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***ECONOMIC DEVELOPMENT***  
***TAIWAN, REPUBLIC OF CHINA*** **2002**

COUNCIL FOR ECONOMIC  
PLANNING AND DEVELOPMENT



# Economic Development Taiwan, Republic of China 2002

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## **Geographic Features and Natural Resources**

Strategically located in the middle of a chain of islands stretching from Japan in the north to the Philippines in the south, and only 160 kilometers off the southeastern coast of the Chinese mainland, the island of Taiwan is a natural gateway to East Asia. Taiwan occupies an area of only 36,006 square kilometers, roughly equal to the size of the Netherlands. At mid-2001, its population stood at 22.3 million. With 619 persons per square kilometer, Taiwan is one of the most densely populated areas in the world.






Three-quarters of the land is mountainous, with a spine-like ridge of steep mountains extending from north to south. About 60% of the land is forested, but forest resources are minimally exploited because of limited accessibility and environmental concerns. Even though only one-quarter of the land is arable, the subtropical climate permits multi-cropping of rice and growing of fruit and vegetables all-year-round. However, agricultural production accounted for only 2.5% of real gross domestic product (GDP, at 1996 prices) in 2001.

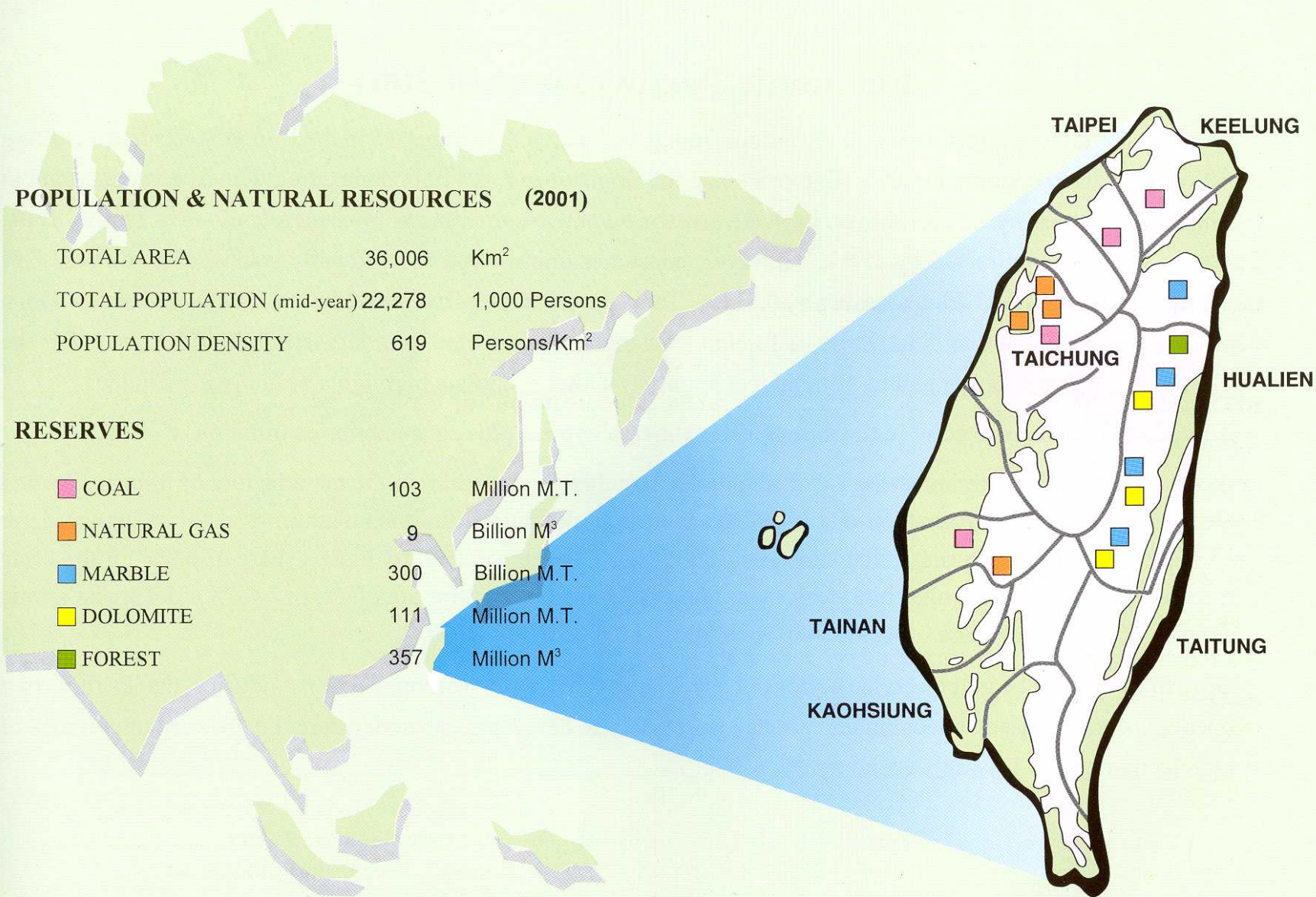
Although Taiwan does have deposits of coal, limestone, marble, dolomite, and natural gas, it is not richly endowed by nature. Indeed, more than 90% of its energy needs are met by imports, and its rapid industrialization also has relied heavily on imports of raw materials. However, Taiwan has an ample supply of human resources, of which it has made highly effective use.

## POPULATION & NATURAL RESOURCES (2001)

TOTAL AREA	36,006	Km <sup>2</sup>
TOTAL POPULATION (mid-year)	22,278	1,000 Persons
POPULATION DENSITY	619	Persons/Km <sup>2</sup>

## RESERVES

 COAL	103	Million M.T.
 NATURAL GAS	9	Billion M <sup>3</sup>
 MARBLE	300	Billion M.T.
 DOLOMITE	111	Million M.T.
 FOREST	357	Million M <sup>3</sup>



## **Economic Performance in 2001**

Global economic sluggishness and the fallout from the events of September 11 in the United States had a chilling effect on Taiwan's economy in 2001. External trade fell dramatically, not only dampening domestic production but leading to a steep decline of 26.7% in real private investment and a higher unemployment rate of 4.6%. During 2001, Taiwan's economy contracted by 1.9%. However, consumer prices were exceptionally stable, with the core CPI rising by only 0.08% (the CPI decreasing by 0.01%). Taiwan's per capita GNP ranked 24th among economies with a population exceeding one million, while its foreign exchange reserves were third largest. In 2001, Taiwan was the world's 14th biggest exporter and its 15th largest importer. Other economic highlights of the year included:

- A rise of 0.3 percentage point in the misery index (unemployment plus consumer price inflation) to 4.6%.
- A contraction of 6.0% in industrial value added, due largely to a downturn in the manufacture of information and electronic products. Information and high-tech industries dominated the manufacturing sector, accounting for 33.6% of total manufacturing value added (at 1996 prices), far above the next-largest share of 6.9% for the basic metals industry. Meanwhile, high-tech manufacturers contributed more than half, or 54.4%, of Taiwan's total exports, though their share of exports dipped slightly from 55.8% in 2000.
- Growth of only 0.3% in the service sector but as much as 7.5% in the communications industry, thanks to further opening of the domestic telecommunications market. These developments underscore the growing importance of high technology in Taiwan's economy.

## Major Economic Indicators\*

Item	Unit	1999	2000	2001
Economic growth rate (real GDP increase)	%	5.4	5.9	-1.9
Gross national product (GNP)	US\$ billion	290.5	313.9	288.3
Per capita GNP	US\$	13,235	14,188	12,941
Changes in consumer price index (CPI)	%	0.2	1.3	-0.01
Exchange rate (end of the year)	NT\$ per US\$	31.395	32.992	34.999
Prime lending rate (end of the year)	%	7.840	7.940	7.600
Unemployment rate	%	2.9	3.0	4.6
Foreign exchange reserves (end of the year)	US\$ billion	106.2	106.7	122.2
Merchandise exports (at FOB prices)	US\$ billion	121.6	148.3	122.9
Merchandise imports (at CIF prices)	US\$ billion	110.7	140.0	107.2
Balance of trade in merchandise	US\$ billion	10.9	8.3	15.6
Balance of trade in goods & services	US\$ billion	7.9	7.0	14.9
Balance of trade in goods & services as percentage of GDP	%	2.8	2.3	5.3

\*GNP and trade figures are given at current prices.

**Sources:** 1. Directorate-General of Budget, Accounting and Statistics (DGBAS), Executive Yuan, R.O.C., *Quarterly National Economic Trends, Taiwan Area, R.O.C.*, No. 96, Feb. 2002.

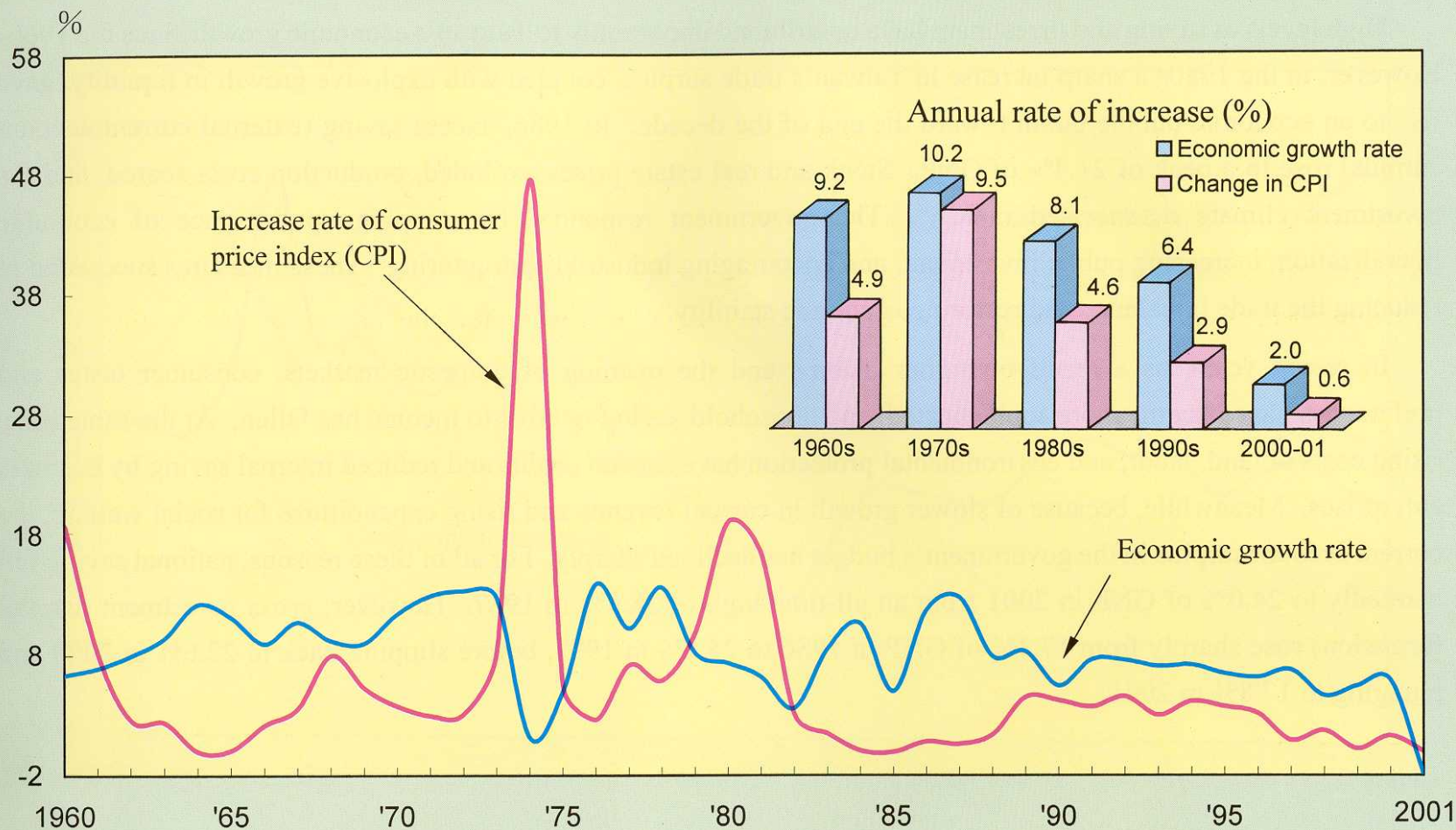
2. The Central Bank of China, R.O.C., *Financial Statistics Monthly, Taiwan District, R.O.C.*, Feb. 2002.

