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Ideas the engine of new growth

Craig Emerson | December 08, 2008

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NEXT to love, the greatest gift parents can give their children is the gift of imagination. Nurturing imagination begins in the earliest hours of a child's life with a mother's tender touch. Those children whose curiosity is nourished at home also do best at school, most of them later enrolling at our universities.

Albert Einstein concluded that imagination is more important than knowledge. As new ideas are imagined, the techniques of logic, mathematics and science can translate them into valuable knowledge. Einstein worried that he lacked imagination. In coming up with the theory of relativity he imagined he was riding on a beam of light. From this he deduced $E=mc^2$. Imagination came first, the maths followed.

Ideas possess three virtuous qualities, making them a powerful source of increasing prosperity.

First, one person's use of ideas does not detract from another's. Ideas differ from physical assets such as machines, where one person's use prevents another from using the same machine.

A second virtue of ideas is that the originator of an idea cannot fully and indefinitely prevent others from using it.

Which brings us to the third virtue of ideas: unlike land, equipment and labour, there is no limit to the number of potentially useful ideas. Indeed, as the total number of good ideas grows, researchers have an ever-broader field on which to make new discoveries. This is what Isaac Newton was referring to when he said if he had seen farther than others it was because he was standing on the shoulders of giants.

Once an idea has been developed and applied to achieve a breakthrough, the average cost of producing extra units of the good in question actually falls. Consider a new wonder drug. The cost of producing the first pill is very high. But the cost of producing the second pill is very low, comprising the sugar coating and more of the substance contained in the first pill. Once a breakthrough has been made, it's cheaper to produce lots of the drug rather than just one or two pills.

These virtues of ideas have helped new growth theorists understand the history of economic advancement. Sustained increases in living standards have been achieved only since the 1700s, a period corresponding with the Industrial Revolution and the Enlightenment.

What happened during this very short period in the history of the human race that had not happened before? Growth theorists argue population reached a critical mass that enabled new ideas to be created and shared. Further ideas were built on this spurt of inspiration. And intellectual property rights were established, enabling the creators of new ideas to gain personally from their imagination and effort.

In the 20th century the great contests of the world were of the worst kind: two world wars and a cold war.

Now, with hope, at the dawning of the 21st century, the great contest of the world will not be an armed conflict but the battle of ideas.

Based on a series of empirical studies, former US Federal Reserve Chairman Alan Greenspan has concluded that almost all of the increase in America's prosperity during the past half-century is attributable to new ideas.

There is nothing more powerful, it seems, than the power of a good idea created by a vivid imagination. In this 21st century battle of ideas, those communities best able to generate, attract and retain pools of creative talent will be the most prosperous. And they will be the most open and tolerant.

In this modern contest, good social policy becomes good economic policy. The campuses of our preschools, schools, colleges and universities are the places where the economy meets society.

As Australia navigates through the global financial crisis, investing in infrastructure such as roads, rail,

ports and telecommunications can provide a valuable economic stimulus and a boost to stalled productivity growth.

But the greatest long-term investment Australia can make is an investment in our young people, in the freeways, thoroughfares and avenues of their minds. By supporting early childhood development to help wire the brains of infants, nurturing their imaginations through school and encouraging them on to our universities, Australian parents and governments can secure our future as a prosperous, fair, tolerant and compassionate country.

The Rudd Government is making that investment, through an \$11 billion Education Investment Fund, more than \$1.2 billion for computers in schools and \$2.4 billion for early childhood education and care. And for the first time, through the Council of Australian Governments, the commonwealth and the states are working on a truly national education reform agenda.

What a great and noble cause: fashioning an imaginative, creative Australia. Through the Government's education revolution, it can be the defining achievement of our times.

Craig Emerson is the Minister for Small Business.

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