

### Research Focus

#### *Some questions raised by the 'China Resources Boom'*

*Ross Garnaut\**

The current period of exceptionally high growth in demand for and prices of energy and metallic minerals is a 'China boom', rather more than high metals prices from the late 1950s to 1973 represented a 'Japan boom', or in the two decades preceding the First World War a 'United States–Germany' boom.

The first reason why the current resources boom has been generated in one country, China, to an exceptional degree, arises out of the nature of rapid, internationally-oriented economic growth. Such growth, which Australians associate with East Asian development over the past half century, involves backward economies 'catching up' with the technologies, institutions and intensity applied in the most advanced economies. The global frontiers of productivity investment incomes continue to be extended over time, so that latecomers can move more rapidly than their predecessors, because the gap is larger between the productivity of their own and the world's most advanced economies.

The second reason why the impact of rapid Chinese growth on international markets is greater than that of any of its predecessors is simply that China has a much larger population – almost twice as large – as all of the established advanced economies taken together. This means that when it reaches the peak of its per capita demand for metals and energy – in a few decades in the most likely case – China will be using considerably more metals and energy than the rest of the developed world combined. It will probably account for the majority of the world's growth in import demand for resource-intensive products for most of the intervening years.

Finally, China has a low per capita domestic endowment of most economically valuable natural resources relative to the established developed economies – especially relative to the United States, but also relative to other populous developing countries such as Brazil and India, that have been experiencing acceleration of economic growth over the past decade. Following its trade policy reforms of the past two decades, a high proportion of incremental Chinese demand for most minerals flows directly into imports. Coal is an exception, and this has major implications for the impact of Chinese industrialisation on the global resources economy.

While there are risks to the sustainability of rapid economic growth in China, there is a reasonable prospect that growth will proceed for several decades at rates near the average growth achieved for the past quarter century. China's per capita rates of consumption of energy and metals will have approached the average for the developed world by the end of that time. In the absence of major changes in behaviour in response to higher prices or to take account of negative environmental effects, the expansion in China's own consumption will have raised global energy demand by around 40 per cent of what it would otherwise have been. In the absence of major changes in behaviour, the growth pattern of China's demand for metals is expected to be somewhere between that of Japan and Korea, but China's proportionate impact on global metals markets will be somewhat larger. The trend increase in Chinese demand may be augmenting global energy demand by about 3 per cent per annum for a considerable period.

#### **East Asian strategies and the APEC**

The East Asia Forum at the Australian National University will host a major international conference at the Australian National University 6–7 August to consider regional cooperation strategies beyond the APEC Summit in Pusan in November 2005 and the first East Asian Summit in Kuala Lumpur in December 2005. The aim of the conference will be to reflect on evolving regional architecture, to examine the complementarities and inconsistencies in the relationship between East Asian forums and APEC, and to explore ideas that may be helpful to the APEC and East Asian agendas. Speakers will include Kyung Tae Lee (Korea), Hadi Soesastro (Indonesia), Mohamed Ariff and Jawhar (Malaysia), Zhang Yunling (China) and Pisit Leeahtam (Thailand).

#### **The turning point in China's economic development**

With President Hu's 11th Five-Year Program (2006–2010) formally adopted, and with China's rapid growth and integration into the international economy now close to the end of its third decade, China's economy has reached a crucial turning point.

Nicholas Lardy, one of America's leading authorities on the Chinese economy will highlight some of the international issues facing China at the China Update 2006 in Canberra on 29 August.

A highlight of this year's Update will be a special panel session examining China's demand for energy and resources. Understanding China's medium and long-term growth prospects and the implications for both demand and supply of resources are critically important to Australian economic policy and performance, as well as to the investment decisions of Australian resource producers, and professional decisions of Australians in a wide range of occupations.

Where would the supplies come from and what would be the nature of the impact on global markets?

Given the slowdown in growth in established developed economies, even this rate of growth in Chinese demand would not push the total rate of increase in global energy consumption to the high levels of the last decade of rapid economic growth in Japan, 1963–73. Those high rates of increase in energy demand were supported by low-cost expansion of petroleum production. There was some tightening in oil markets over time, but prices did not move much until the political shocks of 1973.

