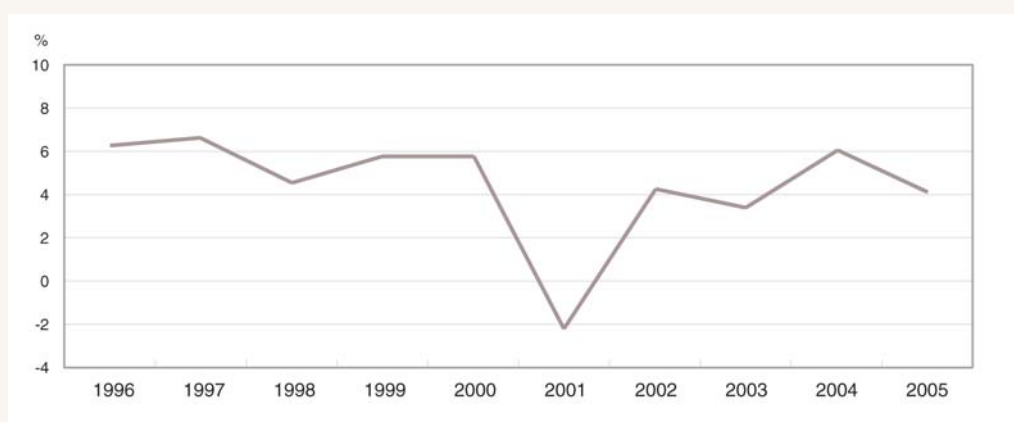


## 2. National Output and Income

Taiwan's national accounts were revised according to the United Nations' 1993 System of National Accounts (93SNA), and were released by the Directorate-General of Budget, Accounting and Statistics (DGBAS) in November 2005. This version of national accounts differs from its earlier version (the 68SNA) in several important ways. It set aside consumption of fixed capital on public infrastructure, including roads, bridges, breakwaters, etc. It regrouped expenditure on mineral exploration and computer software from intermediate consumption to gross fixed capital formation. It allotted financial intermediation services indirectly measured to the government, households, business sector and foreign sector, and the first two are regrouped from intermediate consumption to final consumption. It also introduced the concepts of adjusted disposable income and actual final consumption. Above all, with the adoption of this new system, national account figures in Taiwan can be more actually compared with figures worldwide. The following descriptions will report national account figures in accordance with the newly instituted revision.

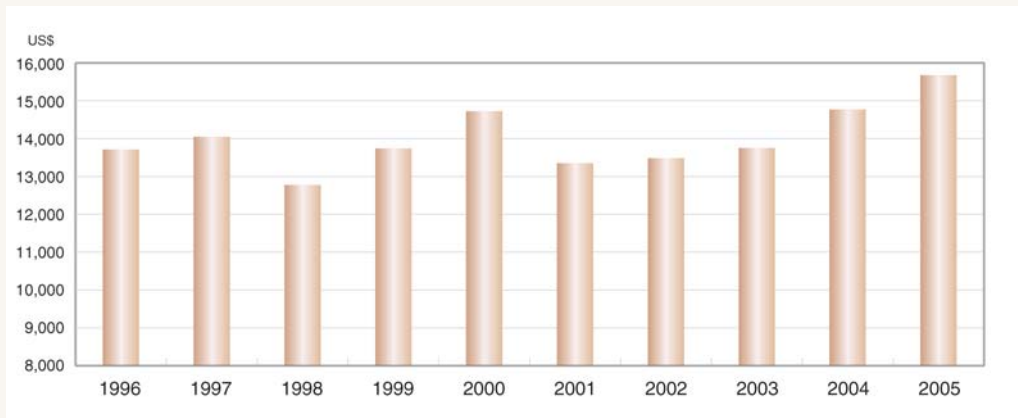
In 2005, real GDP growth was 4.09 percent, down from 6.07 percent in 2004. The slowdown was more apparent during the first half of the year as growth in external trade slowed and oil and raw material prices climbed. During the second half of the year, accompanied by an information-technology (IT) recovery and advances in infrastructure development, export growth

### Economic Growth Rate



Source: *Statistical Abstract of National Income, Republic of China, Directorate-General of Budget, Accounting and Statistics (DGBAS), Executive Yuan, February 2006.*

### Per Capita GNP



Source: *Statistical Abstract of National Income, Republic of China, DGBAS, Executive Yuan, February 2006.*

picked up and real GDP growth managed to gain ground by year-end.

