

Economic Note

Sector Impacts of COVID-19

22 May 2020

Sharing the pain

- COVID-19 is expected to lower nominal value-added production GDP by around 7% over 2020, which cumulates to a loss of more than \$30bn over 2020. The hit to production values (which measures intermediate inputs in addition to just the valued-add component) will be correspondingly greater.
- The hardest-hit sectors are those that have been directly impacted by the tighter border requirements and focus on physical distancing.
- Nevertheless, our sector analysis suggests that the direct impacts of COVID-19 are likely to be widespread, with production values for more than 60% of the economy expected to fall by more than the 7% fall for the NZ economy.
- The second-round impacts are expected to be significant, with proportionately more of the impacts to fall on the services sector. This will have implications for employment and consumer spending.

Executive Summary

COVID-19 represents a significant negative shock to the NZ and global economy, potentially the largest since the Great Depression almost a century ago. Our economy-wide estimates point to an approximate 7% fall in NZ real (i.e. inflation-adjusted) production value-added GDP over 2020, with nominal production value-added GDP a cumulative \$32.5bn lower over 2020. The latter estimates may be on the conservative side as we assume firms can reduce their costs in proportion to the fall in value added, which may not always be the case. Moreover, the actual fall in sales values will be much larger – in the region of \$70bn over 2020 according to our estimates.

In this note, we also use industry analysis to see how different sectors of the economy will fare over 2020 and in the years ahead. We examine both the direct and wider economic impact of COVID-19 on industry sectors.

Direct effects of COVID-19

Given most businesses have an element of interpersonal physical contact, the direct impacts of COVID-19 are likely to be widespread across sectors. The hardest-hit sectors are those who have been directly impacted by the tighter border requirements and focus on physical distancing to try to contain the spread of the outbreak. Accommodation services, transport, hospitality, retail trade, professional services, and arts and other services are likely to be the hardest hit in terms of percentage falls. The non-primary manufacturing and construction sectors have been significantly impacted by the lockdowns and stricter distancing requirements and, although a pick-up in the second half of 2020 is envisaged, the next few years could prove challenging. The primary sector, food manufacturing, and the healthcare sector should be amongst the stronger performers. The rest of the economy is somewhere in the middle.

It gets murkier beyond 2020. The timing for when a new vaccine for COVID-19 will be available is highly uncertain, with the risk that the 2020 slump in activity persists well into 2021. Sectors that can adapt to the new environment and are not dependent on physical contact will tend to outperform. Rates of recovery will vary by sector and there will

be marked differences within sectors. Our core macro-economic forecasts assume that the level of real GDP does not overtake pre-COVID-19 levels until 2023. For sectors bearing the brunt of the direct hit from COVID-19, the period at which the level of activity will remain below pre-COVID-19 levels is likely to be considerably longer.

Wider economic impacts

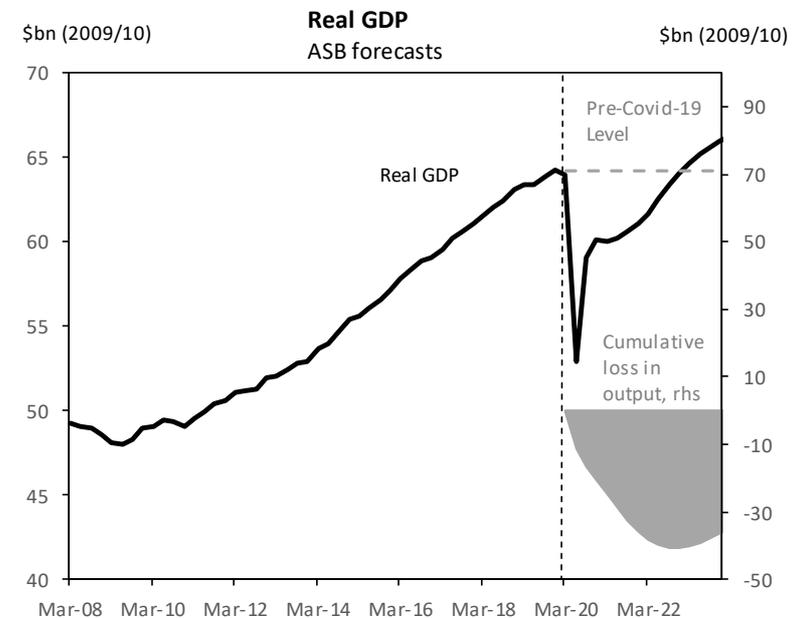
Even those sectors that are not directly impacted by COVID-19 will likely be impacted by a fall in demand from other sectors. Our estimates suggest the magnitude of indirect (i.e. spill-over) economic impacts for the NZ economy are about 80% of the direct impact. We estimate a direct \$32.5bn hit to NZ production value-added GDP over the 2020 year as a result of COVID-19, but the total longer-run impact could be closer to \$60bn after taking into account the weaker demand for firms supplying inputs to these sectors. More of the second-round impacts are expected to be borne by the employment-rich services sector. This, in turn, will have implications for employment and wider consumer spending throughout the economy.

