MANUFACTURING:

double production by 2035

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White Paper

EXECUTIVE SUMMARY

To deal with the urgent need to build industries for jobs and for national security, aim to build manufacturing to double current production by 2035.

- **This will employ another 1 million people directly.**
- **Another 750,000 would likely be employed indirectly as manufacturing has a high multiplier into the economy.**
- **Further, 85% of Australians in manufacturing jobs are full-time and are well paid.**

Aim to have $1 trillion invested into manufacturing and related infrastructure by government, a development bank, commercial banks and equity finance over 15-20 years.

This investment will pay for itself in profits and taxes.

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IN PRINCIPLE PLAN FOR BUILDING MANUFACTURING INDUSTRIES

Economic and strategic challenges

Today's economic crisis is worse than, and very different from the 2008 Global Financial Crisis (GFC), which originated in (and mostly impacted upon) the **global financial sector.** It was overcome by major global efforts, particularly by the US Federal Reserve, that stabilised the financial system, while the Australian government pump-primed the economy with payments to tax payers, school funding and house insulation projects to help stop a serious recession. Once the financial system stabilised, the economy returned to normal.

First, today the economic crisis is in the **global productive sector**, where a global depression not seen since the 1930s is possible. In purely economic terms, COVID-19 restrictions limiting business operations across the world have disrupted many critical global supply chains, leaving import-dependent Australia vulnerable.

In the next six months, there may be many more business failures (here and globally) and large jobs losses across many sectors. There could be significantly higher unemployment and a lower property market. This has the potential to create a downward economic spiral.

Second, Australia faces serious **strategic challenges from China**, including threats of economic sanctions on exports important to Australia's economic prosperity. Currently, China is demonstrating its power to punish Australian exporters. This has exposed Australia's strategic vulnerability from heavily depending on China that is an economic superpower, a military superpower, a technological superpower, and an emerging global superpower.

This is happening at a time when China can rival US power in the region, as America struggles with global overreach problems. Sustaining a global military presence since WWII has come at great cost to the American economy, which cannot even provide a universal basic health care system. Today, America's ability to provide a reliable defence umbrella for Australia needs to be questioned.

Of further concern, China has demonstrated what some have described as a "disproportionate" interest in Australia. This interest stems from Australia being a huge, underpopulated, resource-rich continent (Australia is 7.7 million sq km with 25 million people, China is 9.6 million sq km with 1,393 million people). Australia is more vulnerable to Beijing's influence than much larger Asia-Pacific neighbours, partly because of its relative size and partly because of its economic dependence on trade with China. If the Australia-US Alliance could be weakened or terminated, separating Australia from America would significantly weaken US influence in the region at a time when the US is facing major domestic economic, political and social problems. This would greatly enhance China's influence in the region and in Australia.

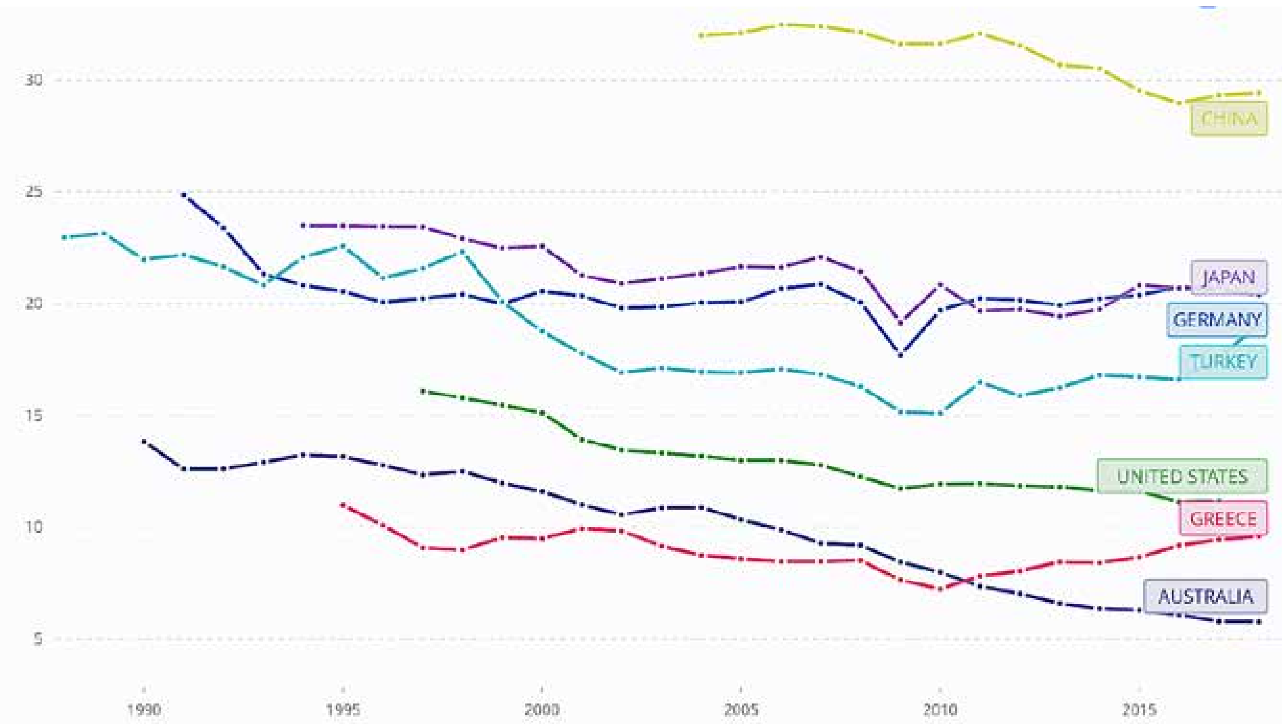
The COVID-19 crisis and the behaviour of Beijing's leaders towards Australia and the world, has highlighted fragilities in global supply chains.