In year-on-year terms, real GDP grew 2.49 percent during the first quarter of 2005. While employment conditions improved, the thin film transistor-liquid crystal display (TFT-LCD) industry carried over investment plans from the previous year, and private consumption and private investment expanded steadily, external demand dwindled and exports slowed. This momentum proceeded onto the next quarter. Real GDP growth was 2.97 percent, until a turn around in the third quarter. The international economy gained strength, exports rallied, private consumption continued to expand steadily although the investment planning of high tech industries were somewhat muddle and that the base was rising. Real GDP growth rose to 4.38 percent. During the fourth quarter, leading high tech companies successively announced new investment plans while a number of smaller businesses experienced cuts in investment. Exports surged to two-digit growth as demand for electronics rose, pushing real GDP growth up to 6.40 percent.

Per capita GNP increased by US\$906, reaching US\$15,676 in 2005.

### Expenditure Components of GDP

Real GDP growth in 2005 was mainly driven by an expansion in foreign trade and solid domestic demand, which contributed 2.52 percentage points in net and 1.56 percentage points, respectively, to real GDP growth. Broken down by expenditure components, the largest share, exports of goods and services, accounted for 62.78 percent of GDP, followed by private

### Expenditure on Gross Domestic Product

Unit: %

|   | 2005    |                  |  | 2004    |                  |  |
|---|---------|------------------|--|---------|------------------|--|
|   | Share   | Real Growth Rate | Contribution to Real Growth Rate of GDP* | Share   | Real Growth Rate | Contribution to Real Growth Rate of GDP* |
| Private Consumption                     | 62.33   | 3.00             | 1.75                                     | 61.46   | 3.91             | 2.33                                     |
| Government Consumption                  | 13.42   | 0.71             | 0.09                                     | 13.60   | -0.54            | -0.07                                    |
| Gross Fixed Capital Formation           | 20.39   | 0.46             | 0.09                                     | 21.26   | 17.48            | 3.09                                     |
| Change in Inventory                     | -0.16   | —                | -0.37                                    | 0.29    | —                | 0.96                                     |
| Exports of Goods and Services           | 62.78   | 6.93             | 4.17                                     | 61.93   | 14.83            | 8.24                                     |
| ( Less : Imports of Goods and Services) | (58.76) | (3.22)           | (1.64)                                   | (58.45) | (18.55)          | (8.47)                                   |
| Expenditure on GDP                      | 100.00  | 4.09             | 4.09                                     | 100.00  | 6.07             | 6.07                                     |

Note: \* Percentage point.

Source: *Statistical Abstract of National Income, Republic of China, DGBAS, Executive Yuan, February 2006.*

consumption at 62.33 percent and gross fixed capital formation at 20.39 percent.

#### (1) Steady Expansion in Private Consumption

Private consumption expanded during the first three quarters in 2005 as improvements in job market conditions nudged up household income. Notwithstanding, as high international commodity prices pushed up wholesale prices, a contraction in the growth of private consumption followed. The real growth rate of private consumption and its contribution to GDP, as a result, fell to 3.00 percent and 1.75 percentage points in 2005 from 3.91 percent and 2.33 percentage

#### Real Growth Rate of Private Consumption Expenditure

Source: *Statistical Abstract of National Income, Republic of China, DGBAS, Executive Yuan, February 2006.*

points in 2004.

Analyzing private consumption growth by its components, food consumption growth dropped to 1.60 percent in 2005 from 1.94 percent in 2004 while non-food consumption fell to 3.40 percent from 4.49 percent. Breaking non-food consumption expenditure down into its components, the categories of transport and communication, fuel and power, and household operation posted the largest growth. Transport and communication grew as households gained greater access to IT products such as mobile phones, Internet-related products, and computers. Fuel and power grew as oil prices rose, pushing fuel costs up. Likewise, household operation grew as an expansion in the number of double-income households lead to a hike in the demand for housekeeping services.