## **Growth with Stability and Equity**

Rapid economic growth, stable prices, low unemployment, and equitable income distribution — these are among Taiwan's most noteworthy economic achievements.

- From 1960 through the 1980s, Taiwan sustained an average annual economic growth rate of 9.2%.
- Aside from the oil-crisis years, consumer prices advanced at an average annual pace of 4.8% during the 1970s. In the 1980s, their increase slowed to only 1.4% per year.
- Although Taiwan's economy has entered a more-mature stage in recent years, growth momentum has been maintained. In the 1990s, the economy expanded 6.4% per year, while the annual increase in consumer prices averaged 2.9%. From 2000 through 2001, the corresponding figures were 2.0% and 0.6% respectively.
- Disregarding the two oil-crisis periods, unemployment remained below 2.0% of the labor force for most years after the mid-1960s. However, after jumping to 2.6% in 1996 and climbing further to 3.0% in 2000, the jobless rate shot up to 4.6% in 2001.
- Breaking the US\$1,000 level in 1976, per capita GNP reached US\$12,941 in 2001. The ratio between income received by the most-affluent one-fifth of Taiwan's households and that received by the least-affluent one-fifth rose from 4.17 in 1980 to 5.55 in 2000, due to a decrease in the size of households in the lower income group. However, on the basis of household income per capita the ratio between the two groups actually declined, from 2.60 to 2.37. This record of growth with stability and equity has been matched by only a handful of countries worldwide.

# Economic Growth and Price Changes



Sources: 1. DGBAS, *Statistical Abstract of National Income, Taiwan Area, R.O.C., 1951-2002*, March 2002.  
 2. DGBAS, *Quarterly National Economic Trends, Taiwan Area, R.O.C.*, No. 96 Feb. 2002.

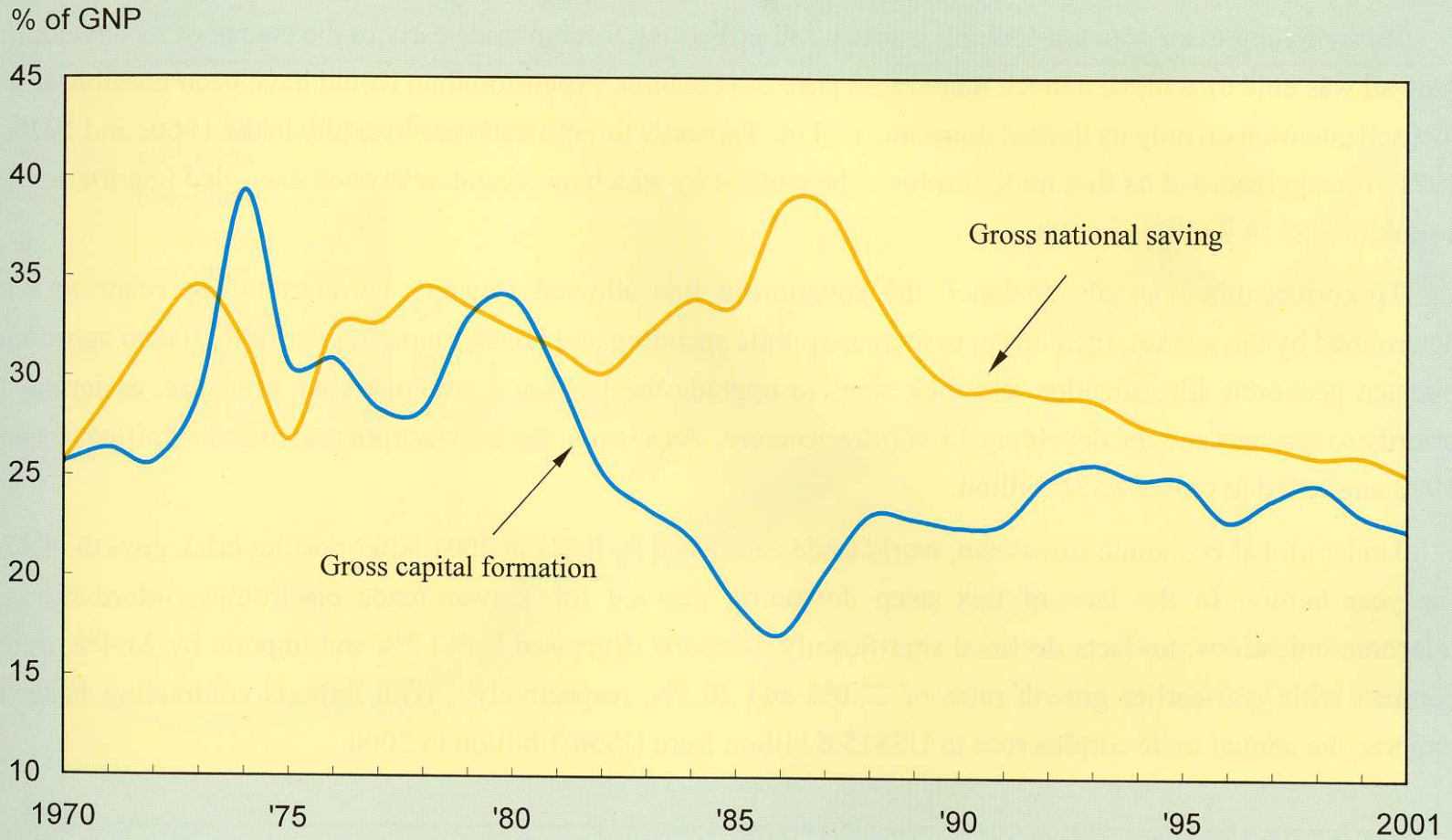


## **Saving and Investment**

High levels of saving and investment have contributed importantly to Taiwan's economic growth since the 1960s. However, in the 1980s a sharp increase in Taiwan's trade surplus, coupled with explosive growth in liquidity, gave rise to an economic bubble boom toward the end of the decade. In 1986, excess saving (external current account surplus) rose to a peak of 21.4% of GNP. Stock and real estate prices exploded, production costs soared, and the investment climate deteriorated rapidly. The government responded by stepping up the pace of economic liberalization, increasing public investment, and encouraging industrial restructuring. These measures succeeded in reducing the trade imbalance and restoring economic stability.

In recent years, as a result of higher income and the opening of domestic markets, consumer tastes and preferences have become more sophisticated, and household saving relative to income has fallen. At the same time, rising costs of land, labor, and environmental protection have shaved profits and reduced internal saving by business enterprises. Meanwhile, because of slower growth in current revenue and rising expenditures for social welfare, the current account surplus in the government's budget has declined sharply. For all of these reasons, national saving fell markedly to 24.0% of GNP in 2001 from an all-time high of 38.5% in 1987. However, gross investment (capital formation) rose sharply from 17.1% of GNP in 1986 to 25.7% in 1993, before slipping back to 22.6% in 2000 and plunging to 17.8% in 2001.

# Saving and Investment



Source: DGBAS, *Quarterly National Economic Trends, Taiwan Area, R.O.C.*, No. 96, Feb. 2002.

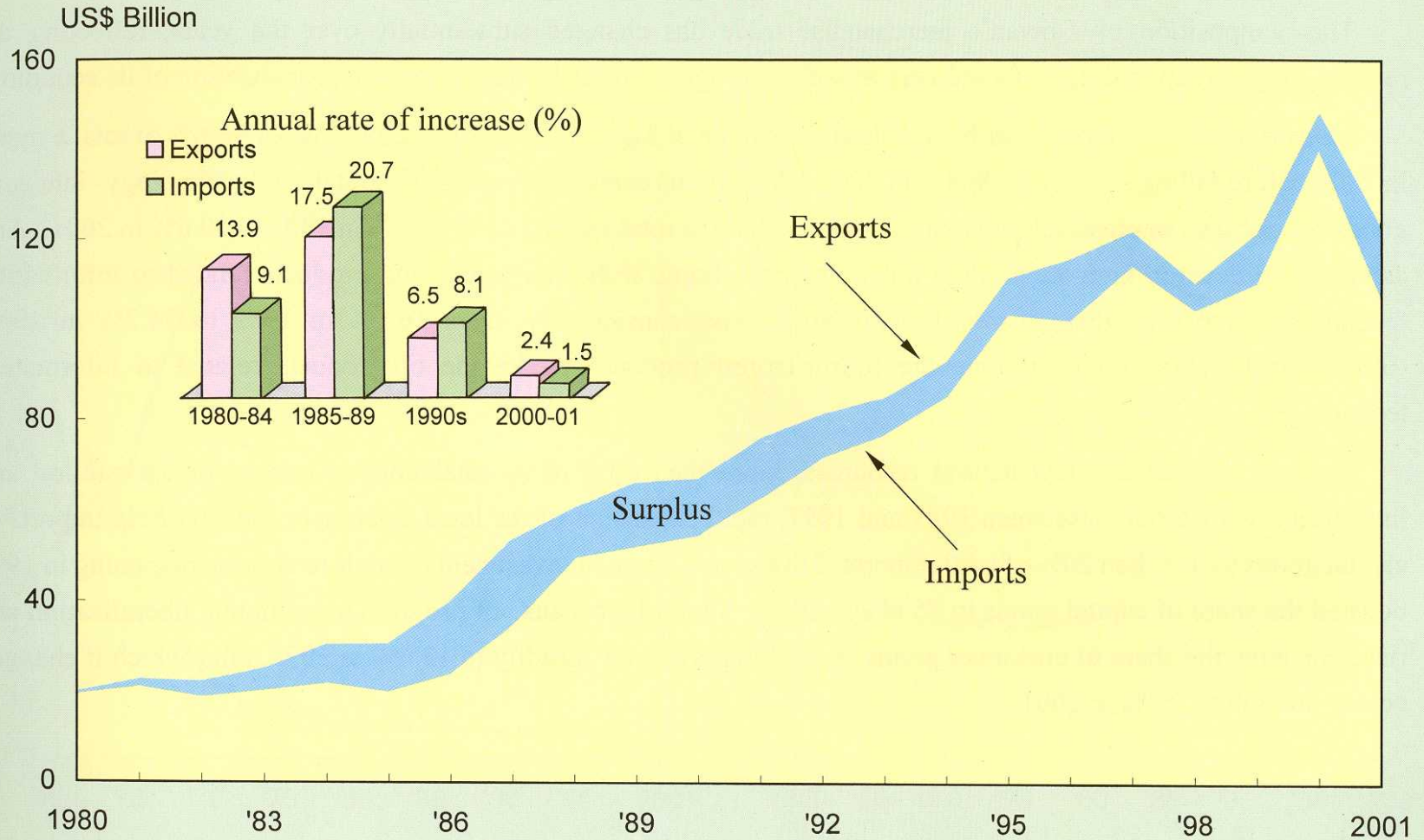
## Trade

By switching to an outward-looking strategy and promoting foreign trade early in the course of its development, Taiwan was able to achieve a much more rapid pace of economic expansion than would have been possible if it had focused attention on only its limited domestic market. Taiwan's foreign trade grew rapidly in the 1960s and 1970s. In 1971, Taiwan recorded its first trade surplus. The amount by which merchandise exports exceeded imports soared to a peak of US\$18.7 billion in 1987.

