

# *Developments in the Real Economy*

# I. Developments in the Real Economy

## 1. Overview

In 2015, a slow global economic recovery and low commodity prices dampened Taiwan's export growth and caused the domestic economy to stagger along at a pace of 0.75% year on year, whereas the balance of payments stayed healthy owing to a wider current account surplus. The average annual growth rate of the consumer price index (CPI) fell 0.31% over the previous year, as fuel, gas, and electricity prices trended down following the plunge in international energy prices. The central government deficit shrank markedly to NT\$11.0 billion, helped mainly by a significant pickup in government tax revenue as well as fee income from second-round 4G mobile spectrum auctions. Amid the economic slowdown, the unemployment rate began to edge up from June onwards; nonetheless, at an average annual rate of 3.78%, the unemployment rate was the lowest in fifteen years. In addition, average non-farm (industrial and services sectors) monthly real earnings rose by 2.83% year on year, the highest in the past five years.

### **Modest Economic Growth**

Taiwan's economy gained momentum in the first quarter of 2015, mainly because private consumption rose steadily and exports were bolstered by increased profit margins from merchanting. The annual GDP growth rate was 4.04%, outpacing all the other quarters in 2015. However, economic growth languished from the second quarter on and even slipped into negative territory in the last two quarters of the year. This downtrend was primarily due to export contraction driven by diminishing demand from Mainland China and a cyclical downturn in the technology industry, as well as Taiwan's own structural concerns. The economy expanded by 0.75% for the year as a whole.

In terms of GDP components by expenditure, domestic demand increased by a mere 1.57% year on year, owing to slowing private consumption and negative growth in government expenditure. Domestic demand contributed 1.41 percentage points to GDP growth, while the contribution from net external demand shrank to negative 0.67 percentage points.

Broken down by type of activity, only the services sector recorded modest growth and made a positive contribution to GDP growth at 0.24 percentage points. The agriculture and industry sectors both slipped into contraction, contributing -0.06 and -0.32 percentage points to GDP growth, respectively.

## Healthy BOP Surplus

In 2015, the current account surplus and the net outflow in the financial account both reached historical highs. Overall, the balance of payments stayed healthy with a surplus of US\$15,011 million, increasing by US\$1,996 million from the previous year.

In the current account, the goods trade surplus widened to US\$53,341 million, reflecting a greater decline in imports over exports. The services account surplus waned to US\$9,406 million as travel expenses and expenditure on trade commissions both increased. The income account surplus expanded to US\$16,791 million, mainly owing to a decrease in outward payments for non-residents' direct investment income. The deficit on the current transfers balance rose to US\$3,373 million. Overall, the current account surplus widened by 19.4% to US\$76,165 million, representing a greater share of 14.5% in GDP from the previous year's 12.0%.

In 2015, the financial account recorded a net outflow of US\$68,041 million, mostly accounted for by a record-high portfolio investment net outflow. Of the components, the net outflow in residents' portfolio investment abroad rose to US\$56,535 million, mainly reflecting increased portfolio investment abroad by insurance companies. As foreign investors shed their domestic bond holdings, non-residents' portfolio investment posted a net outflow of US\$1,181 million in contrast to a net inflow the previous year. Direct investment abroad exhibited a wider net outflow of US\$14,773 million, with Mainland China remaining the top destination. Direct investment in Taiwan by non-residents showed a net inflow of US\$2,415 million. Other investment recorded a net inflow of US\$3,283 million, mainly because the private sector withdrew overseas deposits.

## Stable Price Trends

In 2015, international commodity prices continued to fall, dragging import prices in NT dollar terms lower by 12.93%. In addition, a downward price trend in consumer electronics and reduction in electricity rates combined to result in an 8.84% decrease in wholesale price index (WPI) growth, the steepest decline ever recorded.

In terms of CPI growth, food prices went up but prices of fuel, gas, and electricity came down as a result of international energy price slumps. Meanwhile, domestic demand remained soft. Reflecting these influences, the CPI annual growth rate fell into negative territory for the first time in six years and registered -0.31%. Core inflation (excluding fruit, vegetable, and energy prices) gained by a mild 0.79%, slightly lower than the 1.26% of 2014.

## Significant Reduction in Central Government Deficit

In 2015, the central government deficit narrowed significantly as the increase in revenue exceeded a smaller increase in expenditure.

Nearly 80% of total central government revenue came from tax revenue, which recorded a 9.1% increase thanks to rising corporate profits in the previous year. Revenue from fees, fines, and indemnities gained substantially by 43.7%, boosted by fee receipts from second-round 4G mobile service licensing. By contrast, surpluses of public enterprises and public utilities decreased marginally by 1.4% over a year ago.