Sector Impacts of COVID-19 – it’s levels that matter

In earlier work, we have used a combination of approaches to try and work out the impacts on the NZ economy from COVID-19. These impacts will be sizeable and long lasting. Our central forecasts suggest real production value-added GDP is likely to be 7% lower over 2020, with the unemployment rate peaking above 9% and only gradually abating.

For this sort of analysis, levels matter more than growth rates. Our forecasts suggest the level of real GDP is unlikely to get back to pre-crisis levels until the first half of 2023 (see accompanying chart). Losses in cumulative output will continue to grow until about then. Even in the second half of 2020, when we expect growth to rebound, the level of economic activity will still be well below pre-COVID-19 levels; hence the cumulative losses from COVID-19 are likely to continue to grow.

The degree of uncertainty over the outlook is very high and there are a number of potential [paths](#) ahead for the NZ economy. Here we dig more deeply to look at which sectors would likely bear the brunt of the outbreak, which ones will take a more modest hit, and which sectors could potentially outperform. Two types of impacts are examined.



Source: Statistics NZ, ASB

A) 2020 Impacts - Direct or 1st round Impacts

This is the extent to which COVID-19 has directly impacted on the demand for each sector of the economy. Our earlier [work](#) has used both a bottom-up approach (adding together the impacts for individual industries) and top-down approaches (making a judgment of the impact of COVID-19 on economy-wide capacity utilisation) to estimate the impacts. The [Treasury](#) has taken a similar approach as has the [RBNZ](#).

The direct economic impact will depend on key determinants including:

- **The severity of the outbreak** – the more severe the outbreak and the more difficult and longer-lasting the effort to contain it, the larger the subsequent economic disruption and likely cost.
- **Containment actions taken** – the longer lasting and more widespread the actions taken to prevent the spread of the outbreak, including physical distancing, the larger the economic cost.
- **Cost structures** – the more variable the cost structure in the sector, the more able it is to adjust costs during periods of fluctuating demand. The more fixed the cost structure, the larger the potential impact from a slowing in demand. At the margin, rent holidays may act to lower intermediate consumption and support value added.
- **Policy offset** – The more effective the actions by global central banks and fiscal policymakers to mitigate the impacts of the outbreak, the lower the economic cost.

- **Other factors** – Humans are incredibly adaptive and will find new ways of working, but this will be easier said than done for many. COVID-19 is a viral outbreak, and sectors that rely on person-to-person contact and the movement of people will face greater challenges. The more flexible and adaptable the economy to cope with the changed landscape posed by COVID-19, the better the economy will be able to manage the outbreak and the lower the economic hit.
- **The time of year** – Many businesses are seasonal. The economic impact of the outbreak will be greater if it disrupts activity when firms are at their busiest time of year; less so if the outbreak hits during a seasonal lull.

The hardest-hit sectors are those that have been directly impacted by the tighter border requirements and focus on physical distancing to try to contain the spread of the outbreak. Border restrictions to reduce and manage the number of imported cases of COVID-19 have significantly impacted the international tourism industry. Non-essential workplaces were shut during the Level 4 lockdown, with a relatively strict definition of essential business. Remote learning became the modus operandi for primary, secondary and tertiary education. Physical distancing has resulted in widespread disruptions to workplaces. Restrictions have been put in place to limit mass gatherings, including conferences, major sporting events and concerts.

