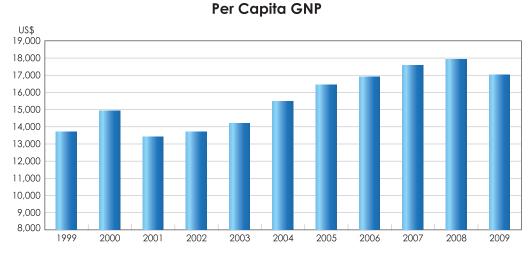
# 2. National Output and Income

Taiwan experienced a notable slowdown in overall economic activity in 2009 amid a synchronized global recession in the aftermath of the financial crisis. While consumption expenditure grew moderately, domestic demand contracted as corporations further slashed capital outlays and held back investment projects. External trade also suffered a marked setback reflecting a pronounced decrease in foreign demand. Despite continued contraction in real GDP for the first three quarters, the pace of deceleration eased considerably and real GDP resumed positive growth thereafter. For the year as a whole, real GDP decreased by 1.87 percent, down from positive growth of 0.73 percent in 2008, and per capita GNP in nominal terms decreased by US\$944 to US\$16,997.

As the global financial turmoil that emerged in mid 2008 continued into early 2009, economic conditions worsened and real GDP further declined by 9.06 percent year on year in the first quarter. Coupled with slowing consumption, falling capital spending and declining exports, real GDP continued to shrink but at a slower pace of 6.85 percent in the second quarter. Thanks to an upturn in stock markets and a strengthening rebound in Asian economies, consumption expenditure improved and the plunge in trade and capital outlay mitigated, moderating GDP contraction to 0.98 percent in the third quarter. From the fourth quarter onwards, the sustained recovery of the global economy boosted external trade and helped encourage consumption and business investment. Moreover, with a low base effect, real GDP advanced 9.22 percent in the last quarter.

## **Economic Growth Rate** -2



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2010.

#### **Expenditure Components of GDP**

Among all of the expenditure components of GDP, private consumption and government consumption contributed 0.83 of a percentage point and 0.42 of a percentage point to economic growth in 2009, respectively. Net exports also posted a positive contribution of 1.48 percent for the year because imports fell more than exports. On the contrary, affected by a sharp decline in investment in machinery and equipment, fixed capital formation declined substantially, dragging real GDP growth down by 2.20 percentage points. With respect to

## **Expenditure on Gross Domestic Product**

Unit: %

	2009			2008		
	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*
Private Consumption	60.82	1.48	0.83	60.06	-0.57	-0.33
Government Consumption	12.83	3.63	0.42	12.32	0.68	0.08
Gross Fixed Capital Formation	18.53	-11.80	-2.20	21.15	-11.17	-2.36
Change in Inventory	(1.28)	_	-2.39	1.52	_	1.07
Exports of Goods and Services	62.51	-9.21	-6.47	72.66	0.56	0.40
( Less : Imports of Goods and Services)	(53.41)	(-13.73)	(-7.94)	(67.71)	(-3.12)	(-1.88)
Expenditure on GDP	100.00	-1.87	-1.87	100.00	0.73	0.73

Note: \* Percentage point.

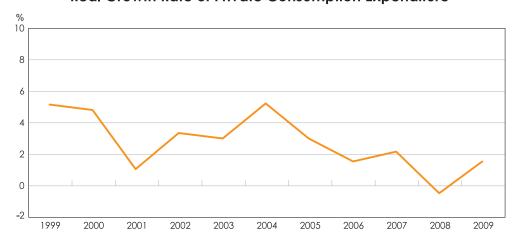
shares of GDP, private consumption rose further, accounting for 60.82 percent of GDP for the year. Due to a contraction in global trade, both exports and imports slid considerably to 62.51 percent and 53.41 percent of GDP, respectively. Meanwhile, reflecting a slump in private investment, the share of gross fixed capital formation further shrank to 18.53 percent.

#### (1) Moderate Growth in Private Consumption

In line with the easing pace of the economic downturn, private consumption grew moderately by 1.48 percent in real terms, contributing 0.83 of a percentage point to GDP growth for the year. While the government's consumption-voucher program and the excise tax cut on motor vehicles helped bolster consumer sentiment in the beginning of the year, consumer spending decreased by 1.96 percent in the first quarter due to rising unemployment, declining incomes and falling housing wealth. Private consumption picked up slightly in the middle of the year, but in the aftermath of Typhoon Morakot in August slipped back into a gloomy state. In the late third quarter, the number of persons on unpaid leave gradually declined and the stock and housing markets showed signs of resilience, which lifted consumers' willingness to spend. Thereafter, supported by a surge in stock prices and the positive effect of the impending expiration of the excise tax cut on demand for motor vehicles, consumer spending rose by a remarkable 6.27 percent in the fourth quarter.