Central government expenditure increased in 2015. The largest category remained social welfare expenditure, whose share grew to 23.2% owing to budgets drawn up to cover the shortfall in the government's required contribution to the national insurance budget and to subsidize insufficient funds for the National Pension Insurance Fund. Expenditure on education, science, and culture constituted the second largest share at 20.0%, owing to a budget increase for the use of the National Science and Technology Development Fund.

At the end of 2015, the total outstanding debt of the central government posted a lower ratio of 34.6% to the average nominal GDP for the previous three years, under the statutory limit of 40.6%

### **Further Decline in Unemployment Rate; Wage Growth at Five-Year High**

In 2015, the monthly figure of the unemployment rate inched down to 3.62% in May, a new low since February 2001. As economic growth weakened, the unemployment rate began to trend up from June onwards and reached 3.87% in December. However, the annual average unemployment rate was 3.78%, still the lowest since 2001.

The average number of employed persons totaled 11.2 million in 2015, 1.08% more than the previous year. Employment in the services sector rose by 1.26%, the highest among all sectors, whereas the industrial sector recorded an increase of 0.76%. The monthly figures of employment growth rates (year on year) showed a downward trend from March onwards, in stark contrast to the broadly upward climb in the previous year.

Average non-farm (industrial and services sectors) monthly earnings grew by 2.52% year on year to NT\$48,490, while average monthly regular earnings of non-farm employees increased by 1.33% to NT\$38,716. Adjusted for inflation, real monthly earnings posted a five-year high growth rate at 2.83%, and real monthly regular earnings also rose by 1.64%, the largest increase in the past 16 years.

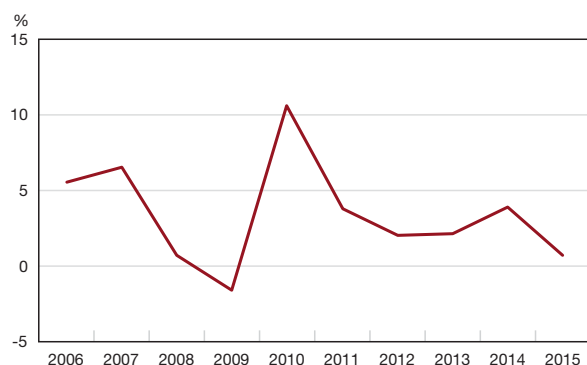
Labor productivity indices of the industrial sector and the manufacturing industry exhibited year-on-year declines of 1.29% and 0.91%, respectively. Unit labor costs increased by 6.61% in the industrial sector and by 6.22% in manufacturing, reflecting an increase in total earnings while production decreased.

## 2. National Output and Income

Taiwan experienced a slowdown in economic activity in 2015 amid weak global demand, continuously plunging commodity prices, and Mainland China's active development of supply chain localization. Private consumption grew moderately owing to a modest wage increase, an improving employment situation, and an increase in disposable income resulting from declining oil prices. Fixed capital formation displayed modest growth, mainly because the semiconductor and aviation industries continued to expand capital outlays. External trade suffered a marked setback reflecting a pronounced decrease in foreign demand and the impact of Mainland China's expanded supply chain. For the year as a whole, real GDP growth edged up a tiny 0.75%, the slowest annual growth in six years.

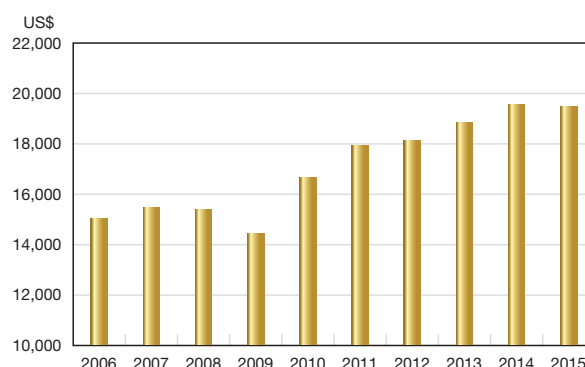
On account of an expansion in exports and a pickup in private consumption, real GDP advanced 4.04% year on year in the first quarter. In the second quarter, external trade growth significantly decelerated owing to the weaker-than-expected global economic growth momentum, together with slackening demand for electronics products. Influenced by falling construction investment and declining exports, real GDP growth declined to 0.57%. With Mainland China's efforts to expand its supply chain, continued drag on the global economy and falling commodity prices, external trade dropped sharply. Weak external trade weighed on business and consumer sentiment, which affected domestic demand. Consequently, real GDP contracted 0.8% in the third quarter. In the fourth quarter, external trade continued to fall as foreign demand remained lackluster, export orders from high-tech industry clients diminished, and prices of energy and raw materials kept hovering at low levels. As modest growth in domestic demand was unable to offset sluggish external trade, the real GDP growth rate shrank 0.52% in the last quarter. Meanwhile, owing to a slowdown in economic activity, per capita GNI in nominal terms decreased slightly from US\$19,558 to US\$19,451.

