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Australia's future in the
global economy

Outcomes Report

Trade 2020 Strategic Dialogues

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These reports provide an overview of the broad range of issues discussed during the Trade 2020 dialogue sessions. The views expressed were those of individual participants, and do not necessarily represent the views of Austrade or CEDA.

Education and Creative Capital

Discussion in the strategic dialogue on creative capital and education, held in Adelaide on 22 September 2009, centred on how to enhance Australia's skills base, trade, investment and prosperity through education and research and development (R&D). Participants also noted the need for migration policies and education programs to be attuned to the jobs of the future. They also commented on the importance of taking a longer-term view with regard to international education – to emphasise the quality of Australia's export offering and move to more sophisticated and varied modes of delivery, both onshore and offshore.¹

One participant noted that international education services contribute around \$12 billion a year to the Australian economy, with over 500,000 foreign students enrolled in Australian courses. While education as an export industry faces some challenges, the growth opportunities (e.g., in China and India) are significant with flow through to broader economic benefits. International education also has broader social, cultural and diplomatic benefits which are more difficult to quantify.

Given its ageing population, Australia will continue to rely on migration to expand and enhance the skill base of the national workforce. The view was expressed that it is difficult to de-link immigration opportunities from international education programs. There was strong support for a more targeted and longer-term approach to education, linking the jobs of the future to education courses. In international education, the strong policy-led growth in vocational education, in hairdressing for example, has in some areas outstripped available job opportunities with the result that some foreign students have been unable to finalise courses with a vocational component.

Immigrants make a significant contribution to the economy and Australia's skill base: almost half of all Australians were either born overseas or have at least one overseas-born parent. International education creates linkages through alumni back to the home nation and has the potential to increase two-way trade.

Australia's natural advantage in migration has tended to result from non-economic factors, such as climate, lifestyle and security. Participants felt that the marketing of international education needs to emphasise a sophisticated education model, focusing on educational quality rather than the attractiveness of living in Australia.

The ability of Australia's tertiary institutions to attract the 'best and the brightest' foreign students depends in large part on academic reputation – including an institution's ranking in R&D. While Australia is equal first (along with the UK) in terms of the percentage of our universities in the world's top 200, no

¹ The Government has transferred responsibility for the international promotion of Australian education from the Department of Education, Employment and Workplace Relations to Austrade from 1 July 2010.

Australian university is in the top 50 research-based universities (Shanghai Jiao Tong University Rankings), in contrast to smaller countries such as Sweden and Denmark.

There was a suggestion that Australian universities should focus on attracting highly qualified people working in a particular area (e.g. solar technology) in order to build a critical mass of innovation. However, Australian universities can find it difficult to compete for students and for staff when competitor countries, such as the US, Canada, UK, France, Germany and Scandinavia offer what are perceived to be more attractive scholarships and levels of financial support.

There was a view that Australian institutions need to expand their collaboration at both the domestic and global levels with new partners, attracting investment, stimulating collaborative R&D, and enhancing links with industry. There would be great value in exploring ways to make university research more readily available to industry.

Proposals to achieve deeper, reciprocal engagement with overseas institutions included greater curricula alignment, a greater number of student exchanges and increased collaboration on R&D. Institutions in a number of Asian countries had limited R&D capacity 20 years ago, but today are at the forefront of many developments in such areas as IT and biotechnology and present Australian institutions with good opportunities for collaboration. The guidelines for the establishment of Cooperative Research Centres could be broadened to allow more foreign partners to be brought into R&D collaborations.

Participants recognised the need to find creative ways to attract greater private sector funding into the education sector. For example, the Victorian Government attracted a foreign IT company to set up operations in regional Victoria under an arrangement through which the company created a foundation to fund research, internships and scholarships.

Participants also suggested the one million Australians, including academics, living and working abroad represent a pool of creative capital with which we could better engage in building Australia's future, particularly given the senior and strategic positions many of them occupy.

One suggestion for showcasing Australian expertise and attracting interest in Australia from around the world was that the Commonwealth, States and Territories should develop a strategic and collaborative business model for attracting major conferences and events to Australia in areas where Australia has particular strengths.

Global Supply Chains

The second strategic dialogue, on global supply chains, was held in Brisbane on 6 October 2009, with broad industry representation, particularly from the resources sector.