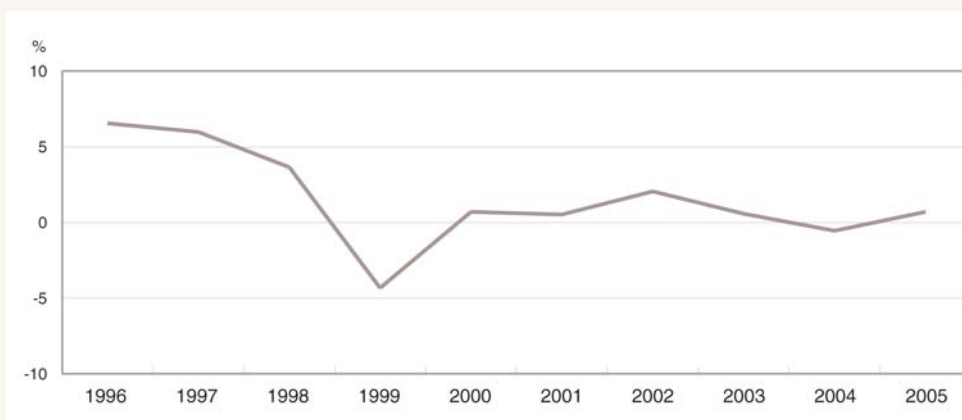
### (2) Slight Increase in Government Consumption

Government consumption increased by 0.71 percent in real terms, contributing 0.09 of a percentage point to GDP in 2005, compared to a decline of 0.54 percent or -0.07 of a percentage point contribution in 2004. This was mainly due to the government's active promotion of the *Project for the Creation of Job Opportunities* with the aim of improving employment conditions, despite its long-term objective of containing spending.

### (3) Slower Growth of Fixed Capital Formation

The real growth rate of fixed capital formation in 2005 tumbled to 0.46 percent from 17.48

**Real Growth Rate of Government Consumption Expenditure**



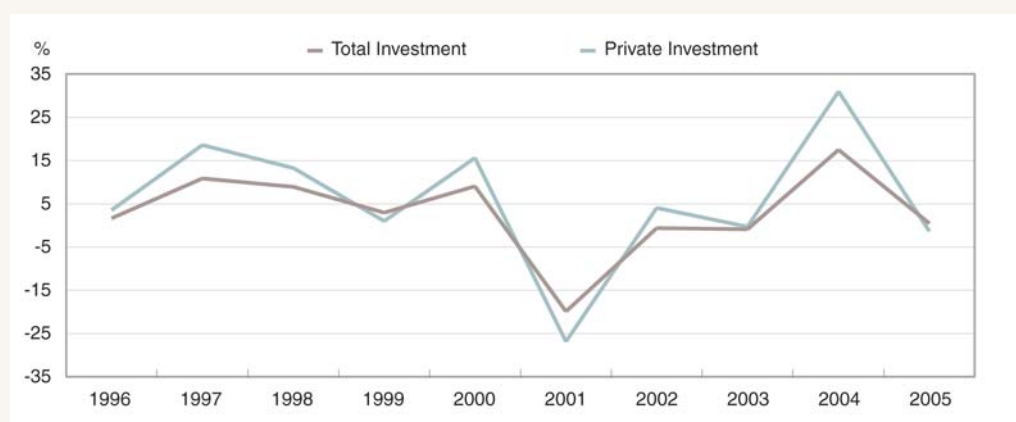
Source: *Statistical Abstract of National Income, Republic of China, DGBAS, Executive Yuan, February 2006.*

percent in 2004, contributing a mere 0.09 of a percentage point to real economic growth. For 2005, real investment carried out by public enterprises had an above-average growth at 17.21 percent, and contributed 0.28 of a percentage point to real GDP growth, in contrast to the negative contribution of 0.38 of a percentage point in 2004. The expansion primarily resulted from the large-scale investments by Taiwan Power Company's Fourth Nuclear Power Project, the Sixth Transmission and Substation Project, and the Tatan Thermal Power Plant Project.

