave

for Tasmanians, funded by the Commonwealth Government, was only announced on 26 August—well after the pandemic hit.

Average total weekly earnings are substantially lower in Tasmania than across Australia as a whole—\$1081.40 per week in May 2020, compared to \$1304.70 for Australia (ABS, 2020d). Even when only full-time time hours are considered (adjusting for the high prevalence of part-time work in Tasmania), there is still a notable discrepancy—\$1488.10 per week as opposed to \$1713.90 nationally in May 2020.

While there has been considerable volatility in wage growth from May 2012 (the earliest figures in the current time series) to now, it is notable that Tasmanian full-time ordinary time earnings have grown at an average of 2.6% per annum across the period; the comparable figure for Australia was 2.8%. Australia-wide wage growth is still well short of the expressed goals of even mainstream players, such as the Governor of the Reserve Bank of Australia (RBA), Dr Philip Lowe, and Scott Morrison, in his previous role as Treasurer (Heath, 2017; Karp, 2019). Tasmania's wage growth has been even slower—and applied against a lower starting point. Thus the earnings gap between Tasmania and the rest of the country has widened further in recent years, in both relative and absolute terms.

Figure 9. Growth in Average Weekly Earnings, Tasmania and Australia, May 2012 to May 2020.



Source: ABS (2020d), tables 2 and 12f. Seasonally adjusted figures. Full-time earnings are for ordinary time and do not include overtime.

The size profile of Tasmania's employers is similar to Australia's figures overall; this is somewhat surprising, as one might expect that there would be fewer large employers in the state. In 2019, non-employing businesses (sole traders) constituted 55.6% of enterprises in Tasmania, compared with 56.1% Australia-wide. 40.7% of businesses were small firms with 1–19 employees, compared with an Australian figure of 40.6%. Medium-size enterprises constituted 3.4% (20–199 employees), compared with 3.0% Australia-wide. Large businesses (200+ employees) made up 0.2% at both the state and Australian levels (author's calculations from ABS, 2020e).

The property sector has been especially strong in Tasmania, but this has damaged ordinary Tasmanians, with prices significantly outstripping wage growth. For example, in the year from June 2017 to June 2018, dwelling prices in Hobart grew by 15.5% (ABS, 2020f). This can be attributed in significant part to an influx of wealth from the mainland. It is also demonstrative of the 'tale of two Tasmanias', where a wealthy, comfortable segment of society contrasts sharply with a larger group who have been pushed to the economic fringes.

During the COVID-19 crisis, Australians have been reminded of the many ways in which our lives literally depend on public servants' skill and dedication. State-funded public service workers constitute the largest portion of the broader public sector workforce. Across many crucial industries and occupations—health, education, training, infrastructure—the work of public sector workers has never been more vital.

The public sector also has a natural stabilising macroeconomic role. As Jericho (2020) states:

[M]ost public sector work is ongoing—it needs to be done regardless of the economy. Police, healthcare workers, teachers and yes, even 'bureaucrats', don't stop having work to do because unemployment rises.

One reason they are the public sector is because they are stable. Teachers and nurses and police are needed week in, week out, regardless of business cycles ... Do we really want fewer nurses and aged care workers right now?

When there is both unrealised productive capacity in the economy and unrealised needs for essential services in society, governments should expand public sector services. Right now is an unusually good time for Tasmania to increase public sector investment. Apart from the cost of government borrowing being at historically low levels, there is a larger pool than usual of available (unemployed or underutilised) workers and skills.

The maintenance and expansion of the public sector is therefore not so much a 'cost' as an investment: an investment in social stability, economic efficiency and public wellbeing. Government hires public sector workers to provide the whole community—including business—with essential services, which at times of economic and social distress are more vital than ever.

While private sector stimulus can be appropriate and useful in achieving economic aims, the state government should consider more carefully the private sector industries into which money is spent. For example, the Tasmanian Government has committed \$1.8 billion over two years in stimulus to the construction sector (Gutwein, 2020), although construction has a low ratio of jobs to expenditure. Perhaps there is a call, unrelated to the immediate need to create jobs, for construction and infrastructure—and if so, the government should certainly support construction. However, if the primary strategic policy goal in this depressed labour market is to support employment, the state government should also look to other, more employment-intensive industries, such as child care, aged care, nursing, and school and tertiary education.

Manufacturing is a special case. While it is moderately jobs-intensive in its own right, it also anchors other jobs and supply chains throughout the Tasmanian and Australian supply chains—including mining upstream (that is, the process of turning raw materials into usable goods), and construction downstream (the production of building materials). We will discuss this in further detail below.

If the rest of the economy and household consumption is vibrant, the non-tradeable private domestic sector—which includes residential construction—will take care of itself. It is not possible to build, extend or renovate a Tasmanian home in any geography other than Tasmania. Therefore, if people are attracted to, or if they remain in, Tasmania because the broader economy is sufficiently buoyant for them to do so, the Tasmanian construction sector will prosper.

To understand where the Tasmanian Government can most effectively invest to create jobs, Table 1 considers the number of jobs per million dollars gross value added by industry. These numbers differ from industry to industry because some sectors are far more capital-intensive than others. Economic inputs into, and outputs from, those industries are largely expressed through the application of materials, plant and equipment, rather than through the employment of workers.

Table 1
Employment per \$1 Million Gross Value Added by Industry
Australia, 2018–19

	Jobs per Million Dollars
Accommodation and Food Services	23.8
Retail Trade	16.9
Other Services	14.9
Arts and Recreation Services	14.5
Agriculture, Forestry and Fishing	14.4
Administrative and Support Services	14.2
Education and Training (Private)	14.0
Health Care and Social Assistance (Private)	13.6
Public Administration and Safety (Private)	12.7
Construction	8.7
Professional, Scientific and Technical Services	8.5
Wholesale Trade	7.9
Transport, Postal and Warehousing	7.8
Manufacturing	7.6
Rental, Hiring and Real Estate Services	5.0
Information Media and Telecommunications	4.5
Electricity, Gas, Water and Waste Services	2.2
Mining	1.0
Total Selected Industries	8.9

Source: ABS (2020g), author's calculations.

Some of the most employment-intensive industries are not ones we are used to thinking of in terms of public provision. Yet a government with sufficient vision and commitment to genuinely put job creation at the forefront of its economic planning can certainly co-invest in, or subsidise, these industries. After all, nationally, Australia effectively subsidises fossil fuels to the tune of \$29 billion per year (International Monetary Fund, 2019), even though mining is not an industry with direct public ownership. Furthermore, mining is at the bottom of the list of industry divisions in terms of job intensiveness.

Another way to understand possible futures for Tasmania's industrial recovery is to examine the recent past. As shown in Figures 10a and 10b, the key growth sectors over the last decade in the Tasmanian economy have been:

- health and social services (8200 jobs; 27.5%)
- education and training (5000 jobs; 26.4%)
- professional, technical and scientific services (3300 jobs; 30.1%).

Figure 10a. Job Creation by Industry, Tasmania, Change in Absolute Terms, May 2010 to May 2020.

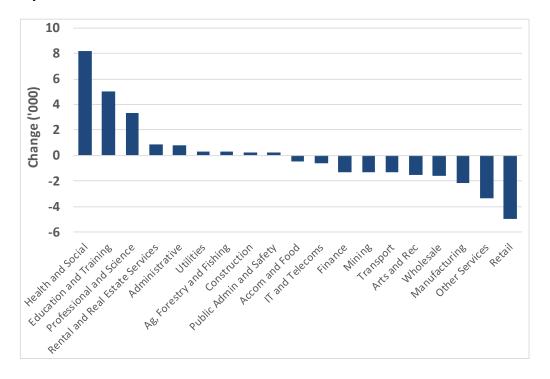
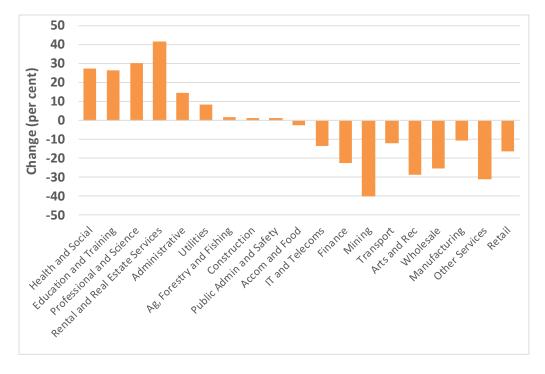


Figure 10b. Job Creation by Industry, Tasmania, Change in Percentage Terms, May 2010 to May 2020.



Source: ABS (2020c), author's calculations from table 05.

In proportional terms, the rental, hiring and real estate services sector has also grown rapidly (by over 40%); however, the actual number of jobs added was a mere 900. Notably, the construction sector has not increased much at all.

Unfortunately, just as elsewhere in Australia, Tasmania has experienced a hollowing-out of the manufacturing sector. This is an avoidable instance of Australia lacking an industry policy that favours manufacturing. Australia is now less self-sufficient in manufacturing than any other rich nation (Stanford, 2020). But Tasmania has advantages in renewable energy that make manufacturing especially promising, provided that the right policy settings are in place (Nahum, 2020a).

Agriculture, forestry and fishing have shown some small growth over the decade. However, forestry—as distinct from agriculture and fishing—has not increased as an employer over the decade (ABS, 2020c, table 06). And while some significant value in this industry is derived from aquaculture, it is not a job-intensive subset of the industry and is ecologically extractive (see Minshull & Browne, 2019).

