

Bulletin 1 of 6

*The role of science, research and technology
in lifting Australian productivity.*

5 June 2014



Innovation key to Australia's future prosperity

Productivity growth is critical for Australia's prosperity, economic growth and social wellbeing.

There is strong evidence from both Australia and around the world that research, science and technology contribute positively to productivity with innovation a key driver of productivity growth.

Innovation also delivers new products and services that create jobs and increase GDP.

Innovation contributes to productivity growth by lowering the cost of production or improving the quality of goods and services. Innovation can also involve improvements in areas such as marketing and management. New to firm innovation is as important as new to world innovation. Beyond the individual firm, innovative activity has benefits that diffuse throughout the economy.

New research undertaken for this project using a dataset of Australian small and medium sized businesses, confirms that innovation has a clear, unambiguous and positive effect on productivity. Innovation-active firms saw an average increase in productivity of 21 per cent over the following years. Organisational and managerial innovations, and innovations sourced from science and research were shown to have the largest effect on productivity.

Productivity gains are also driven by public sector investment in research and development through our universities and government research agencies*.

Investment in research and development is used internationally as a proxy measure for innovation performance. Overall, Australia's gross expenditure on research and development has been growing but is still below the OECD average. In particular, our business expenditure on research and development lags well behind our competitors.

Maximising the benefits from innovation driven productivity growth requires the best policies. Increasing Australia's levels of research and development to at least the OECD average would be an appropriate first step.

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On 3 June 2014 ACOLA released *The role of science, research and technology in lifting Australian productivity*. This bulletin is designed to continue the discussion around the role that science, research and technology plays in the Australian economy and in lifting productivity.

For more information or to arrange an interview contact Rebecca Skinner, Communications and Project Manager on 03 9864 0925 or 0400 684 993 or rebecca@acola.org.au

* The Contribution of Research and Innovation to Productivity and Economic Growth, <http://acola.org.au/index.php/the-role-of-science-research-and-technology-in-lifting-australian-productivity-contributing-reports>

Quote

“The potential contribution of resources utilisation to economic growth is limited by natural constraints, meaning that sustained economic growth in the long term will have to come from productivity enhancements. Investments in research and innovation are central drivers of productivity. These include R&D, ICT, skills development, design and organisational improvements and other types of intangibles. Such investments create new products, more efficient services and production processes, more effective workplace organisation and open up new markets.

Despite the potential for research and innovation to boost productivity and economic growth, there remain many complexities and challenges in identifying precise relationships between investments and productivity outcomes. Improving the understanding of these relationships is key to informing effective policy formulation for raising productivity from these sources. I believe that the report, and the underlying research which has been conducted in preparing the report, make significant contributions to this end.”

Professor Kevin J. Fox

School of Economics Director, Centre for Applied Economic, Research, Australian School of Business, University of New South Wales