In assessing the economic impacts, we have made some judgements on the proportion of economic activity will be disrupted under each alert level. As an input into that we have used the Government’s COVID-19 Alert [System](#) for guidance to estimate the proportion of economic activity that would be permissible under each Alert Levels. Details for Alert Levels 2 to 4 have been released, and the Government staggered the move to Alert Level 2 over the 14th May to the 21st of May. Alert Level 2 opens up more of the economy, with fewer restrictions for retail, hospitality and personal services, the relaxation of physical distancing in some workplaces, and with people allowed to move around the country. A “keep it safe” mantra will apply, with social gatherings limited to 10 persons, and with a 100-person limit on the capacity of hospitality outlets, with these limits to be reviewed every few weeks. We are still awaiting specific details on the Alert Level 1 restrictions. With the high level [description](#) of Alert Level 1 being a contained outbreak in NZ but an uncontrolled one overseas, we have assumed that people entering NZ will have to be quarantined for at least two weeks under Alert Level 1. This would have a greater impact on tourism arrivals than it would for immigration or international education exports.

Table 1 compares our estimates of what portion of the economy would be allowed to, and would in practice, operate under different Alert Levels alongside published estimates from the Treasury and the RBNZ.

Table 1: Capacity utilisation while COVID-19 Alert Levels are in place

	ASB				Treasury				RBNZ			
	Level 4	Level 3	Level 2	Level 1	Level 4	Level 3	Level 2	Level 1	Level 4	Level 3	Level 2	Level 1
Primary	81	90	98		71	81	90		75	93		
Manufacturing	56	77	90		44	72	90		48	85		
Construction	20	70	90		10	60	90		19	85		
Electricity, gas, water and waste	83	87	90		80	90	90		80	85		
Transport & storage	60	75	90						58	76		
Retail trade	45	75	90						38	56		
Accommodation & food services	30	40	50		20	20	50		11	20		
Other Services	67	79	92		58	75	83		68	74		
Govt (local, central, education & health)	93	95	97		90	93	95		90	90		
Total	67	81	92	94	61	76	87	92.5	63	81	91.2	96.2

Source: RBNZ, NZ Treasury, ASB

There are some differences for specific sectors, but our estimates are in a similar ballpark to RBNZ estimates of the economy-wide impacts under Alert Levels 1 to 3. We assume about one-third of economic activity is lost during Alert Level 4, slightly lower than the 40% losses expected by the Treasury and RBNZ. The estimates from all three parties are consistent in that they show a much larger difference in capacity utilisation between Alert Levels 4 (average of 64%) and 3 (79%) than they do between Levels 2 (90%) and 1 (94%).

Another major determinant of the direct economic impact will be the length of time spent in each different alert level. We have assumed kiwis follow official advice and that their actions and the actions of authorities prove to be sufficient to contain the outbreak within NZ, with alert levels gradually eased over the course of the year. The timing

in shifts to alert levels are assumed to be uniform and the changes to restrictions in each Alert Level are assumed to be modest. These assumptions will not always prove to be the case, with the move to Alert Level 2 done in phases. The future relaxation of restrictions could be phased in across sectors, and potentially regions.

Our assumed timetable over the next few months is:

- May – ½ Alert Level 3, ½ Alert Level 2
- June – September – Alert Level 2
- October – December – Alert Level 1

If NZ moves to Alert Level 1 sooner than October, the economic cost would be lower. However, this timetable still looks to be at the optimistic side of the ledger given the recent experience of other countries that have tried to restart their economies too soon and have seen a flaring up of infections. A similar occurrence in NZ and the associated tightening of restrictions (which we don't assume) would be a large set-back for the NZ economy.

Moreover, both the RBNZ and Treasury assume that the restrictions will be longer than what we assume. In the May [MPS](#), the RBNZ assumed that NZ will be at Alert Level 2 for 10 months (i.e. March 2021), with international border restrictions set to remain in place until the end of the March 2021 quarter. In the 2020 [Budget](#), the NZ Treasury assumed that the NZ economy would either be at Alert Level 1 or 2 till next March.

