



**MAKE|NZ**



Response to the Productivity Commission inquiry into  
*The resilience of the New Zealand economy to supply chain disruptions*

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*Submitted on behalf of the following Manufacturing Industry Organisations: MESNZ<sup>1</sup>;  
MAKE|NZ; NASH<sup>2</sup>; PrintNZ and the WPMA<sup>3</sup>*

*Summary*

1. Manufacturing is a major contributor to New Zealand's economy at 13% of private market GDP, as well as a critical supplier to others, especially the primary and construction sectors. It is the obvious vehicle by which NZ adds 'value' rather than volume in increasing the export receipts from what are otherwise commodity exports
2. In the medium term, ownership structures and demography pose the biggest risk to manufacturing retaining its role as a key pillar of New Zealand's economy, followed by market risks if manufacturers don't intensify their efforts to reduce their carbon footprint, or at least document that it's very low where that is the case, and to adopt circular economy principles
3. Government needs to vastly augment its resources to understand the role of manufacturing in our economy and support the sector accordingly. A Minister for Manufacturing in Cabinet, and a reallocation of current resources within MBIE is needed to improve the understanding and potential of manufacturing to NZ's current and future resilience
4. From the manufacturing sector's perspective, the biggest risk of the current inquiry is posed by a potential failure to recognise the importance of domestic supplies within New Zealand's manufacturing ecosystem, and the factors jeopardising the stability of that system. Such a lack of understanding has persistently been evident within recent governments and has led to multiple failures in adequately supporting and regulating the sector in the past.

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<sup>2</sup> National Association of Steel-framed Housing

<sup>3</sup> Wood Processors and Manufacturers Association

## A. Preamble – The Context in which we see this Inquiry

In his request to the *Productivity Commission*, Minister Robertson writes: ‘The purpose of this inquiry is to identify policies and interventions that can enhance the resilience of New Zealand’s economy and living standards to persistent medium-term supply chain disruptions.’

In his Terms of Reference [ToR] to the *Commission*, the Minister doesn’t define what he means by ‘Resilience’. The *Productivity Commission*, in its *Call for Submissions* on its *Inquiry*, defines ‘economic resilience’ as “The capacity of industries and associated communities to anticipate, prepare, absorb, recover and learn from supply chain disruptions.” It defines ‘supply chains’ as “... complex networks that connect suppliers of goods and services to producers, distributors and end users ... They encompass the flow of material inputs, labour services, information, and finance – from raw materials through to finished products and their distribution to customers.”

While government does not explicitly define what it means by Resilience in its ToR, it provides an indication by referring to supply chain disruptions as a threat to resilience, and in more detail:

- factors that make New Zealand economy vulnerable to supply chain disruptions within the context of increasing risks and the pandemic experience;
- New Zealand importer and exporter dependencies on global supply chains, to identify vulnerabilities; ...
- drivers of variation in firm, sector, and community, resilience to supply chain disruptions.

The Minister further clarifies his brief to the Productivity Commission by declaring the following out of scope:

- the long-term development of transport infrastructure underpinning supply chains (Ministry of Transport and Infrastructure Commission)<sup>4</sup>;
- Ministry of Foreign Affairs and Trade led inter-agency work on supply chain resilience, including the identification of essential goods (and services) that New Zealand needs to be able to access, and policy options for dealing with six-month to one-year scenarios<sup>5</sup>

If it is the government’s intent to explore the vulnerability of key economic activities, it will need to find answers to the following questions in a sector-by-sector approach:

- What are the sector’s critical dependencies in terms of *inputs*: information; materials; labour; energy (and other resources, *e.g.* water) and capital (finance) – all in terms of availability and cost
- Ability to manage external threats to operations
- (Social) licence to operate
- What are the sector’s critical dependencies in terms of *outputs*: markets (customers); reputation; capacity (ability to meet demand).

The Productivity Commission’s definitions quoted above cover most, but not (explicitly) all of the above.

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<sup>4</sup> [https://www.transport.govt.nz/assets/Uploads/MOT-FSChain-Paper\\_a8.pdf](https://www.transport.govt.nz/assets/Uploads/MOT-FSChain-Paper_a8.pdf)

<sup>5</sup> We could not find any public information about the ToR for this work, and a request to MFAT for an indication of where this work is at remains unanswered

## B. Economic Resilience in New Zealand's manufacturing sector

Putting aside transport issues as suggested in the government's ToR for this inquiry, and applying the framework laid out above, we can find some sectors in New Zealand's economy for which we have most of the answers – dairy, for example:

- Milk supply is resilient to major disruptions, except on a local / regional basis
- Labour supply issues are long-term, but unlikely to pose a major risk short-term
- Likewise for access to energy and other resources
- (Catastrophic) operational risks are mostly biological and well-understood and -mitigated through government and industry biosecurity plans and activities
- Social and regulatory issues around the licence to operate are well-understood (greenhouse gas emissions; impact of water quality; animal welfare) and unlikely to pose abrupt catastrophic risk
- The biggest risk of catastrophic impact for New Zealand's dairy industry is on the market side. Should the Chinese government decide, for example, to (temporarily) block the importation of New Zealand dairy products, consequences for the sector would be dire and its ability to divert product (milk powder) to other markets without a drop in prices that would likely put the industry in a (temporary) financial loss situation would be limited.