**Real Growth Rate of GDP**



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2016.

**Per Capita GNI**



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2016.

## Expenditure Components of GDP

All expenditure components of GDP posted growth rates lower than the previous year. Among them, private consumption recorded a positive contribution of 1.22 percentage points for the year, replacing exports as the primary source of economic growth. Gross fixed capital formation contributed 0.33 percentage points to GDP growth owing to a pickup in capital expenditures by the private sector. On the contrary, affected by a limited fiscal budget, government consumption declined mildly, dragging GDP growth down by 0.06 percentage points. With weak global demand, net exports posted a negative contribution of 0.67 percentage points to economic growth for the year. With respect to shares of GDP, exports of goods and services remained to account for the largest share of GDP at 64.51%, followed by private consumption at 52.22% and gross fixed capital formation at 20.77% for the year.

### (1) Moderate Growth in Private Consumption

During 2015, private consumption grew by 2.28% in real terms and contributed 1.22 percentage points to GDP growth. Overall consumer spending grew at a steady pace owing to a boost in disposable income resulting from falling oil prices, improvement in labor market conditions, and brisk tourism activity.

In the first quarter, driven by stronger new car sales, an improving employment situation, and an increase in the numbers of citizens traveling abroad, private consumption expanded at an annual rate of 3.73%. Then, a decline in new car sales caused private consumption growth to drop to 3.55% in the second quarter. In the third quarter, affected by a sharp decrease in new car sales, poor performance in the stock market, and negative growth in retail sales, private consumption

## Expenditure on Gross Domestic Product

Unit: %

	2015			2014		
	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*
Private Consumption	52.22	2.28	1.22	53.31	3.33	1.80
Government Consumption	13.89	-0.44	-0.06	14.55	3.55	0.52
Gross Fixed Capital Formation	20.77	1.52	0.33	21.64	1.76	0.39
Change in Inventory	0.11	-	-0.07	0.17	-	0.52
Exports of Goods and Services	64.51	-0.21	-0.15	69.94	5.91	4.10
(Less : Imports of Goods and Services)	51.50	0.87	0.52	59.61	5.65	3.42
Expenditure on GDP	100.00	0.75	0.75	100.00	3.92	3.92

Note: \* Percentage point.

Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2016.

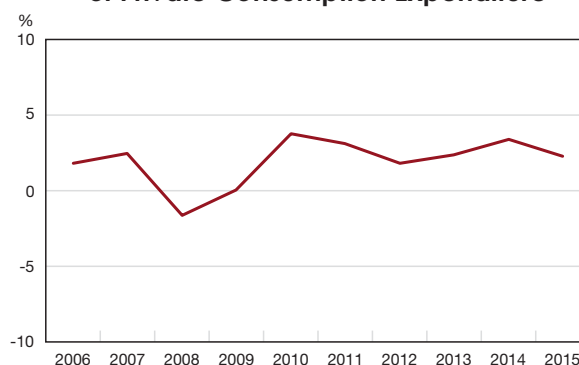
registered the lowest growth rate of 0.48% for the year. With the government's Consumption-Boosting Program and a buoyant stock market, consumer spending in the retail sector and restaurant business rose stably, leading private consumption expenditure to increase by 1.46% in the final quarter.

## (2) Modest Growth in Fixed Capital Formation

Fixed capital formation exhibited modest growth with an annual rate of 1.52% in real terms for the year 2015 and contributed 0.33 percentage points to economic growth. In the first quarter, a rise in the investment in aircraft purchases was partially offset by a decrease in semiconductor investment, such that fixed capital formation registered the lowest growth rate of negative 0.44% for the year. In the second quarter, although the Japanese yen depreciation prompted manufacturers to import more capital equipment, construction investment declined, leading fixed capital formation to grow only mildly by 0.60%. Subsequently, because the semiconductor industry continued to invest in advanced technologies and the transportation industry raised capital spending, fixed capital formation expanded by 3.24% and 2.54%, respectively, in the last two quarters.

