

### Australian Business Payments and Receipts for Technical Know-how

	1984/5	1986/7
Payments	172.9	257.5
Receipts	37.5	98.7

Source: Year Book Australia.

### Areas of Technical Strength

Despite the technology gap, Australia has developed world-class status in several areas of advanced technology. The following are some of the country's leading technology sectors:

- **Medical Research:** Several Australians have won Nobel prizes for medicine and the country's scientists have done pioneering work in areas such as transplant surgery, fertility research, deafness, and genetic engineering.
- **Communications:** Australia leads the world in the development of low-density, long-distance communications that offer smaller nations affordable access to satellite communications. These systems have been exported to the Pacific, Africa, and Asia.
- **Space Technology:** Australia has long operated its own satellites to support domestic telecommunications and it is developing launch facilities that are located close to the equator and thus require less power to lift rockets into geostationary orbit. The Australian radio telescope in New South Wales is one of the world's most advanced.
- **Computing:** Australia is the manufacturing base for IBM computers that are exported to the Pacific and Asia. It is a leader in data management technology based on CD-ROMs. Australian software is used in robot tool control.

- **Energy:** Australia is a leader in solar power for water heating systems and has developed a system to produce household electricity from solar power.
- **Automotive Industry:** Five large companies produce 400,000 vehicles a year, some of which are exported to Japan and the United States. Automotive components are sent to Japan, Europe (especially Germany), and the U.S.
- **Metal and Mineral Processing:** Australia is a leader in the production of zirconia powders, rare earths, gallium, silicon, and advanced industrial materials, as well as the development of new smelting techniques and speciality steels.
- **Transportation Equipment:** Australia is known for the production of aircraft, passenger and vehicle ferries, trawlers, sailboats, and small naval craft.

### Australia's Technology Policy

Since 1983, Australian government policy has aimed to accelerate the shift to higher value-added manufacturing. The government has made agreements with trade unions to remove the restrictive practices that impede structural adjustment, it has offered financial assistance to businesses to invest in upgrading their operations, and it has removed tariff protection to force Australian companies to become more internationally competitive.

To build the technology base, the Australian government is promoting expanded R&D activities. In 1985, a 150% tax concession on R&D expenditures was introduced and will be available until 1993. There are numerous other national and state R&D incentive programs. At the same time, government-sponsored research centres throughout the country bring together academic and industrial researchers to widen the country's scientific and industrial base. As a result of these efforts, gross expenditure on R&D has