To correct this external imbalance, the government first allowed Taiwan's currency to appreciate to a level determined by the market, then began to increase public spending and bolster domestic demand. It also aggressively pursued economic liberalization and took steps to upgrade the legal and administrative structure, assigning high priority to services and the development of infrastructure. As a result, the trade surplus narrowed significantly and in 1998 amounted to only US\$5.9 billion.

Under global economic slowdown, world trade contracted by 0.2% in 2001, after posting brisk growth of 12.4% the year before. In the face of this steep downturn, demand for Taiwan-made electronics, information, and telecommunications products declined significantly. Exports decreased by 17.2% and imports by 23.4%, in sharp contrast with year-earlier growth rates of 22.0% and 26.5%, respectively. With imports contracting faster than exports, the annual trade surplus rose to US\$15.6 billion from US\$8.3 billion in 2000.

# Trade



Source: Ministry of Finance, R.O.C., *Monthly Statistics of Exports and Imports, Taiwan Area, R.O.C.*, Feb. 2002.

## Composition of Trade

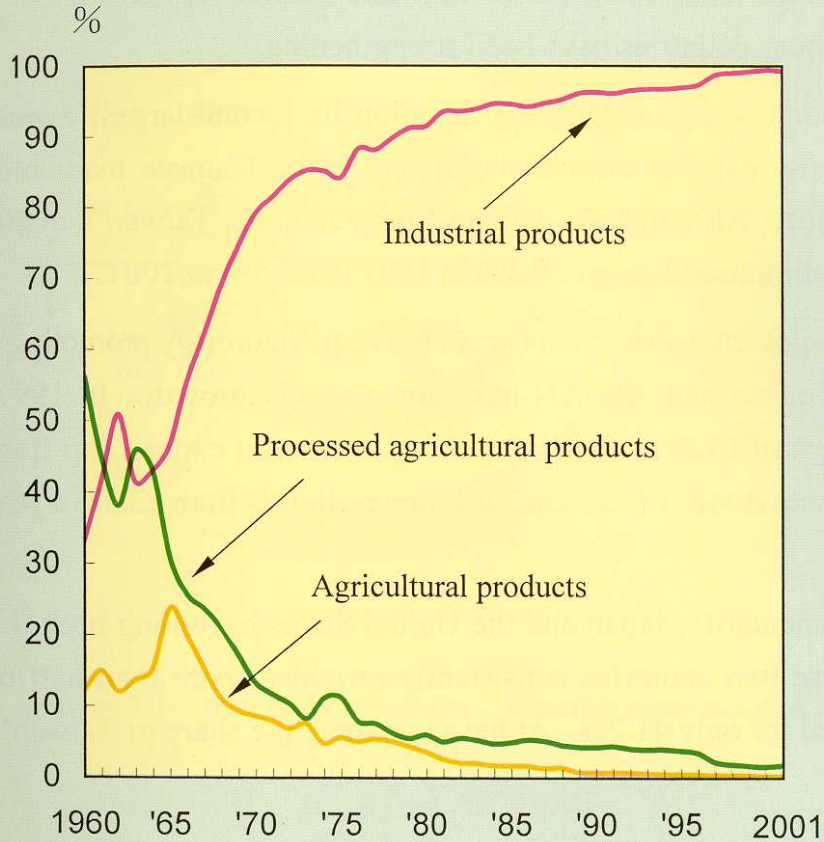
The composition of Taiwan's merchandise trade has changed substantially over the years, reflecting the restructuring and upgrading of its industry as well as progress in the liberalization and globalization of its economy.

Industrial products have steadily increased their share of Taiwan's exports, accounting for 98.6% of total exports in 2000 before falling slightly to 98.4% in 2001. Within this category, exports of capital- and technology-intensive goods have shown impressive growth, raising their share of total exports from 32.2% in 1981 to 69.6% in 2001. And as efforts to develop high-technology industries have borne fruit, electronics and products related to information technology have seen their share of total exports rise considerably, from 16.1% in 1981 to 34.7% in 2001. Consequently, Taiwan has become the fourth-largest producer worldwide of products related to information technology.

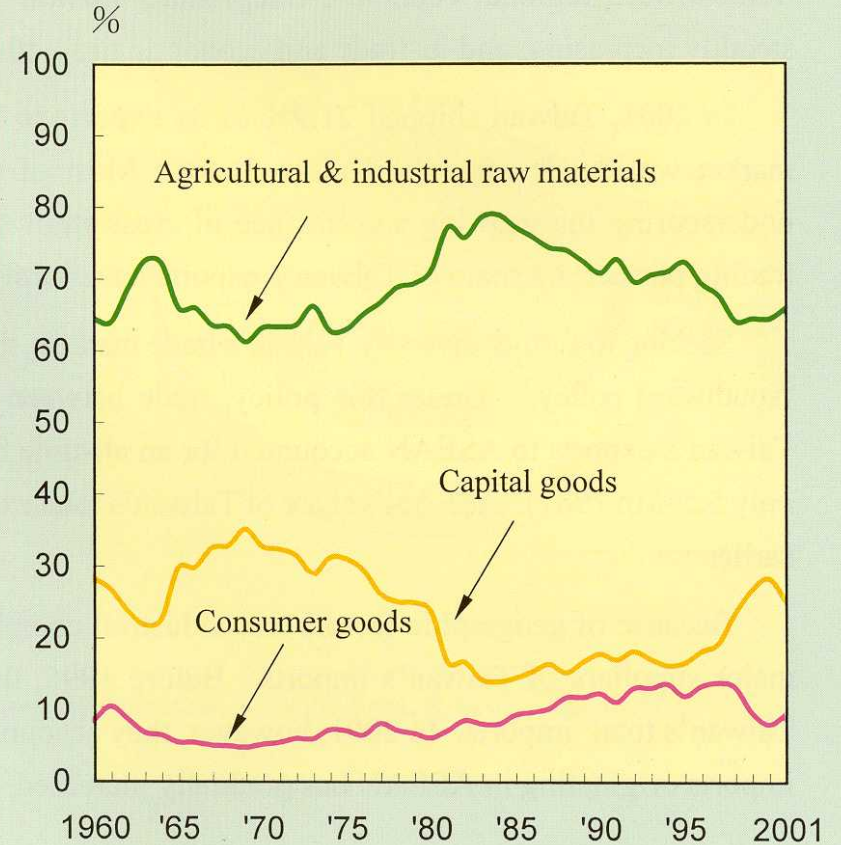
Because Taiwan has few natural resources, more than 60% of its total imports consist of agricultural and industrial raw materials. Between 1981 and 1997, rapid expansion of the local machinery industry held imports of capital goods to less than 20% of total imports. However, a surge in investment by high-tech firms beginning in 1998 boosted the share of capital goods to 25.0% in 2001. Similarly, because of progress in economic liberalization and rising income, the share of consumer goods in total imports grew steadily to 13.6% in 1997, after which it changed course and fell to 9.2% in 2001.

# Composition of Trade

## Exports



## Imports



Source: Ministry of Finance, R.O.C., *Monthly Statistics of Exports and Imports, Taiwan Area, R.O.C.*, various issues.

## Trading Partners

Because of the continuing shift of the center of world economic gravity from West to East, and the increasing trend toward regional economic integration, Taiwan's trade with countries of the Asia-Pacific region has been steadily increasing, and its trade and economic ties with those countries have been strengthening.

In 2001, Taiwan shipped 21.9% of its exports to Hong Kong, making that location its second-largest export market worldwide after the United States. Most of those exports were transshipped to the Chinese mainland, underscoring the growing significance of cross-strait trade. Although the United States remains Taiwan's major trading partner, its share of Taiwan's exports has sharply diminished, from 29.3% in 1991 to 22.5% in 2001.

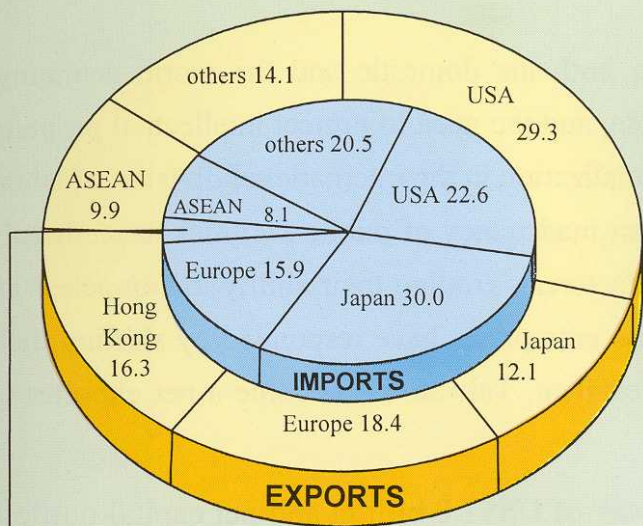
Seeking to further diversify Taiwan's trade markets, the government in recent years has been vigorously promoting a "southward policy." Under this policy, trade between Taiwan and ASEAN has shown steady growth. In 1997, Taiwan's exports to ASEAN accounted for an all-time high of 13.3% (US\$16.2 billion) of its total exports (up from only 5.5% in 1987). ASEAN's share of Taiwan's total exports stood at 12.0% in 2001, down slightly from 12.3% a year earlier.

Because of geographic factors and industrial complementarity, Japan and the United States have long been the major suppliers of Taiwan's imports. Before 1995, these two countries consistently provided more than half of Taiwan's total imports. In 2001, however, they accounted for only 41.2%. At the same time, the share of Taiwan's imports originating in ASEAN has gradually increased.

