University operations	<ul> <li>UNSW's ongoing operations contributed \$1.76 billion to Australian GDP in 2014, including \$1.58 billion to GSP in NSW</li> </ul>
	<ul> <li>The total contribution of UNSW's operations to NSW is equivalent to 7% of the total education and training in the state or 12% of the state's mining industry output.</li> </ul>
Skilled graduates	<ul> <li>University education added an estimated \$140 billion to GDP in 2014, by raising the productivity of the workforce</li> </ul>
	• Assessing the impact of just one cohort of UNSW undergraduate students, as an example, UNSW's 4,900 bachelor degree graduates from 2013 are estimated to contribute as much \$204 million to Australia's GDP each year over their lifetimes, equivalent to around \$41,500 per graduate per year.
	<ul> <li>UNSW's 8,100 bachelor and post-graduate degree graduates from 2013 will earn, in total, an estimated additional \$56 million on average each year over their lifetimes.</li> </ul>
University Research	• The stock of technology and knowledge attributable to Australia's universities is estimated to contribute approximately \$160 billion to GDP in 2014, almost 10% of total GDP. UNSW's share of this contribution would be in the order of \$15 billion.
	<ul> <li>UNSW's current annual expenditure on research of around \$1.04 billion, if sustained over time, is estimated to:</li> </ul>
	<ul> <li>increase GDP by between \$106 and \$190 billion over a period of 35 years, based on research expenditure of \$17 billion (both in present value terms)<sup>1</sup></li> </ul>
	<ul> <li>indicating a return for the economy of between \$5 and \$10 for each \$1 invested, over a period of 35 years (in present value terms)</li> </ul>
	<ul> <li>this implies the equivalent annualised return from investments in real per capita university research lies in the order of 60%-100%</li> </ul>
	<ul> <li>by way of comparison, the current annualised real return to paying down government debt is around 1.5% in real terms and the historical real before-tax rate of return on private investment is around 7%.<sup>2</sup></li> </ul>
Future investments in research	• Halving the growth in university research expenditure in 2014 from the current trend of 4.3% to 2.1% is estimated to cost the economy around \$23-\$42 billion in GDP (in present value terms, out to 2050).
	• Alternatively, increasing the growth in university research expenditure in 2014 from the current trend of 4.3% to the average of the past decade of 5.7% is estimated to raise GDP by \$16-\$29 billion (in present value terms, out to 2050).
Supporting Australia's productivity growth	• For growth in national income over the next decade to remain at the level experienced from 2001-2013, labour productivity will need to increase by almost 3% annually from 2014 to 2023.
	• A 10% increase in university research spending (per capita) compared to 2013 levels is estimated to generate almost a third of the required rate of labour productivity growth required to maintain our growth in living standards out to 2050.

## Key findings

<sup>&</sup>lt;sup>1</sup> Further explanation of this present value calculation is included in footnote 28 on page 54 of this report.

<sup>&</sup>lt;sup>2</sup> Further explanation of this result is included in paragraphs 2-3 on page 80 of this report.