Global supply chains are based on collaborative alliances and networks. The discussion centred around the increasing importance of global supply chains within multinational corporations and across industries. Participants pointed to the need for firms to be technologically savvy, adaptable and agile in a global, service-oriented economy. Outward investment, joint ventures and strategic partnerships are important market entry strategies and can lead to regional or global supply chains. Inward foreign investment can also provide linkages into regional and global supply chains.

Other countries (including those within our region) are increasingly looking for solutions to issues in areas where Australia has international expertise. This includes fields such as power generation, mining services and technology, engineering services, infrastructure, logistics and energy efficient building services.

Multinationals dominate global supply chains and they are looking to link up with companies that can provide the full gamut of services in countries with different cultures and often at remote locations. Participants noted the many opportunities that exist in China and India – but also how Australian companies are breaking new ground in markets in Latin America, the Middle East and Africa.

Australian expertise is well regarded internationally, and a hands-on approach to training and skills development has benefits in building enduring relationships and capability in the host country. Australia is particularly well positioned to be not just a supplier – but a ‘partner’ in a country’s development. While Australia is sometimes perceived as a high-cost supplier in some areas, what works in Australia’s favour is that customers are frequently more focused on finding the right solution, rather than on cost alone. Many Australian companies are innovation leaders in supply chains and tailor Australian technology and solutions to local conditions as they supply international companies seeking consistent global services. Companies could think about building supply chains and then servicing them, although this can be challenging unless it is a sector dominated by Australian firms.

Participants agreed that companies, including services firms, need to factor supply chain opportunities into their business planning processes, but that some businesses lack an understanding of global supply chain opportunities and the means of accessing them. Australia’s embedded services expertise will become more valuable in the future and Australia could focus more on ensuring that the intrinsic value of Australian expertise was recognised and captured. At the same time, those with expertise are often not aware of its value.

The integration of global supply chains means that intangible assets, such as intellectual property (IP), knowledge and relationships are increasingly valuable. Protecting IP has become much more important.

For smaller Australian companies, and those seeking to break into global supply chains, the main issues of concern are how to identify project opportunities; how to demonstrate their value-added credentials internationally and how to form effective international collaborative relationships. A comment was made about the difficulty in practice of creating industry clusters as networks must be maintained. However, it was noted that there are a range of business and government support programs to help companies connect to domestic and global opportunities, including the Industry Capability Network, the Enterprise Connect Program and the Austrade network.

While FDI in Australia can be an important mechanism for linking Australian companies to global supply chains, MNCs setting up in Australia can, however, have a limited knowledge of local supplier capabilities. Conversely, local companies find it difficult to demonstrate their value-added credentials.

In considering how to better position Australian companies in global supply chains, we also need to ensure that our domestic infrastructure is productive and competitive. A number of concerns were expressed in Brisbane about infrastructure bottlenecks (eg at ports), government regulation and lengthy approval processes. However, there was also recognition that the Government understands these challenges, through its commitments on infrastructure, including the establishment of Infrastructure Australia and the Building Australia Fund.

Climate Change

The strategic dialogue on climate change, held in Perth on 19 October 2009, found that while industry has a positive outlook about opportunities emerging in renewable energy and associated research and technology, significant challenges remain in harnessing these renewable energy sources and bringing the technologies to market.

The issue of “picking winners” was debated, with a general view that, given the size of Australia’s market, Australia should concentrate on our strengths and not attempt to “be good at everything” in the renewable energy sector.

A number of participants felt that Australia should concentrate its efforts on areas where we have comparative advantages and could become a world leader – wind power, solar photovoltaic technologies, services such as carbon and energy audits, urban design, agricultural efficiencies and technologies, smart energy grids and carbon sequestration technologies.

The natural markets were perceived to be in Asia, particularly urbanising, energy-hungry countries such as China and India. Some niche technologies are capable of capturing export markets in Europe and the United States.

The small scale of Australia’s renewable sector was a concern. Some questioned whether Australia could assume a leadership role in the clean energy sector when our industry size and depth was no match for more heavily funded competitors in the United States and Europe. Opportunities for renewables were seen in Asia, including through developing connections through aid programs.

West Australia is a major player in energy and the local audience had a strong focus on LNG. The export of lower emissions LNG and coal seam methane gas to markets which are looking for cleaner sources of energy will help underpin Australia’s prosperity. However, Australia is not just exporting gas but also the expertise in LNG conversions and hybrid technologies.

