



SUBMISSION TO DEPARTMENT OF INDUSTRY TOURISM AND RESOURCES ON INDUSTRY POLICY STATEMENT AUGUST 2006

1. INTRODUCTION

In response to the invitation from The Hon. Ian Macfarlane, Minister for Industry, Tourism and Resources, the Australian Business Foundation makes this submission to assist the formulation by the Australian Government of an Industry Policy Statement in 2007.

The Australian Business Foundation is an independent, apolitical and non-partisan research think tank founded in 1997 by the eminent industry organisation, Australian Business Limited / State Chamber to produce fresh insights and practical intelligence to enhance Australia's capabilities and global competitiveness.

The body of research and scholarship generated over nine years has probed beyond the obvious to advance knowledge about what makes Australia competitive and what will support Australia's enduring economic prosperity, levels of employment and enhanced living standards.

The Australian Business Foundation's research focuses on business innovation, new models of competitiveness and opportunities arising from a knowledge-based economy.

More information about the Australian Business Foundation and access to electronic copies of Foundation publications can be found at <http://www.abfoundation.com.au>.

In making this submission, the Australian Business Foundation draws on the distilled intelligence from its own body of research and other related international scholarship to offer insights about a robust and potent policy framework for long term economic prosperity and industry capability-building in Australia.

This submission addresses:

- Industry Policy Rationale
- Guiding Principles for Industry Policy
- Program Priorities

These themes are detailed in the following sections of this submission.

2. INDUSTRY POLICY RATIONALE

In this context, the first question to ask is why Australia needs an industry policy. After all, Australia is enjoying enviable levels of economic and jobs growth, has weathered international shocks better than most other economies and has sustained strong productivity performance over the last decade.

The answer lies in understanding what underpins Australia's current economic performance and the challenges likely to be faced in sustaining that level of economic growth and productivity improvement, especially in the face of:

- demographic pressures on living standards and social programs over the next generation;
- significant shifts in the competitive global business environment facing Australia; and

- the impact on Australia's position in the global economy of the rise of emerging national economies, particularly China and India.

Microreform and competition policy advances over the last two decades have had lasting effects on the dynamism, flexibility and adaptability of the Australia economy. Similarly, the strong uptake of information and communications technologies have played an important role in Australia's productivity gains.

The Productivity Commission in a 2002¹ paper cites strong links between microreform and Australia's productivity acceleration in the 1990's on two sides – generating external competitive pressure and fostering the internal flexibility of firms to respond.

But this same Productivity Commission paper makes the point that these productivity gains don't come just from the adoption of new technology, but by facilitating business transformation, ie. changing what businesses do and how they do it.

The question becomes how are these productivity gains to be sustained in the long run, especially in an increasingly complex, globalised and competitive world. To date, productivity initiatives have promoted the efficiency and flexibility of the Australian economy. In the future, productivity gains will depend on the capabilities of firms and their level of business transformation. In other words, we need to understand the dynamics of innovation performance among firms resident in Australia. This is at the heart of crafting sound industry policy for Australia.

INNOVATION AND COMPETITION

The Foundation's body of research work highlights a recurring theme that innovation underpins the competitive performance of firms and industries, and therefore the growth of labour productivity and national income. This view is by no means unique to the Foundation. It is also confirmed by the work of UN economists and those in the OECD.²

The critical question, however, is gaining a greater understanding of the way in which innovation underpins sustained economic success and prosperity.

The view that business innovation is the driver of economic growth and development has its origins in the analytic work of Joseph Schumpeter, who drew a useful distinction between:

- growth (steady quantitative expansion); and
- economic development (qualitative changes to production that disrupt business routines).³

Since Schumpeter wrote, his general propositions have been confirmed by numerous empirical studies throughout the world. From the consequent body of knowledge, prominent commentators on innovation concur that:

- the competitive advantage of firms (and the nations in which they produce) hinges ever more on the accumulation and application of knowledge, and ever less on the exploitation of given factor endowments;
- investment expenditure is increasingly being directed towards intangible assets;
- freer cross-border flows of trade, finance, foreign direct investment and research and development are heightening the interdependency of firms;
- successful innovation commonly requires local concentrations ('clusters') of interconnected companies and institutions in specific fields;
- innovation fosters new services, which provide employment for significant numbers of workers;

- higher real wages and profits prevail in those countries that harbour innovative activities;
- governments play an integral role in providing the physical and intellectual infrastructure that makes sustained innovation possible; and
- innovation success and failure are cumulative, and governments cannot rely on market mechanisms to correct persistent trade deficits or to direct FDI to places where capital is scarce.⁴

Clearly, a crucial aspect of the link between innovation and economic performance is the competitiveness of private enterprises. The conventional view is that firms are competitive to the extent that their market structure approximates the model of perfect competition, with many competing enterprises freely entering and exiting the market, selling highly similar products and competing on price.