The growth of real government investment increased from a rate of negative 5.71 percent in 2004 to 0.33 percent in 2005 as a result of vigorous infrastructure development in the second half of the year, resulting in a contribution of 0.01 of a percentage point to overall economic growth. Alternatively, real private investment growth dropped compared to 2004. While the procurement of aircraft and passenger trains increased and the investment plans from the previous year carried over by the TFT-LCD industry in the first half of 2005, real private investment growth swung into a negative territory from the third quarter, and posted -1.34 percent for the year as a whole. The cause was, mainly due to the rising base, somewhat muddle investment planning of high tech industries, and cuts in investment by a number of smaller businesses during the second half of the year. Overall, it took away 0.20 of a percentage point from real GDP growth, reversing a positive 3.68 percentage point increase in 2004.

When analyzing fixed capital formation by types of capital goods, it is evident that investment in transportation equipment posted the largest growth. Investment in intangible

### Real Growth Rate of Investment



Source: Statistical Abstract of National Income, Republic of China, DGBAS, Executive Yuan, February 2006.

fixed assets came in second. Investment in construction and machinery, in contrast, contracted. The real growth of investment in transportation equipment continued to rise. It grew 31.15 percent in 2005. Investment in intangible fixed assets grew by 2.29 percent in real terms. The real growth rate of investment in the construction sector turned to -0.07 percent from 6.23 percent in 2004, owing to oversupply in the real estate market and the surge in construction material prices. Likewise, real investment in machinery slowed and posted a decline of 3.69 percent, a sharp decrease when contrasted with 27.33 percent in 2004.

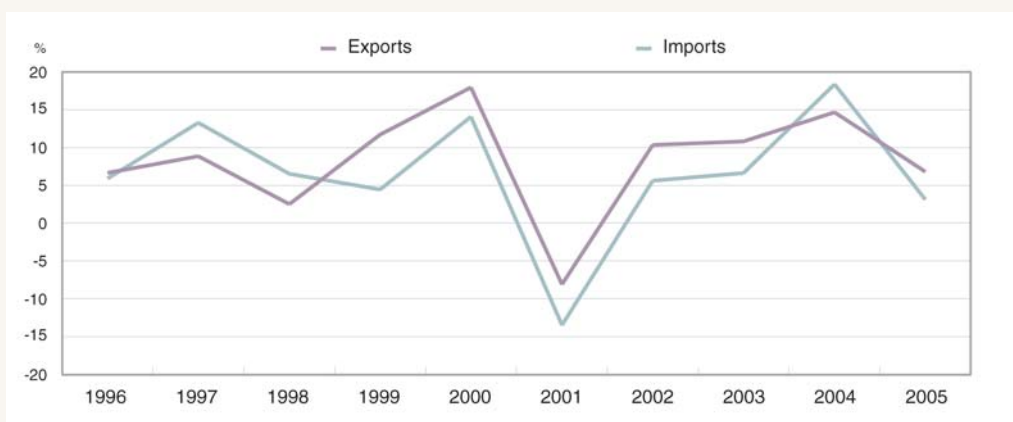
#### (4) Moderate Rise in Exports

Exports were a major pillar of strength for real GDP growth in 2005. During the first half of 2005, exports growth slowed compared to 2004 as external demand growth declined amid a slowdown in the global economy. From the third quarter on, exports regained strength owing to strength in the international economy accompanied by IT recovery. During the fourth quarter, exports surged to double-digit growth as demand for electronics intensified. For 2005 as a whole, the real growth rate of exports of goods and services measured in NT dollars decreased from 14.83 percent in 2004 to 6.93 percent. Exports of goods and services accounted for 62.78 percent of GDP for the year, contributing 4.17 percentage points to overall economic growth.

#### (5) Slight Increase of Imports

Driven by the derived demand from the steady growth of exports, import growth also ex-

**Real Growth Rate of Exports and Imports**



Source: *Statistical Abstract of National Income, Republic of China, DGBAS, Executive Yuan, February 2006.*

perienced a similar expanding trend. However, dragged by the slump in private investment, the pace of import growth was much slower than that of exports in the fourth quarter.

For the year as a whole, the real growth rate of imports of goods and services measured in NT dollars dropped to 3.22 percent, substantially lower than the 18.55 percent registered the previous year. Imports of goods and services accounted for 58.76 percent of GDP for the year, subtracting 1.64 percentage points from economic growth.

Overall, foreign trade, which withheld 0.23 of a percentage point of economic growth in 2004, turned to offer 2.52 percentage points of economic growth in 2005.