Impacts on nominal GDP

Table 2 provides a summary of the impacts to nominal value-added GDP by industry sectors from COVID-19. The figures in this table are seasonally adjusted. **All up, the largest hit will come in the first half of the year**, with around a 12.5% fall in nominal value-added GDP and the level of nominal GDP about \$20bn lower than at the second half of 2019. We then expect the shift to lower alert levels to open up more of the economy, helping to drive a modest rebound in the second half of 2020. Despite this, levels of activity for most sectors will still be below pre-COVID-19 levels. **Over the 2020 year, the cumulative loss in nominal GDP would be in the region of \$32.5bn.**

The downturn is expected to be reasonably generalised across economic sectors. Sectors representing just over 60% of the economy (61.5%) are likely to experience larger proportionate falls to value added over 2020 than the roughly 7% average fall for all sectors combined. Only five of the 21 major sectors of the economy – including agriculture, healthcare and public administration – which account for around 25% of GDP – are not expected to register a fall in nominal value added this year.

The tourism-related impacts are likely to filter through into impacting production for several sectors, including transport, accommodation and retail. Commercial property operation is captured in the retail, hiring and real estate services sector. The arts and recreation component of GDP is impacted by the restrictions on mass gatherings and the additional requirements on public venues.

The hardest-hit sectors are expected to be those who have seen a sharp drop in demand or those impacted by restrictions to contain the spread of the outbreak. The largest proportionate hit is associated with tourism – transport, retail, accommodation – and/or to the sectors impacted by restrictions to maintain physical distancing. Over 2020, accommodation services, transport, retail, professional services, and arts and other services would be the hardest hit in terms of percentage falls. Non-primary manufacturing and construction have been significantly impacted by the lockdowns and stricter distancing requirements in workplaces.

There will be some bright spots. The primary sector, food manufacturing, and the healthcare sector should do well. Even within sectors that will struggle, certain portions – for example internet service providers (in the media and information services sector) and courier services (rental and hiring services) – will likely outperform. Financial services (which include banks) do not look to bear as much of the brunt as other sectors.

The GDP value-added measure is designed to measure the contribution of each sector to economic growth. Simply put, it is the value of all of the outputs less the costs of intermediate inputs in production. **As such the total impact of COVID-19 on production values - which includes a value-added component and an intermediate input (or production cost) component - are likely to be correspondingly greater than its impact on nominal GDP.** In NZ, the total value of production is in the region of \$700bn per annum, more than twice that of nominal GDP (just over \$300bn). Our estimates point to a cumulative \$44bn hit to production values over the first half of 2020 and a cumulative \$72.5bn hit over 2020. Appendix 1 has detailed sector estimates.