While, as Figures 10a and 10b show, the arts and recreation sector experienced a contraction over the preceding decade, it *more than halved* in absolute terms over the course of the year ending May 2020, losing 4600 jobs. Additionally, while there is considerable volatility in these numbers over the course of the decade, arts and recreation employment has not been this low since the mid-2010s. The arts make an important contribution to the broader Tasmanian economy, as well as to its social and cultural life; later in the paper we present a plan to mitigate COVID-19's impact on this sector.

The Tasmanian state public sector is the largest employer in the state, employing almost 32,000 staff as of June 2020, or almost 26,000 in full-time equivalent terms (Department of Premier and Cabinet, 2020). The total head count equates to 5.9% of the total Tasmanian population (author's calculations from ABS, 2020h), which makes public sector employment an especially important sector in Tasmania—socially as well as economically. After all, state public servants—both those on the front line as well as those supporting direct service delivery—provide vital services for all Tasmanians.

The Centre for Future Work has conducted substantial research on the economic benefits—and in a crisis, the necessity—of sustained and expanded public sector employment (see, for example, Henderson & Stanford, 2020; Nahum, 2020b). In terms of the economic footprint of this sector, as well as the direct employment provided by the sector, the jobs of a large cohort of private sector workers in both upstream (supply chain) and downstream (consumer spending) industries are anchored by public sector spending. Nahum (2020b) recently estimated that, in the Queensland context, for every direct 10 public sector jobs, another 4.5 private sector jobs are indirectly

supported by government expenditure. Similar relationships will apply in the Tasmanian case, too. Clearly, public sector expenditure supports business investment and household expenditure throughout the economy.

An important consideration anywhere, but especially in the Tasmanian context, is the value of the natural environment. The natural environment is important in its own right, and it should be preserved and stewarded for intrinsic reasons. But it is also why many people choose to live in Tasmania. It holds significant direct economic value, both in boosting tourism within the state and in attracting visitors from elsewhere.

An Inclusive, Sustainable Reconstruction Plan for Tasmania

It is no exaggeration to say we are at an inflection point in economic history—both in Tasmania and nationally. Among many important differences between Tasmania and other Australian states are Tasmania's reliance on outside income and its wholly successful health response. The latter cannot be sacrificed to prop up the former, however. Politically, this would be an impossibility; and empirically, as we have seen elsewhere in Australia and internationally, a faltering or incomplete health response does not foster a faster economic recovery.

A holistic and durable policy response to the crisis in Tasmania would include a deliberate focus on young people and women, who have suffered the worst economic effects of the crisis.³ Additionally, it would focus on public provision of health care, aged care and education. These professions, which were under-resourced even prior to COVID-19, have a feminised workforce; they are growing sectors; and they lend themselves to direct government provision.

The Tasmanian Government is therefore equipped with a powerful lever to directly affect economic outcomes. Energising these sectors will also have add-on effects that support broader economic and social recovery. For example, parents who utilise government-delivered, non-profit child care are far more able to participate in the labour market than parents who are, under the current arrangements, sometimes effectively paying to work. In this way, government-funded child care pays for itself through the economic growth that it generates (Denniss & Grudnoff, 2020).

A strong response must also involve concerted policy action aimed at ensuring job security and ending work precarity. In turn, this will have positive effects on consumer confidence and demand, which will support the state economy in the absence of the usual discretionary income from outside the state.

³ While men showed a higher headline unemployment rate in Tasmania in September (8.4% as compared to 6.8%), the effects of underemployment have more acutely been felt by women (10.6% of employed men report being underemployed, compared with 13.1% of employed women). Additionally, more women than men have dropped out of the workforce altogether (3600 as compared to 1800), 'hiding' the extent of unemployment amongst women—since those who are neither in work nor seeking work are not counted as part of the labour force (ABS, 2020b, tables 9 and 23).

A response which tinkers around the edges in terms of government's place in Tasmania's economy is one which condemns the Tasmanian economy, and Tasmanian livelihoods, to a longer-than-necessary downturn after the COVID-19 crisis. We are not making an ideological argument in favour of expanding government for the sake of it. Rather, we are proposing measures that will create a vibrant and resilient mixed economy, and equality of opportunity for all Tasmanians. The flipside—the absence of a durable government-led response to the crisis—is sustained economic depression.

TASMANIA'S PUBLIC SECTOR

As we have discussed, the Tasmanian public sector is the largest employer in the state.

Thus far, the pandemic has seen increased co-operation between trade unions and the Government. Premier Gutwein has even opened a regular dialogue with Unions Tasmania, as both sought to protect jobs and health.⁴

This is because the Tasmanian Government correctly identified that cutting public sector spending during a crisis is the wrong course of action, for both macroeconomic and social reasons. Correspondingly, the government cancelled the planned 'efficiency dividend' (the first of what was presumably to be an annual series of across-the-broad budget cuts applied across the public sector).

However, the Gutwein Government subsequently considered a pay freeze for state public sector senior executive service (SES) workers. The direct impact of this measure would not have been huge: the number of state SES workers is comparatively small, and, as high-income individuals, their marginal propensity to spend (rather than save) is lower than for many other workers. Still, we are concerned that this signals the beginning of a turn towards austerity—'the thin end of the wedge'—which will more broadly affect public sector workers and, in turn, the macroeconomy. We are, however, pleased to note that the Tasmanian Government has subsequently indicated that all public servants—including SES—will receive their annual pay rise as scheduled.

The Tasmanian Government also has an opportunity to engender fair pay and secure jobs by 'backsourcing' or 'insourcing': moving public sector services that have previously been outsourced to the private sector wholly back within the purview of the public sector. This is desirable for reasons of quality, accountability and cost. We provide several examples below.

The Economic Future of Tasmania

⁴ On the public sector specifically, see Lynch (2020).

'Quality' refers both to the quality of services provided, as well as to the quality of jobs offered to staff. By removing the profit motive from the provision of human services, the motivation to pay workers poorly is largely removed. In fact, if services are provided directly, the government can exert direct control over wages and conditions (resulting in positive spillover effects in the broader economy; see Nahum, 2020b).

By 'cost', we are referring to the fact that without profit bleed (that is, the impetus to work towards providing owners with a return, beyond the actual cost of providing the service), consumers will enjoy better services for less expense—and ideally with no additional expense to service-users at the point of service. Human services are not like consumer goods, whereby one can decide whether or not one wishes to purchase them—and businesses must price accordingly to attract customers. Rather, consumers *must* obtain human services to preserve their basic quality of life. Putting a profit motive in between the consumer and the service—especially if that service is delivered by an oligopoly—is a recipe for underservicing.

Through expanding direct service provision, the government can have the powerful effect of serving currently underserviced geographies. In rural Tasmania, this would combine additional, badly needed services with decently remunerated public service workers, boosting local spending—in other words, in the provision of a localised stimulus. This would be socially beneficial, and economically welcome.

The government is a major customer of private sector goods and services. We note that the state government can substantially support the local private sector through preferring Tasmanian suppliers in its procurement decisions. In doing so, it can consider broader social benefits and spillover effects to the Tasmanian economy in a way that a profit-driven business, especially under conditions of economic pressure, cannot.

For all these reasons, the expansion of directly-provided public services, and bigger public investments in Tasmania's physical and social infrastructure, must play a central role in Tasmania's recovery from the pandemic. Here are several of the specific areas in which expanded public provision will be particularly important after COVID-19:

Social housing

Housing costs and availability were a major issue in Tasmania's political and economic context even prior to COVID-19. This reflects Tasmanian *incomes* being displaced by an influx of mainland *wealth* (as mainlanders retire or 'tree-change' to Tasmania, selling in major metropolitan regions and using their purchasing power to bid up the cost of Tasmanian residential property), as well as the rapid growth of unregulated short-term

rental services (like Airbnb) displacing standard private rental accommodation, and ongoing underinvestment in social and affordable housing. The cost of housing stock had risen to such a level that many Tasmanians were no longer able to afford housing in their own cities and towns. This is demonstrated by comparing Tasmania's stagnant wage growth, discussed above, with rapid increases in the cost of residential dwellings—increases that significantly outstripped wage growth over several years.

While government income protections during the pandemic (for example, the JobKeeper and JobSeeker Payments, along with the Coronavirus Supplement; and state government rent relief) have mitigated housing stress for some time, it is likely that, as those income supports are withdrawn, Tasmania will return to the same levels of housing stress experienced prior to COVID-19.

To the extent that the state government has backed construction, it has largely backed private sector projects, such as with the state government's First Homeowner Funding of \$20,000 (Gutwein, 2020). This emphasis is misplaced. As we discussed earlier, the private construction sector will tend to rebound automatically once the broader economy is thriving.

Furthermore, the construction sector—whether for publicly or privately funded projects—is not especially jobs-intensive (see Table 1), and it employs proportionally far more men than women (nationally, construction employment is 85.5% male; author's calculations from ABS, 2020c, table 06). The economic effects of the pandemic have impacted women much more heavily. Boosting overall employment, and women's employment in particular, would be a more fruitful source of stimulus in terms of jobs created per public dollar spent.

