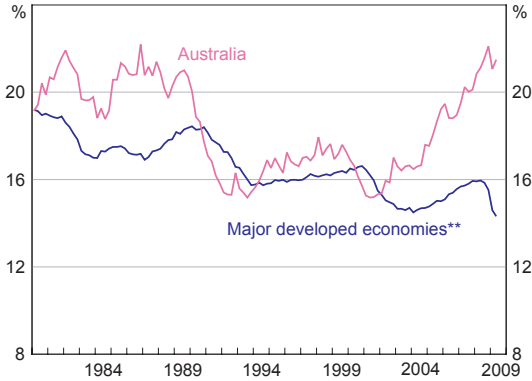


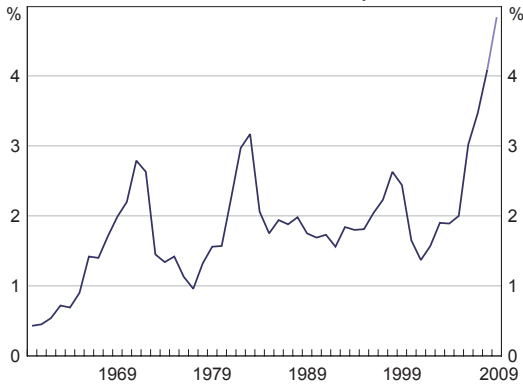
Box D: Investment in the Resources Sector

Graph D1
Non-residential Investment*
 Share of nominal GDP, quarterly



* Total private and public investment
 ** Canada, euro area, Japan, UK and US; euro area data based on selected countries prior to 1995; GDP-weighted at average market exchange rates in 2006–2008
 Sources: ABS; Eurostat; RBA; Thomson Reuters

Graph D2
Mining Investment
 Share of nominal GDP, fiscal years



Sources: ABS; RBA

Australia has experienced strong investment growth since the early 2000s, with the share of non-residential investment in GDP rising from around 15 per cent to nearly 22 per cent in 2008/09 (Graph D1). This is in contrast to the experience of most other advanced economies, where investment ratios are at or near historically low levels.

This increase in large part reflects investment in the resources sector, which as a share of GDP has been significantly higher over recent years than during the mining booms of the late 1960s/early 1970s and early 1980s (Graph D2). With resource export prices now at very high levels by historical standards, mining investment is around 5 per cent of GDP, up substantially from just 1½ per cent early this decade.

Information from the Bank's liaison with mining companies suggests that further significant increases in mining investment and output are likely over the years ahead. The outlook for iron ore and coal remains strong, with investment expected to remain at its current high level, or increase further, as a share of GDP. However, the industry that is likely to see the largest increase

in investment is liquefied natural gas (LNG). In addition to the two LNG plants already in operation, two major new projects have been initiated: the \$43 billion Gorgon project that received final investment approval from its three joint venture partners in September; and the \$12 billion Pluto project that has been under construction since 2007 and is due to ship its

first LNG in early 2011. In addition, there are several proposed large offshore LNG projects in Western Australia and the Northern Territory, as well as ‘coal seam gas to LNG’ projects in Queensland, that are aiming for final investment approval in the next 18 to 24 months. While any projections on future investment are subject to considerable uncertainty, it is plausible that investment in this sector could increase from around ½ per cent of GDP currently, to around 2½ per cent within the next four or five years.

While the extent to which the large number of projects under consideration will translate into actual high levels of mining investment is uncertain – there are examples of previous episodes of optimism which quickly faded, leaving plans for expansion unfulfilled – the probability that many of these projects will be realised may be higher now than during past booms. This reflects three important considerations: the prospect of continued strong growth in China, India and other emerging economies in Asia; the fact that confirmed reserves of gas, iron ore and coal have already been discovered; and, for LNG, that projects generally lock in multi-decade contracts with buyers before construction commences.

If the increases in investment discussed above were to occur, output of the mining sector would rise substantially in the medium term. Over the past five years, iron ore output increased by around 70 per cent. However, growth in coal capacity has been relatively slow, largely reflecting problems with shared rail and port infrastructure for coal in Queensland and New South Wales. Over the next two years, if capacity comes on-line as planned, production of these bulk commodities could increase by around one-third, with further significant increases possible over the remainder of the next decade. LNG exports could increase significantly over the next two years following the completion of the Pluto project, but the largest expansions in capacity are projected to come on-line later, potentially leading to a three to fourfold increase in LNG exports. Production increases of this magnitude would likely see the value of LNG exports increase towards a similar share of total exports as for coal or iron ore.

Investment booms can present challenges for macroeconomic management, particularly when the economy is operating at a high level of capacity. While investment increases the economy’s long-run productive capacity, it adds to short-run demand pressures within the economy. For example, during 2007 and early 2008, shortages of appropriate labour and some capital equipment resulted in an escalation in construction costs in the mining sector, prompting the delay or scaling back of some investment plans. Although the recent period of slower growth in demand has lessened some of the immediate capacity pressures in the economy, constraints could well emerge over coming years. More broadly, for the resource companies to implement their investment plans and for the mining sector to expand, capital and labour will have to shift from other areas of the economy. This process of structural change will present challenges. However, having flexible markets, including a floating exchange rate, will help facilitate the adjustment of the economy to these pressures. ✎