# Trading Partners

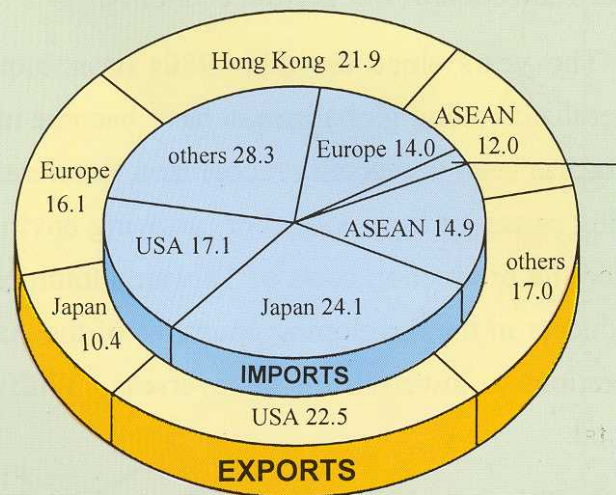
Unit: %

1991



Hong Kong 3.1

2001

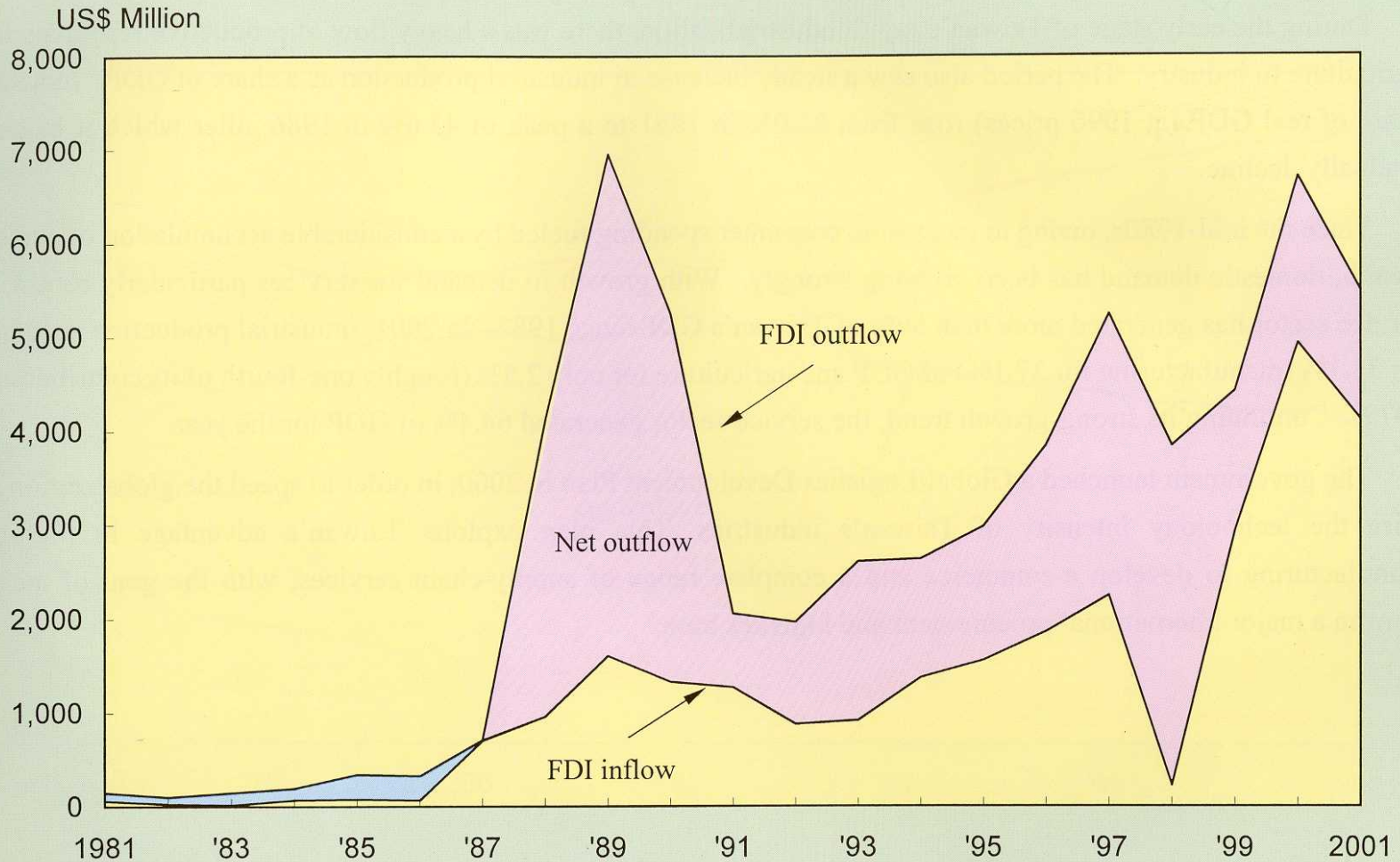


Hong Kong 1.7

Source: Ministry of Finance, R.O.C., *Monthly Statistics of Exports and Imports, Taiwan Area, R.O.C.*, Dec. 1999 and Feb. 2002.



# Foreign Direct Investment



Source: The Central Bank of China, R.O.C., *Balance of Payments Quarterly, Taiwan District, R.O.C.*, Feb. 2002.

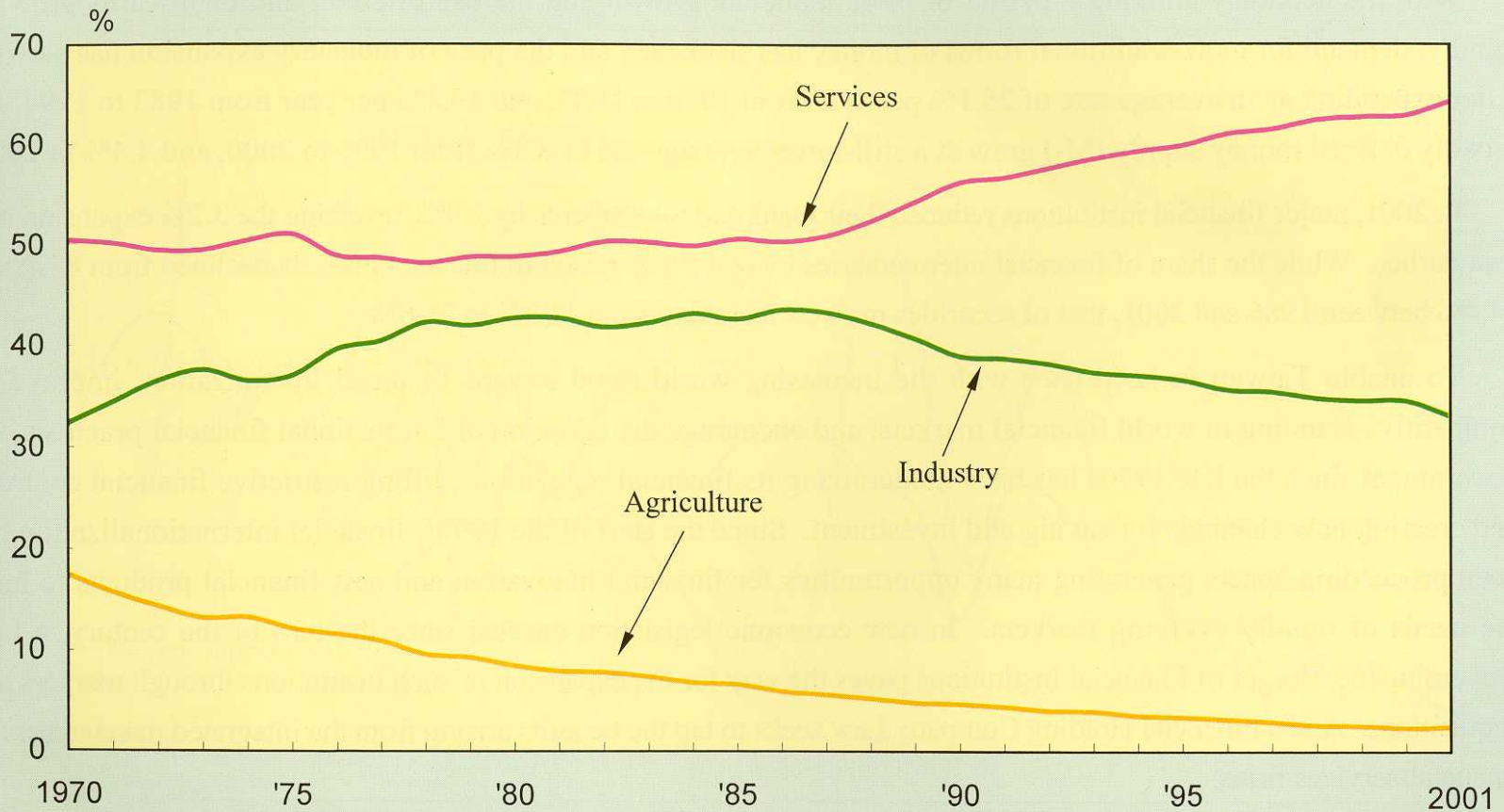
## Production Structure

During the early stage of Taiwan's rapid industrialization, there was a heavy flow of productive resources from agriculture to industry. The period also saw a steady increase in industrial production as a share of GDP. Industry's share of real GDP (at 1996 prices) rose from 22.0% in 1961 to a peak of 43.6% in 1986, after which it began to gradually decline.

Since the mid-1980s, owing to increasing consumer spending fueled by a considerable accumulation of personal wealth, domestic demand has been growing strongly. With growth in demand for services particularly robust, the service sector has generated more than 50% of Taiwan's GDP since 1982. In 2001, industrial production accounted for 33.1% (manufacturing for 27.1%) of GDP and agriculture for only 2.5% (roughly one-fourth of its contribution in 1979). Continuing its strong-growth trend, the service sector generated 64.4% of GDP for the year.

The government launched a Global Logistics Development Plan in 2000, in order to speed the globalization and raise the technology intensity of Taiwan's industries. This plan exploits Taiwan's advantage in high-tech manufacturing to develop e-commerce and a complete range of supply-chain services, with the goal of making Taiwan a major international procurement and logistics base.

## Gross Domestic Product by Sector\*



\* at 1996 prices.

Source: Computed from DGBAS, *Statistical Abstract of National Income, Taiwan Area, R.O.C., 1951-2002*, March 2002.