In terms of food and non-food categories, both went up moderately with respective annual growth rates of 1.86 percent and 1.43 percent in 2009. Among the components of non-food consumption, with the emergence of the Otaku economy, namely the stay-at-home economy, and the popularity of mobile phones, outlays for communications registered the

## Real Growth Rate of Private Consumption Expenditure

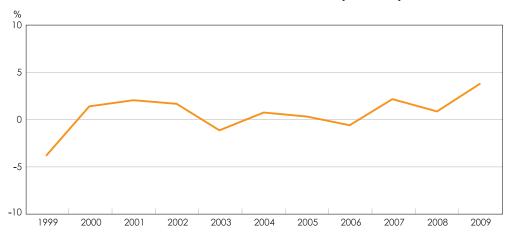


largest growth of 7.81 percent, higher than the previous year's 7.59 percent. Attributable to the tax incentive program encouraging new car purchases, outlays for transport posted the second largest growth, up significantly from negative 4.95 percent in 2008 to positive 5.62 percent in 2009. Meanwhile, consumer spending on recreation and culture posted a modest growth of 4.30 percent, reflecting increasing demand for outdoor recreation and arts and cultural activities.

#### (2) Marked Increase in Government Consumption

In 2009, government consumption grew by 3.63 percent in real terms and contributed 0.42 of a percentage point to GDP growth, compared with a rise of 0.68 percent and a 0.08 of a percentage point contribution in the previous year. The marked increase was attributable to the government's economic stimulus package, including employment promotion programs, unemployment relief, issuance of consumption vouchers and subsidies for purchase and installation of home appliances, aimed to ease the adverse impact of economic contraction and boost domestic demand.

### Real Growth Rate of Government Consumption Expenditure



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2010.

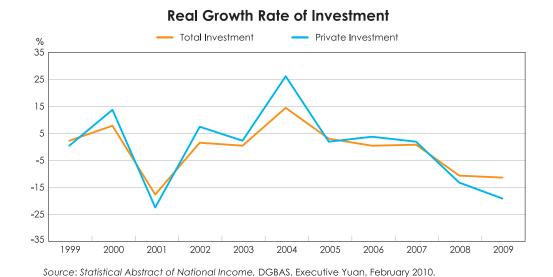
## (3) Significant Fall-off in Fixed Capital Formation

Adjustment in business activity continued in response to a sharp slowdown in demand both internally and externally, which resulted in a significant fall-off in fixed capital outlay for the year. Fixed capital formation receded sharply in the first half, but contracted at a slower pace in the third quarter due to a narrower decline in private investment along with rising capacity utilization and loosening financial conditions for businesses. Thanks to the onset of a

recovery in the global economy, fixed capital formation resumed growth and rebounded to 11.14 percent with the help of a lower-base effect in the fourth quarter. For the year as a whole, fixed capital formation dropped by 11.80 percent, subtracting 2.2 percentage points from GDP growth in 2009.

In terms of the type of purchaser, while investment by public enterprises and general government showed robust growth, investment by private businesses declined sharply over the year. During the first two quarters, private investment plunged by more than 30 percent, restrained by an uncertain economic outlook. Later, following a turnaround in major Asian economies and a gradual pickup in domestic consumption, capacity utilization rose and incentives for business investment subsequently improved. Accordingly, business capital outlays showed signs of recovery as some manufacturers upgraded their production equipment and operating systems to meet a gradual increase in demand in the third quarter. Thereafter, strengthening domestic demand and ongoing global economic recovery further improved capacity utilization and encouraged capital spending, which boosted private investment to increase by 8.16 percent in the final quarter. For the year as a whole, private investment declined by 19.38 percent, deducting 2.79 percentage points from real GDP growth.