Under these conditions, competitive advantage is attained either by selling a given rate of output at the lowest possible cost, or by maximising output with given costs.⁵

However, this conventional view of competition is inapplicable to an economic system driven by innovation. This is because innovation is an evolutionary process where enterprises compete on the smart application of knowledge, differentiated products and other non-price factors in highly uncertain conditions.

The hallmarks of the process of innovation are uncertainty and ambiguity, because the process hinges on:

- the creation and deployment of knowledge that is tacit (i.e., uncodifiable and untradeable);
- the possibility of unknowable outcomes (without which there could be no novelty); and
- non-price forms of competition (e.g., real or artificial product differentiation, privileged relationships with customers and suppliers, entrepreneurial flair, etc.).

With this viewpoint, the implication for policy is that there are measures specific to government that are necessary for the generation and absorption of business knowledge by private firms. Further, it is the international competitiveness (or relative innovativeness) of companies resident in Australia that ultimately determines national economic advantage.

In short, market forces alone have limitations in their ability to shape and sustain competitive industry capabilities in modern knowledge-based economies.

ECONOMIC AND INDUSTRY STRUCTURE

Further, an additional consideration for Australia's industry policy development are the particular features of our economic and industry structure that have the potential to affect Australia's future growth and industry building options. These features include the following:

The importance of small and medium sized enterprises

According to ABS (2001)⁶, 1.1 million non agricultural small businesses account for more than 96% of all businesses in Australia, but their size and resource constraints place limits on Australia's local capability.

For example:

- SME's are limited in absorbing and using knowledge, simply by their size and resource constraints and by their risk management capacity. While Australia has

strong knowledge infrastructure through grants and tax concessions for research development and support to universities, publicly-funded research institutes and Cooperative Research Centres, it has relatively weak knowledge diffusion mechanisms. SME's as a rule do not have the capacity to take up knowledge generated from universities and the like and apply it to create products and services that attract and sustain sales worldwide. The result is often that Australian-created intellectual property is acquired by off-shore interests and capabilities and wealth are consequently lost to Australia.

- SME's (less than 200 employees) account for around 40% of business investment in research and development, which is a very high proportion for small firms when compared to OECD nations. SME's are already investing in research and development and their ability to take on more of the load is questionable.
- The preponderance of small business in Australia is concentrated in the construction, retail and property & business services sectors. These are all industries that do not have significant exports. Austrade (2002)⁷ research shows that close to 30,000 Australian businesses export, which accounts for just 4% of the firms in Australia. Furthermore, many of these are one-time exporters. Clearly, a rather modest number of high-achieving exporters are doing a lot of "heavy lifting" for the rest of the Australian national economy. Growth in trade to GDP remains unremarkable in comparison to many other countries and is below the OECD average, according to the OECD Factbook 2006⁸.

Industry is highly dependent on multinational enterprises

According to Thorburn et al (2003)⁹, Australia is one of the most dependent of OECD countries on the operations of firms headquartered overseas. Australia has about 2,500 foreign affiliates, which in 2000 accounted for 17.9% of industry revenue with the 500 largest multinational enterprises accounting for 90% of that share (or 16% of the total)¹⁰. Australia's largest businesses (>1000 people), many of which are multinationals, account for 34% of total business expenditure on research and development. But, the benefits to Australia are limited because this research and development primarily serves the global interests of the parent firm, not Australia's national interests. Further, the bulk of research and development conducted by multinationals in Australia is focused on product modification for the Australian market, not the creation and diffusion of new knowledge. There is little attention to technology transfer or global supplier linkages, which limits the innovation return to Australia¹¹.