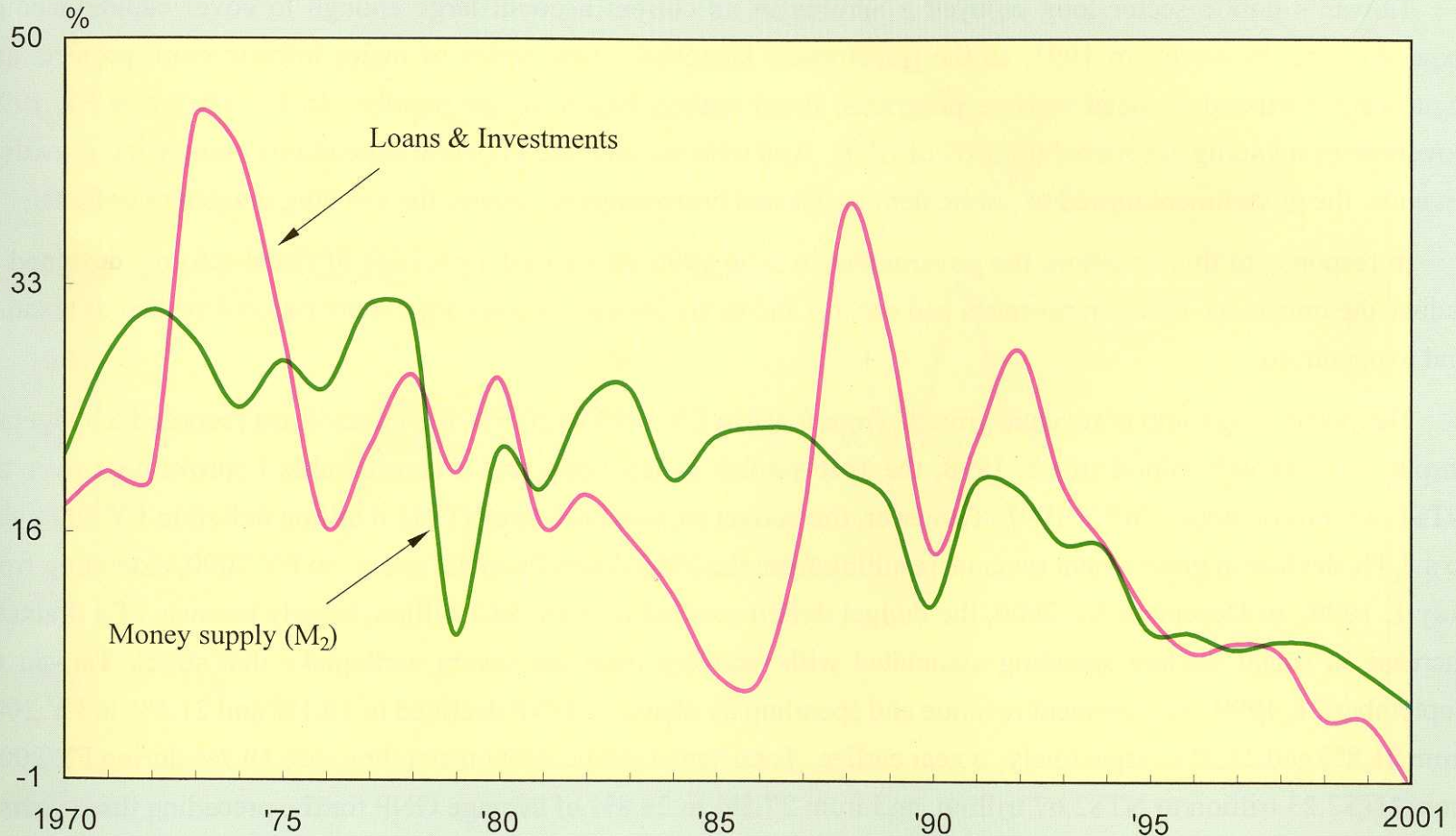
## Monetary and Financial Development

With the economy entering a period of more moderate growth and the use of credit and debit cards growing rapidly, demand for more-traditional forms of money has slackened and the pace of monetary expansion has slowed. After expanding at an average rate of 25.1% per year from 1970 to 1982, and 19.4% per year from 1983 to 1994, the broadly defined money supply ( $M_2$ ) grew at a still-lower average rate of 8.3% from 1995 to 2000, and 4.4% in 2001.

In 2001, major financial institutions reduced their loans and investments by 1.0%, reversing the 3.2% expansion of a year earlier. While the share of financial intermediaries in total funds raised in financial markets declined from 88.7% to 74.4% between 1986 and 2001, that of securities markets increased from 11.3% to 25.6%.

To enable Taiwan to keep pace with the increasing world trend toward financial liberalization, improve its competitive standing in world financial markets, and encourage the adoption of international financial practices, the government since the late 1970s has been modernizing its financial regulations, lifting restrictive financial controls, and creating new channels for saving and investment. Since the start of the 1990s, financial internationalization has been proceeding apace, generating many opportunities for financial innovation and new financial products to meet the needs of rapidly evolving markets. In new economic legislation enacted since the turn of the century, a Law Governing the Merger of Financial Institutions paves the way for the expansion of such institutions through mergers and acquisitions. And a Financial Holding Company Law seeks to tap the benefits arising from the integrated management of financial-services firms.

## Changes in Money Supply and Credit



Source: The Central Bank of China, R.O.C., *Financial Statistics Monthly, Taiwan Area, R.O.C.*, various issues.

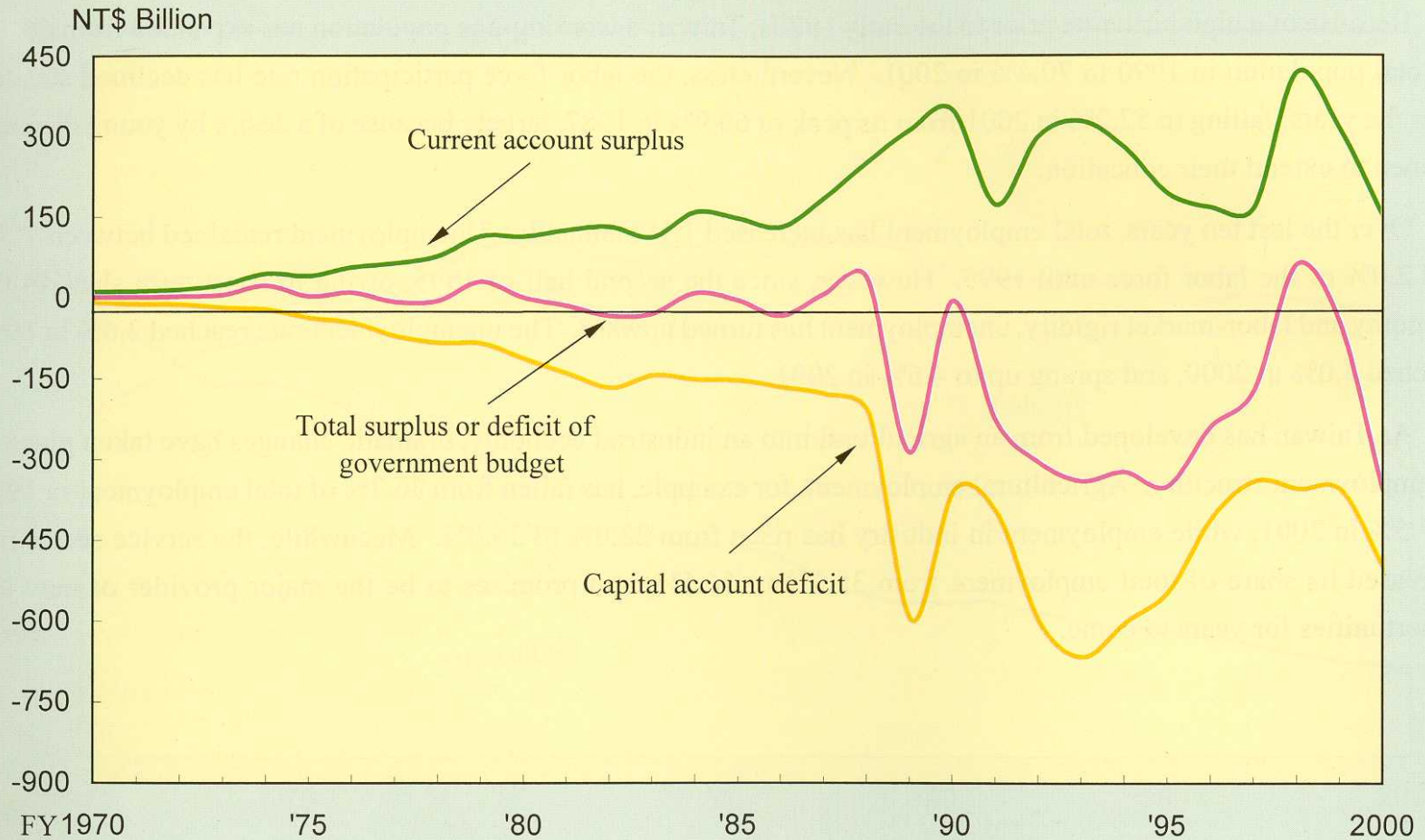
## Public Finance

Taiwan's public sector long enjoyed a surplus in its current account large enough to cover capital-account expenditures. However, in 1991, as the government launched a new series of major infrastructure projects and significantly expanded social welfare programs, fiscal outlays began to rise rapidly. In FY 1992 and FY 1993, government spending accounted for 30% of GNP. And with the increase in public expenditures outpacing growth in revenue, the government turned to public debt issues and borrowings to finance the growing budgetary deficits.

In response to this situation, the government in June 1996 introduced a package of fiscal reforms designed to reduce the imbalance between revenues and outlays and to lay the groundwork for a more rational system of taxation and expenditure.

Thanks to a big jump in revenue growth, from 6.3% in FY 1997 to 20.5%, the government recorded a budgetary surplus of NT\$60.9 billion in FY 1998, the first surplus in ten years and a considerable improvement over the NT\$174.0 billion deficit in FY 1997. However, the budget slipped back to a NT\$45.6 billion deficit in FY 1999, due to a 2.4% decline in government revenue resulting from the 1997 Asian financial crisis. In FY 2000, extending from July 1, 1999, to December 31, 2000, the budget deficit swelled to NT\$356.1 billion, largely because of a dramatic increase in social welfare spending associated with recovery from the severe earthquake that struck Taiwan on September 21, 1999. Government revenue and spending as shares of GNP declined to 19.1% and 21.5% in FY 2000 from 21.8% and 22.3%, respectively, a year earlier. Total actual public debt outstanding rose 19.7% during FY 2000, from NT\$2.23 trillion to NT\$2.67 trillion, and from 27.5% to 29.8% of average GNP for the preceding three years.