Putting this in contrast with key parts of New Zealand's non-food manufacturing sector, the answers are a lot less clear:

- Sources of input materials abroad are usually varied in terms of country and firm, but in some cases highly specialised critical inputs are restricted to (very) few suppliers internationally
- (Global) fluctuations in the supply of inputs are of regular occurrence in some sub-sectors. That is true in particular for electronic components and dates well back before the current 'chip crisis'<sup>6</sup>
- For the vast majority of manufacturing activities, including those supporting the commodity export sector, the majority of (material) inputs come from domestic suppliers<sup>78</sup>
- Labour supply issues are long-term, but unlikely to pose a major risk short-term
- Likewise for access to energy and other resources
- (Lack of) access to capital is one of the key vulnerabilities in the manufacturing sector. Most of New Zealand's manufacturing firms are privately held. They are not necessarily thinly capitalised, but access to significant levels of external funding - to invest in improving productivity, for example - is limited even under 'non-stressed' circumstances. Root causes are owner attitudes – being unwilling to bring in (private) equity partners - and a lack of more predictable returns on investment in the face of competition from manufacturers in other countries where fewer impositions on their activities are in place (often justified by those countries on the basis of increasing resilience by supporting and protecting domestic manufacturing). Finally, a specific competitive disadvantage in New Zealand is the lack of a financial services industry focused on and equipped to invest in the manufacturing sector. That lack of access to capital poses an even greater risk when manufacturers are subjected to operational – and, as a consequence - financial stress where severe disruptions to operations

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<sup>6</sup> [https://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/meetingdocument/wcms\\_317267.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/meetingdocument/wcms_317267.pdf)

<sup>7</sup> <https://www.stats.govt.nz/experimental/top-suppliers-and-users-of-products/>

<sup>8</sup> <https://www.mbie.govt.nz/assets/manufacturing-factsheet.pdf>

are not covered by insurance, as was the case with the Canterbury earthquakes and the recent extreme weather events, for example

- Given the highly diverse nature of manufacturing in terms of geographic location and type of activity, catastrophic operational risks are minimal
- Likewise for risks to the freedom to operate from society and regulatory authorities when considered at an above-individual-firm level
- Given the highly diverse landscape when it comes to markets for New Zealand-manufactured products and services, especially outside of the food industry, catastrophic market risks are hard to envisage in the short term – but note the ‘sustainability market risk’ we mention in our response to Question 1 (iii). New Zealand’s manufacturing sector – outside of food and beverage and some suppliers to the building and construction sector – is largely organised in SMEs that succeed by gaining a strong position in (very) narrow niche markets, typically supplying a relatively small numbers of customers (10s, rather than 100s). There is also no clustering in the sectors they supply into – apart from, arguably, agriculture. As a consequence, they are relatively sheltered from market shocks like the one hitting suppliers to the ICE-powered automotive industry in Germany, for example.

In practical terms, the biggest problem manufacturers have been facing over the past four years – apart from skills and labour shortages – are the consequences of a real and perceived uncertainty of timely supply of material inputs. That has led to significant increases in inventory and inventory costs on the supply side – some companies have more than doubled their inventories - and artificial demand spikes as *their* customers also increased their inventories. Most of New Zealand’s non-food manufacturers produce components and consumables for other manufacturers in New Zealand and abroad, rather than finished goods.

### **C. Response to the Specific Questions asked by the Productivity Commission**

*Question 1 What supply chain disruptions and trends are you worried about?*

- i. The biggest risk to New Zealand’s manufacturing sector results from a combination of ownership structures and demography. Many firms – especially smaller ones – are owned and still led by people in the 60+ age bracket with incomplete or unrealistic succession plans. These people not only lead their business formally, they are also its *spiritus rector* - heart and soul - when it comes to process and product expertise and innovation, and customer relationships. In other words, they will be hard to replace.