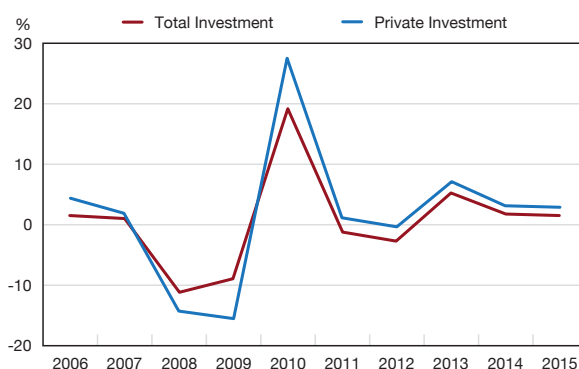
Regarding expenditure by type of purchaser, investment by the private sector registered positive growth, while investment by public enterprises and general government posted further contraction for the year. The private sector steadily expanded new investment in aircraft purchases and its gross fixed capital formation grew by 1.33% in the first quarter. In the second quarter, affected by weaker construction investment, investment by the private sector fell by 0.64%. In the second half of the year, as the semiconductor and transportation industries increased capital spending, private investment expanded by 5.24% and 6.81%, respectively, in the third and final quarters. For the year as a whole, private investment increased by 3.11%. In contrast, investment by public enterprises went down by 6.79% because the fourth nuclear power plant was mothballed and some construction projects

**Real Growth Rate of Private Consumption Expenditure**



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2016.

**Real Growth Rate of Fixed Investment**



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2016.

fell behind schedule. Government investment continued to shrink 4.28% for the year owing to a limited budget.

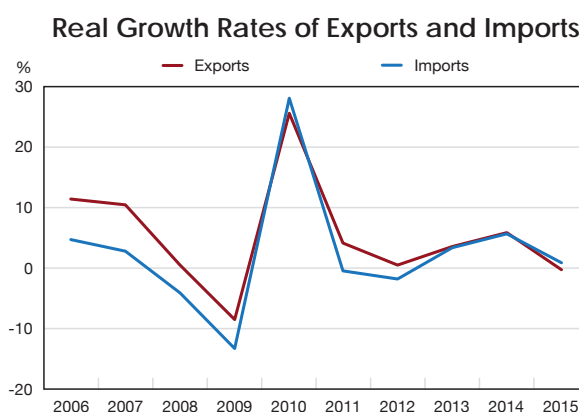
In terms of the type of capital formation, bolstered by growth in the global tourism industry, the largest growth was observed in outlays on transportation, resulting from increased procurement of airliners. Investment in transportation registered a growth of 6.23% for the year. Investment in machinery and equipment posted a moderate growth for the year at 3.24%, attributable to capacity expansion and technology upgrades conducted by semiconductor manufacturers. Investment in intellectual property was relatively stable, registering an annual growth rate of 2.84%. On the other hand, because of a decline in housing transactions, investment in the construction sector went down by 1.36%.

### (3) Exports Fell More than Imports

On account of sluggish global demand for electronics products, Mainland China's efforts to localize the supply chain, and plunging oil prices, exports of goods and services fell by 0.21% for the year, subtracting 0.15 percentage points from economic growth.

For the first quarter, growth in exports of plastics, rubber, base metals, and optical and precision instruments all retreated; however, a solid expansion in exports of electronics products and machinery led total exports to rise by 6.13%. In the second quarter, with weakening global demand for electronics products and machinery, slowing growth in net proceeds from merchanting, and a decline in the number of tourists from Mainland China, growth in exports of goods and services went down to negative 0.74%. During the last two quarters, owing to global manufacturing overcapacity, challenges arising from Mainland China's supply chain localization, and a continued plunge in commodity prices, growth in exports of goods and services dropped to negative 2.88% and 2.57%, respectively.

In 2015, imports of goods and services slightly increased by 0.87%, subtracting 0.52 percentage points from economic growth. Since the import contents of exports and capital formation stood at a high level, the growth trend of imports moved upward in the first two quarters during the year. However, the import demand derived from exports and private consumption started to fall in the third quarter, leading to a contraction in imports in the last two quarters.



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2016.



## Sectoral Components of GDP

On the output side, in 2015, overall production activity was relatively weak because of softening demand both at home and abroad. The services sector remained the key driver of economic growth, pitching in 0.24 percentage points to economic growth for the year, down from 1.88 percentage points in 2014. The contribution of the industrial sector to overall GDP reversed from positive 2.34 percentage points in 2014 to negative 0.32 percentage points in 2015 largely owing to a sharp drop in manufacturing output. Likewise, the contribution of agricultural production to overall GDP fell into negative territory, subtracting 0.06 percentage points from economic growth.

Likewise, the contribution of agricultural production to overall GDP fell into negative territory, subtracting 0.06 percentage points from economic growth.