### **GDP by Sector of Production**

The services and industrial sectors grew in 2005, while the agricultural sector contracted. On a whole, the services sector remained the predominant driving force for economic growth, pitching in 2.64 percentage points to economic growth in 2005, down from 3.70 percentage points in 2004. Industrial output contributed only 1.51 percentage points to overall economic growth. However, agricultural production subtracted 0.07 of a percentage point from overall economic growth.

Analyzing sector shares of GDP in nominal terms, the services sector continued to rise and the agriculture sector experienced some growth, accounting 73.56 percent and 1.80 percent of GDP, respectively. The industrial sector, in contrast, continued to recede, ending with 24.64 percent of GDP for the year.

#### **(1) Negative Growth of Agricultural Output**

The real growth rate of agricultural production, including agriculture, forestry, fishing, and animal husbandry industries, fell to -4.10 percent in 2005 due to cost factors. Except animal husbandry, all other industries within the sector were adversely affected by floods and severe typhoons.

#### **(2) Steady Growth in Industrial Output**

Industrial production, including mining and quarrying, manufacturing, construction, electricity, and gas and water, grew by 5.24 percent in real terms, lower than the 8.68 percent posted in 2004.

### Gross Domestic Product by Type of Activity

Unit: %

|   | 2005   |                  |  | 2004   |                  |  |
|---|--------|------------------|--|--------|------------------|--|
|   | Share  | Real Growth Rate | Contribution to Real Growth Rate of GDP* | Share  | Real Growth Rate | Contribution to Real Growth Rate of GDP* |
| Agriculture                                   | 1.80   | -4.10            | -0.07                                    | 1.68   | -4.09            | -0.07                                    |
| Industry                                      | 24.64  | 5.24             | 1.51                                     | 25.58  | 8.68             | 2.44                                     |
| Mining & Quarrying                            | 0.31   | -4.62            | -0.01                                    | 0.34   | -2.80            | -0.01                                    |
| Manufacturing                                 | 21.13  | 5.76             | 1.41                                     | 21.95  | 9.45             | 2.25                                     |
| Construction                                  | 1.61   | 0.03             | 0.00                                     | 1.65   | 5.95             | 0.13                                     |
| Electricity, Gas & Water                      | 1.59   | 5.78             | 0.11                                     | 1.66   | 3.91             | 0.07                                     |
| Services                                      | 73.56  | 3.80             | 2.64                                     | 72.73  | 5.28             | 3.70                                     |
| Trade   | 18.19  | 6.39             | 1.03                                     | 17.53  | 7.59             | 1.21                                     |
| Accommodation & Eating-drinking Places        | 2.19   | 8.23             | 0.16                                     | 2.08   | 6.04             | 0.12                                     |
| Transport, Storage & Communications           | 6.38   | 4.47             | 0.30                                     | 6.47   | 7.48             | 0.49                                     |
| Finance & Insurance                           | 10.87  | 2.87             | 0.30                                     | 10.81  | 4.73             | 0.50                                     |
| Real Estate, Rental & Leasing                 | 8.32   | 2.68             | 0.22                                     | 8.37   | 3.64             | 0.31                                     |
| Professional, Scientific & Technical Services | 2.42   | 2.52             | 0.06                                     | 2.40   | 7.81             | 0.17                                     |
| Educational Services                          | 1.90   | 3.38             | 0.06                                     | 1.87   | 2.70             | 0.05                                     |
| Health Care & Social Welfare Services         | 3.08   | 3.24             | 0.09                                     | 2.99   | 3.13             | 0.09                                     |
| Government Services                           | 11.30  | 1.07             | 0.11                                     | 11.42  | 1.35             | 0.15                                     |
| Gross Domestic Product                        | 100.00 | 4.09             | 4.09                                     | 100.00 | 6.07             | 6.07                                     |

Note: \* Percentage point.

Source: *Statistical Abstract of National Income, Republic of China, DGBAS, Executive Yuan, February 2006.*

The overall decline in growth, in turn, was mostly due to the slowdown in the growth in manufacturing production, the largest share of the sector, and partly due to the contraction of mining and quarrying that were let down by a slower growth in the construction industry. In 2005, manufacturing production grew by 5.76 percent in real terms, compared with 9.45 percent posted in the previous year. In the same year, production in mining and quarrying reported -4.62 percent growth, less than the -2.80 percent reported a year ago.

