SUBMISSION 3

**RE: Inquiry into raising the level of productivity growth in the Australian Economy**
**by**
**Dr Boon L. Lee**
**School of Economics and Finance, QUT**

There are many studies on Australia's productivity growth and as such undertaking another empirical study of it would serve little purpose. What this brief document focuses on are the implications of the results from various sources and compile them into a one-page document to explain sources of productivity growth and opportunities for further productivity gains. The term productivity henceforth refers to multi-factor productivity.

Australia's productivity growth in the 1990s is well-documented and largely due to its **microeconomic reforms**, but since 2000 productivity growth had slowed down. Parham (2005) noted that growth in the 1990s was a 'step-up in levels' effect due to policy reforms, rather than from long-term increase in rate of growth. As such, policy reforms can only contribute to short-term growth. As to long-term growth, the decline in productivity according to Parham (2005), was due to weaker capital deepening which is also a finding in Rahman, Stephan and Tunny (2009). The effectiveness of policy reforms was also analysed by Tressel (2008). His study showed that reforms in product and labour market were a major contributor to Australia's **productivity performance relative to 15 OECD countries** in the 1990s and that Australian industries benefited from the diffusion of Information and Communication Technologies (ICTs).

ICT will no doubt be a contributing factor in productivity growth as noted by Lipsey, Carlaw and Bekar (2005). In their book *Economic Transformations: General Purpose Technologies and Long Term Economic Growth*, which was awarded the prestigious 2006 Joseph Schumpeter Prize in evolutionary economics, ICT will play a significant role in productivity and growth and has yet to be realised fully. Their findings suggest that the efficiency and application of programmable computing networks are still in a process of acceleration, with no foreseeable end in sight for additional applications.

In Hughes and Grinevich (2007), their study which focused on Australia's labour productivity in two time-periods, 1980-1992 and 1992-2004, identified sources of productivity from business transformation such as enhancing the use of enabling technologies, building management capabilities and capitalising on regulatory reforms, rather than as a result of greater capital investment replacing labour.

Although the current document has covered only a miniscule number of studies relating to Australia's productivity growth, what is common in all these studies is that Australia can raise its' productivity growth through efficient ways in terms of utilising existing technologies as well as raising the capital intensity, including ICT development. However, increasing the **level of investment in physical capital and public infrastructure** is a short-term solution as diminishing returns will set in. Using a phrase coined up by Paul Krugman, what Australia needs is to adopt an "inspiration approach rather than a perspiration approach". Australia's approach towards high savings rate (ie. through superannuation) and heavy emphasis on education is very similar to the experiences adopted by some of the Asian nations which is good in the short-term but does not represent an innovative strategy of economic development.

The path towards long-term growth would involve two subsequent phases. First in the short term, policy reforms advocating the adoption of ICTs and other technologies should be embraced and employed. Second and more significantly in the long term, creative innovation in technology and creative thinking in the work force and education system (ie. from content learning to applied learning) should be developed resulting in new technologies, new ideas and new entrepreneurship skills. These approaches will thus form the stepping stone to development and changes in other sectors of the economy which in the long term, lead to gains in productivity growth.

## References

Hughes, A., Grinevich, V., 2007. *The Contribution of Services and Other Sectors to Australian Productivity Growth*, Centre of Business Research, University of Cambridge.

Lipsey, R. G., Carlaw, K. I., Bekar, C. T., 2005. *Economic Transformations: General Purpose Technologies and Long-term Economic Growth*. Oxford: Oxford University Press.

Parham, D., 2005. Is Australia's Productiivty Surge Over? *Agenda*, Vol. 12 (3), pp. 253-266.

Rahman, J., Stephan, D., Tunny, G., 2009. *Estimating Trends in Australia's Productivity*. Treasury Working Paper 2009-01.

Tressel, T., 2008. *Does Technological Diffusion Explain Australia's productivity Performance?* IMF Working paper, WP/08/4, IMF.