Table 2: Nominal GDP impacts by sector

Sector outlook	Nominal Production Based GDP						
	Seasonally Adjusted values						
Sector	% GDP	2020 H1 Impact		2020 H2 Impact		2020 Impact	
		% H1	vs. Pre-COVID Levels (\$m)	% H2	vs. Pre-COVID Levels (\$m)	%Q/Q-4	Cum (\$m) H1 + H2
Primary sector	9.1%	-5.8%	-827	4.3%	-245	-1.1%	-1072
Agriculture	6.5%	0.0%	0	0.0%	0	0.0%	0
Fishing	0.6%	-17.7%	-172	12.4%	-73	-5.0%	-245
Forestry	0.9%	-30.0%	-448	32.1%	-112	-5.0%	-560
Mining	1.0%	-13.0%	-207	10.6%	-60	-2.5%	-267
Goods Sector	21.1%	-14.5%	-4847	6.4%	-3027	-8.6%	-7874
Food and Beverage Manufacturing	4.3%	-7.2%	-485	1.0%	-423	-5.0%	-908
Other manufacturing	7.0%	-16.0%	-1764	7.1%	-1105	-10.0%	-2869
Electricity	2.8%	-7.4%	-335	-1.4%	-395	-7.5%	-731
Construction	7.0%	-20.5%	-2263	13.2%	-1104	-10.0%	-3367
Services sector	69.9%	-12.7%	-14102	4.8%	-9504	-7.4%	-23606
Wholesale trade	5.5%	-11.3%	-990	2.9%	-764	-7.5%	-1754
Retail	5.5%	-18.1%	-1586	8.2%	-992	-8.8%	-2579
Accommodation and Food Services	2.4%	-24.0%	-910	2.5%	-838	-20.2%	-1748
Transport	4.8%	-15.4%	-1167	6.4%	-757	-10.0%	-1923
Information, Media services	2.5%	-9.0%	-359	1.6%	-299	-7.5%	-658
Financial services	6.2%	-12.1%	-1194	5.2%	-741	-5.0%	-1934
Rental Hiring Real Estate	7.9%	-22.1%	-2782	15.5%	-1260	-10.0%	-4041
Dwelling occupation	6.5%	0.0%	0	0.0%	0	0.0%	0
Professional & administrative Services	8.4%	-13.4%	-1780	1.1%	-1658	-12.5%	-3438
Public administration	6.5%	-3.0%	-308	3.1%	0	0.0%	-308
Education	4.3%	-10.3%	-695	0.3%	-678	-10.0%	-1373
Healthcare	6.0%	-3.3%	-318	8.6%	476	5.0%	159
Arts and other	3.4%	-37.9%	-2016	0.7%	-1994	-25.0%	-4009
Total	100.0%	-12.5%	-19776	5.0%	-12776	-7.1%	-32552

Source: Statistics NZ, ASB

Beyond 2020

Here the outlook gets cloudier still. A vaccine for COVID-19 could be 12 to 18 months away, quite possibly longer. Until then, physical distancing and border restrictions are expected to remain in some shape or form. Our core macro view is that COVID-19 will have some longer-lasting impacts that will prevent a rapid rebound. It will not be until 2023 that the level of economic activity moves above pre-COVID-19 levels. **We expect many of the trends in the comparable performance in sectors we have highlighted for 2020 will continue into 2021. For sectors bearing the brunt of the direct hit from COVID-19, the period at which the level of activity will remain below pre-COVID-19 levels is likely to be considerably longer.**

We have not provided point estimates beyond 2020 given that COVID-19 represents a massive shock in our recent history and it is difficult to know with any precision what the next few years will bring.

We can point to three specific factors that will cap the magnitude of the subsequent rebound:

- **Capacity.** The pronounced nature of the downturn means that capacity constraints may take longer to emerge. The outlook for business and residential investment is weaker than what it was pre-COVID-19.
- **Balance sheets.** Household, corporate and government balance sheets – both here and abroad – have taken a significant hit. It will take time for them to recover. This will also impact investment.
- **Productivity.** This is likely to be weak until the outbreak has been brought under control and some degree of normality returns. Even after a new vaccine has been developed and disseminated, restrictions on mobility and additional health and safety precautions and weak investment outlook will weigh on growth prospects.

B) Wider economic impacts and sector implications

Sectors of the economy are also likely to be indirectly impacted by COVID-19 if it results in a material change to the demand patterns/incomes of their own customers. The widespread nature of the hit to sectoral demand shown in Table 2 suggests these second-round impacts could potentially be sizeable. To assess this, we use input/output analysis. This tracks the transactions between industry sectors and are a useful way of assessing the wider impacts throughout the economy. First, the health warnings. There are 3 critical assumptions:

- That the structure of the economy is not much different to when the input output tables were calculated – March 2013 year. The NZ economy is more than 40% larger by value. Some sectors have grown in importance (e.g. professional services), whilst others have declined (manufacturing).
- The shocks hitting the economy are assumed to have persistent effects – the input/output analysis is a static/long-run type analysis. COVID-19 impacts should hopefully be shorter-lived.
- The analysis assumes that firms do not alter their behaviour given the changing economic landscape. Yet in practice firms and households have shown considerable adaptability during the lockdown period.