Regarding the sectoral shares of GDP in nominal terms, Taiwan's economy was still dominated by the services sector with a 62.97% share in 2015. The ratio of agricultural output to GDP slightly declined to 1.80%. On the other hand, the industrial sector accounted for 35.41% of GDP, slightly higher than the share in the previous year.

### (1) Marked Decrease in Agricultural Output

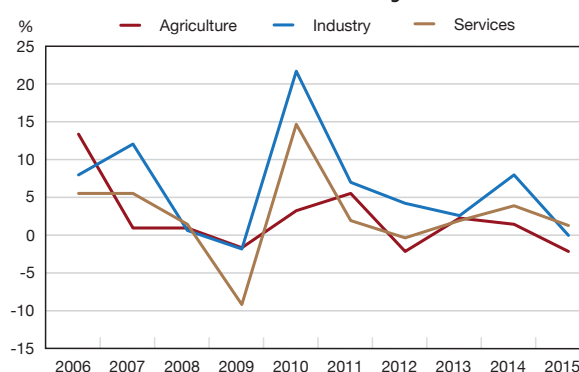
Agricultural production, covering agriculture, forestry, fishing and animal husbandry industries, contracted by 3.09% in 2015, largely attributable to a decline in rice production.

### (2) Small Contraction in the Industrial Sector

Against the backdrop of faltering export demand in 2015, all industries in the industrial sector, namely mining and quarrying, manufacturing, construction, and electricity, gas and water, experienced negative growth. Industrial output posted a contraction of 0.95% for the year as a whole, a significant deceleration compared with the previous year's growth of 6.96%.

Influenced by worse-than-expected global economic performance, growth in manufacturing output slipped to negative 0.60%, reversing from positive growth of 7.93% in the previous year. Production of the information and electronics industry contracted 1.14% during the year owing to softening global demand, weakening demand for mobile devices and the semiconductor industry's inventory overstock. Dragged down by weaker demand and price competition in the global steel market, output growth in metal and machinery decreased by 4.18% for the year. Similarly, output growth in food, textile and other industries decreased by 1.26% for the year because of sharp declines in demand for apparel, clothing accessories and wood products. In contrast, production

Real Growth Rates by Sectors



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2016.

of the chemical industry slightly rebounded by 1.16%, attributable to rising demand for inventory replenishment and a lower base effect.

In contrast to the previous year's 0.42% growth, output in the construction industry contracted by 1.03% for the year, particularly reflecting a slowdown in the real estate market. Output of mining and quarrying also dropped significantly by 6.59% for the year, owing to the decline in the production volume of marble, sand and gravel.

### (3) Slight Growth in the Services Sector

For the year, services output grew by a mere 0.39%, much slower than the growth of 2.92% registered in the previous year. Some of the services subsectors remained in positive growth, but recorded lower growth rates than in the previous year on account of weak domestic demand and a slump in exports.

## Gross Domestic Product by Type of Activity

Unit: %

	2015			2014		
	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	-3.09	-0.06	1.81	0.52	0.01
Industry	35.41	-0.95	-0.32	34.55	6.96	2.34
Mining and Quarrying	0.10	-6.59	-0.01	0.10	-3.65	0.00
Manufacturing	30.34	-0.60	-0.18	29.75	7.93	2.28
Construction	2.53	-1.03	-0.03	2.56	0.42	0.01
Electricity and Gas Supply	1.86	-6.98	-0.09	1.51	1.71	0.03
Water Supply and Remediation Services	0.58	-1.55	-0.01	0.63	3.08	0.02
Services	62.79	0.39	0.24	63.64	2.92	1.88
Wholesale and Retail Trade	15.93	-1.06	-0.17	16.48	3.90	0.66
Transport and Storage	3.31	0.84	0.02	2.84	0.59	0.02
Information and Communications	2.82	2.72	0.08	2.95	2.09	0.06
Finance and Insurance	6.56	3.00	0.20	6.58	7.56	0.49
Real Estate and Ownership of Dwellings	8.13	0.71	0.06	8.26	1.93	0.16
Public Administration and Defense; Compulsory Social Security	6.43	0.62	0.04	6.69	-0.36	-0.02
Other Services	19.61	0.10	0.01	19.85	2.61	0.51
Gross Domestic Product	100.00	0.75	0.75	100.00	3.92	3.92

Note: \* Percentage point.