Limited ability to hold critical mass in key sectors

There are limitations on Australia's ability to hold critical mass in key industry sectors where it has created innovative products and services and secured entry into global markets. Australia suffers from an industry structure in many sectors populated by one or two large players and a vast bulk of SME's, but with few home-grown world-class major 'platform' companies, like Nokia in Finland, Ericsson in Sweden or Phillips in Holland. These platform firms have the capability of capturing and holding the economic 'value-add' from their innovative technologies and global brands and bringing a stream of both novel products and entirely new businesses to the market. The existence and success of such enterprises ensures the continued viability and contribution of those industry sectors to their national economies. Australia can build successful companies that operate globally but, in many instances, the sector gradually falls to foreign ownership, with the bulk of the value created flowing to overseas equity holders, eg mining, food processing, wine.

Signs of decline in Australia's market share of global exports

2004 WTO data shows that after 15 years in which Australia's share of the global market for goods and services was slowly rising in trend terms, it lost that momentum and has been falling since 1997¹². The growth of China and its appetite for Australian commodities may be masking such underlying vulnerabilities in Australia's current economic growth performance. With fully fledged participation on the world economic stage by rapidly industrialising countries like China and the rebalancing of trade relationships that will result, Australia's share of global economic activity could well decline, taking us deeper into a niche role. This makes it even more imperative for Australian enterprises to boost their level of international trade and to secure a place for themselves in distributed global production and supply chains, including those in the emerging economies of China, India and even Latin America.

The foregoing discussion provides the rationale for an Australian Government Industry Policy Statement. It is the backdrop against which the Australian Business Foundation draws on its research intelligence to suggest the following critical drivers for Australia's future Industry Policy choices and resource allocation decisions.

3. GUIDING PRINCIPLES FOR INDUSTRY POLICY

CONTEXT

The starting point is evidence from contemporary research by the Australian Business Foundation and others that knowledge and innovation play a decisive role in the sustained competitive success of both firms and nations.

The Australian Business Foundation discerns the following defining characteristics of operating in a more knowledge-driven and globally-connected business environment:

- A quantum leap in the *competitiveness challenges* facing Australian businesses – greater global competition and opportunities; new work and business patterns; shifts in the power relationships with consumers and suppliers; and greater regulatory, governance and social responsibility expectations.
- The knowledge economy is real and potent, where the *smart application of knowledge* is a decisive factor both in generating maximum commercial value in individual businesses and in driving long run economic growth.
- Knowledge is not confined to the products of formal research and development, but comes from *learning* by doing, learning by using technology and equipment and learning by interacting with others.
- Innovation is *business transformation*, not science, technology or research, and not restricted just to the invention, sale and export of novel products and technologies. It also includes new production processes, work and organisational practices and business models and relationships.
- Innovation is not a solitary pursuit, but thrives on *strategic collaboration*, both in Australia and across national borders.
- Australian firms are showing proficiencies in competing based on better, more productive ways of *solving customer problems* and acting as intelligent *technology integrators*.
- Fundamental shifts are evident in how firms are *reinventing their businesses* to better serve market and customer needs, and consequently, finding more diverse

ways to command premium prices and to *capture value* from their business activities.

It can be argued that Australia is operating in a knowledge economy every bit as potent as the industrial revolution. This competitive knowledge economy cuts across distinctions between old and new industries, between manufacturing and services and between the traditional and the high tech.

Success in all sectors comes from competing on the basis of innovation, individual and organisational learning and active business relationships. Australia's industry policy should facilitate the creation and successful performance of many more resident Australian enterprises competing on the basis of knowledge and innovation, rather than on price. This is the decisive factor in firms being able to meet global competitiveness challenges and to make a viable living from their businesses.

In effect, in a modern global knowledge economy, industry policy is innovation policy.

GUIDING PRINCIPLES

This leads the Australian Business Foundation to suggest the following guiding principles for Australia's industry policy.

Support and reinforce the revealed competitive advantage of Australian firms

Fundamental new patterns of competitive business activity are emerging in Australian firms. These firms are achieving success by redefining their business offerings and operations and by building new capabilities that allow them to better solve customer problems and respond to opportunities as market needs evolve and change.

The Australian Business Foundation's research identifies this new competitive behaviour being revealed in practice as follows:

- new hybrid business offerings that blend products and services for customer problem solving;
- proficiency as technology integrators (rather than as just either technology producers or users) by generating and acquiring technologies and combining them in imaginative ways to develop value-added products and services that better meet customer needs; and
- competing by superior knowledge management or by sustained incremental innovation, which results in cumulative distinctive capabilities in the enterprise.