On the other hand, in order to stimulate domestic demand to offset the impact of the global economic slowdown, the government vigorously carried out its fiscal stimulus, including the Program for Strengthening Local Infrastructures and the Project for Expansion of Investment in Public Works. For the year, government investment advanced by 18.77 percent, contributing 0.53 of a percentage point to economic growth. Furthermore, because public enterprises speeded up their execution of investment projects, investment by public enterprises also



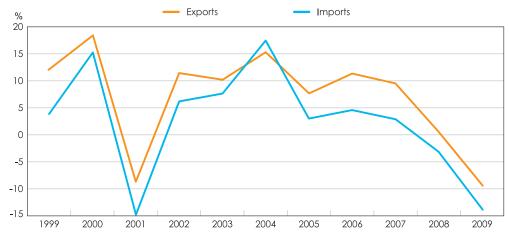
increased by 4.03 percent, contributing 0.06 of a percentage point to economic growth for the year.

In regard to the type of capital formation, investment spending on transportation equipment and intangible fixed assets edged up by 1.12 percent and 0.88 percent respectively, a significant slowdown compared with the previous year. Affected by the intensification of global economic contraction, outlays on machinery and other equipment continued to fall sharply, posting a decrease of 21.02 percent, the largest decline among all types of capital formation. Likewise, due to weakness in the domestic economy and a slowing housing market, investment in construction also went down by 6.36 percent.

#### (4) Exports Fell Less Than Imports

As a result of the dismal international trade environment in the first half of 2009, exports of goods and services suffered a significant setback for the year. With a sharp decline in foreign demand and a high base effect, exports fell further by 26.87 percent in the first quarter and remained in negative territory in the following two quarters. However, supported by an improvement in the Asian economies, demand for electronic goods and IT products gradually rose, mitigating the pace of deceleration in exports in the third quarter. Against the backdrop of a recovering global economy, foreign demand steadily increased and exports continued rebounding. Moreover, the expansion of service exports, including the influx of tourists from China and the growth in merchanting, together with the low base effect led growth of exports to jump to 19.06 percent in the fourth quarter. For the year as a whole, exports contracted 9.21 percent and took 6.47 percentage points from economic growth, a considerable slowdown when compared with last year's 0.56 percent growth and 0.40 of a percentage point contribution to GDP growth.

## Real Growth Rate of Exports and Imports



Similarly, imports of goods and services shrank by 13.73 percent for the year, a further decline compared with last year's 3.12 percent contraction. The sharp decrease was particularly affected by the reduction of demand for machinery and electrical equipment due to further cutbacks in business investment resulting from slowing demand. Nevertheless, because the sharp fall in imports surpassed the decline in exports, net exports posted a positive contribution of 1.48 percentage points to GDP growth.

## Sectoral Components of GDP

Largely hindered by the economic slowdown and unfavorable weather conditions, overall production activity remained subdued and all sectoral output dropped. A further deceleration in manufacturing activity led the industrial sector to post the largest decline in output, subtracting 1.47 percentage points from economic growth for the year, a larger decrease than in the previous year. The contribution of the services sector to overall GDP also went down and reversed from 0.62 of a percentage point in 2008 to negative 0.15 of a percentage point in 2009. Likewise, the contribution of agricultural production to overall GDP fell into negative territory, subtracting 0.05 of a percentage point from economic growth.

## **Gross Domestic Product by Type of Activity**

Unit: %

	2009			2008		
	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*
Agriculture	1.55	-3.08	-0.05	1.60	0.55	0.01
Industry	29.86	-4.61	-1.47	29.25	-0.17	-0.05
Mining & Quarrying	0.46	-12.03	-0.04	0.36	-13.80	-0.05
Manufacturing	24.78	-4.64	-1.27	24.98	0.43	0.12
Construction	2.55	-6.69	-0.16	2.87	-5.55	-0.14
Electricity, Gas Water & Remediation Services	2.07	-0.28	-0.01	1.03	1.19	0.02
Services	68.59	-0.22	-0.15	69.16	0.94	0.62
Wholesale and Retail Trade	18.49	-0.41	-0.07	18.80	1.16	0.21
Transport & Storage	3.10	-2.62	-0.08	3.15	0.46	0.01
Information and Communications	3.67	3.15	0.11	3.62	5.14	0.17
Finance and Insurance	6.35	-7.03	-0.50	7.24	-2.20	-0.16
Real Estate	9.08	2.12	0.18	8.77	0.96	0.08
Administration and Defense	7.58	1.39	0.10	7.50	0.90	0.06
Educational	4.90	1.84	0.08	4.77	1.00	0.05
Other Services	15.42	0.26	0.04	15.30	1.36	0.20
Gross Domestic Product	100.00	-1.87	-1.87	100.00	0.73	0.73

Note: \* Percentage point.