In contrast to the Premier's press release (Gutwein, 2020), it is implausible that 1000 social houses can be built for \$100 million (\$100,000 per home). Even if that were possible, there are 3373 applications on the social housing register as of June 2020 (Department of Health and Human Services, 2020). This gap can be expected to worsen as the recession continues.

To blunt the social consequences of the pandemic, to address pre-existing inequities in Tasmanian society, and to free up consumer purchasing power to keep businesses afloat, the Tasmanian Government needs to focus on substantially and rapidly expanding the supply of non-market housing. Unorthodox possibilities such as prefabricated or modular dwellings should be considered.

Aged care

Our senior citizens are particularly at risk of the acute impacts of COVID-19, including death.

We see, from the Victorian context, the dangers of privately provided health care, where staff—precariously employed, with poor wages and conditions—needed to work across a number of aged care homes to cobble together a liveable income. This increased the likelihood and impact of virus transmission, with tragic results. It is notable that COVID-19 transmission was much rarer in the public aged care system (Handley, 2020).

The Tasmanian Government can choose to circumvent the dynamic of 'profits before lives' by ensuring that staff in aged care facilities have secure, decently remunerated, publicly provided jobs. Where direct public provision might not be possible in the short term, the state government should require stronger labour standards—wages, conditions, and staffing ratios—in privately owned facilities. By doing so, the state government is likely to save lives, should the virus re-emerge in Tasmania.

Health

The health crisis of COVID-19 is unfortunately not yet over, notwithstanding the fact that Tasmania has succeeded in limiting infection. For this reason—and to mitigate future health crises—Tasmania should take the opportunity to build more resilience into its health system now, especially by directly hiring staff. Even before COVID-19, the Tasmanian health system was characterised by insufficient funding, poor emergency wait times and severe ambulance ramping (paramedics continuing to care for patients beyond arrival at emergency departments), and a shortage of beds resulting, in some cases, in early deaths. Tasmanians were acutely aware of these weaknesses when COVID-19 struck.

Additionally, as PESRAC (2020) notes, societies around the world will be experiencing a greater level of mental health challenges due to the acute health, economic and social impacts of COVID-19. Unfortunately, Tasmania is no exception. The Tasmanian Government has a responsibility to protect its citizens: to put in place additional measures to help Tasmanians cope, not only with the anxiety and isolation associated with COVID-19 itself, but also with the economic impacts—unemployment and business failure—that the crisis has engendered.

More generally, with an ongoing increase in the demand for health services (a corollary of the aging population), and the cheap cost of borrowing for state governments, now is an ideal time for capital investment in the health sector.

Education

As with other parts of the public sector, the economic and social crisis of COVID-19 offers the state government the ideal moment to review its role in the provision of education.

In one of its more adventurous recommendations, PESRAC (2020) suggests that the Tasmanian Government should fund a program of free vocational education and training (VET) courses in areas of demonstrated jobs growth. We suggest going even further. This moment offers the state government an opportunity to repair the broader damage done to the VET sector through marketisation and privatisation over the last decade. By ensuring the delivery of public, free courses that involve the direct hiring of staff, the state can invest in its own ongoing productivity and economic growth.

From grade 7 onwards, additional careers support to connect students with future jobs is important. It is not obvious to many young people how to navigate the world of work, what options are on offer, and how to take advantage of those possibilities.

Education services are particularly in need of increased resources and attention in Tasmania's rural and regional communities, whose access to quality public education is constrained by geographic isolation. Through additional education expenditure in rural Tasmania, the government can further support regional economies and businesses through both the associated upstream (supply chain) and downstream spending (given that teachers are also consumers).

A substantial number of non-attending students will have disengaged over the course of COVID-19 and will need to be supported to re-engage with the education system. If this is not done, there is a risk that some may end up in contact with the justice system—ultimately costing the state far more, in both social and economic terms.

NURTURING STRATEGIC SECTORS

We have emphasised the importance of expanded public services and infrastructure to Tasmania's economic reconstruction after COVID-19. But private sector businesses and jobs will also play a vital role. This is particularly true of 'strategic' sectors, by which we refer to industries with qualitative features that make them especially valuable and

important in a national or regional economy. These features include an export orientation (generating needed export earnings); strong supply chain linkages, that support large numbers of spin-off jobs throughout the broader economy; technology-and innovation-intensity (that in turn supports high productivity); and a strong potential to pay high and rising incomes. These strategic sectors thus play a vital role in lifting the overall dynamism and success of the economy. This is why governments around the world pay special attention to nurturing the domestic presence of these sectors, invoking the whole range of industrial and sector development policies at their disposal.

Industries with strong supply chain linkages in turn support demand, production, and employment in all the various sectors which supply them with needed inputs: raw materials, parts, supplies, and services. Through these 'upstream' linkages, an anchor facility in a strategic sector can stimulate and support hundreds or thousands of additional jobs, located throughout the diverse and far-reaching supply chain. For example, the installation of a wind farm demands a wide range of manufactured components, materials, supplies, and other inputs. The employment impacts of this investment are larger and further-reaching than the people employed directly in the project. Then, when it is complete, the wind farm produces energy, which is itself an input to other industries.

In this section of the report, we will consider the prospects for several of these strategic sectors to play an important and positive role in Tasmania's post-pandemic reconstruction.

General manufacturing in Tasmania

As in other parts of Australia, manufacturing has been hit hard in Tasmania for several years, losing over 2000 jobs in the last decade (see Figures 10a and 10b). Australia is now less self-sufficient in manufacturing than any other nation in the OECD (Stanford, 2020), with its trade profile representing something like a resources-based, developing-world economy. This is reflected in Australia's low and falling ranking of economic complexity (93rd—ahead of Pakistan, but behind Senegal; Observatory of Economic Complexity, 2019).

That Australia did not experience acute shortages of manufactures, especially medical and personal protective equipment, therefore owes more to good luck than good management.

Of important note for Tasmania's ongoing prosperity, manufacturing is a highly innovation-intensive sector—which in turn influences growth in productivity.

Nationally, manufacturing allocates more of its income to innovation than does any other industry: manufacturers spent \$4.6 billion on research and development in 2017–18 (most recent data), equal to over 4% of the sector's total value added. The share of GDP invested by manufacturing in R&D is four times the economy-wide average. It is no coincidence that the eight OECD countries that allocate more than twice as much of their GDP to research and development as Australia—Israel, Korea, Switzerland, Sweden, Japan, Austria, Germany and Denmark—are all successful exporters of manufactures (notwithstanding that none of them are low-wage nations).

As a strategically interlinked sector, manufactures are an input into, as well as an output from, the broader economy. They are essential to the production of other goods and services. In short, there is no job in society that can be performed without the use of manufactured goods.

On the inputs side, the production of manufactures depends on purchases from a huge and diverse supply chain, all of which add value to the overall chain of production. Manufacturing depends on the collection or harvesting of raw materials from nature (in 'primary' industries, such as agriculture, forestry or mining). Manufacturing uses many semi-processed goods, parts, machinery, and sub-assemblies, all purchased from other manufacturers (the 'secondary' sector). Finally, manufacturing also requires inputs of services (the 'tertiary sector')—including engineering and design, transportation, logistics, retail, business, and repair services.

Between its own use value and its linkages to other parts of the economy, there is therefore no doubt that manufacturing is an essential and strategic link in the chain of all value-added activity (Stanford, 2020).

In addition, Tasmania could boost the export share of its economy, and reduce its reliance on imports, using manufactures. Most international trade is in manufactures. Economic evidence also indicates that export-oriented industries demonstrate higher productivity growth and higher average incomes than import-reliant industries, because of the discipline imposed in competing for foreign customers. Attracting and nurturing new and expanded manufacturing activity to Tasmania thus automatically improves the state's balance of payments with other states, and other countries.

For all these reasons, measures to support the state's manufacturing sector should play a central role in the overall economic reconstruction effort. The Tasmanian Government should support skills development in manufacturing fields. Subsidies or co-investments in Tasmanian manufacturing operations can also play a key role in expanding this strategic sector. Where practicable, the Tasmanian Government should also extend its preferential procurement of Tasmanian manufactures—increasing the weighting of geographic origin in purchasing decisions, and extending these

stipulations to government contractors and business enterprises. This will support the state economy and Tasmanian manufacturing jobs. In this, our views broadly align with those expressed by PESRAC (2020).

The promise of sustainable manufacturing

Tasmania enjoys enviable renewable energy resources, especially hydroelectricity and wind power. Its generation capacity and grid are publicly owned, and 100% of Tasmania's electricity requirements will be generated renewably by 2022. Across the political spectrum, there is agreement that this should continue. Indeed, by 2040, 200% of Tasmania's current electricity requirements will be provided renewably, facilitating major exports of renewable power (Department of State Growth, 2020).

This fortunate endowment of renewable energy provides a corresponding opportunity for expanding renewably-powered manufacturing. This synergy between renewable energy and manufacturing is already in evidence with aluminium production at the hydroelectrically powered Bell Bay smelter. Similar principles can apply to steelmaking and other forms of heavy manufacturing, as well. Transmission costs are lessened by producing value-added products close to the source of energy—in Tasmania's case, largely hydroelectricity. Economic and social benefits are also generated by using the energy to manufacture value-added products in Tasmania, rather than exporting the energy for use (including in manufacturing) elsewhere.