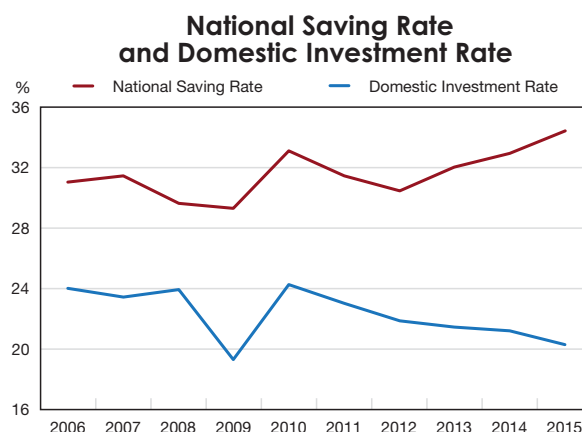
Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2016.

Resulting from increased fee income and insurance premium income, finance and insurance services registered the largest growth of 3.0% among the services subsectors for the year. Information and communications services also posted an increase of 2.72%, up from the previous year's 2.09% growth, attributable to the rising number of internet users over the year. Transport and storage services continued to grow along with the increase in the number of visitors and falling oil prices,

yet posted a slight growth of 0.84%. Real estate and ownership dwellings services grew by 0.71%, reflecting a cooldown in the housing market. On the other hand, wholesale and retail trade services decreased by 1.06% in 2015 because of a slowdown in trade-related export demand, weak domestic demand and a higher base effect.

### Rise in National Saving Rate

The national saving rate (the ratio of national saving to GNI measured at current prices) further rose from 32.95% in the previous year to 34.41% in 2015 as nominal national consumption (including both private consumption and government consumption expenditures) grew at a moderate rate of 1.12% compared to the GNI growth rate of 3.88%. The relatively slow growth in nominal national consumption was primarily due to the contraction in government spending and modest growth in private consumption. Accordingly, the excess saving ratio, defined as the excess of national saving over gross domestic investment to GNI, climbed from 11.75% in 2014 to 14.14% in 2015, reflecting a greater increase in national saving than that in domestic investment.



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2016.

### 3. Balance of Payments

In 2015, the current account registered a record surplus of US\$76,165 million, which accounted for 14.5% of nominal GDP, up from 12.0% in the previous year, as a result of wider surpluses on the goods and income accounts. The financial account posted a net outflow, which reached a new high of US\$68,041 million as investment in overseas debt securities by residents exhibited record-high net outflows. Because the current account surplus was partly offset by the net outflow in the financial account, the overall balance of payments recorded a surplus of US\$15,011 million, which was reflected in the increase in foreign reserve assets held by the CBC.

#### Balance of Payments

Unit: US\$ Million

	(1) 2015	(2) 2014	(1)-(2)
A. Current Account	76,165	63,812	12,353
Goods: exports f.o.b.	284,934	317,845	-32,911
Goods: imports f.o.b.	-231,593	-277,742	46,149
Balance on Goods	53,341	40,103	13,238
Services: credit	56,779	56,793	-14
Services: debit	-47,373	-45,747	-1,626
Balance on Services	9,406	11,046	-1,640
Income: credit	29,753	30,402	-649
Income: debit	-12,962	-14,945	1,983
Balance on Income	16,791	15,457	1,334
Current transfers: credit	6,612	6,624	-12
Current transfers: debit	-9,985	-9,418	-567
Balance on Current Transfers	-3,373	-2,794	-579
B. Capital Account	-82	-76	-6
Total, Groups A plus B	76,083	63,736	12,347
C. Financial Account	-68,041	-53,304	-14,737
Direct investment abroad	-14,773	-12,711	-2,062
Direct investment in R.O.C. (Taiwan)	2,415	2,839	-424
Portfolio investment assets	-56,535	-57,064	529
Portfolio investment liabilities	-1,181	12,840	-14,021
Financial derivatives assets	10,675	5,690	4,985
Financial derivatives liabilities	-11,925	-5,406	-6,519
Other investment assets	15,375	-14,243	29,618
Other investment liabilities	-12,092	14,751	-26,843
Total, Groups A through C	8,042	10,432	-2,390
D. Net Errors and Omissions	6,969	2,583	4,386
Total, Groups A through D	15,011	13,015	1,996
E. Reserves and Related Items*	-15,011	-13,015	-1,996

Note: \* Excluding valuation changes in exchange rates.  
Source: *Balance of Payments*, CBC, February 2016.

## Wider Current Account Surplus

The current account consists of four major items, namely goods, services, income, and current transfers.