# Government Budget



**Note:** Financing revenues and debt repayments are excluded.

**Source:** Ministry of Finance, R.O.C.

## Labor Force and Employment

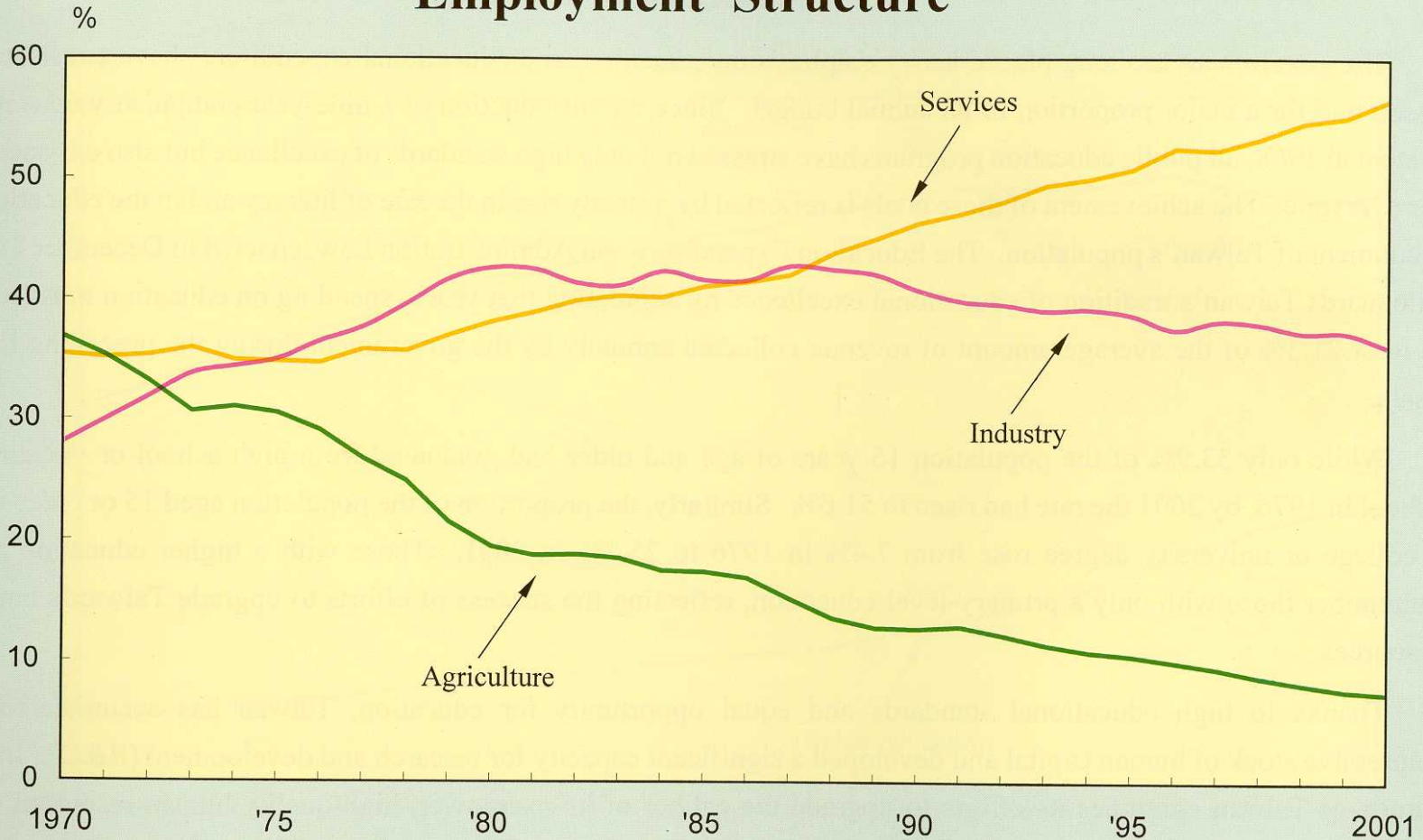
Because of a high birth rate prior to the early 1980s, Taiwan's working-age population has expanded from 66.7% of total population in 1990 to 70.4% in 2001. Nevertheless, the labor force participation rate has declined steadily over the years, falling to 57.2% in 2001 from its peak of 60.9% in 1987, largely because of a desire by young men and women to extend their education.

Over the last ten years, total employment has increased 1.1% annually. Unemployment remained between 1.5% and 2.0% of the labor force until 1995. However, since the second half of 1995, owing to short-term slack in the economy and labor-market rigidity, unemployment has turned upward. The unemployment rate reached 2.6% in 1996, touched 3.0% in 2000, and sprang up to 4.6% in 2001.

As Taiwan has developed from an agricultural into an industrial economy, dramatic changes have taken place in its employment structure. Agricultural employment, for example, has fallen from 36.7% of total employment in 1970 to 7.5% in 2001, while employment in industry has risen from 28.0% to 36.0%. Meanwhile, the service sector has increased its share of total employment from 35.3% to 56.5%, and promises to be the major provider of new job opportunities for years to come.



# Employment Structure



Sources: 1. DGBAS, *Retrospective Estimation and Adjustment of Taiwan Area Manpower Data: 1951-1983*, Oct. 1984.

2. DGBAS, *Monthly Bulletin of Manpower Statistics, Taiwan Area, R.O.C.*, March 2002.

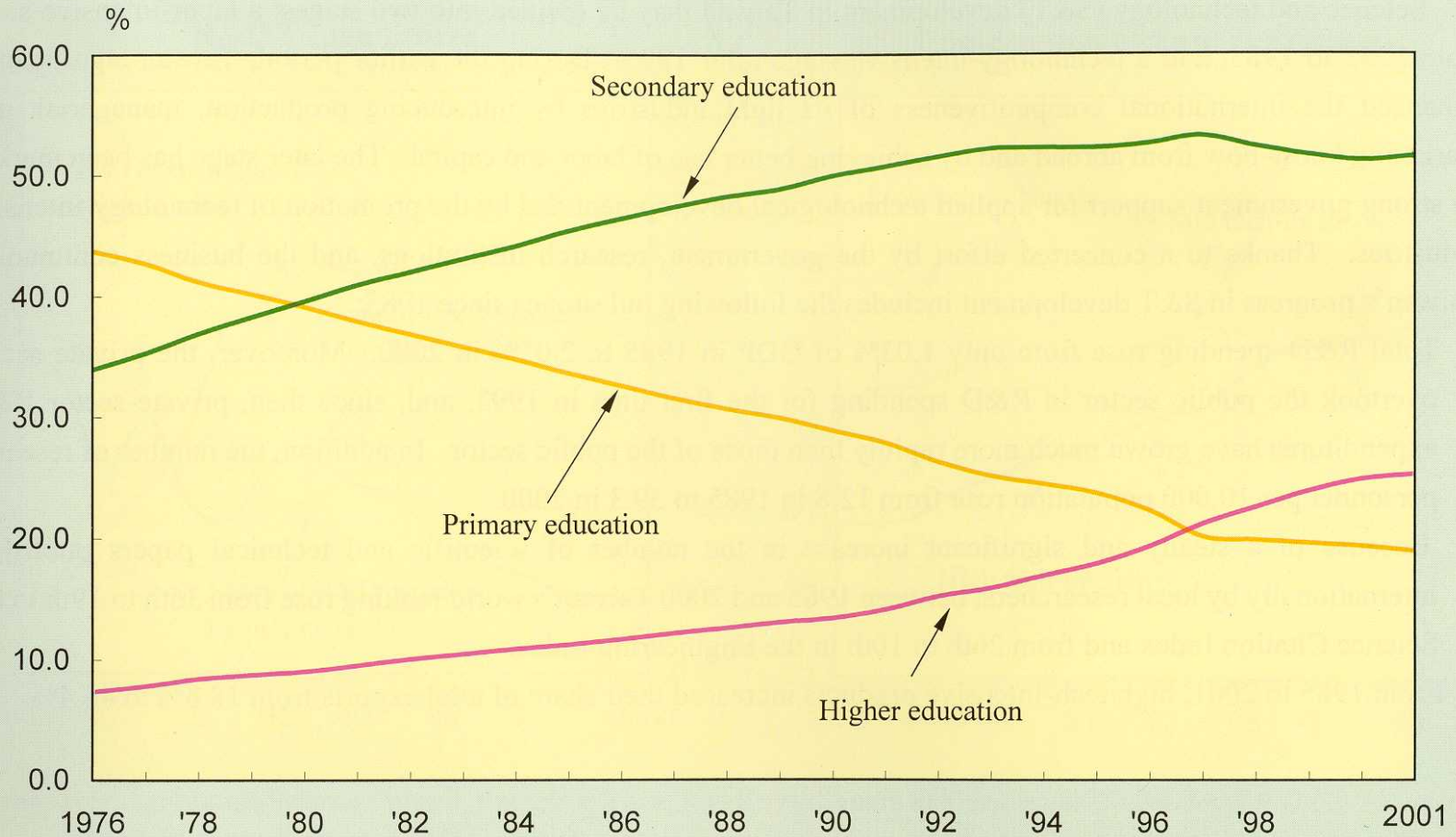
## Education

The government has long placed heavy emphasis on education, and educational expenditures have consistently accounted for a major proportion of its annual budget. Since the introduction of a nine-year compulsory education system in 1968, all public education programs have stressed not only high standards of excellence but also easy access for everyone. The achievement of these goals is reflected by a steady rise in the rate of literacy and in the educational attainment of Taiwan's population. The Education Expenditure and Administration Law, enacted in December 2000, safeguards Taiwan's tradition of educational excellence by stipulating that yearly spending on education must equal at least 21.5% of the average amount of revenue collected annually by the government during the preceding three years.

While only 33.9% of the population 15 years of age and older had graduated from high school or vocational school in 1976, by 2001 the rate had risen to 51.6%. Similarly, the proportion of the population aged 15 or older with a college or university degree rose from 7.4% in 1976 to 25.2% in 2001. Those with a higher education now outnumber those with only a primary-level education, reflecting the success of efforts to upgrade Taiwan's human resources.

Thanks to high educational standards and equal opportunity for education, Taiwan has accumulated an impressive stock of human capital and developed a significant capacity for research and development (R&D). In the future, as Taiwan continues its efforts to upgrade the caliber of its manpower, high-quality human resources will remain its most precious asset and the most important source of its competitiveness.