These are all illustrations of the often unrecognised reality of business innovation. Innovation is generally viewed too narrowly, being equated with expenditure on research and development or the production of new scientific discoveries or technology breakthroughs. This blinkered view of innovation results in opportunities that are lost or insufficiently exploited.

The current predominance of the 'science, technology and research push' approach to innovation should be replaced by one that supports business engagement with customers and markets, ie. a focus on the 'demand pull' dimension of innovation.

The greatest value from innovation comes not from the production of a new technology or the next generation product, but from imaginative and novel ways of solving customer problems or meeting market needs, and continually being able to do this as conditions and circumstances change. Integral to this are the business systems and management competencies to replicate and scale up such business offerings including for the global market.

Industry policy should give priority to those initiatives which foster the capacity for innovation at the company level in response to market and customer requirements. Further, it should assist enterprises to secure returns and to appropriate value from undertaking innovative business activities. Industry policy can serve to ensure benefits are captured not just by the well-resourced technology first movers, but by agile, smaller enterprises adept at harnessing knowledge, skills and business relationships and turning these into distinctive capabilities and services to meet market needs in a superior way to competitors.

Promote and facilitate industry clustering as a critical ingredient of capability building for Australia

The argument for industry clustering in promoting innovation and competitiveness in firms, regions and nations owes much to Harvard Business School's Professor Michael Porter and his book on "The Competitive Advantage of Nations" and other later contributions.

Michael Porter pioneered the concept that competition and collaboration can co-exist to drive remarkable business productivity and performance because of the concentration of specialised skills and capabilities, institutions and rivals, related businesses and sophisticated customers. This forms an "eco-system" where companies acquire knowledge and turn it into new capabilities and fresh business offerings with high commercial value because of their connections and interplay with other firms and institutions.

Industry clustering of firms and supporting organisations (eg. universities, trade associations, science and technology parks, business service providers, development boards, etc) is seen as a potent tool for growing new business opportunities, revitalising declining regions and fostering large scale competitiveness and innovation.

Industry clustering has potential to foster strong economic development in Australia. But, it is not enough just to recognise the natural connections in a supply chain or a geographic area between economic actors. These interactions must be harnessed to create distinctive capabilities that come to characterise the industry or region and drive its economic prosperity.

Deliberate and disciplined efforts are required to encourage the collaboration that puts enterprises in touch with the know-how, resources, technologies, skills and motivation that pushes them along an outward-looking, high growth path. The performance and productivity of such firms then serves to attract other investors, suppliers and competitor firms into a critical mass of business capability and community connections that becomes self-reinforcing. The end result is a viable industry cluster (or more likely, multiple clusters), a hub of high performing industries with proven capacity for stronger participation in global supply chains.

There is a role for government to act as a catalyst to foster such industry clustering and innovation. This could take the form of supply chain or regional development programs, investment attraction projects and other initiatives to encourage and support business enterprises and related organisations banding together to identify new market needs and opportunities, and to act on their competitive strengths, gaps and obstacles collectively.

Existing programs like the Federal Government Action Agendas, the Industry Co-operative Innovation Program and various regional development initiatives provide a good starting point.

Capitalise on the diversity of options for global engagement by Australian firms

Exports are not the only way of trading internationally and therefore, of acquiring income, markets and growth benefits for Australia. One of the effects of more intense globalisation is the diversity of ways that enterprises can enter and sustain long run success in global markets. Central to this are initiatives to boost the ability of resident Australian enterprises to meet the needs of demanding customers in transnational markets.

In addition to export and trade facilitation programs, there are unexplored opportunities for global engagement and international trade by Australian firms in distributed global production chains especially in the Asia Pacific region.

Further, given Australia's concentration of large multinational corporations, there is potential for Australian firms to make greater use of these multinationals to extend their global reach and as a source of personnel, knowledge transfer and technology diffusion, eg. through alliances and partnering.

It is important to note that intangible assets can create wealth too. Firms and nations can capture value not only by exporting products and services, but also from leveraging capabilities and ownership of global assets and intellectual property. Even the diaspora of Australian expatriates in key global roles can provide a competitive asset to be capitalised on by Australia.

The concept of global 'webs of enterprise' from US economist Robert Reich¹³ points to the potential for Australian resident firms to be participants in virtual business units that span national borders.