The long lead times in exploration and development mean that we know now that there are no opportunities in the decade ahead to expand global oil production painlessly in the manner of the years of rapid growth in Japan. This time, the international market response will be more varied and complex. Prices will rise above the average levels of the past two decades. This will lead to economies in use of oil, as happened following the high prices in the decade after 1973, as well as more rapid development of the many alternative sources of energy all over the world. Amongst much else, we will see heavy investment in expanding production from China's own coal reserves, and in nuclear energy generation in China.

The increases over the past two years have already taken oil prices to levels where economies in use of energy are becoming evident in the global numbers. Investments in many alternative energy sources are now profitable. The price increases over this period may turn out to be unnecessarily large or small, but there are reasonable prospects that we have seen most of the necessary adjustment in relative prices. For the global economy, the greatest costs of higher prices are borne in the adjustment to change, and we are in the process now of bearing a major part of those costs.

The experience of the last decade of rapid economic growth in Japan (1963–73), may provide a closer guide to prospective global market developments for metals than for energy. Strong growth in post-war demand led to average real prices for most metals that were twice as high as the average during the long stagnation from 1914 until the post-Second World War recovery. This induced steadily expanding supplies, including from countries that had hitherto played marginal roles in global markets. New forms of long-term contracts and project finance underpinned the development of major new sources of coal and alumina in Australia and iron ore in Australia and Brazil.

The big lift in copper prices over the past two years has taken real copper prices to around

the high averages of the 1960s and early 1970s. There have also been large price increases for other metals – some a bit more than for copper, some a bit less. All metals have witnessed large increases in investment in exploration, mine development, and expanding output from established mines. As in the 1960s, the focus of large investments has been on new institutional arrangements (the Chinese multinational corporation) and on new suppliers (Papua New Guinea for nickel and several African and Latin American and Central Asian countries for a wide range of metals). As with oil, most of the price adjustment has probably already occurred, and there is no reason to doubt the capacity of global markets to meet this new demand.

One note of caution: China's rapid growth involves economic, social and political change on a scale that is unprecedented in world history. It is unlikely to proceed over decades without bumps in the road, and an occasional dead end and detour. With China in a few decades consuming annually more resource-based products from world markets than the whole of the currently developed world, the rest of the world will feel every bump through energy and metals as well as other markets.

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A conference on China and East Asian energies issues will follow the China Update.

### Events

**2 August**, *Fiji Update*, Canberra

**6–7 August**, *Asia Pacific and East Asian Architecture for Economic and Political Co-operation*, conference, Canberra

**9 August**, Pacific Leader's Virtual Forum – Anti corruption strategies (*GDLN*)

**29 August**, *Fiji Update and Pacific 2020*, Suva

**30 August**, *Fiji Update*, with Reserve Bank of Fiji, Suva

**29 August**, *China Update*, Canberra

**29–30 August**, *China and East Asia Energy Issues*, conference, Canberra

### School seminars\*\*

**1 August**, Richard McLoughlin, (Australian Fisheries Management Authority) *Turning a financially failing and environmentally struggling industry around – policy and resource*

*management development in the Australian fishing industry*

**8 August**, Andrew MacIntyre (Crawford School) *East Timor: Getting it Wrong and Getting it Right*

**15 August**, Prema-chandra Athukorala (Research School of Pacific and Asian Studies) *Post-crisis export performance: the Indonesian experience in regional perspective*

**22 August**, Ligang Song (Crawford School) *The impact of reform on economic growth in China: a principal component analysis*

**29 August**, Andrew Leigh (Research School of Social Sciences) *Beautiful politicians*

\*\* Seminars are held at 12.30 pm in Seminar Room 4, First Floor, Crawford Building

### Publications

*Pacific Economic Bulletin*, Volume 21 Number 2, Special issue on Fiji <http://peb.anu.edu.au>

*The Turning Point for China's Economic Development*, Ross Garnaut and Ligang Song (eds) Available 29 August

*Islands of Turmoil: elections and politics in Fiji*, Brij V. Lal Available 22 August

*Power and Pork: the political life of a Japanese politician*, Aurelia George Morgan Available 4 September

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### Pacific Economic Papers

357 *Reliability of structural shocks estimates from a bivariate SVAR model: the case of south-east Asian countries*  
Arief Ramayandi 2006

To view the latest papers, please visit [http://apseg.anu.edu.au/research\\_units/ajrc/ajrc\\_pub.php](http://apseg.anu.edu.au/research_units/ajrc/ajrc_pub.php)

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