# Population Aged 15 and Over by Level of Education



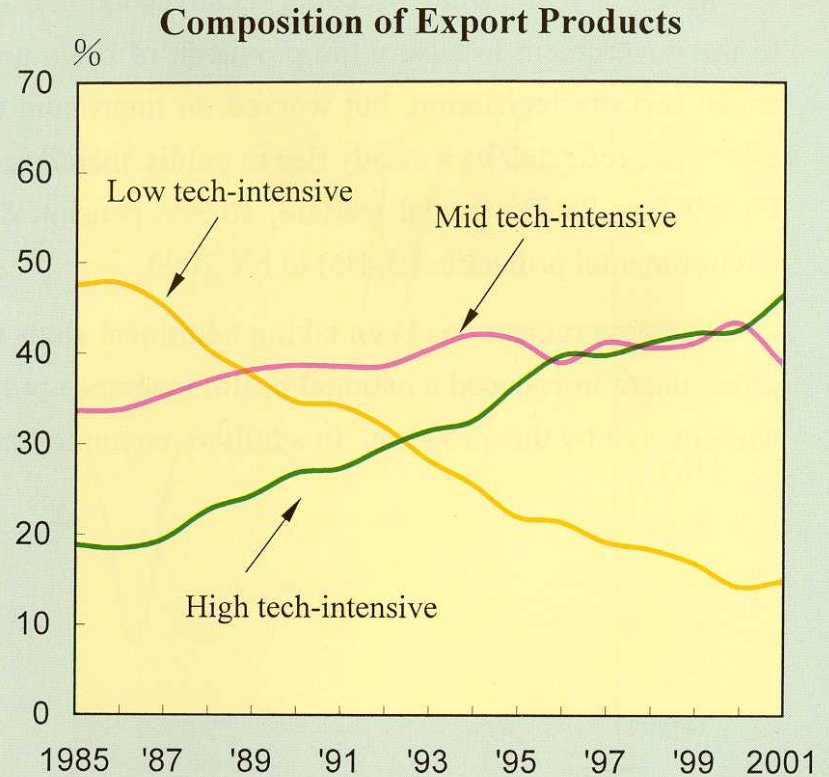
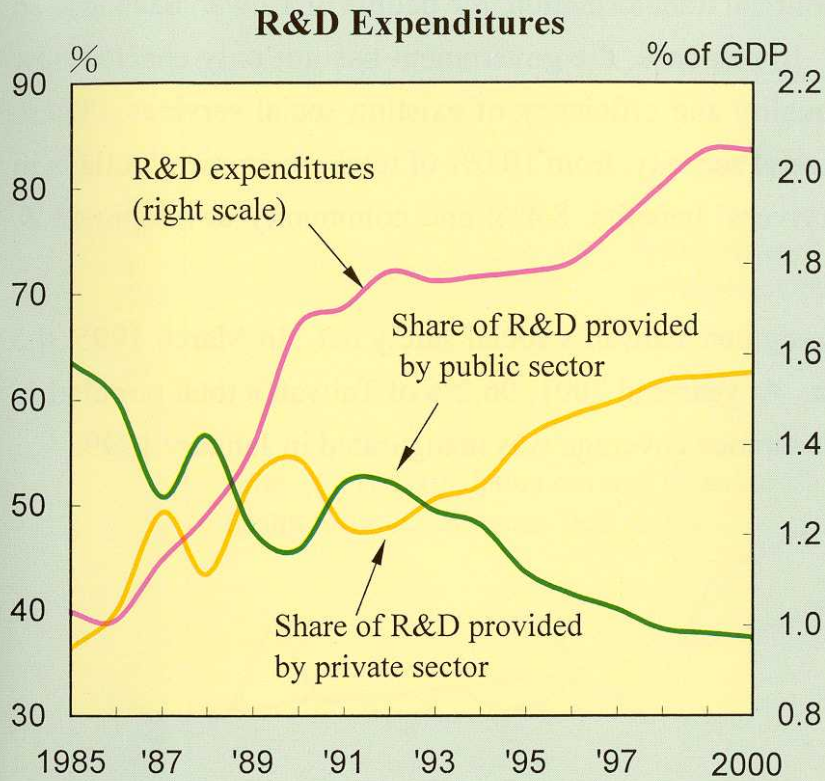
Source: Ministry of Education, R.O.C.

## Science and Technology

Science and technology (S&T) development in Taiwan may be divided into two stages: a labor-intensive stage from 1952 to 1985, and a technology-intensive stage after 1985. During the earlier period, Taiwan significantly enhanced the international competitiveness of its light industries by introducing production, managerial, and marketing know-how from abroad and by achieving better use of labor and capital. The later stage has been marked by strong government support for applied technological development and by the promotion of technology-intensive industries. Thanks to a concerted effort by the government, research institutions, and the business community, Taiwan's progress in S&T development includes the following milestones since 1985:

- Total R&D spending rose from only 1.03% of GDP in 1985 to 2.05% in 2000. Moreover, the private sector overtook the public sector in R&D spending for the first time in 1993, and, since then, private-sector R&D expenditures have grown much more rapidly than those of the public sector. In addition, the number of research personnel per 10,000 population rose from 12.8 in 1985 to 39.3 in 2000.
- Because of a steady and significant increase in the number of scientific and technical papers published internationally by local researchers, between 1985 and 2000 Taiwan's world ranking rose from 36th to 19th in the Science Citation Index and from 26th to 10th in the Engineering Index.
- From 1985 to 2001, high tech-intensive products increased their share of total exports from 18.8% to 46.4%.

# Science and Technology



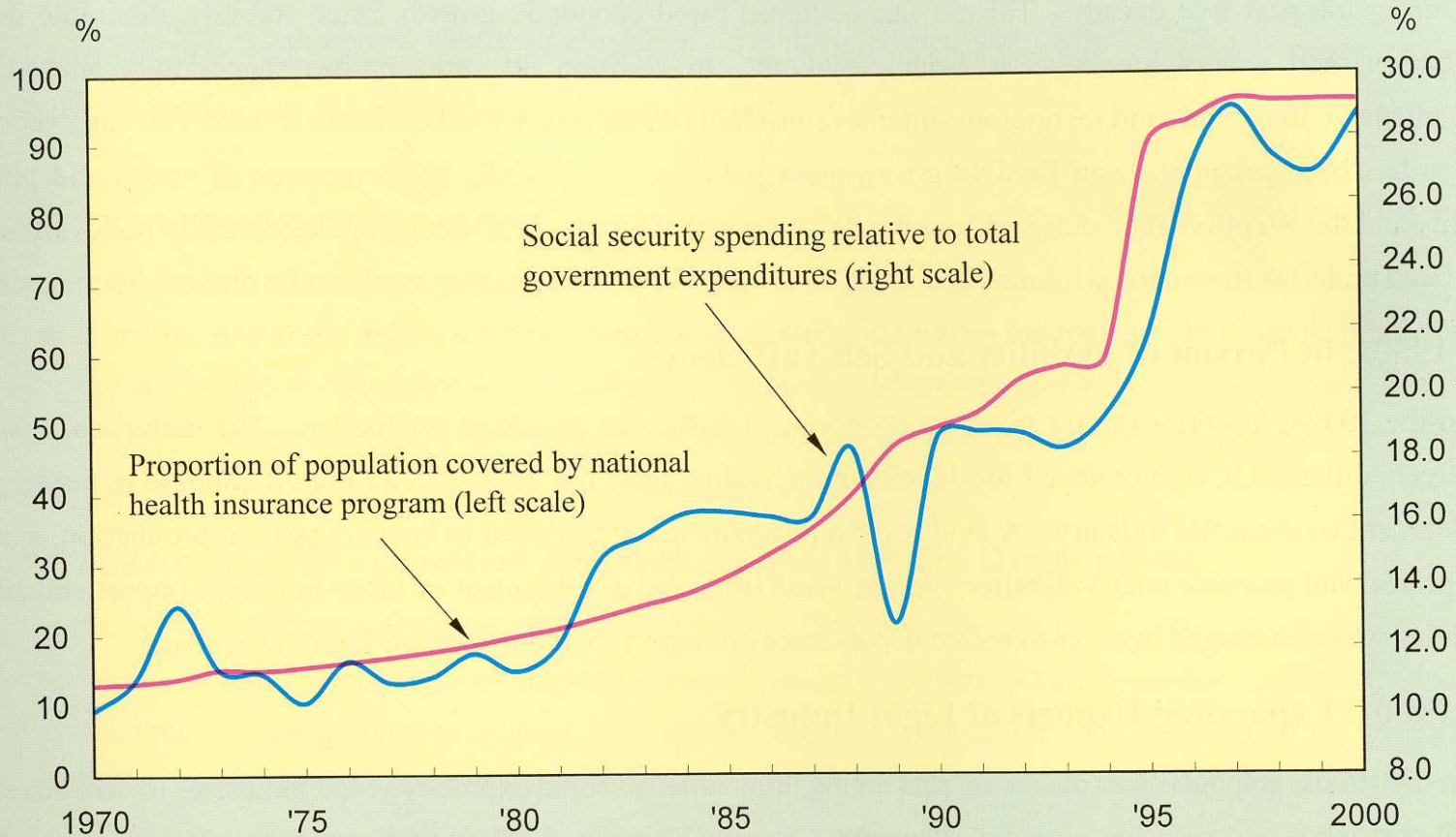
Sources: 1. National Science Council, Executive Yuan, R.O.C., *Indicators of Science and Technology, R.O.C.*, 2001.  
 2. Ministry of Finance, R.O.C., *Monthly Statistics of Exports and Imports, Taiwan Area, R.O.C.*, Feb. 2002.

## **Social Security**

In recent years, amid sweeping social, economic, and political transformation, the people of Taiwan have looked to the government to ensure the provision of basic needs. In response, the government has not only enacted new social security legislation, but worked on improving the quality and efficiency of existing social services. These efforts are reflected by a steady rise in public spending on social security, from 10.0% of total government outlays in FY 1970 to 28.7% (social welfare, 16.9%; pension & survivors' benefits, 8.4%; and community development & environmental protection, 3.4%) in FY 2000.

The government has been taking additional steps to strengthen Taiwan's social safety net. In March 1995, the government introduced a national health insurance program. At year-end 2001, 96.2% of Taiwan's total population was covered by this program. In addition, unemployment insurance coverage was inaugurated in January 1999.

# Social Security



**Note:** Debt repayments are excluded from government expenditures.

**Sources:** 1. Ministry of Finance, R.O.C.

2. Bureau of National Health Insurance, R.O.C.

## **Strategies of Economic Development**

During the past five decades, Taiwan has achieved rapid economic growth, price stability, equitable income distribution, and a very low level of unemployment. In addition, its industry has successfully shifted from labor-intensive to capital- and technology-intensive production. A very important factor behind Taiwan's economic success has been pragmatic and flexible government policies — especially the promotion of social and political stability and the adoption of an outward-looking development strategy. And timely, market-friendly policy initiatives have been undertaken to cope with new problems. Taiwan's economic development can be divided into six stages:

### **The 1950s: in Pursuit of Stability and Self-sufficiency**

In the 1950s, top priority was given to economic stabilization and food production. The major tasks were to effectively utilize U.S. economic aid for development, and to make use of tariffs and import controls in fostering the development of domestic industry. A land reform program was introduced to encourage food production, stabilize food prices, and promote social stability. At the same time, the development of labor-intensive import-substituting industries was encouraged in order to lessen dependence on imports and the need for foreign exchange.

### **The 1960s: Expanding Exports of Light Industry**

In the 1960s, emphasis was placed on promoting labor-intensive and export-oriented industries to take advantage of low-cost labor and reap the potential of markets beyond Taiwan. Toward that end, the government introduced



reforms in foreign exchange administration and taxation, enacted the Statute for the Encouragement of Investment, and in 1966 established Taiwan's first export-processing zone. Amid buoyant recovery of the world economy, Taiwan's exports increased rapidly, becoming the locomotive of its economic growth.

### **The 1970s: Developing Basic and Heavy Industries**

By the end of the 1960s, rapid export expansion had stimulated strong domestic demand for machinery, equipment, and intermediate materials on the one hand, and led to a substantial improvement in the production structure on the other. Meanwhile, management had become more sophisticated and industrial technology more advanced. The time had come to encourage a gradual shift to basic and heavy industries. This was accomplished by promoting the production of domestic substitutes for imported intermediates and the development of capital-intensive industries. This strategy enabled Taiwan to effectively reduce its reliance on foreign suppliers of essential intermediate products and to upgrade its industrial structure.