Globally, renewable metals manufacturing is clearly moving from the industrial fringe into the mainstream. Industrialist Sanjeev Gupta's firm GFG Alliance recently bought the Tasmanian Electro Metallurgical Company manganese alloy smelter. This is in addition to Gupta's investments in renewable-powered steel-making in South Australia, and furthers his plans to become a carbon-neutral metals manufacturer by 2030 (Australian Associated Press, 2020). The completely fossil-fuel-free Hybrit steel plant in Northern Sweden has begun operations (Burgess, 2020). If Sweden can do it, then Australia, with a superabundance of renewable resources and high-grade iron ore, certainly can as well.

Manufacturers who use renewable energy to produce metals can charge a premium price for their output, since top-tier manufacturers are demanding sustainably sourced inputs throughout their supply chains. Numerous major Original Equipment Manufacturers, including companies like Toyota, Apple and Volkswagen, have pledged to use low-emissions aluminium, but supply is thus far restricted (Lord, 2019). Many regions will experience physical barriers in bringing the requisite renewable energy supply to bear, but Tasmania faces no such restrictions.

Exporting Tasmania's renewable electricity to boost and stabilise the National Electricity Market would incur transmission costs, and would effectively provide the mainland's private generation and transmission with the opportunity to profit from Tasmania's renewable endowment. Instead, Tasmania can use its renewable energy resources to support local manufacturing investment, attract emissions-exposed businesses, and create high-productivity, high-quality, well-paid manufacturing jobs.

The state government could tie its investment incentives for renewable manufacturing projects to particular conditions (for example, including commitments by supported companies to workforce development and training; stable and non-precarious jobs; and reductions in emissions). It could also use specifically targeted procurement to support Tasmanian businesses. Rather than simply buying the cheapest—likely imported—product, the Tasmanian Government has the mandate and the capacity to consider major procurement decisions in terms of social benefits to Tasmania (such as employment and the fostering of key sectors).

Renewable energy exports from Tasmania

Tasmania's energy grid is, as we have seen, on track to produce through renewable sources twice as much power, in 2040, as Tasmania presently needs (Department of State Growth, 2020). It is encouraging that successive Tasmanian governments have recognised this renewable energy superabundance and are keen to capitalise on it. Tasmania's hydroelectric resources are excellent, and there is also considerable scope for wind and solar energy production.

The Department of State Growth has produced a Draft Tasmanian Renewable Energy Action Plan (2020), concentrating on the Marinus Link interconnector and the Battery of the Nation hydroelectric assets. Key questions arising from the document are:

- To what extent will ordinary Tasmanians benefit from the unlocking of Tasmania's renewable resources?
- Will the production of renewable energy in Tasmania engender greater broadbased benefits?
- Is supplying the mainland NEM the best use of Tasmania's remarkable endowment of renewable energy, or could Tasmania more profitably use that energy at home – including for priorities like nurturing more domestic manufacturing (as discussed above)?

In the case of the existing Basslink Interconnector, energy generators have profited handsomely from access to the national market, while energy prices for Tasmanian

consumers have increased considerably. If history is any guide, there is certainly a risk that the benefits generated by projects such as Marinus Link and Battery of the Nation will be captured by energy generators with little benefit to ordinary Tasmanians. In particular, a more interconnected energy market, exposed to high or volatile energy prices on the mainland, could further impact energy costs for Tasmanian households and businesses. Meanwhile, the benefits of those inflated prices would be captured by energy companies. While it is true that Tasmania's generation is publicly owned, a transfer of wealth from households to the Tasmanian Government as a result of this exposure to the NEM may not be an optimal outcome for Tasmania.

Clearly, Tasmanians will be employed in the construction, operation and maintenance of resources such as Marinus Link and Battery of the Nation, especially if because of COVID-19 restrictions, Tasmania is unable to 'import' mainland labour. However, given that these are such capital-intensive projects, they are not the most effective sources of job creation. For a smaller outlay, with greater labour intensity (in other words, more jobs), a virtual power plant could be created by installing solar and battery equipment on every home in Launceston and Hobart (CEPU, 2020).

The other possible industry that could benefit from Tasmania's renewable endowment is the nascent hydrogen industry, which could theoretically be used to 'ship sunlight' (Garnaut, 2019). In this process, water undergoes electrolysis using renewably generated power to split it into its constituent hydrogen and oxygen; then, when the hydrogen is later combusted (perhaps following export) to produce energy, the resulting emission is harmless water vapour. However, as Kaitsu, Swann and Quicke (2019) note, official estimates of the value of the hydrogen export market may be grossly overstated. And it is critical that the development of a hydrogen industry occur on the basis of strong environmental principles.

Hydrogen can certainly be used in the production of green metals, and it is required for the replacement of coking coal in the production of green steel. As a domestic store of energy, though, it is currently less efficient and cost-effective than pumped hydroelectricity or batteries (Australian Renewable Energy Agency, 2018).

If Tasmania insists on expanding renewable energy exports rather than capturing the value of additional domestic generation (including through value-added industries attracted here by the abundance of renewable power), it needs to do so in a way that protects Tasmanian consumers—households and businesses. Tasmania's renewable advantage should not be parlayed into a commercial advantage for industry at the expense of ordinary Tasmanians. We are concerned that Marinus Link, for example, could benefit the owners of wind farms that are yet to be built, while domestic power

bills continue to rise. Instead, the Tasmanian Government needs to ensure that an appropriate share of Tasmania's commonwealth is enjoyed by all Tasmanians.

Monetising Tasmania's renewable endowment by exporting more electricity to the mainland, thereby further exposing the Tasmanian electricity market to price fluctuations from the NEM, would represent a great lost opportunity. It may be good for the state budget's bottom line, but Tasmanians would experience higher power bills. In contrast, if Tasmania's renewable endowment is harnessed to *lower* Tasmanian power bills, this would benefit Tasmanian households and businesses. In addition, businesses will improve their competitiveness in both the Tasmanian and broader markets, and additional investment could be attracted to the island.

Finally, labour standards and conditions in the growing renewables industry are of crucial importance. Unfortunately, in Australia and elsewhere there have been instances where workers employed in the renewable energy sector have endured substandard wages and conditions. This growing, high-tech sector should contribute to the lifting of wages and conditions economy-wide, and government can ensure that this occurs through specification of appropriate conditions on development approvals and power contracts. Indeed, the state government has a powerful lever to lift wages and standards by directly employing workers in energy-related industries, on wages and conditions commensurate with what other public sector workers enjoy. The government could also ensure that any future income-generating assets, such as wind farms, are—and remain—in public hands.

Tourism and hospitality

Tasmania's tourism, accommodation and hospitality sectors have been hit particularly hard by the health response to COVID-19. Prior to COVID-19, tourism and hospitality directly and indirectly supported 10% of Tasmania's GSP and 17% of total Tasmanian employment (Tourism Tasmania, 2019).

Tasmania is therefore in an almost paradoxical situation, where it has been very successful in its health response to COVID-19, but where it is simultaneously unusually reliant for its economic wellbeing on other states and nations that have been less successful. The problem is emphasised by the fact that so much employment in tourism and hospitality is characterised by low wages and precarious conditions.

There is no clear timeline for a vaccine or broadly effective therapeutic measures. However, due to its hard border, Tasmania may be the Australian state that is most likely to achieve lasting elimination of the virus, as opposed to suppression. At the time of writing, there are no active cases in Tasmania. Precautionary public health measures remain in place.

From 26 October 2020, Tasmania reopened to Queensland, the Australian Capital Territory, South Australia, Western Australia and the Northern Territory. However, there is no indication of when Tasmania will reopen to Victoria or New South Wales, or when it will reopen to other countries, without quarantine periods.

To undertake a successful economic reconstruction in tourism and related industries, Tasmania will therefore need to find bold new strategies for recovery and reinvention based on domestic consumption. Without support, simply urging Tasmanians to go on holiday in Tasmania (when household incomes are so damaged) is not enough. The Australian Council of Trade Unions' 'National Economic Reconstruction Plan' (2020) proposed a number of Commonwealth measures that could assist the sector, including sponsorship of events, and a holiday on state payroll taxes for workers in domestic tourism.

However, as the Commonwealth Government is now prematurely winding back emergency fiscal measures, the Tasmanian Government should approach the sector's recovery with a 'two-pronged' strategy. First, it should support household incomes, to equip Tasmanians with the purchasing power to explore their own state (including through expanding the public sector payroll). Second, it should support viable but struggling tourism and hospitality businesses—with, for example, interest-free loans, conditional on retaining employees.

One example of household support has been issuing Tasmanian residents with 'Make Yourself at Home' vouchers—a voucher with a small cash value for travel in Tasmania (Alvaro, 2020). The two rounds of the program have been popular to the point of oversubscription, and given the amount of economic activity generated beyond the value of the voucher itself, the cost of the vouchers will have been significantly offset by an increased tax take—to say nothing of the broader social and economic benefits. The Tasmanian government should extend and expand this program.

Arts, culture and entertainment

As we discussed earlier, arts and recreation has been hit especially hard by COVID-19, with the sector's employment more than halving in absolute terms in the year to May 2020. The federal government has been notably unforthcoming in its support for the arts and entertainment sector. Despite its pledge of \$250 million nationally in June, by October less than one-fifth of these funds had been distributed, all of which had gone to the film industry (Burke, 2020). The full \$250 million is, in any case, not nearly

commensurate with what the sector has lost. Nationally, an industry worth \$14.7 billion has gone into a hibernation from which it is yet to emerge (Browne, 2020).