Coal accounts for about 80 per cent of Australian electricity generation, but consumption will slow as LNG helps meet the increasing demand for energy in Australia and the region.

Australia could become a global leader in carbon capture and storage, a technology with the potential to support the continued, sustainable operation of mining and industrial activity. Geological storage techniques present export opportunities and are a natural fit to existing competitive advantages in coal, oil and gas.

By pricing carbon into energy costs, the proposed Carbon Pollution Reduction Scheme (CPRS) will cause a shift to low-emissions technologies and processes over time. While prices for renewable energy will be high initially, prices will fall while the cost of non-renewable fuels will inevitably rise. The transition may occur within a generation.

Participants readily agreed that Australia has abundant natural resources to develop solar, wind, wave and geothermal energy. However, there are obstacles to the uptake of renewables. Many technologies do not meet investment hurdles yet or have commercial application.

Co-generation (e.g. solar thermal in a coal-power station; wind powered by a gas turbine) and hybrid technologies will contribute to emissions reduction. Blending new and existing technologies is an area where Australia has particular expertise.

There were uncertainties about the impact that policies to mitigate climate change will have on industry, particularly energy-intensive industries.

A panellist questioned whether the CPRS will provide strong enough incentives to reduce carbon emissions without further demand-side measures. Governments may need to provide greater incentives for industry and consumers, R&D support and infrastructure.

Several participants argued that Australia also needs to provide greater incentives for industry to develop and use alternative energy sources; at present the drivers of carbon reduction are incentives (and disincentives) and the savings from improving energy efficiency. Household energy and carbon audits could encourage consumers to become more energy efficient. Western Australia has audited 360,000 houses under the 'Living Smart' program.

The need to focus on smart grid and energy storage solutions was recognised in order to bring renewable energy to the market. In Western Australia, some 65 per cent of electricity usage is off-grid, mostly diesel generated. Many of the captive generation units could be replaced with renewables.

Water availability and price is becoming a factor in the selection of energy technologies and how extracted water is treated. Water markets, which are now developing, will add new dimensions to Australian energy markets. The reticulation of water is energy-intensive and the needs of remote communities may be better served by alternative measures of supply.

Public acceptance of new technologies will be a factor limiting their application, and the imperative for capturing public opinion on key climate change issues was emphasised throughout the dialogue. Australia could become a test bed and a first market for new renewable energy technologies. This would attract investment into Australian environmental technologies both domestically and from overseas.

Participants asked whether there is a need to begin a dialogue with the public about nuclear energy. It was noted that nuclear energy had not been prominent in the climate change debate in Australia.

The water, carbon and energy footprint of products is becoming increasingly important to consumers who check the environmental provenance of goods they consume. This has implications for trade. Walmart, for example, requires its suppliers to track carbon emissions and water use.

A number of specific areas of opportunity were mentioned in the dialogue. They included:

- Farm efficiencies and land management – Australia is a world leader. Despite a halving of rainfall in key Western Australia producing areas, yields had doubled.
- Australia has world-class knowledge in water conservation. Australian skills in applying desalination technologies were exportable, notably membrane and osmosis technologies.
- Soil sequestration was noted as a key area for the sequestration of carbon. Companies are able to invest in landscaping works to capture carbon credits and some offshore investment has been attracted.
- Carbon and energy auditing. A genuine new profession has emerged, with export potential to Asia.
- Energy management and urban design are very exportable services, notably to urbanising Asian countries.
- Secondary technologies for the automotive sector such as conversion, as well as transitions from petroleum-based fuels to LPG.

Renewable remote power generation is another area where Australia has capability to develop technologies to generate electricity in a carbon-neutral manner for major mining developments and for small remote communities.

Financing Trade

The strategic dialogue on trade finance, held in Sydney on 26 October 2009, took stock of the adequacy and contribution of trade finance to Australia's emerging business and economic recovery from the global financial crisis and also looked beyond this to likely developments towards 2020.

There was a recognition among participants that while Australia's global economic status has been enhanced by our strong economic performance compared to others, there are some weaknesses in the domestic economy and continued difficulties in accessing credit.

Concern was expressed that foreign banks are reducing their exposure in Australia as they reconsolidate balance sheets. This is affecting the availability of working capital and export financing.

Some business representatives expressed concern at what they perceive to be a very conservative and risk averse stance by the major Australian banks to rating/supporting Australian business in the recovery from the global financial crisis.

