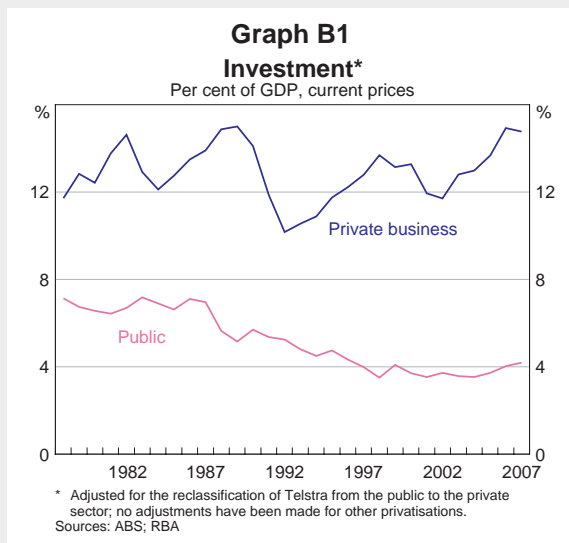


## Box B: Investment and the Productive Capacity of the Economy

Strong growth in investment spending over the past five years has lifted investment to a relatively high level as a share of GDP. As a consequence, the capital stock is now growing at its fastest pace since the early 1970s, thereby adding to growth of the economy's productive capacity. This box uses data from the annual national accounts to examine medium-term trends in investment and the implications for Australia's productive capacity.<sup>1</sup>

Private business investment is usually the starting point in thinking about increments to the capital stock and the productive capacity of the economy. Over the past five years, real business

investment has grown by an average of 13 per cent a year, underpinned by high profitability and the ready availability of funding. As a share of GDP, private business investment has increased strongly and is now around levels last seen in the late 1980s (Graph B1).



While private business accounts for most of the investment undertaken in Australia, public investment – which covers a broad range of spending including on transport infrastructure, hospitals, educational facilities and state-owned utilities – also plays an important role. Public investment

declined significantly through the 1990s as a share of GDP, although it has started to pick up over the past couple of years. The earlier decline partly reflected the fiscal consolidation that started in the 1990s, the shift towards the private provision of services, and the privatisation of public enterprises; more than 80 enterprises were privatised in the 1990s alone, including Qantas, the Commonwealth Bank and the Loy Yang power station in Victoria. Given these structural changes, examining broader measures of investment that include both the public and private sectors provides a more complete picture of changes in Australia's productive capacity.

While total private and public investment has increased in recent years, as a share of GDP it is not unusually high by historical standards; the current level of total investment is close

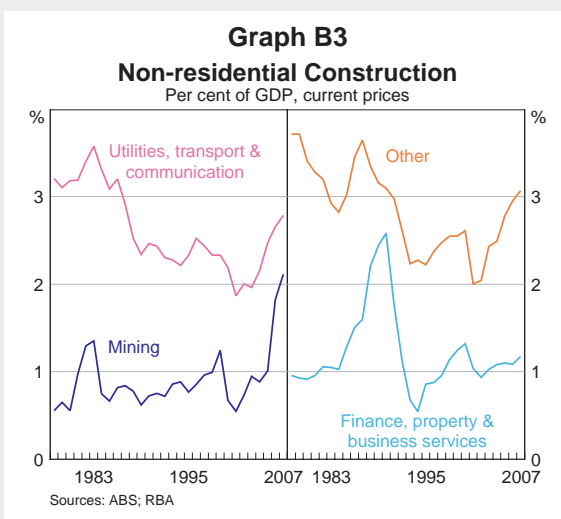
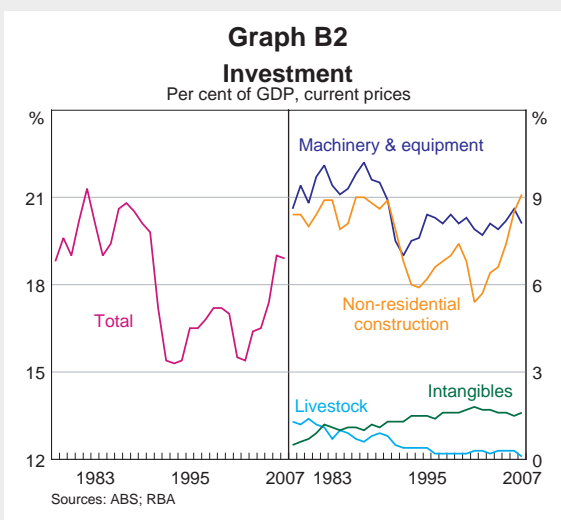
<sup>1</sup> The investment and capital stock measures used here exclude dwellings since they are not directly utilised by businesses and the government to produce output. However, since dwellings provide a stream of income to households, dwellings are included in the investment and capital stock measures published in the annual national accounts.