### (1) Goods

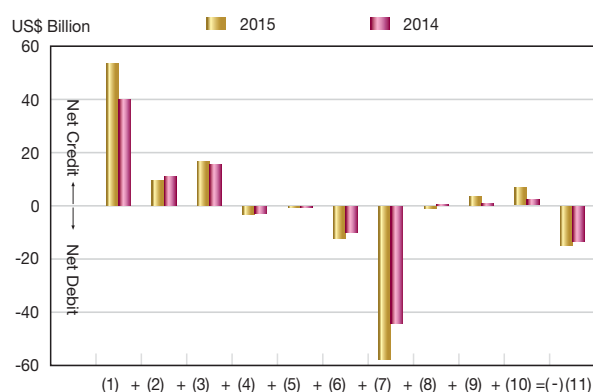
Global demand for semiconductors softened, and falling oil prices dragged down the export prices of petrochemical products. As a result, the value of exports dropped 10.4% to US\$284,934 million in 2015. The value of imports fell sharply by 16.6% to US\$231,593 million, mainly accounted for by decreasing import prices of raw materials. As a result of a larger reduction in imports over exports, the goods surplus widened to US\$53,341 million in 2015, hitting a new record high.

According to customs statistics, the top three export partners of Taiwan in 2015 were Mainland China including Hong Kong (hereafter in this chapter referred to as Mainland China), the US, and Japan, accounting for a combined share of 58.4% of total exports. The top three import partners were Mainland China, Japan, and the US, with a combined share of 48.3%.

In terms of Taiwan's trade with Mainland China, the value of exports amounted to US\$112,580 million in 2015, slipping by 12.4% from the previous year. China's economic growth slowdown, supply chain localization, and overcapacity limited Taiwan's growth in exports to Mainland China. Major export products exported to Mainland China declined, with the exception of information, communication and audio-video products and transport equipment. Taiwan's parts of electronic products and optical equipment, which made up the biggest two shares of exports to Mainland China, contracted by 8.1% and 27.6%, respectively. The share of exports to Mainland China shrank to 39.4% compared to the previous year, but Mainland China remained Taiwan's largest export market.

Imports from Mainland China dropped 8.3% to US\$46,771 million. With a share of 19.7%, Mainland

## Balance of Payments

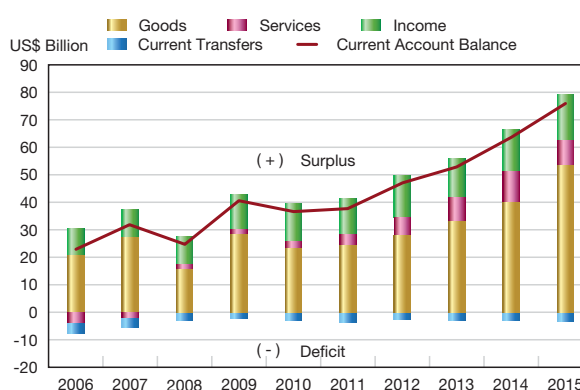


(1) Goods (2) Services (3) Income (4) Current Transfers (5) Capital Account  
(6) Direct Investment (7) Portfolio Investment (8) Financial Derivatives  
(9) Other Investment (10) Net Errors and Omissions (11) Reserves \*

Note: \* The minus sign (-) indicates an increase in foreign exchange reserves held by the CBC.

Source: Balance of Payments, CBC, February 2016.

## Current Account



Source: Balance of Payments, CBC, February 2016.

China continued to be Taiwan's largest import partner. The trade surplus with Mainland China decreased by 15.1% to US\$65,809 million in 2015. Nevertheless, Mainland China remained the largest source of Taiwan's trade surplus.

Exports to the Association of Southeast Asian Nations (ASEAN), including Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam decreased by 14.2% to US\$51,647 million in 2015, affected by falling export prices of petrochemical products amid a prolonged global oil slump. The combined share of exports to ASEAN in total exports fell to 18.1%. Imports from these countries decreased 16.1% to US\$29,117 million, with a share of 12.3% in total imports. In sum, the trade surplus with ASEAN reduced from US\$25,447 million in 2014 to US\$22,530 million, with Singapore, Vietnam, and the Philippines being the second, third, and fourth largest sources of Taiwan's trade surplus, respectively.

Despite the US economic recovery, Taiwan's exports to the US declined 1.6% to US\$34,550 million in 2015 yet comprised a higher share of 12.1% in total exports. The top three types of products exported to the US were information, communication and audio-video products, base metals and articles of base metal, and machinery. Among these product groups, only machinery exports increased. Taiwan exported 6.2% less base metals and articles of base metal to the US, mainly attributable to China's steel overproduction and the resulting steel prices falls. Imports from the US reduced by 2.8% to US\$29,199 million, while its share in total imports increased to 12.3%. The trade surplus with the US expanded to US\$5,352 million, the fifth largest source of Taiwan's trade surplus.