Tasmania's arts and entertainment sector is unusually vital to its economy. It anchors other sectors and activities, upstream and downstream, in ways that are more commonly understood for other industries (like manufacturing). For example, in terms of upstream supply-chain linkages, the arts sector supports demand for training, venues and rehearsal spaces, and equipment sales and hire—all of which in turn generate economic activity of their own. In addition, the production and display or performance of the arts attracts visitors to Tasmania, who in turn spend their money on hospitality and accommodation.

The cancellation of June's Dark Mofo event, which normally attracts an audience and line-up from around Australia as well as overseas, was one striking example of arts opportunities that Tasmania has had to forego. This event is deliberately scheduled annually in winter, to counteract the effects of the 'off season' when tourism is generally depressed, and brings large volumes of commerce and employment into Tasmania. Special events like these also generate incomes for artists, and spin-off demand for tourism-related activities in all guises: including accommodation, hospitality, travel and retail.

Tasmania has a vibrant arts scene which, under non-pandemic circumstances, is umbilically connected to its tourism industry. Nevertheless, many dedicated and talented artists in Tasmania and elsewhere need to work in other jobs besides the ones for which they are often formally trained to make ends meet. COVID-19 has simply reinforced this dynamic.

It does not have to play out this way. Eltham (2020) correctly identifies that governments—including the Tasmanian Government—have the power to directly fund various segments of the arts sector, in part by selecting artists for grants and subsidies (through peer-review panels). This kind of stable funding would allow emerging and recognised artists to produce work in a more focused and engaged way than is possible when they are living below the poverty line or working in other sectors to make ends meet—or both.⁵

As well as the human, social and creative benefits that such a scheme would entail, this would be economically useful, adding purchasing power to the economy and

⁵ Eltham (2020) additionally identifies that not all remuneration needs to be monetary. Payment can be partially in kind, in the form of 'tools of the trade' that might otherwise be disused (causing economic distress elsewhere in the economy), such as equipment or rehearsal and creative space.

tiding over the economically important but vulnerable Tasmanian arts sector—at least until the economic impacts of the COVID-19 crisis ease. Providing artists with a salary in this way would also allow them a level of security that they do not normally enjoy, as they would continue to draw their salary while they were sick or caring for someone dependent on them.

Eltham (2020) calculates that supporting 50 artists in this way, the average full-time wages from 2021–24 would cost slightly over \$5 million per annum in total (including superannuation and administration). A more ambitious program, employing 300 artists, would cost just over \$30 million per annum. For macroeconomic purposes, these would be public service incomes. The spillover effects into the private sector would be commensurate with the size of the public sector investment undertaken by government. Both the upstream (supply chain) benefits as well as the downstream (consumer expenditure) benefits of this scheme would benefit Tasmanian businesses more broadly.

Finally, and crucially, women comprise 45% of the arts industry (as opposed to 12% for construction; author's calculations from ABS, 2020b table 06). In a recession that has impacted women to a remarkably greater extent than men, governments should seek to mitigate those gendered impacts.

Food production

Tasmanian produce has a well-recognised international reputation for its quality. Indeed, people travel to Tasmania specifically to enjoy its food and drink—tying Tasmania's food and beverage production to its tourism and hospitality industries. As well as agricultural produce, craft breweries, distilleries, and cheese makers have proliferated in recent years.

However, to concentrate on agricultural output specifically is to miss important opportunities for value-added production. When Tasmania exports raw produce for processing and packaging elsewhere in Australia, or even overseas, it foregoes opportunities for economic growth at home. The current 'buy Tasmanian' drive that politicians and business have promulgated—and that Tasmanians, in the face of the crisis, have adopted enthusiastically—should be mobilised to ensure that as much value is added in Tasmania as is practicable.

Crucially, the social purpose of expanding the food and beverage sector is nullified if workers in that sector do not enjoy decent wages and conditions. There is both a moral case for decent wages and conditions, and an economic case as well—since the wages earned by workers in that sector are put back into circulation in the Tasmanian

economy. This is especially true in lower-income occupations such as fruit picking: low-income workers have a much stronger propensity to spend, rather than save, each additional dollar they earn.

The upshot is that the Tasmanian Government may wish to co-invest in certain operations that it identifies as being economically and ecologically sustainable: operations that are linked to the economic success of the broader economy. This includes making support conditional on decent wages and conditions. Note also that, where Tasmanian food manufacturing can make use of electricity rather than gas as a heat input (possibly with state government financial assistance), the industry stands to save money as well as to become less emissions-intensive. For example, Beyond Zero Emissions (2018) calculates that the manufacture of prepared meals could halve its energy costs by shifting to electricity, with the additional advantage that the electrical energy could be supplied renewably.

Another important consideration for the state government in making co-investment decisions is that the Tasmanian agriculture operations it supports must also have, and maintain, a clear social licence to operate. 'Brand Tasmania' is crucial to the success and expansion of the food production sector. For example, the Tasmanian salmon farming sector has been the recipient of significant state government largesse, but the environmental performance of this sector has been criticised (see Minshull & Browne, 2019).

Higher education

Tasmania has enjoyed significant economic benefits from the development of Australian higher education as an export industry. International education revenues were estimated to add \$376 million to the Tasmanian economy in 2017 (Department of State Growth, no date).

However, higher education as an export industry is largely on hold for now, and the extent to which the sector will recover its export orientation is unclear. Alarmingly, the Commonwealth Government has put far less back into the sector than has been removed by the economic impacts of the pandemic. Universities were excluded from JobKeeper wage subsidies, and there has been little targeted support for the sector since COVID hit (including a one-time \$1 billion emergency injection to sustain

university research projects this year). But universities are expected to lose \$16 billion in revenue over the next three years (Karp, 2020),⁶ and shed up to 20,000 jobs.

Ultimately, COVID-19 poses Tasmania and Australia with the question: Are our universities businesses or academies? If they are businesses, they should have been cushioned from the impact of COVID-19 with access to JobKeeper or other purposedesigned measures. If, however, universities are academies, then they should not need to rely on the income of international students for cash flow. Instead, academics and other university staff should be paid out of recurrent Commonwealth Government funding (like public servants), rather than having to depend on cash flow from feepaying students.

The current challenge and opportunity for the Tasmanian Government is how to orient the sector towards domestic students. Regardless of whether we see higher education as an export industry or a public good, defraying the economic impacts of COVID-19 and subsidising the higher education of Tasmanians will have long-term economic benefits on the sector.

The Victorian and Queensland state governments are offering free TAFE programs for in-demand occupations. Similarly, the expansion of TAFE in Tasmania would support the development of the strategic sectors identified above, by providing skilled workers. Tasmania would do well to extend such a measure into the higher education sector. It should offer employment permanency to educators in doing so, helping to boost consumer confidence and household consumption. The COVID-19 crisis offers the opportunity for Tasmania to further the educational opportunities of its own population (with benefits for necessary skills and workforce productivity in years to come), while keeping educators employed.

LABOUR AND SOCIAL STANDARDS

One important and positive effect of the COVID-19 crisis is that workers who were not previously recognised as 'essential' or 'frontline'—including retail workers, cleaners, teachers, transport and logistics—have been identified as crucial to our health and economic recovery, and more broadly, to the functioning of society.

The question now is how to recognise and compensate those workers appropriately, not just in the present but in the future. Additionally, the workers who support

⁶ International student income cross-subsidises research, and therefore, unfortunately, Australia should expect its research output to drop until either the export of higher education recovers or another funding solution is implemented.

frontline workers—who make it possible for frontline workers to coordinate and work effectively—are just as essential. Earlier, we made the case for backsourcing workers into direct government employment wherever possible. We reiterate here that doing so wherever possible will have broader pro-growth, pro-equity effects across the economy. In addition, the state government must undertake ambitious measures (within its jurisdiction) to better protect and value workers performing all of these essential functions, but who have been taken for granted by employers.

For example, workplace health and safety is an area where the state government can play a leading role in lifting labour standards and job quality. PESRAC (2020) reports receiving consistent feedback that work health and safety requirements for 'COVID-safe' workplaces are a 'material burden for enterprises'. In response, PESRAC recommends effectively that the Regulator only pursue penalties for 'genuine recalcitrant non-compliers'. Not only is this against the spirit, if not the letter, of relevant legislation such as the Commonwealth's *Work Health and Safety Act 2011*, but it also risks Tasmania's economic recovery.

As events in Victoria and overseas have demonstrated, there is no trade-off between protecting public health and rebuilding economic health. Indeed, we cannot have an enduring economic recovery in the presence of the public health risk that COVID-19 presents. The business lobby's suggestion that we should 'learn to live with the virus' is an attempt to normalise preventable deaths.

In other areas, too, the state government should utilise its regulatory powers to support stronger wages and conditions, better labour standards, and more secure jobs. It can set a good standard in this regard through its own hiring practices: including relying on permanent job creation (rather than causal or labour hire positions) in its own hiring, and recognising the value of essential public services through normal, healthy wage increases for public servants. High labour standards should be benchmarked as a key criterion in all procurement decisions by the state government, its agencies, and public corporations. And regulatory powers in other areas (such as transportation licensing, development approvals, energy regulation, and others) can be used to further apply upward pressure to norms of compensation and job quality throughout the state's labour market—including private sector employers. By lifting labour standards over time, and breaking the vicious cycle of downward bidding of wages and conditions in unregulated competition, the state government can contribute to an economic reconstruction that truly benefits all Tasmanians.