The slowdown in the growth in manufacturing production was most apparent during the first half of the year as growth in the global economy weakened and oil and raw material prices rose. From the third quarter onwards, the situation improved as the global economy, and IT in particular, recovered. Manufacturing production expanded at an accelerated pace, reporting double-digit growth in the fourth quarter as export performance improved markedly. Within the manufacturing production, the information and electronic industry posted the



strongest growth, or 8.70 percent in 2005. In the second half of the year, growth in the chemical industry was boosted as damages incurred by Hurricanes Katrina and Rita caused a shortage in the supply of U.S. petrochemicals. Nevertheless, this was outweighed by a decline in growth in the first half of the year, resulting in a mere 0.30 percent increase in the chemical industry for the year as a whole. The metal and machinery industry, however, contracted 0.30 percent for the year.

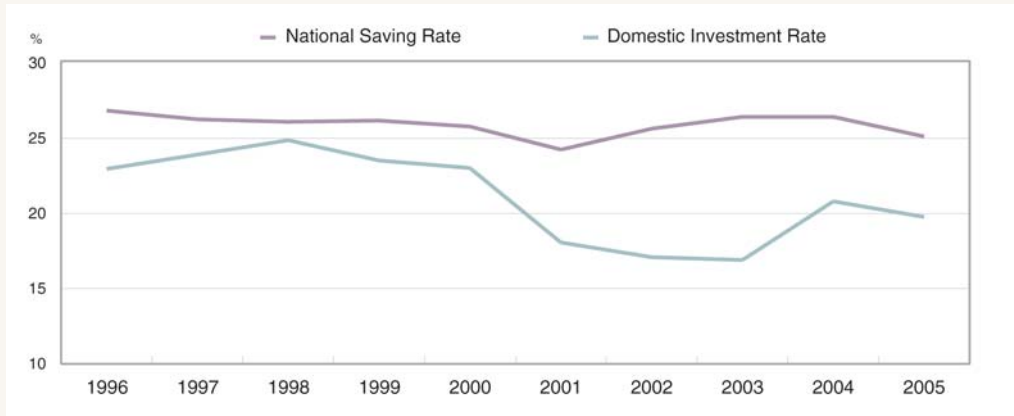
### **(3) Tepid Growth in the Services Sector**

Services output rose by 3.80 percent in real terms for the year 2005, lower than the 5.28 percent posted in the previous year. Against the backdrop of consumers spending more on tourism and eating out, the real growth rate of the accommodation and eating-drinking places industry increased most significantly, and posted 8.23 percent growth for the year. In addition, the growth of the health care and social welfare services industry rose to 3.24 percent in real terms. The increase was primarily attributable to the rising expenditure on medical care incurred by the aging population. However, most of the other industries within the services sector posted lower growth rates than those of the previous year. The real growth rates of the trade industry, and the transport, storage and communications industry decreased to 6.39 percent and 4.47 percent, respectively, due to the decline in external trade growth during the first half of the year. The real growth rate of the finance and insurance industry edged down to 2.87 percent as a result of relatively weak stock market activities. Among the services sector, the government services sector recorded the smallest growth rate of 1.07 percent for 2005, reflecting the government's continued efforts to constrain expenditure.

### **Decline in National Saving Rate**

The national saving rate (national saving to GNP measured at current prices) decreased from 26.32 percent in the previous year to 25.01 percent in 2005 as nominal national consumption (including both private consumption and government consumption expenditures) grew by a higher rate of 4.30 percent compared to the GNP growth rate of 2.51 percent. The rise in national consumption was mainly attributable to the steady increase in private consumption in response to moderate economic performance and improved employment conditions. In addition, the increase in government consumption, resulting from a 3.00 percent pay raise for teachers, civil servants and members of the military in 2005, also contributed to the rise in national consumption.

### National Saving Rate and Domestic Investment Rate



Source: *Statistical Abstract of National Income, Republic of China, DGBAS, Executive Yuan, February 2006.*

The excess saving (national saving less gross domestic investment) to GNP ratio inched down from 5.59 percent in the previous year to 5.30 percent in 2005 as a result of a greater decline of national saving than that of domestic investment.