A strong finance industry will be essential to supporting the expected increase in credit and private investment as the recovery in Australia becomes more sustained.

Australian banks are currently not strongly engaged in trade finance. While Australian and foreign banks and other lending institutions are interested in working with exporters, business representatives pointed to significant difficulties in accessing trade finance. Banks concentrate on bricks and mortar security rather than the value of trade businesses are undertaking; and on domestic not international lines of business.

Bank representatives at the dialogue acknowledged the concerns but pointed to a number of challenges for them including: the need to maximise shareholder value in choosing which lines of business to pursue; regulatory disincentives to trade finance lending (through the Basel II guidelines); and the difficulties in obtaining adequate information from business clients about their offshore ventures and partners to enable proper risk assessments.

In the regulatory area, representatives from the banks explained that the revised capital risk weightings under Basel II discourage banks from trade finance lending through the application of a one year maturity floor for all lending facilities including trade finance, when in reality trade finance has a much shorter maturity (generally no longer than 180 days). The capital costs of trade finance under Basel II are therefore artificially inflated. National regulators do have scope to adopt a more flexible approach to trade finance, as has been done in the UK, and Australian industry through the ICC is seeking a similar flexible approach from the Australian Prudential Regulation Authority. Dialogue participants believe that support from government for industry's approach could be beneficial.

The discussion identified the need for better education of business, particularly SMEs, to enhance their governance, understanding of the role of trade finance in international business and their

capacity to respond to the prudential requirements of lender institutions. Research by the Australian Institute of Export, which suggests that only one in ten exporting SMEs has a foreign exchange policy, provides some idea of the challenge. There is a range of existing exporter education programs at different levels of government, academia and the private sector, which would benefit from enhancement and better co-ordination.

Lending and business representatives were keen to co-operate in working through some of these issues. There was general agreement, for example, that the focus of attention should be on the medium-sized businesses, which comprise a significant proportion of the Australian economy and have critical capital needs, but are generally not well versed in how to access trade finance.

There was also some discussion around the value of a strengthened program of research in trade-related areas, including the trade finance needs of SMEs. Exports account for 22 per cent of GDP, but there was a perception that there was a need to improve understanding of why only 4–5 per cent of companies export.

Participants discussed the long-term outlook for the credit insurance market, noting the effect of the consolidation of insurance providers upon the cost and availability of trade insurance.

The Australian Institute of Export noted that lack of access to, and higher prices for, export credit insurance continued to be the top concern of Australian exporters. The representatives of credit insurers indicated that they expected the level of capacity to stabilise, following sharp declines in response to growing losses in 2008 and 2009. They added, however, that some credit insurance arrangements which were in place prior to the crisis, such as those for wool, were uncommercial and that permanent decreases in tenors and increases in prices were likely.

The high degree of market concentration in credit insurance was noted, with the top three firms accounting globally for around 90 per cent of business.

Participants noted the links between the shortage of credit insurance and exporters' ability to obtain working capital from banks who relied on cover when setting limits. Credit insurers remarked that APRA's refusal to accept credit insurance as a mitigant when applying Basle II capital standards had to some extent exacerbated this problem. There may be a case to review this approach as part of a general review of the application of capital standards, some participants argued.

The need for improved quality and availability of financial information which had hampered their ability to provide cover in some instances, was also raised by the representatives of the credit insurers. It was noted that steps to improve information could contribute over time to alleviating the high costs involved in entering the market, further assisting market capacity over the long run. Insurers cited the UK's Companies House as a good example of how to improve access to company information. Insurers also noted that strong links between credit insurers and the financial sector in Europe had assisted in helping insurers gain access to relevant information in the pricing and provision of cover.

Participants noted that as Australian companies internationalise, it will be important that Australian banks follow company supply chains abroad through the establishment of their own financial presence in overseas markets and through the establishment of partnerships with foreign banks. Both developments are occurring and bank representatives believe there will be an increase in such offshore bank activity in the future. This was viewed as a helpful development in better linking trade finance to business supply chains and worthy of support.

Participants also noted the Government's recent decision to enhance EFIC's Act in order to provide more financial support to SMEs in this area.

The role of venture capital in supporting Australian innovation and small business was also discussed. The general perception was that the venture capital market is still fairly shallow. There is a need to attract more international investment into Australian innovation, recognising the challenge for a small market which lacks the critical mass to match the technological innovation of countries like the US.