With regard to sectoral shares of GDP in nominal terms, the services sector still dominated Taiwan's economy and accounted for 68.59 percent of GDP in 2009, slightly lower than the 69.16 percent registered in the previous year. The agricultural sector's share of GDP also decreased slightly from 1.60 percent in 2008 to 1.55 percent in 2009. On the other hand, the share of industrial output to GDP rose to 29.86 percent, up from 29.25 percent in 2008.

#### (1) Marked Decrease in Agricultural Output

Agricultural activity further decelerated in 2009 and its output posted a marked decrease of 3.08 percent. The decline was mainly due to an unfavorable climate, particularly affected by Typhoon Morakot in August, and slowing demand for agricultural products.

#### (2) Further Contraction in Industrial Output

Against the backdrop of a slowdown in export demand and business investment in 2009, all sectors of industrial production, namely mining and quarrying, manufacturing, construction, and electricity, gas and water, experienced marked contractions, especially manufacturing activity. While industrial output surged by 22.76 percent in the last quarter, large shrinkages in the first three quarters resulted in a decrease in industrial production of 4.61 percent for the year as a whole, a significant deceleration compared with last year's mild slowdown of 0.17 percent.

Mainly due to falling demand resulting from the worse-than-expected global economic performance, growth of manufacturing output further deteriorated to negative 22.62 percent in the first quarter and remained in negative territory thereafter. Accordingly, production indexes of machinery and equipment, metal and other transportation equipment contracted by more than 20 percent for the year. Thanks to an upturn in exports resulting from the global recovery and resilient intra-Asia trade, manufacturing output revived, especially in electronic parts and components, chemical materials and products, and motor vehicles and parts, leading to a marked rebound of 25.96 percent in the fourth quarter. For the year as a whole, manufacturing output decreased by 4.64 percent, reversing its positive growth of 0.43 percent in the previous year.

While the government actively expanded public works, output in the construction industry further contracted 6.69 percent in 2009, particularly reflecting a lackluster housing market and a gloomy economic environment in the first half of the year. As a result of slowing construction activity, output of mining and quarrying also dropped significantly by 12.03 percent for the year.

#### (3) Mild Contraction in the Services Sector

In contrast to the previous year's 0.94 percent increase, services output suffered a mild contraction, slipping by 0.22 percent for the year. The slight decrease was because its sharp decline in the first half of the year was largely offset by a marked improvement in the fourth quarter.

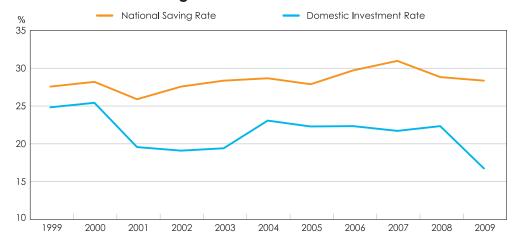
Among the services subsectors, finance and insurance services continued to fall, registering the largest decline of 7.03 percent for the year, resulting from less interest revenues due to low interest rates and slowing trading activity amid the global financial turmoil. Likewise, wholesale and retail trade and transportation and storage shrank by 2.62 percent and 0.41 percent due to a decrease in consumption expenditure and exports demand.

On the other hand, reflecting a higher demand for data processing services, an increasing tendency of home-based businesses and booming popularity of online games, the information and communication services subsector expanded steadily, posting the largest growth of 3.15 percent for the year. Nevertheless, the growth rate was lower than the previous year's 5.14 percent. The housing market showed a marked rebound in the second half of the year, recording a moderate gain of 2.12 percent for the year. Educational services registered a 1.84 percent growth because of an improvement in the quality of education and training.

#### Fall in National Saving Rate

As the economy experienced a marked slowdown, the national saving rate (national saving to GNP measured at current prices) fell from 28.65 percent in 2008 to 28.14 percent in 2009. For the year as a whole, GNP declined by 0.48 percent, and growth of national consumption

#### National Saving Rate and Domestic Investment Rate



(including both private consumption and government consumption expenditures) went down to 0.39 percent, which reflected a slowing consumption demand due to economic contraction. The excess saving, defined as national saving less gross domestic investment, to GNP ratio went up from 6.53 percent in 2008 to 11.45 percent in 2009, resulting from a larger decrease in domestic investment than in national saving.