to the average of the period from the late 1970s to the late 1980s (Graph B2). Indeed, the picture that emerges suggests that investment was unusually weak over the 1990s rather than being especially high at the moment. Given the relatively low share of investment in GDP over the 1990s, it may not be surprising that capacity pressures have now become an important issue following several years of strong growth of domestic demand.

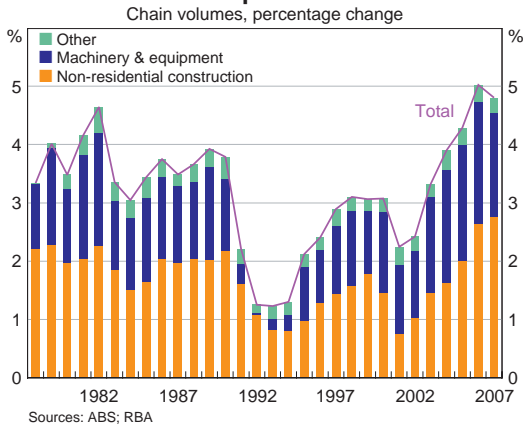
The increase in investment over the past five years has been largely due to the strong upswing in non-residential construction, which has increased from 5¾ per cent of GDP to 9 per cent (Graph B2). The mining industry has accounted for the largest increase, with its investment rising by 1½ percentage points of GDP over the past five years in response to the boom in commodity prices (Graph B3). Nevertheless, the rise in non-residential construction has been broad-based. The main infrastructure industries (utilities, transport and communication) have increased their investment in buildings and structures, in part to meet the needs

of the mining sector, and spending on buildings and structures has also increased solidly in a range of other industries. Despite the boom in office building in Brisbane and Perth, construction for the finance, property & business services industry has remained far below the levels seen in the property boom of the late 1980s (for further discussion, see ‘Box B: Recent Developments in the Office Property Market’ in the November 2007 *Statement*).

Higher investment can raise the productive potential of an economy by contributing to the capital stock and lifting labour productivity. Conceptually, the value of the capital stock is given by the net present value of the future stream of income arising from past investment. This is inherently difficult to measure. In practice, the ABS publishes estimates on an annual basis calculated by adding past investment and subtracting depreciation, making assumptions



**Graph B4**  
**Net Capital Stock**



about the useful lives of assets and the rate at which they lose value.<sup>2</sup> On this measure, the annual growth rate of the capital stock trended down from 6¾ per cent during the 1960s to average 3¾ per cent during the 1980s and then to around 2¼ per cent over the 1990s (Graph B4). To put this in perspective, in the 1990s the growth rate of the capital stock fell below the growth rate of the broader economy for several years, which had not occurred over the previous three decades.

From this low base, the recent surge in investment has had a marked effect on the capital stock, which is now estimated to be increasing at around 5 per cent a year – the fastest pace of growth since the early 1970s. The strength of investment in non-residential construction has a particularly large effect, since assets such as buildings and structures have considerably longer useful lives than other types of investment, such as computers and software that depreciate more rapidly. As a result, the boost to productive capacity from the recent upswing in investment is likely to be felt for some time. However, even after the strong growth of recent years, the estimates suggest that the level of the capital stock is smaller relative to GDP than in the 1980s and early 1990s. This could help explain why firms continue to report very high levels of capacity utilisation, particularly in sectors relatively exposed to the commodity price boom. ↗

<sup>2</sup> The ABS produces several measures of the capital stock. The one used here is the 'net capital stock', which is published for the aggregate economy and has been adjusted to exclude dwellings.