Paid pandemic leave

One labour standards issue that is particularly important in the COVID-19 context is paid pandemic leave. Paid pandemic leave for all workers, funded by the Commonwealth, was announced for Tasmania on 26 August 2020.⁷ The application of this measure was very late in coming. Given Tasmania's high proportion of casual workers (who do not normally receive paid sickness leave), the state was lucky not to have experienced greater problems with spread of the virus from workers going to work while symptomatic—because they simply had no other way to make ends meet.

Even supposing that a successful vaccine for COVID-19 is ultimately discovered, the challenge will remain of how to rebuild *in the presence* of COVID-19. Paid pandemic leave in such a scenario will be important as a risk management tool.

As the experience of other geographies such as Victoria, Sweden and the United States demonstrates, there is no trade-off between the rate of infection and economic recovery. Indeed, a healthy, safe population is required for an economic recovery. That means that workers who do not normally enjoy the benefits of paid sick leave *must* continue to have access to paid sick leave in the face of this lethal and highly contagious illness.

The Economic Future of Tasmania

⁷ Other states accepted the Commonwealth's offer at different times.

Rejecting Austerity

During World War II, in 1942, the Curtin Government established the Department of Post-War Reconstruction. It was clear to the wartime government both that Australia's immediate economic priority was supplying the war effort, and that the establishment of a prosperous post-war society would require deliberate government planning. Ultimately, the post-war era did achieve an unprecedented era of broad-based prosperity, resulting in the emergence of the Australian middle class.

We can compare our situation today to a 'peaceful war'. While the acute difficulties and shortages that face us are different from those during a war effort (such as World War II), the clear parallel is that we have enormous, society-wide challenges to overcome: COVID-19; the associated economic impacts and unemployment; and our ongoing and existential effort to curb climate change. Similarly, we have a set of social resources that can only be mobilised to meet those challenges through large-scale coordination and planning. These social resources include first and foremost a well-trained workforce; an abundance of renewable energy resources; extremely low interest rates ('cheap money') and unconventional monetary policy ('quantitative easing', where the RBA buys government bonds, including state government bonds, on the open market); and a great deal of fixed capital that presently sits idle.

We noted earlier that Tasmania's GSP per capita is the lowest of any Australian state or territory—yet until the pandemic, it was returning budget surpluses (albeit modest ones). It is perverse to define 'good economic management' in terms of generating a budget surplus, when GSP per capita is the lowest in the country. Instead, a budget surplus suggests that the state government needs to spend more on services for the community, on productivity-improving investments such as additional education and infrastructure, and on direct public sector employment—which in turn feeds into purchasing power in the real economy. In the absence of greater investment from the private sector—which, as we have noted, is presently unlikely—the state government should itself be investing in the state.

Australia and the world are experiencing the sharpest and deepest economic contraction since the Great Depression. Expansionary fiscal policy—led primarily by public spending—is the only plausible way to mitigate and recover from such a contraction. Rather than diminishing public sector capability through the COVID-19 crisis, this period should provide an opportunity to build a strategic plan for enhancing the future shape and size of the Tasmanian economy.

The approach the Tasmanian Government takes now will determine the next stage of Tasmania's economic history. It is impossible to realistically imagine a scenario where the private sector plans and invests its way out of the crisis without the government playing a leading, purposeful and expanded role.

The Tasmanian Government should certainly not seek to 'strengthen' its budget position by pulling money out of the broader Tasmanian economy through cutting government employment or wages. Doing so would directly undermine spending power circulating through the private sector. In a recession, government saving is worse than useless. Even the New South Wales Department of Treasury has acknowledged that public sector wage restraint would deepen and lengthen the recession (Visentin, 2020). It is heartening that, in an effort to boost demand and jobs, the Tasmanian Government has indicated that it will no longer apply the planned 2020 efficiency dividend to its public service.

Instead, the Tasmanian Government needs to focus on creating more good-quality jobs for Tasmanians in the public sector and, as a result, in the private sector. Become for Tasmanians in the public sector and, as a result, in the private sector. Become forment debt is cheap to service right now and, in the trade-off between addressing social needs and running a surplus, Tasmania's circumstances clearly favour the former. At a macroeconomic level, Tasmania's budget position as the crisis emerged was arguably the strongest of any Australian jurisdiction: with the lowest state debt in per capita terms, and as a proportion of GSP (Adept Economics, 2019). This gives the Tasmanian Government more leeway—and certainly more perceived leeway—to enact aggressive measures to contain and eliminate the virus while addressing its economic and social impacts.

Furthermore, the very low interest rates on state government debt at present—near 0% in real terms—make it the ideal time to invest in long-term, state-building projects, which will improve the productivity of the state, as well as Tasmanians' prosperity and safety.

In other words, trying to reduce government debt and deficit, in the context of a recession that tends to increase deficits, is precisely the wrong policy focus. It is reassuring that, for the time being, the Gutwein Government appears to recognise that. Governments should be squarely focused on maintaining employment and wages as their top economic priority. A pro-cyclic (that is, contractionary) response to the

⁸ As discussed above, Nahum (2020b) estimates that for every 10 jobs created in the public service, 4.5 are created in the private sector through the positive spillovers associated with upstream and downstream expenditure.

⁹ It's important to note that these macroeconomic aggregates are not experienced by Tasmanians in the day-to-day context of their own lives.

virus-related economic crisis would hobble any recovery in employment and wages in the private sector, and it would, in particular, damage economically and socially vulnerable non-metropolitan and regional communities that particularly depend on public sector jobs and incomes.

Unfortunately, after an enormous initial surge of spending into the economy, the Commonwealth government is now shifting policy in a contractionary direction. For example, on 21 July 2020, the federal government announced a broad-based reduction in the JobSeeker Payment for unemployed workers, from \$1100 to \$810 a fortnight. This move will take money out of circulation in local economies. The government has also removed JobKeeper, against all economic advice, from the early childhood education sector—pinning parents, especially mothers, at home, when they could otherwise be generating income and contributing to the economic recovery. It is imperative that the Tasmanian Government acts to mitigate the Commonwealth's contractionary stance. The livelihoods of Tasmanians, and the recovery of the Tasmanian economy, depend on it.

Thankfully, the Tasmanian Government appears to understand the centrality of maintaining employment to a durable recovery. In Premier Gutwein's words, 'Every job is valuable'; there are no plans to cut jobs in the public sector (Killick, 2020). This is important, but it does not go far enough, which is why we have discussed above some features of a more ambitious reconstruction plan for Tasmania.

From an investor perspective, Tasmania's financial position is not precarious. Major credit agencies rate Tasmania's debt at investment or stable grade (AA+ Standard and Poors Global/Aa2 Moody's; see Tasmanian Government, 2019a, 2019b). Meanwhile, the RBA's cash rate is at record lows as it does all it can to help Australia out of the economic crisis. It is also buying large quantities of government bonds to keep interest rates low, and support expansionary fiscal measures. Interest rates were already low before COVID-19, since the national economy was already in a protracted slump, with high labour underutilisation and stagnant wages growth—and correspondingly near 0% overnight interest rates.

The best approach for the Tasmanian Government is to undertake greater spending, not less, doing everything in its power to restore aggregate demand and employment—and hence its own tax revenues. In the meantime, Tasmania can accumulate what is the most affordable debt in Australian history to retain and expand the public services that are helping Tasmanians through the crisis.

Finally, there are substantial fiscal benefits to putting Tasmanians back to work. At every stage of the flow of production and income through the economy, incomes and expenditure are taxed. When wages or employment fall, governments also experience

a reduction in their own tax revenues. As a result, austerity produces an economic 'blowback' on government revenues. State governments in Australia collect over 15 cents of each dollar of GDP, consisting of 9 cents of own-source revenue and 6 cents in the form of fiscal transfers from the Commonwealth level of government (author's calculations from ABS, 2020a).

As a result, public sector employment generates its own stream of tax revenues: income taxes on wages and salaries (often at relatively high marginal tax rates), payroll taxes, and GST on public sector workers' own purchases. Additionally, the incomes generated by the upstream supply chain purchases of public service agencies, and the consumption spending of public sector workers, in turn underpin more tax revenues.

Therefore, a government which tries to 'save money' by suppressing public sector wages, or downsizing public programs, must take account of the impact of that austerity on its own revenues. The direct loss of tax revenue flowing back to government negates a non-negligible share of the supposed fiscal 'savings' supposedly resulting from the wage policy.

Overall, public sector austerity would have an inevitable and significant negative effect on Tasmanian tax revenues (experienced both directly and, via transfers from the Commonwealth, indirectly). In other words, for every dollar that state governments take out of circulation (thus suppressing overall output and income in the economy), they themselves lose 15 cents. Or, in converse terms, government spending, to a partial but important degree, 'pays for itself' through the positive feedback loop of public revenue raised from public expenditure (Henderson, 2018).

¹⁰ The loss in revenues arising from a contraction in Tasmanian state government spending would also be shared by other states (since the transfer payments to states from Tasmania are not tied to specific state-level GSP performance). In that hypothetical instance, it could be argued that Tasmania is 'free-riding' on other states, by shifting some of the negative fiscal side-effects from its own policies to the rest of the country. Unfortunately, though, several states are practising public sector wage restraint notwithstanding the COVID-19 crisis, and hence Tasmania would be expected to experience a share of the broader fiscal blowback from this austerity throughout Australia.