This recasts the policy challenge facing national governments. Governments cannot assume that public support for locally owned companies is necessarily the best way to enhance national income and employment. Rather, the task may be to attract and retain high value-adding businesses within the country, irrespective of the nationality of the directors or shareholders. In a world of extremely mobile capital and intense cross-border competition, the challenge is to secure the existence of high-performance enterprises within a nation's borders, staffed by skilled managers and specialists and earning a premium from the provision of valued products, services and solutions to customers worldwide.

Strengthen government roles as demanding customer; responsive regulator; and broker of international opportunities and investments for Australian firms

Governments often balk at the suggestion that they use their purchasing power to support local enterprises, as such policies can be market-distorting and prone to feather-bedding and protection for otherwise uncompetitive local firms. However, it is important to recognise the difference between artificially creating a local market with local content preferences on one hand, and encouraging local firms to aspire to and achieve new capabilities that make them internationally competitive, on the other. The importance of this as a policy design issue was highlighted by Lipsey, Carlaw and Bekar in their discussion of the relative merits and effectiveness of key types of policies (framework, focussed and blanket).¹⁴

There is a role for demanding and sophisticated customers in driving such enhanced Australia competencies, including by government in their procurement and investment decisions.

Similarly, government's role as a regulator can operate on the lowest common denominator only to micro-manage compliance by business enterprises with legislation, international agreements and the like. Or, governments can use regulation as a

mechanism to lift industry standards or to facilitate more innovative problem-solving solutions or technologies by business.

Finally, government has an important function to use its 'civic clout' as government to extend the global reach of Australian enterprises. Governments often can make connections that business can't. While there are examples of Australians playing above their weight internationally, essentially Australia is a taker not a shaper of global trends and opportunities. This extends to issues of the location and organisation of global enterprises and brands, positioning of economic power in the newly rearranged value chains of the knowledge economy and access to commercial advantages from new technologies.

4. PROGRAM PRIORITIES

This submission has highlighted the characteristics of an increasingly competitive, knowledge-intensive, interconnected and globalised business environment, where innovation and learning are capabilities critical to sustained successful business performance.

Australia's future competitiveness lies with increasing the number of business enterprises being continually innovative, adaptable, close to customer, quick learners, outward-looking, and having global reach. But given Australia's market size and industry structure, businesses are unlikely to succeed alone. Public policies, programs, regulations and institutions have a critical role to play in creating the environment that allows businesses to take risks, access new opportunities and global markets and capitalise on technological advances, knowledge and innovation.

As the primary economic actors, business enterprises and their behaviour are central to Australia's industry capability and productivity. However, business behaviour is amenable to policy action, the guiding principles for which have been suggested in the previous section.

Finally, the Australian Business Foundation suggests the following programs as priorities for translating these principles into action.

1. *Add an explicit program that recognises and supports the market and customer dimension of innovation to the Backing Australia's Ability initiative.*

There are three explicit elements of the current Backing Australia's Ability initiative – commercialisation, generating ideas and developing skills. The predominant emphasis of these programs is on increasing the supply of science and research and a single linear pathway from research institution or inventor to commercial production.

This is at odds with much of the reality of business innovation, and particularly with where greatest value is generated from investment in innovation – namely, when it is captured and applied by business enterprises in the form of imaginative business offerings that solve real problems in the community and for which customers are prepared to pay.

Therefore, a fourth program, fostering customer-driven innovation at the business enterprise level, should be added to the Backing Australia's Ability initiative. This is designed to balance existing investment to boost the supply of science and research with a program to increase the capacity of Australian enterprises to absorb and use new knowledge for commercial ends.

2. *Design the new customer-driven innovation program for greatest effect on economic outcomes by focusing on two key features as follows:*

- Reducing the transaction costs of enterprises acquiring and using knowledge from external sources, including initiatives that foster reciprocal knowledge flows and collaborative working relationships between enterprises, and between enterprises and other key economic actors, including researchers and multinationals.
 - Assisting enterprises to appropriate value from their innovative activities, eg. assistance with managing risk and uncertainty, discovery of opportunities, market access, implementation of business and management systems and the like.
3. *For selected strategic industry sectors or value chains, evolve the Action Agendas program to include provision for the conduct of foresighting exercises.*

The intent is to develop resiliency and agility in Australian firms in critical sectors in the face of uncertain and unknowable future requirements. This approach is an alternative to trying to anticipate the next technological breakthrough, likely future industrial capabilities or the next firm seeking a bail-out from government.