A long period of complacency has resulted in failures to assess risks, not only from China, but from pandemics, natural disasters (tsunamis, floods, droughts, fires, earthquakes), strategic conflicts, civil turmoil/wars, economic downturns, forecasting errors, industrial disruptions, reliance on one supplier, supplier bankruptcy, telecommunication breakdowns, corruption, government controls (e.g. limits on exports), transport accidents, financial failures (like the Global Financial Crisis), currency collapses, price volatility and volatile exchange rates.

The current COVID-19/China shock is a wakeup call that Australia's sovereignty must be protected with:

- A strong forward defence capability to deter any distant aggressor before they can reach Australian shores.
- A strong national industry base capable of withstanding global economic shocks, denial of major trading routes and denial of critical imports and important exports. Australia may not be able to greatly diversify its exports of minerals and coal, but it can expand its domestic industries and reduce its reliance on global supply chains.

Manufacturing, value added (% of GDP) 1990-2018[1]



1 Source: World Bank national accounts data, and OECD National Accounts data files. Accessed June 15, 2020. https://data.worldbank.org/indicator/NV.IND.MANF.ZS?end=2018&locations=DE-US-AU-GR-TR-JP&start=1988&view=chart

The government's JobKeeper, house renovations/building and infrastructure policies are an important but only a small part of the economic solution. These policies may help maintain parts of the economy, but in the longer term they will not bridge the economy back to "normal", because the world has changed and is unlikely to return to the old "normal". Overcoming the COVID-19/China threats require a significant new restructuring and rebalancing of the Australian economy and new defence arrangements.

This includes building much stronger domestic **manufacturing** industries that can:

- insulate Australia from global supply threats,
- restore a balanced economy in the interests of national sovereignty, and
- create new employment opportunities.

A plan must start with recognising the parlous state of Australian manufacturing.

World Bank data shows that Australian manufacturing stands at 5.8% of the economy (employing a record low 872,000 people[2]), well below Turkey (19.1%) and Greece (9.6%). Manufacturing in the US is 11.2% of GDP, Japan 20.7%, Germany 20.4%, China 29.4%.[3]

AN OVERALL PLAN

The government's job is to ensure full employment for Australians, that is about 13-14 million jobs, and to defend the country from strategic threats.

A strategy for strategic industries starts with the government declaring its determination to build the necessary manufacturing industries.

Nowhere in the world has manufacturing just happened by the working of market forces alone. It only happens when a government says the nation is going to build up manufacturing industries with government help and significant direction.

The government needs to declare its intention to build manufacturing so that industry has a framework in which to plan, invest and operate.

2 *Australian Manufacturing in 2019 Local and Global Opportunities,* AIG, May 2019, pg. 6. https://cdn.aigroup.com.au/Economic_Indicators/Economic_Outlook/Australian_Manufacturing_in_2019.pdf

3 Manufacturing, value added (% of GDP), World Bank. https://data.worldbank.org/indicator/NV.IND.MANF.ZS

First Objective

The Government must roll out a $1 trillion plan to build manufacturing to double current production by 2035, comparable with other developed nations.

- **This will employ another 1 million people directly.** As 872,000 are employed in manufacturing, more than doubling manufacturing should add another one million jobs to the economy.