Innovative Australia

The fifth strategic dialogue, on Innovative Australia, was held in Hobart on 6 November 2009, attended by representatives of industry, state and federal governments and the University of Tasmania.

There was a broadly held view among participants that while Australia was reasonably good at innovation, Australian companies were less proficient at getting the product of that innovation to market.

CSIRO was commended for unlocking a great deal of IP expertise and universities with achieving some success, although there was still the need to educate Australian tertiary institutions to nurture and develop their IP. The observation was made that IP was seldom discussed at universities years ago, but now it is a major focus, and that there was a need to extend that same level of awareness to business – especially small businesses.

Panellists agreed that government policy played an important role in fostering innovation, with government-funded R&D in Australia being above the OECD average.

R&D grants and programs such as Enterprise Connect were seen as essential elements to stimulate innovation and commercialisation. The continuity of these programs was regarded as critical.

Participants discussed the benefits of unlocking the potential of in-house research capability in business, tertiary institutions and government agencies, and documenting innovative processes to enable 'innovation disclosures and sharing'. With publicly funded research, as well as achieving outcomes for the researcher, the view was expressed that an explicit aim should be to promote public benefit for Australia.

New technologies developed through Australian innovation and through FDI will help drive Australia's growth and prosperity in a rapidly changing global environment, with new sectors and markets emerging and the growing importance of global supply chains.

Interest in the national broadband network (NBN) was high in Tasmania and participants viewed the NBN as a technological platform for greater innovation. The connection of users through one fibre network as opposed to a number of differing technologies and standards will provide businesses with greater certainty about the capability of their customers' systems. Businesses will be better able to develop systems to service them, bringing opportunities for highly innovative systems to utilise NBN's network capability. The NBN is likely to attract significant foreign investment and encourage innovative services that capitalise on this technology and meet the needs of customers.

It will be technology users rather than the technology producers who will contribute the most to productivity by converting ideas, knowledge and technology into competitive goods and services. Participants saw the need to help business users understand better the capabilities and potentialities of the NBN. Broad concern was expressed with the lack of awareness of the potential of the NBN and

recommendations were made for a public awareness program to ensure that SMEs were able to recognise the full capabilities of the NBN and the scope it offered for new business innovation.

Several participants expressed concerns that Australian businesses can be risk averse and that innovation can be stifled by government regulations and processes. Many considered that regulation can be a particular impediment for small, less well resourced companies.

There is a growing awareness of the importance of IP protection in safeguarding Australian innovations and making Australia an attractive destination for foreign investment. However, IP protection can be expensive, particularly for small businesses, who lack the resources to pursue or defend cases in court. Around 97 per cent of all Australian patent applications are now filed in at least one other country. There was agreement that companies needed to be better informed on IP protection measures in other countries, especially those with less rigorous patent enforcement and regulation, in order to have greater awareness of the limitations of IP protection systems. Managing IP in commercial collaborations can also be challenging which is why licensing has become a preferred pathway of innovation to market.

Many participants felt that the integrity of IP management made Australia more attractive as a destination for foreign investors who were either considering investment in Australian technology or bringing technology to Australia. Most panellists considered Australian companies, tertiary institutions, researchers and inventors could be more proficient in marketing their innovations internationally. Apart from improved awareness of IP protection, areas where firms may need greater skills and capability included:

- enhanced understanding of commercialisation: its pathways, pitfalls and opportunities
- education on channels for innovation, including the relative merits of licensing, joint ventures and partnering, open source methods (eg in IT by providing software free and generating revenue from ancillary services) and Creative Commons licenses (free licenses)
- improved capability in market research to ensure the best possible selection of partner(s) and target market(s)
- improved understanding of the likely commercial returns from innovation and options to access funds.

Innovation can come from both customer demand for innovative products, technologies and solutions or be proactive, arising from a company's R&D. It was agreed that awareness of client and customer needs was essential to bringing products to the market.

It was observed that innovation in the way we do business should be as much a focus for business as innovation in the more traditional sense of the way products or processes are developed

Collaborations were cited by a number of participants as a valuable way to bring innovation to market. Tasmanian companies were considered successful in building supportive networks and clusters.

The state's relative isolation and the need to leverage the increased scale provided by networks was seen as important factors.