Given these last two points, the impacts in this analysis are likely to err on the high side. However, it is still useful for showing the interdependencies within the economy and pinpointing which sectors could be more exposed. To work out how large the impacts could be within the economy we utilise sector multipliers from input/output tables. Table 3 summarises the input/output multipliers (column c) for 18 major sectors of the economy (under column a), that we have aggregated up from more than 100 sectors.

Table 3: Input/Output multipliers by major sector

Sector (a)	Size (% total) (b)	Multiplier (c)	Own Sector (d)	Second Round Impacts			
				Primary (f)	Goods (g)	Services (h)	Total (i)
Primary	10.2	1.88	1.08	0.15	0.28	0.37	0.80
Primary manufacturing	11.4	2.36	1.10	0.50	0.34	0.43	1.26
Other manufacturing	9.0	1.73	1.07	0.06	0.33	0.27	0.66
Utilities	4.5	2.35	1.51	0.14	0.44	0.26	0.84
Construction	9.0	2.16	1.12	0.06	0.64	0.33	1.03
Wholesale Trade	5.0	1.77	1.01	0.04	0.17	0.54	0.76
Transport	4.9	1.76	1.10	0.02	0.24	0.40	0.67
Essential retail	0.9	1.55	1.00	0.04	0.17	0.33	0.54
Non-essential retail	2.8	1.68	1.00	0.03	0.16	0.49	0.68
Accom & Food services	2.1	1.84	1.00	0.09	0.22	0.53	0.84
Info services	3.1	1.77	1.20	0.02	0.16	0.39	0.57
Bank, finance & insurance	3.1	1.61	1.10	0.02	0.08	0.41	0.51
Property services	10.8	1.56	1.08	0.02	0.21	0.25	0.48
Scientific/prof services	7.8	1.62	1.10	0.02	0.14	0.35	0.52
Arts & Recreation Services	3.1	1.71	1.02	0.04	0.22	0.43	0.69
Govt admin	3.6	1.58	1.00	0.03	0.14	0.40	0.57
Education	3.3	1.43	1.01	0.02	0.15	0.25	0.42
Health	5.5	1.56	1.08	0.03	0.15	0.30	0.48
Total	100.0	1.82		0.10	0.27	0.36	0.73

Source: Statistics NZ, ASB

The input/output multiplier for the NZ economy is around 1.82 (column c). **That is, for every \$1 of output produced directly by each sector, an additional 82 cents of activity is generated by other sectors supplying inputs.** Of the \$32.5bn direct hit to NZ production value added over the 2020 year, the total longer-run impact could be closer to \$60bn after taking into account the weaker demand for firms supplying inputs to these sectors.

The magnitude of second-round impact (columns f to i) varies by economic sector. The larger the multiplier the more the flow-on effects to other sectors and the greater the wider economic impact. In general, the second-round impacts have tended to be larger for industries in the primary and goods sectors than those in the services sector (i.e. the

flow-on effects have been larger). However, it tends to be the services sector that is impacted most by these flow-on effects, with the coefficients of the services sector (column h) tending to be around half of the total second round impact (column i) on average.

Many of the sectors likely to experience a greater direct impact by COVID-19 – accommodation & food services (multiplier 1.84, column c), transport (1.76) and arts & recreation services (1.71) tend to have larger downstream exposures to the services sector (column h). A \$1 fall in value added from the above three sectors would result in a 40-53 cent fall in downstream services sector activity (column h). Within the wider services sector, the commercial property sector has particularly large indirect exposures.

The construction sector (multiplier of 2.16, column c) is likely to cop a greater proportionate direct hit than the economy in general. The hit to downstream suppliers in the rest of the goods sector (column g) is expected to be more acute, with a \$1 fall in value added resulting in a 64-cent fall to firms in the wider goods sector. Within the wider goods sector, manufacturers – particularly fabricated metal product manufacturing, non-metallic mineral production manufacturing, petroleum and coal manufacturing and wood product manufacturing – are exposed to a slowdown in construction activity.

Primary manufacturing (multiplier 2.36, column c) tends to require proportionately more inputs from other sectors. An additional \$1 of value added from this sector triggers an additional \$1.26 from other sectors (column i), with proportionately more of the inputs (50 cents) from the primary sector (column f), followed by services sector suppliers (43 cents, column h) and firms in the goods sector (34 cents, column g)). Given that we expect this sector to hold up reasonably well, more of the benefits (or lack of costs) to downstream sectors will be accrued by the primary sector.