This is about “future proofing” Australian industry’s capabilities, rather than seeking to forecast and pick specific ‘winning’ technologies, firms or industries for Australia.

In light of the value of market-pull approaches to innovation, more open user-centred innovation models and the critical importance of collaboration to the sustained success of both firms and industries, it is vital that Australian enterprises are not once-off, cost-based or technology-driven accidental innovators.

Innovation needs to be a deliberate competitive strategy, one that can be replicated and adapted, so that firms can continue to innovate and survive for the long haul, even in the face of disruptive changes or erosion of their past competitive advantages.

This approach is also designed to allow business and government to anticipate alternative future scenarios and identify robust actions in advance in order to retain investment in Australia or adapt to likely changing circumstances, without the need for hasty decisions for structural adjustment or investment retention purposes, that are controversial and perhaps ineffective in the long term.

¹ Productivity Commission. 2002. *The Drivers of Australia’s Productivity Surge*, presentation by Chairman Gary Banks to ABARE’s *Outlook 2002* Conference in Canberra. <<http://www.pc.gov.au/speeches/cs20020307>>

² UNCTAD (United Nations Conference on Trade and Development), *World Investment Report 2005: Transnational Corporations and the Internationalization of R&D*, United Nations, New York and Geneva, 2005, <http://www.unctad.org/en/docs/wir2005_en.pdf>, pp.112, 116; OECD (Organisation for Economic Co-operation and Development), *National Systems for Financing Innovation*, OECD Publications, Paris; *The OECD Jobs Strategy: Technology, Productivity and Job Creation: Best Policy Practices*, OECD Publications, Paris, 1998; *Dynamising National Innovation Systems*, OECD Publications, Paris, 2002; *Governance of Innovation Systems* (in three volumes), OECD Publishing, Paris, 2005; *Economic Policy Reforms: Going for Growth 2006*, OECD Publishing, Paris, 2006.

³ Oakley, Allen, *Schumpeter's Theory of Capitalist Motion: A Critical Exposition and Reassessment*, Edward Elgar, Aldershot, Hants, UK and Gower Publishing, Brookfield, Vermont, USA, 1990, p.102.

⁴ Reich, Robert B., *The Work of Nations: Preparing Ourselves for 21st-Century Capitalism*, Simon & Schuster, Paperback Edition, London, Sydney, New York, etc., 1993; OECD, *National Systems for Financing Innovation*, etc.; OECD, *The OECD Jobs Strategy*, etc.; Porter, Michael E., *The Competitive Advantage of Nations*, Second Edition, Palgrave, Houndmills, Basingstoke, Hampshire, UK and New York, 1998; UNCTAD, *World Investment Reports*, 2001 to 2005.

⁵ Samuelson, Paul, *Economics: An Introductory Analysis*, Fifth Edition, McGraw-Hill Book Co. Ltd, Chicago, 1961.

⁶ ABS (Australian Bureau of Statistics), *Small Business in Australia*, Cat. No. 1321.0, ABS, Canberra, 2001, <[http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/C639A01ED725ADABCA256C54000336D1/\\$File/13210_2001.pdf](http://www.ausstats.abs.gov.au/ausstats/subscriber.nsf/0/C639A01ED725ADABCA256C54000336D1/$File/13210_2001.pdf)>.

⁷ Austrade (Australian Trade Commission), *Knowing and Growing the Exporter Community*, Austrade, Canberra, 2002, <http://www.austrade.gov.au/publications/k_g.pdf?1107149601007>.

⁸ OECD, *Economic Policy Reforms: Going for Growth 2006*, etc.

⁹ Thorburn, Lyndal, John Langdale and John Houghton, *Friend or Foe: Leveraging Foreign Multinationals in the Australian Economy*, Australian Business Foundation, Sydney, 2002.

¹⁰ Ibid., p. 71.

¹¹ UNCTAD (United Nations Conference on Trade and Development), *World Investment Report 2001: Promoting Linkages*, United Nations, New York and Geneva, 2001, <http://www.unctad.org/en/docs/wir2001_en.pdf>.

¹² Colebatch, Tim. 'Exports share takes dramatic plunge', *The Age*, 6/9/04.

¹³ Reich, op. cit.

¹⁴ Lipsey, Richard G., Kenneth I. Carlaw and Clifford T. Bekar, *Economic Transformations: General Purpose Technologies and Long Term Economic Growth*, Oxford University Press, Oxford, UK, 2005.