Conclusion: The Choices We Make

The COVID-19 pandemic, with its associated economic shutdowns, has been an unprecedented and devastating catastrophe. The economic impact is unlike anything seen since the Great Depression, 90 years ago. Many governments' immediate emergency response has been commendable, including Tasmania's. Additionally, Tasmanians rose to the occasion and prosecuted a successful response to the public health threat of COVID-19. While Tasmanians respected social distancing in an act of collective solidarity, the government demonstrated that it could mobilise a substantial emergency fiscal response.

Now, societies around the world are beginning to transition through the acute emergency response into a rebuilding stage. The shape of that rebuilding, and of the economy to come, is in its early stages. What the COVID-19 crisis has revealed—in Tasmania, Australia and all over the world—is a set of political economic choices of which we may not otherwise have been aware.

At this moment, the only reliable driver of economic expansion occurring is government spending. The household sector is rattled, and businesses regard their depressed levels of investment as prudent. But how will governments behave—and what pressures will prevail upon them to behave that way? What forces will shape the Tasmanian economy as time goes on? Even the PESRAC (2020) Interim Report acknowledges that the Tasmanian economy that emerges from COVID-19 will be much changed from the one that existed prior to the pandemic. This is both a challenge and an opportunity.

Usually, when our governments and media discuss 'fiscal responsibility', they are referring to austerity. This incurs too high a human price to pay at any time, but especially under conditions of crisis. It is heartening that this is not the path that the Tasmanian Government has pursued to this point. Possibly at odds with its natural political instincts, the conservative government has identified that it needs to be a major, proactive player in the state's economic rebuilding, and it has reacted as the moment demands.

To expedite its recovery from the crisis, Tasmania's state government must strengthen and extend its fiscal and economic support for the state's economy, especially as the Commonwealth government begins to withdraw its own fiscal support (including cutting back programs like JobSeeker and JobKeeper). The alternative is that the

economic impact of COVID-19 will spiral into a depression, scarring lives and communities. Tasmania cannot afford that, and Tasmanians deserve far better.

RECOMMENDATIONS

- 1. The Tasmanian Government must make a direct, substantial and focused investment in public housing. The effects of this investment will be threefold: first, it will support the construction sector. Second, it will address the housing affordability challenge that faced Tasmania prior to COVID-19 and that has been exacerbated by it. Third, by tying investment to certain conditions (such as the provision of wages and conditions that are on par with public sector wages and conditions; the greater use of apprentices; and the procurement of materials from Tasmania wherever feasible), the Tasmanian Government can directly leverage longer-term social and economic outcomes.
- 2. The health, aged and disability care sectors have feminised workforces. In the face of women's job losses in the COVID-19 pandemic, expansion of these socially vital sectors must be expedited. Crucially, expanded human and caring services should take place in the public sector. The perverse incentives and profit bleed associated with private provision of these vital services cannot be afforded in this time of crisis (or, indeed, at any other time).
- 3. Backsourcing—that is, moving outsourced public sector functions back into direct employment by government—should be expedited wherever possible, for reasons of cost, accountability and quality. This would also provide the state government with another direct lever to improve wages and conditions across the economy, thereby improving the pre-distribution of income among the population (including in favour of women), assisting the recovery of the household sector, and fostering broader economic recovery (including by indirectly supporting the private sector).
- 4. In this report, we have identified several strategic industries which the government should conditionally support and co-invest in. While measures will vary for individual industries, the general principles are that this support should occur in a way that involves strong consultation with workers and the community, and that seeks to maximise social, environmental and longer-term benefits, rather than in a way that simply provides an immediate boost to business. The industries identified are:
 - a. manufacturing in general

- b. manufacturing tied to use of renewable energy in particular
- c. renewable electricity exports (if a model can be found that broadly benefits Tasmanians)
- d. tourism and hospitality
- e. arts and entertainment
- f. food production
- g. higher education.
- 5. We commend the Tasmanian Government for its initial, strong counter-cyclic response to the economic crisis of COVID-19. The state government seems to understand the necessity of expanded fiscal injections to counter a downturn, and it should continue in this manner. The economic crisis will unfortunately take several years to recover from, even if health measures to control infection are effective. Precisely because the Commonwealth is withdrawing its own stimulus prematurely, Tasmania should not replicate this mistake. There should be no slippage on public sector employment growth, wage increases or conditions over the medium term. Not only are the services delivered by the public sector more vital than ever, but the purchasing power of public sector workers is also required in the real economy, while the cost of finance for government will remain at historically low levels for some time to come.

References

Adept Economics (2019). 'Interstate Debt Comparisons' (available at: https://queenslandeconomywatch.files.wordpress.com/2019/08/interstate-debt-comparisons.pdf).

Alvaro, A. (2020). 'Frustration over second round of 'Make Yourself At Home' vouchers: \$5m more to encourage Tasmanians to holiday at home', *ABC News*, 30 September (available at: https://www.abc.net.au/news/2020-09-30/tasmania-make-yourself-at-home-travel-vouchers-2nd-round/12717738).

Australian Associated Press (2020). 'Sanjeev Gupta Buys Tasmanian Hydro-Powered Smelter to Help Aim of Producing Carbon-Neutral Steel', *The Guardian*, 13 August (available at: https://www.theguardian.com/australia-news/2020/aug/13/sanjeev-gupta-buys-tasmanian-hydro-powered-smelter-to-help-aim-of-producing-carbon-neutral-steel).

Australian Bureau of Statistics (ABS) (2019a). 'Australian National Accounts: State Accounts, 2018–19' (available at:

https://www.abs.gov.au/statistics/economy/national-accounts/australian-national-accounts-state-accounts/latest-release#data-download).

Australian Bureau of Statistics (ABS) (2019b). 'Characteristics of Employment, Australia, August 2019' (available at:

https://www.abs.gov.au/statistics/labour/earnings-and-work-hours/characteristics-employment-australia/latest-release#data-download).

Australian Bureau of Statistics (ABS) (2020a). 'Australian National Accounts: National Income, Expenditure and Product, June 2020' (available at:

https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/5206.0Mar%202020?Open Document).

Australian Bureau of Statistics (ABS) (2020b). 'Labour Force Australia, September 2020' (available at:

https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/6202.0Jul%202020?OpenDocument).

Australian Bureau of Statistics (ABS) (2020c). 'Labour Force Australia, Detailed, August 2020' (available at: https://www.abs.gov.au/statistics/labour/employment-and-unemployment/labour-force-australia-detailed/latest-release#data-download).

Australian Bureau of Statistics (ABS) (2020d). 'Average Weekly Earnings, May 2020' (available at: https://www.abs.gov.au/statistics/labour/earnings-and-work-hours/average-weekly-earnings-australia/latest-release#data-download).

Australian Bureau of Statistics (ABS) (2020e). 'Counts of Australian Businesses, Including Entries and Exits, June 2015 to June 2019' (available at: https://www.abs.gov.au/statistics/economy/business-indicators/counts-australian-businesses-including-entries-and-exits/latest-release#data-download).

Australian Bureau of Statistics (ABS) (2020f). 'Residential Property Price Indexes, Eight Capital Cities, June 2020' (available at:

https://www.abs.gov.au/statistics/economy/price-indexes-and-inflation/residential-property-price-indexes-eight-capital-cities/latest-release#data-download).

Australian Bureau of Statistics (ABS) (2020g). 'Australian Industry, 2018–19' (available at: https://www.abs.gov.au/statistics/industry/industry-overview/australian-industry/latest-release).

Australian Bureau of Statistics (ABS) (2020h). 'National, State and Territory Population, March 2020' (available at:

https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release#key-statistics).

Australian Council of Trade Unions (2020). 'National Economic Reconstruction Plan' (available at:

https://www.australianunions.org.au/national_economic_reconstruction_plan_-_a_plan_for_jobs).

Australian Renewable Energy Agency (2018). 'Comparison of Dispatchable Renewable Electricity Options' (available at: https://arena.gov.au/projects/dispatchable-renewable-electricity-options/).

Beyond Zero Emissions (2018). 'Electrifying Industry' (available at: https://bze.org.au/research/manufacturing-industrial-processes/electrifying-industry/).

Browne, B. (2020). 'Background Brief: Economic Importance of the Arts and Entertainment Sector', Centre for Future Work (available at: https://www.tai.org.au/content/background-brief-economic-importance-arts-and-entertainment-sector).

Burgess, M. (2020). 'Fossil-Free Steel Project Ready for Operation', *H2 View*, 27 August (available at: https://www.h2-view.com/story/fossil-free-steel-project-ready-for-operation/).

Burke, K. (2020). 'Arts Rescue Package Worth \$250 m Still Waiting to be Allocated, Senate Estimates Told', *The Guardian* (available at:

https://www.theguardian.com/australia-news/2020/oct/21/arts-rescue-packageworth-250m-still-waiting-to-be-allocated-senate-estimates-told).

Communications Electrical Plumbing Union (CEPU) (2020). *CEPU Submission—The Draft Renewable Energy Action Plan 2020*, 16 September.