- **Another 750,000 would likely be employed indirectly as manufacturing has a high multiplier into the economy.** The Industry Capability Network (2016) estimates that $1 million in manufacturing output supports between $713,400 and $1.2 million in related economic activity (See Appendix 1).[4] In the US automotive industry, final jobs multiplier for original equipment manufacturing in the automotive industry is 10-to-1.[5]

- **85.5% of Australians in manufacturing jobs are full-time, compared with 65% of the total workforce,[6] and tend to be well paid.**

- **Aim to have $1 trillion invested into manufacturing and related infrastructure by government, a development bank, commercial banks and equity finance over 15-20 years**. (If Daniel Andrews can announce $50bn to $100bn project to put a ring rail around Melbourne by 2050, is $1 trillion to build manufacturing industry and infrastructure by 2035 beyond the federal government?)

- **This investment will pay for itself in profits and taxes.**

If Australia builds manufacturing to about double current production, manufacturing will employ another 1 million, and we can expect about another 700,000 jobs in support industries, in today's terms.

Manufacturing, like agriculture, has a high multiplier effect because:

> Most manufacturers rely disproportionately on inputs of all kinds (primary, secondary, and tertiary) purchased from outside companies. Those intermediate purchases

4 *Economic Impacts of New and Retained Business in the Australian Manufacturing Industry*, Industry Capability Network Limited, 2012. https://icn.org.au/sites/default/files/AEC_Report_2012%20summary%20flyer.pdf

5 Kim Hill, Debra Menk, and Adam Cooper, *Contribution of the Automotive Industry to the Economies of all Fifty States and the United States*, Ann Arbor: Center for Automotive Research, 2010, cited in Manufacturing (Still) Matters: Why the Decline of Australian Manufacturing is NOT Inevitable, and What Government Can Do About It, By Jim Stanford, Centre for Future Work at the Australia Institute, June 2016; pg. 6. https://www.tai.org.au/sites/default/files/Manufacturing%20Briefing%20Paper%20FINAL.pdf

6 *Australian Manufacturing in 2019 Local and Global Opportunities,* AIG, May 2019, pg. 15. https://cdn.aigroup.com.au/Economic_Indicators/Economic_Outlook/Australian_Manufacturing_in_2019.pdf

totalled almost $250 billion in 2012-13, according to the input-output tables published by the Australian Bureau of Statistics. As business models have become more sophisticated and specialized, supply chains have become more complex and interconnected.

But they [domestic supply chains] still rely on the domestic presence of a key manufacturing customer, which acts as an economic "anchor" stabilizing the whole supply chain. These supply chain relationships explain why, when a major manufacturing facility opens (or, unfortunately, closes), the impact on regional and national labor markets is magnified. Jobs in supply industries (some of which may be several steps removed from that final manufacturing customer) are also ultimately affected. These "multiplier effects" are stronger in manufacturing than in other sectors, because of the more developed and elongated supply chain. In specialized, high-technology manufacturing operations like automotive assembly or ICT, final jobs multipliers can be as high as ten-to-one.[7]

Second Objective

Once the government gives the go-ahead for manufacturing to double current production, it needs to bring defence and industry groups together to determine which industries are strategic priorities, industries that also reduce Australia's reliance on unreliable and strategically vulnerable global supply chains.

Industries need to audit their supply chains, and if found to be vulnerable there should be an assessment to establish if Australia can produce substitute products.

The states need to be involved to avoid downward competition for industries.

Potential industries include:

- important **defence products**, under licence if necessary, as already done with ships and submarines;
- essential **pharmaceutical and other medical supplies**;
- domestically owned firms in the **transportation and agricultural equipment sectors** – automotive (even the Holden brand could be recoverable if actioned quickly), heavy

7 Manufacturing (Still) Matters: Why the Decline of Australian Manufacturing is NOT Inevitable, and What Government Can Do About It, By Jim Stanford, Centre for Future Work at the Australia Institute, June 2016; pg. 6. https://www.tai.org.au/sites/default/files/Manufacturing%20Briefing%20Paper%20FINAL.pdf

- vehicles, rail and rolling stock, agricultural machinery, heavy tractors, etc., are well within national capabilities;

- **machine tools** industry for supplying tools to strategic industries and some areas of manufacturing;

- **metals processing** industries are needed to supply other strategic, machine tool and other industries;

- **an advanced chemical industry** is important to supply pharmaceuticals, defence and manufacturing industries;

- essential **consumer goods manufacturing;**

- **telecommunications and transport**;

- **agriculture and food processing industries;**

- **energy.**

Third Objective

New government policies will be needed to ensure new strategic manufacturing industries stay in Australia, including:

1. An enhanced Department for Industries is needed, with a section for strategic industries, similar to the US Office of Strategic Industries and Economic Security (SIES) that supports the US defence industrial base through its involvement in the interagency and international programs and activities.[8]

2. Declare key industries as strategic industries, which would give them security exemptions under the World Trade Organisation rules and thereby allow favourable treatment of such companies and the prevention of foreign takeovers.