### **The 1980s: Economic Liberalization and Technology-Intensive Development**

In the early 1980s the economy began to reap the benefits of trade-promotion policies, and an increasing surplus was recorded in foreign trade. Against this background, the government adopted economic liberalization and internationalization as new guiding principles for Taiwan's further development, and endeavored to bring market forces into full play. At the same time, Taiwan began to tap its ample capital resources to develop such capital- and technology-intensive industries as electronics, information, and machinery.

## **The 1990s: Coping with Change and Setting New Priorities**

As the 1990s began, Taiwan turned to the task of strengthening its infrastructure. Toward this end, a Six-Year National Development Plan was introduced in 1991. In 1994, the government assigned top priority to the implementation of Twelve Major Construction Projects, covering transportation, culture and education, improvement of living standards, water resources development, and environmental protection. A Comprehensive Physical Development Plan was initiated with a view to rationalizing land use, improving the investment climate, and upgrading the quality of life. In January 1997, a Plan for National Development into the Next Century (1997-2000) was introduced. Aimed at accelerating Taiwan's transformation into a modern industrialized society, this plan was centered on the achievement of three goals: strengthening national competitiveness, improving the quality of life, and promoting sustainable development. At the same time, as an overture to the emergence of a mature economy, efforts were begun to develop Taiwan into an Asia-Pacific Regional Operations Center (APROC).

In 1998, to remove Taiwan from the shadow of the Asian financial crisis as quickly as possible, the government launched a Domestic Demand Stimulus Plan, including a series of major infrastructure projects under the BOT (Build, Operate, and Transfer) scheme. And in February 1999, it began to implement a package-style program to strengthen Taiwan's economic fundamentals. The September 1999 earthquake had a very serious impact on Taiwan's economy and society. The president immediately declared a state of emergency, and the government launched a post-disaster relief and rehabilitation effort to speed Taiwan's recovery from the quake.

## **The 2000s: Sustainable Development on a Green Silicon Island**

The National Development Plan for the New Century (2001-2004), the Plan to Develop a Knowledge-Based Economy, and the Global Logistics Development Plan will be given the highest priority as Taiwan moves forward into the twenty-first century. Liberalization, internationalization, and systemization will continue to serve as guiding principles as this agenda is carried out. The ultimate objective is to harness the power of Taiwan's dynamic silicon-based economy to provide a clean and self-renewing natural environment for an increasingly affluent and compassionate civil society.

From 2002 to 2007, the government will implement the new national development plan, *Challenge 2008*. This is a strategic development plan that emphasizes such goals as strengthening international competitiveness, upgrading the quality of life, and promoting sustainable development. Built around ten programs involving substantial investments in manpower, R&D and innovation, logistics networks, and the living environment, the plan also aims to achieve significant political, financial, and fiscal reforms. Under *Challenge 2008*, the government and the private sector over the next six years will work together to realize seven major goals: (1) make Taiwan the home of at least fifteen world-class products and technologies; (2) double the number of tourists visiting Taiwan; (3) raise R&D spending to 3% of GDP; (4) reduce the unemployment rate to below 4%; (5) boost the economic growth rate to above 5%; (6) increase the number of broadband Internet users to more than six million; and (7) create 700 thousand new employment opportunities. By achieving these targets, *Challenge 2008* will pave the way for Taiwan's emergence as a Green Silicon Island in the first decade of the new century.

# Strategies of Economic Development

<b>1950s</b>	<b>In Pursuit of Stability and Self-sufficiency</b> <ul style="list-style-type: none"><li>• Introducing economic planning in 1953, after the completion of postwar rehabilitation</li><li>• Implementing a land-reform program, stimulating agricultural production, and promoting economic stability</li><li>• Developing labor-intensive import-substituting industries to reduce the trade deficit</li></ul>
<b>1960s</b>	<b>Expanding Exports of Light Industry</b> <ul style="list-style-type: none"><li>• Encouraging saving, investment, and exports</li><li>• Introducing new agricultural products</li><li>• Establishing export-oriented industries and export-processing zones</li></ul>
<b>1970s</b>	<b>Developing Basic and Heavy Industries</b> <ul style="list-style-type: none"><li>• Improving infrastructural facilities and eliminating transport bottlenecks</li><li>• Establishing intermediate-goods industries</li><li>• Developing basic and heavy industries</li></ul>
<b>1980s</b>	<b>Economic Liberalization and Technology-Intensive Development</b> <ul style="list-style-type: none"><li>• Restructuring industrial production and expanding R&amp;D spending</li><li>• Promoting economic liberalization and internationalization</li><li>• Expanding domestic demand to improve the trade imbalance</li></ul>

## Strategies of Economic Development (*Continued*)

1990s	<p><b>Coping with Change and Setting New Priorities</b></p> <ul style="list-style-type: none"><li>• Stepping up public investment (promoting the BOT scheme) and improving the investment climate</li><li>• Speeding up deregulation to strengthen national competitiveness</li><li>• Enforcing pollution controls and rationalizing land use to promote sustainable development</li><li>• Encouraging more-balanced economic and social development to improve the quality of life</li><li>• Developing Taiwan into an Asia-Pacific Regional Operations Center</li></ul>
2000s	<p><b>Sustainable Development on a Green Silicon Island</b></p> <ul style="list-style-type: none"><li>• Developing a knowledge-based economy</li><li>• Providing a clean and self-renewing national environment</li><li>• Fostering the development of an affluent and compassionate civil society</li><li>• Promoting the spread of e-commerce and developing a complete range of supply-chain services to speed Taiwan's emergence as a major international procurement and logistics base</li><li>• Implementing the new national development plan, <i>Challenge 2008</i> — a strategic plan paving the way for Taiwan's emergence as a Green Silicon Island in the first decade of the new century</li></ul>

## **Future Development Prospects**

Taiwan's economic achievements have been in no small part due to its continuous pursuit of economic liberalization and globalization. In the 21st century, we have committed ourselves to accelerating progress in this direction, with the aim of strengthening the competitiveness of our increasingly knowledge-driven economy.

We will continue to expand our trade and investment in the Asia-Pacific region, reaching out to form closer trade and economic ties with neighboring countries. The implementation of the Global Logistics Development Plan, launched in October 2000, will build on the achievements of the APROC plan to develop Taiwan as a major international procurement and logistics base.

While seeking to promote greater harmony and balance between the different sectors of our own economy, we will continue to pursue the healthy development of cross-strait ties, helping to create a 'win-win' situation for both sides on the basis of equality and mutual benefit.

According to the International Monetary Fund, Taiwan has already entered the ranks of the world's advanced economies. As a productive and responsible member of the international community, Taiwan has enjoyed significant benefits and advantages. In return, we are determined to do our utmost to further the goals of peace and prosperity worldwide.

# Appendix

## Major Themes of the ROC's

Plan	1st Medium-Term Plan 1953-1956	2nd Medium-Term Plan 1957-1960	3rd Medium-Term Plan 1961-1964	4th Medium-Term Plan 1965-1968	5th Medium-Term Plan 1969-1972
<b>Theme</b>	<ol style="list-style-type: none"> <li>1. Step up agricultural and industrial production</li> <li>2. Promote economic stability</li> <li>3. Improve balance-of-payments deficit</li> </ol>	<ol style="list-style-type: none"> <li>1. Expand agricultural production</li> <li>2. Accelerate industrial development</li> <li>3. Stimulate export expansion</li> <li>4. Create job opportunities</li> <li>5. Narrow balance-of-payments deficit</li> </ol>	<ol style="list-style-type: none"> <li>1. Maintain economic stability</li> <li>2. Speed up economic growth</li> <li>3. Strengthen industrial base</li> <li>4. Improve investment environment</li> </ol>	<ol style="list-style-type: none"> <li>1. Foster economic modernization</li> <li>2. Maintain economic stability</li> <li>3. Develop sophisticated industries</li> </ol>	<ol style="list-style-type: none"> <li>1. Maintain price stability</li> <li>2. Promote export expansion</li> <li>3. Intensify infrastructural development</li> <li>4. Upgrade industrial structure</li> <li>5. Accelerate pace of agricultural modernization</li> </ol>



# Economic Development Plans

6th Medium-Term Plan 1973-1975	7th Medium-Term Plan	8th Medium-Term Plan 1982-1985	9th Medium-Term Plan 1986-1989
<ol style="list-style-type: none"> <li>1. Speed up modernization of industry</li> <li>2. Expand infrastructural development</li> <li>3. Improve manpower quality</li> <li>4. Encourage export expansion</li> </ol>	<ol style="list-style-type: none"> <li>1. Raise energy efficiency</li> <li>2. Improve industrial structure</li> <li>3. Step up manpower development</li> <li>4. Promote balanced economic and social development</li> <li>5. Complete the Ten Major Development Projects</li> </ol>	<ol style="list-style-type: none"> <li>1. Maintain reasonable price stability</li> <li>2. Continue economic growth</li> <li>3. Ensure coordinated industrial development</li> <li>4. Provide adequate job opportunities</li> <li>5. Promote more-equitable income distribution</li> <li>6. Emphasize balanced regional development</li> <li>7. Foster social harmony</li> </ol>	<ol style="list-style-type: none"> <li>1. Promote trade liberalization</li> <li>2. Expand public investment</li> <li>3. Strengthen the fiscal and monetary system</li> <li>4. Speed up the modernization of services</li> <li>5. Actively develop key technologies</li> <li>6. Step up pollution control</li> </ol>

## Major Themes of the ROC's Economic Development Plans(*Continued*)

Plan	10th Medium-term Plan 1990-1993	Six-Year National Development Plan 1991-1996	Plan for National Development into the Next Century 1997-2000	National Development Plan for the New Century 2001-2004
<b>Theme</b>	<ol style="list-style-type: none"> <li>1. Policy directions                             <ol style="list-style-type: none"> <li>(1) Increase public expenditures</li> <li>(2) Streamline laws and regulations, and enforce economic liberalization policies</li> </ol> </li> <li>2. Implementation priorities                             <ol style="list-style-type: none"> <li>(1) Improve investment environment</li> <li>(2) Actively promote transportation development</li> <li>(3) Strengthen environmental protection</li> <li>(4) Devote more resources to social welfare</li> </ol> </li> </ol>	<ol style="list-style-type: none"> <li>1. General goals: Rebuild social and economic order, and promote balanced overall development</li> <li>2. Policy goals:                             <ol style="list-style-type: none"> <li>(1) Raise national income</li> <li>(2) Ensure the provision of sufficient resources for continued industrial growth</li> <li>(3) Promote balanced regional development</li> <li>(4) Improve the national quality of life</li> </ol> </li> </ol>	<p>General goal: National modernization</p> <ol style="list-style-type: none"> <li>1. Sharpen national competitiveness</li> <li>2. Enhance the quality of life</li> <li>3. Promote sustainable development</li> </ol>	<p>General goal: To develop Taiwan as a green silicon island</p> <ol style="list-style-type: none"> <li>1. Develop a knowledge-driven, silicon-based economy</li> <li>2. Provide a clean, self-renewing natural environment</li> <li>3. Foster the development of an affluent and compassionate civil society</li> </ol>

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