Denniss, R., and M. Grudnoff (2020). 'Participating in Growth: Free Childcare and Increased Participation', The Australia Institute (available at:

https://www.tai.org.au/content/participating-growth-free-childcare-and-increased-participation).

Department of Health and Human Services (2020). 'Human Services Dashboard', 25 September (available at:

https://health.tas.gov.au/humanservicesstats/human services dashboard).

Department of Premier and Cabinet (2020). 'Employees by Agency and Employment Category' (available at:

http://www.dpac.tas.gov.au/divisions/ssmo/about_ssmo/state_service_workforce_reporting/state_service_workforce_report_no_2_of_2020).

Department of State Growth (no date). 'International Education' (available at: https://www.stategrowth.tas.gov.au/business/sectors/international_education).

Department of State Growth (2020). 'Draft Tasmanian Renewable Energy Action Plan' (available at:

https://www.stategrowth.tas.gov.au/energy_and_resources/energy/renewable_energy).

Eltham, B. (2020). 'A Proposal for 300 Australian Creative Fellows Annually', School of Media, Film and Journalism, Monash University, February.

Garnaut, R. (2019). *Superpower: Australia's Low-Carbon Opportunity* (Melbourne: La Trobe University Press).

Gutwein, P. (2020). 'Two Year Blitz to Generate \$3.1 billion in Construction Value', Tasmanian Government, 4 June (available at:

http://www.premier.tas.gov.au/releases/two_year_blitz_to_generate_\$3.1_billion_in _construction_value).

Handley, E. (2020). 'Why Are There More COVID-19 Cases in Private Aged Care than the Public Sector?', *ABC News*, 1 August (available at:

https://www.abc.net.au/news/2020-08-01/why-more-covid-19-cases-in-private-aged-care-than-public-sector/12503212).

Heath, M. (2017). 'Morrison Remains "Concerned" at Weak Wages, Australian Budget', *Bloomberg Politics*, 5 March (available at: https://www.bloomberg.com/news/articles/2017-03-05/morrison-remains-concerned-at-weak-wages-australian-budget).

Henderson, T. (2018). 'The Economic Importance of Public Services in Regional Communities in NSW', Centre for Future Work at The Australia Institute, May (available at:

https://www.futurework.org.au/the_importance_of_public_sector_work_in_regional_nsw).

Henderson, T., and J. Stanford (2020). 'The Same Mistake Twice: The Self-Defeating Consequences of Public Sector Pay Freezes', Centre for Future Work at The Australia Institute (available at:

https://www.futurework.org.au/pay_freezes_recession_to_depression).

Hutchens, G. (2020). 'Businesses Pay Dividends and Bonuses from the Profits Generated by JobKeeper', *ABC News*, 6 September (available at: https://www.abc.net.au/news/2020-09-06/coronavirus-businesses-using-jobkeeper-profits-for-ceo-bonuses/12634164).

International Monetary Fund (IMF) (2019). 'Global Fossil Fuel Subsidies Remain Large: An Update Based on Country-Level Estimates', IMF Working Paper (available at: https://www.imf.org/en/Publications/WP/Issues/2019/05/02/Global-Fossil-Fuel-Subsidies-Remain-Large-An-Update-Based-on-Country-Level-Estimates-46509).

Jericho, G. (2020) 'Wishing for the public sector to shrink is wishing for less economic activity when it's most needed', The Guardian, 15 September (available at: https://www.theguardian.com/business/grogonomics/2020/sep/15/wishing-for-the-public-sector-to-shrink-is-wishing-for-less-economic-activity-when-its-most-needed).

Kaitsu, M., T. Swann, T., and A. Quicke (2019). 'Hy-Trojan: Is Hydrogen the Next "Clean Coal"?', The Australia Institute (available at: https://www.tai.org.au/content/hy-trojan-hydrogen-next-clean-coal).

Karp, P. (2019). 'RBA Governor Endorses Lifting Public Sector Wage Caps to Stimulate Economy', *The Guardian*, 9 August (available at:

https://www.theguardian.com/business/2019/aug/09/rba-governor-endorses-lifting-public-sector-wage-caps-to-stimulate-economy).

Karp, P. (2020). 'Australian Universities Facing \$16 bn Black Hole as COVID-19 Student Numbers Plummet', *The Guardian*, 3 June (available at:

https://www.theguardian.com/australia-news/2020/jun/03/australian-universities-facing-16bn-black-hole-as-covid-19-student-numbers-plummet).

Killick, D. (2020). 'Premier Says Now is Not the Time to Cut the Public Sector', *The Mercury*, August 26 (available at:

https://www.themercury.com.au/news/politics/premier-says-now-is-not-the-time-to-cut-the-public-sector/news-story/c1b0519deb848e02d11867e9c1f0fde2).

Lord, M. (2019). 'From Mining to Making: Australia's Future in Zero-Emissions Metal', Energy Transition Hub (available at: https://www.energy-transition-hub.org/resource/miningmaking-australias-future-zero-emissions-metal).

Lynch, T. (2020). 'Expand Public Sector Employment to Boost Economy and Jobs', Community and Public Sector Union (available at: https://www.cpsu.com.au/2020/08/for-the-public-good/).

McCutcheon, P. (2020). 'What is the Point of the Queensland Premier's Long-Awaited Wage Freeze?' *ABC News*, 17 June (available at: https://www.abc.net.au/news/2020-06-17/wage-freeze-deferral-queensland-public-servants-whats-the-point/12360646).

McKinsey & Company (2020). 'The Next Normal for Australian Industries and Workforces', 9 August (available at: https://www.mckinsey.com/industries/public-and-social-sector/our-insights/the-next-normal-for-australian-industries-and-workforces).

Minshull, L. (2020). 'Great Southern Hand: State Emergency Economic Responses to COVID-19', The Australia Institute, May (available at:

https://www.tai.org.au/content/great-southern-hand-state-emergency-economic-responses-covid-19).

Minshull, L., and B. Browne (2019). 'Making Mountains out of Minnows: Salmon in the Tasmanian Economy', The Australia Institute, July (available at:

https://www.tai.org.au/content/making-mountains-out-minnows-salmon-tasmanian-economy).

Morrison, S. (2020). Press conference transcript, 21 August (available at: https://www.pm.gov.au/media/press-conference-1).

Nahum, D. (2020a). 'Powering Onwards: Australia's Opportunity to Reinvigorate Manufacturing through Renewable Energy', Centre for Future Work at The Australia Institute (available at:

https://www.futurework.org.au/renewable_energy_could_power_australian_manufacturing_renaissance).

Nahum, D. (2020b). 'Public Service in Challenging Times: The Economic and Social Value of Public Sector Work in Queensland' (available at:

https://www.futurework.org.au/the_value_of_public_sector_work_in_queensland).

Nahum, D. (2020c). 'Submission to NSW Select Committee on the Future of Work', Centre for Future Work at The Australia Institute (available at:

https://www.futurework.org.au/submission_to_nsw_select_committee_on_the_future of work).

Observatory of Economic Complexity (2019). 'Economic Complexity Rankings (ECI)' (available at: https://oec.world/en/rankings/country/eci/).

Pennington, A. (2020). 'Australian Unions Can Win the Fight Against COVID-19—And Against Neoliberalism', *Jacobin* (available at:

https://www.jacobinmag.com/2020/09/australia-unions-covid-19-neoliberalism-scott-morrison).

Pennington, A., and J. Stanford (2020). 'Rebuilding After Covid-19 Will Need a Sustained National Reconstruction Plan', *Journal of Australian Political Economy*, No. 85, pp. 164–74.

Premier's Economic and Social Advisory Council (PESRAC) (2020). 'Interim Report', 21 August (available at: https://www.pesrac.tas.gov.au/reports).

Reserve Bank of Australia (RBA) (2020). 'Statement on Monetary Policy—August 2020—3. Domestic Economic Conditions' (available at:

https://www.rba.gov.au/publications/smp/2020/aug/domestic-economic-conditions.html).

Stanford, J. (2020). 'A Fair Share for Australian Manufacturing: Manufacturing Renewal for the Post-COVID Economy', Centre for Future Work at The Australia Institute (available at:

https://www.futurework.org.au/a_fair_share_for_australian_manfacturing).

Tasmanian Government (2019a). 'Moody's Confirms Growth and Stability in Tasmanian Economy', 15 July (available at:

http://www.premier.tas.gov.au/releases/moodys_confirms_growth_and_stability_in_t asmanian_economy).

Tasmanian Government (2019b). 'S&P Global Maintains Tasmania's Credit Rating', 22 October (available at:

http://www.premier.tas.gov.au/releases/s_and_p_global_maintains_tasmanias_credit_rating).

Tasmanian Government (2020). 'Our Plan to Rebuild a Stronger Tasmania' (available at:

http://www.premier.tas.gov.au/__data/assets/pdf_file/0020/535115/Our_Plan_to_Rebuild_a_Stronger_Tasmania.pdf).

Tourism Tasmania (2019). 'Tourism Fast Facts', August (available at: https://www.tourismtasmania.com.au/industry/facts).

Visentin, L. (2020). 'Treasury Advice Says Public Sector Wages Freeze Will "Deepen Recession"', *The Sydney Morning Herald*, 12 July (available at: https://www.smh.com.au/politics/nsw/treasury-advice-says-public-sector-wages-freeze-will-deepen-recession-20200710-p55awl.html).