Not all of this will translate into lower value added (i.e. GDP) given some of these inputs are imported or will subsequently be treated as intermediate consumption in the production of final goods and services within the economy. **Nevertheless, it represents an impact on demand and revenues for affected downstream sectors that will have a wider bearing on economic activity, hiring decisions and inflationary pressures throughout the economy.** With more of the impacts likely to be felt by the employment-rich services sector - which accounts for approximately three quarters of economy-wide employment – the impacts on employment and consumer spending could potentially be sizeable.

Appendix 1 Direct Impacts of COVID-19 on nominal production values by sector

In the NZ economy the total nominal value of production is in the region of \$700bn per annum, more than twice nominal value-added GDP. As such, the total hit in the value of production is likely to be correspondingly greater than that for value added. Table A1 suggests that production values could be around \$44bn lower in the first half of 2020 than they were in the preceding 6 months. Despite an expected recovery in the second half of this year, the level of production values for most sectors are still below late 2019 levels. All up, the hit to cumulative production values would be in the region of \$72.5bn over 2020.

Table A1: Nominal Production Value impacts by sector

Sector outlook	Nominal Production Values						
	Seasonally Adjusted values						
	Sector	% Total	2020H1 Impact		2020 H2 Impact		2020 Impact
% H1			vs. Pre-COVID Levels (\$m)	% H2	vs. Pre-COVID Levels (\$m)	%Q/Q-4	Cum (\$m) H1 + H2
Primary sector	11.8%	-4.4%	-1862	3.2%	-594	-0.9%	-2457
Agriculture	9.1%	0.0%	0	0.0%	0	0.0%	0
Fishing	1.0%	-17.7%	-647	12.4%	-274	-5.0%	-922
Forestry	0.7%	-30.0%	-792	32.1%	-198	-5.0%	-990
Mining	0.9%	-13.0%	-423	10.6%	-122	-2.5%	-545
Goods Sector	33.8%	-13.9%	-16696	6.0%	-10527	-8.3%	-27223
Food and Beverage Manufacturing	10.1%	-7.2%	-2583	1.0%	-2253	-5.0%	-4836
Other manufacturing	9.3%	-15.7%	-5213	6.7%	-3328	-10.0%	-8542
Electricity	3.3%	-7.4%	-876	-1.4%	-1032	-7.5%	-1908
Construction	11.0%	-20.5%	-8023	13.2%	-3914	-10.0%	-11937
Services sector	54.4%	-13.1%	-25511	4.9%	-17287	-7.6%	-42798
Wholesale trade	5.2%	-11.3%	-2099	2.9%	-1621	-7.5%	-3720
Retail	4.1%	-18.1%	-2633	9.8%	-1462	-6.2%	-4095
Accommodation and Food Services	2.3%	-24.0%	-1977	2.5%	-1821	-20.2%	-3798
Transport	4.6%	-15.4%	-2539	6.4%	-1647	-10.0%	-4185
Information, Media services	2.3%	-9.0%	-748	1.6%	-623	-7.5%	-1371
Financial services	4.7%	-12.1%	-2030	5.2%	-1260	-5.0%	-3291
Rental Hiring Real Estate	5.9%	-22.1%	-4643	15.5%	-2103	-10.0%	-6746
Dwelling occupation	4.1%	0.0%	0	0.0%	0	0.0%	0
Professional & administrative Services	6.2%	-13.4%	-2944	1.1%	-2743	-12.5%	-5686
Public administration	5.2%	-3.0%	-558	3.1%	0	0.0%	-558
Education	2.7%	-10.3%	-979	0.3%	-955	-10.0%	-1934
Healthcare	4.3%	-3.3%	-506	8.6%	760	5.0%	253
Arts and other	2.9%	-37.9%	-3855	0.7%	-3813	-25.0%	-7668
Total	100.0%	-12.4%	-44070	5.0%	-28408	-7.0%	-72478

Source: Statistics NZ, ASB

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Senior Economist
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