3. Strategic industries need to be Australian owned, or majority owned, and given incentives to stay onshore, while welcoming partnerships that encourages technology transfers. To this end:

8 US Office of Strategic Industries. https://www.bis.doc.gov/index.php/other-areas/strategic-industries-and-economic-security-sies

- The Foreign Investment Review Board (FIRB) would have to be tasked with preventing such takeovers by foreign companies.

- Government equity, temporary and sometimes permanent, may be needed in some companies for them to be viable.

- Trade policy would require appropriate limitations/restrictions on imports where foreign competitors threaten a strategic industry, particularly where the competing imports are subsidised. Selective tariffs would provide more better class jobs and a more robust economy more firmly in local control. Although the cost structure will be higher from some sectors shielded from import competition, tax collections will be better with less foreign ownership and thereby less access to corporate tax havens, transfer pricing and other forms of corporate tax avoidance. Inevitably the government will need to be deeply involved in managing this properly, creating a body like the former Tariff Board.

4. A major emphasis should be on providing incentives to build new industries in regional areas as part of federal and state commitments to decentralisation, which provides other benefits like decongesting cities and making more affordable housing available.

5. Governments should encourage/incentivise strategic industries to have domestic suppliers wherever possible, further minimising reliance on global supply chains.

6. A development bank, modeled on banks like the former Commonwealth Development Bank and Germany's KfW, is needed to target long-term capital for strategic industries and infrastructure. This would reduce reliance on financing by federal and state deficit budgeting.

7. Incentives and/or mandates should be applied to Australian superannuation funds to encourage investment in domestic industries, particularly strategic industries.

8. Incentives should be provided for strategic industry research and development.

9. Incentives are needed for liquid fuel exploration, extraction and refining to ensure energy security.

10. Many strategic industries, and their upstream suppliers, will require reliable liquid fuel and electricity supplies – affordability is the biggest consideration in future energy policy in Australia, over and above most other considerations

11. An inventory of skills required by strategic industries would give direction to the education and training needed for these industries, and would require the expansion of TAFE institutions.

12. All levels of government should have procurement policies that support strategic industries. Had governments had a “buy Australian made cars” policy, the nation would still have a domestic motor vehicle industry.

13. To secure international trade routes, there needs to be a domestic shipping line and airline, or a majority government stake in these critical transport industries.

14. Rather than company tax cuts, only tax company dividends collected at source, or allow full up-front tax deductibility for equity investment to discourage too much borrowing. Tax reform should include ensuring multinationals operating in Australia pay their fair share of tax.

15. Mechanisms are needed to ensure that volatile currency fluctuations don’t disrupt new manufacturing industries.

Appendix 1

Manufacturing has a high multiplier into the economy, meaning it creates industrial support activity and more jobs. The Industry Capability Network (2016)[9] estimates that $1.0 million in manufacturing output supports (using a Type I multiplier) creates a further:

- $713,400 worth of gross value added in terms of industrial support activity (i.e., type I effects),
- six full time equivalent (FTE) job,
- $64,900 in avoided welfare expenditure,
- $225,300 in tax revenue.[10]

And using a Type II multiplier, $1.0 million in manufacturing provides a further:

- $1.2 million in value added,
- 10 FTEs (an additional four FTEs compared to Type I analysis),
- saves approximately $101,800 in welfare payments,
- $365,000 in tax revenue.[11]

Type I multipliers show induced activity resulting from industry production to supply inputs into either new or retained manufacturing business, assuming an exogenous household sector. Type I multipliers assume the income generated from induced industry activities does not affect household consumption decisions. [12]

Type II multipliers show induced activity resulting from industry production to supply inputs into either new or retained manufacturing business, and as households respond to income (generally by increasing demand for goods and services) from induced industry activity. Consequently, Type II multipliers give higher estimates of impacts than those of Type I as they include the Type I effects plus household expenditure effects.[13]

NOTE: Andrew Liveris shows in his book, *Making it in America*, that the US manufacturing industry multiplier is virtually the same as Australian Type I multiplier. He calculates that for every $1 spend on final manufactured goods, another $1.70 is spent in other sectors of the economy (primary production, and services), whereas for every $1 spend on services jobs, only $0.71 is spend on support industries.[14]

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9 *Economic Impacts of New and Retained Business in the Australian Manufacturing Industry*, Industry Capability Network Limited, 2012. https://icn.org.au/sites/default/files/AEC_Report_2012%20summary%20flyer.pdf

10 Ibid., pg. 14.

11 Ibid., pg. 16.

12 Ibid., pg. 14.

13 Ibid., pg. 14.

14 *Making it in America: the case for reinventing the economy,* Andrew Liveris, President and Chair of Dow Chemicals, John Wiley and Sons Inc., 2011.

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