Combine that with the fact that in quite a few instances the firms these people own, and run, are providers of highly specialised goods and services to other manufactures in New Zealand (and sometimes overseas) – as we will lay out in more detail under Q. 4 below – and you have a manufacturing ecosystem that is highly fragile and subject to key suppliers dropping out of that system in the foreseeable future

- ii. New Zealand manufacturers are increasingly using sophisticated machinery and equipment in their operations that will require the involvement of overseas service technicians for anything but routine maintenance and repairs. New Zealand’s manufacturing sector isn’t big enough for such technicians to be deployed in the country permanently. This has led to serious disruption in operations during the recent COVID-19 pandemic, when exemptions to travel were refused for such technicians in all but a handful of cases

- iii. Most firms are inadequately prepared for future challenges to their products and processes – and thus their market position – posed by a world where a failure to reduce their carbon footprint (greenhouse gas emissions), and to pursue circular economy principles, are becoming increasing threats to their sales, and their (social) licence to operate. The primary risk is that *their* customers – predominantly in northern-hemisphere developed-economy markets – will turn around and demand change quickly – often under pressure from their own customers and end consumers and overseas jurisdictions imposing WTO-sanctioned and other obligations 'at the border'. Similar pressures from the New Zealand society and regulatory authorities are likely to build over time
- iv. For a long time, New Zealand governments have been acting as champions of free trade and compliance with WTO Rules. They have been active in discouraging our manufacturers from any actions that could be interpreted as violating those rules, and reluctant or refusing to use the tools available to them when it comes to pursuing (sometimes blatant) breaches of those rules by others. New Zealand manufacturers currently face a situation where in Australia, for many their most important export market, the government is vastly outspending New Zealand's government when it comes to (directly) supporting manufacturing, even when the different sizes of both economies are considered. In the medium term, that presents a direct threat to the competitive positioning of New Zealand manufacturers in Australia and other export markets
- v. Restricting trade and access to critical supplies are increasingly becoming a weapon of choice in the growing geopolitical confrontation between the US and China – sometimes under the cover of improving 'domestic economic resilience'. Under current government policy, New Zealand is increasingly opting to align itself with the 'Western world' led by the US. That already has – and increasingly will have - implications for New Zealand exporters of high-tech machinery and equipment (or components thereof) in terms of export market restrictions. It may also present challenges on the supply side in the future in the case of New Zealand manufacturers not being able to access critical components manufactured by an increasingly sophisticated high-tech manufacturing sector in China.

*Question 2 What is your industry / community currently doing or planning to do to address supply chain concerns?*

Short answer – not enough. Apart, maybe, from raising inventory levels for key input materials again in the early stages of future supply chain disruptions.

In the absence of a peak industry body or government department that could advise and support individual firms in preparing for (and learning from) supply chain disruptions, it will be mainly the (relatively) larger manufacturers – of which they are few and far between in our manufacturing sector, apart from the large primary processors – that have the capability and capacity to prepare and learn.

Compare that to the primary sector, which is looked after by a ministry with almost 3,000 employees, and levy-funded peak industry bodies.

*Question 3 How can the government help to enhance the resilience of your industry/community to supply chain disruptions?*

- i. Ensure that government is adequately resourced at all levels to support manufacturers with advice and direct (financial) measures if required to prepare for, manage and learn from future supply chain disruption. That will include a Minister for Manufacturing in Cabinet, and the reallocation of resources within MBIE to support such a Minister
- ii. Ensure that New Zealand has an efficient and affordable transport infrastructure that can stand up to future challenges posed by climate change, labour shortages, *etc.* New Zealand's manufacturing ecosystem has geographically differentiated based on specialised expertise, rather than short supply routes, meaning that key domestic suppliers to New Zealand manufactures are often spread throughout the country. In this context, government support for a high-frequency coastal shipping system will be critical
- iii. Focus on keeping the playing field for New Zealand's manufacturers as level as possible. New Zealand doesn't have the financial resources to enter into major subsidy battles with the likes of Australia, but shedding the ideology that we need to be world champions in WTO compliance would be a good start. As would be following Ernest Rutherford's suggestion that "We haven't the money, so we've got to think". A more vigorous pursuit of at least the most blatant cases of unfairly subsidised imports would also help.

*Question 4 What should the Commission study to learn more about the economic resilience of industries and communities?*

From a manufacturing sector perspective, the main concern with the current inquiry is that it could fail to understand, analyse and lay out the consequences of supply chain disruptions *within* New Zealand's manufacturing ecosystem. We have pointed to the fact that the most important suppliers to New Zealand manufacturers – and to other sectors, in particular primary industries – are (other) domestic manufacturers. We have also pointed to the fact that individual manufacturers that are of critical importance to others may drop out of that system, and mentioned some of the reasons for that. The consequences of such 'extinction events' can be compared to extinction events in natural ecosystems, and be of similarly severe consequences in terms of the stability of the entire system.

We have been proposing to MBIE for several years now that it needs to complement its manufacturing industry reports – the last one dating back to 2018 and being due for an update – with a detailed study of supply chain relationships within the sector, and to other key sectors such as construction and agriculture, but to no avail so far.

The consequences of government not understanding New Zealand's manufacturing ecosystem are becoming painfully obvious on a regular basis – last and most prominently when it decided on which parts of the sector would be allowed to continue to operate under COVID-19 restrictions, and in the process creating severe supply chain disruptions that could easily have been avoided without creating additional pandemic risk.