### Direction of Trade in Goods by Country

Unit: %

	2015			2014		
	Amount (US\$ Million)	Share	Annual Change	Amount (US\$ Million)	Share	Annual Change
Exports						
Mainland China (including Hong Kong)	112,580	39.4	-12.4	128,534	40.2	2.6
ASEAN	51,647	18.1	-14.2	60,172	18.8	1.6
U.S.	34,550	12.1	-1.6	35,114	11.0	7.6
Europe	25,971	9.1	-10.8	29,122	9.1	4.4
Japan	19,602	6.9	-2.7	20,142	6.3	3.9
Rest of the World	41,071	14.4	-12.6	47,008	14.7	0.1
Total	285,421	100.0	-10.8	320,092	100.0	2.8
Imports						
Mainland China (including Hong Kong)	46,771	19.7	-8.3	50,989	18.1	13.5
Japan	38,875	16.4	-7.4	41,984	14.9	-3.9
U.S.	29,199	12.3	-2.8	30,036	10.7	5.7
ASEAN	29,117	12.3	-16.1	34,725	12.3	5.0
Europe	28,503	12.0	-11.1	32,045	11.4	3.3
Rest of the World	65,084	27.4	-29.3	92,069	32.7	-5.0
Total	237,549	100.0	-15.7	281,850	100.0	1.4

Note: \* Including Brunei Darussalam, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam.  
Source: *Monthly Statistics of Exports and Imports*, Ministry of Finance, R.O.C. (Taiwan).

Exports to Japan decreased by 2.7% to US\$19,602 million. However, a positive growth trend remained for parts of electronic products, the primary export commodity to Japan, with an increase of 15.7% from a year before. The share of exports to Japan also went up to 6.9%. Although a weaker yen lowered the cost of imports from Japan, the relocation of Japanese manufacturing firms abroad and a weak export-derived demand led Taiwan's imports from Japan to decrease 7.4% to US\$38,875 million, but its share in total imports climbed to 16.4%. Japan remained Taiwan's second largest source of imports in 2015. The trade deficit with Japan narrowed to US\$19,273 million.

Exports to Europe decreased 10.8% to US\$25,971 million, but Europe's share in total exports remained at 9.1%. Imports from Europe dropped 11.1% to US\$28,503 million, with the share slightly up to 12.0% in total imports. The trade deficit with Europe narrowed to US\$2,532 million.

## (2) Services

In 2015, services receipts slightly decreased by US\$14 million to US\$56,779 million. Services payments increased by US\$1,626 million to US\$47,373 million. In all, the services surplus contracted by US\$1,640 million to US\$9,406 million.

Of the various components of the services account, transportation receipts shrank by US\$763 million to US\$10,355 million, reflecting decreases in international freight fares and passenger fares received by domestic carriers. Transportation payments also shrank by US\$348 million to US\$10,864 million, resulting mainly from reduced import freight payments by domestic sea carriers. Overall, net transportation payments increased by US\$415 million to US\$509 million in the year.

Travel receipts decreased by US\$208 million to US\$14,406 million owing to decreases in average daily expenditures per inbound visitor and average length of stay despite a record 5.34% increase in the total number of inbound visitors. Meanwhile, travel payments increased by US\$1,494 million to US\$15,492 million. This was mainly due to an 11.3% increase in the number of outbound travelers, mostly boosted by visits to Japan to take advantage of a weaker yen. In sum, the travel account exhibited a deficit of US\$1,086 million in 2015, shifting from a surplus in the previous year.

Other services receipts increased by US\$957 million to US\$32,018 million, mainly attributable to an increase in receipts of royalties and license fees, computer and information services, and professional and technical services. Other services payments increased by US\$480 million to US\$21,017 million on account of increases in expenditures on trade-related commissions and on construction. In all, the surplus in other services expanded to US\$11,001 million in 2015.

## (3) Income

In 2015, income receipts decreased by US\$649 million to US\$29,753 million, mainly owing to

decreases in interest earnings generated by residents' foreign exchange assets. Meanwhile, income payments amounted to US\$12,962 million, US\$1,983 million less than in 2014, mostly attributable to a decrease in non-residents' direct investment income. Consequently, the surplus on the income account expanded to US\$16,791 million for the year of 2015.

#### (4) Current Transfers

For the year of 2015, current transfer receipts and payments amounted to US\$6,612 million and US\$9,985 million, respectively. As a whole, the deficit in current transfers expanded to US\$3,373 million in 2015, mainly owing to an increase in outward cross-border workers' remittances.

### Slightly Higher Net Outflow in the Capital Account

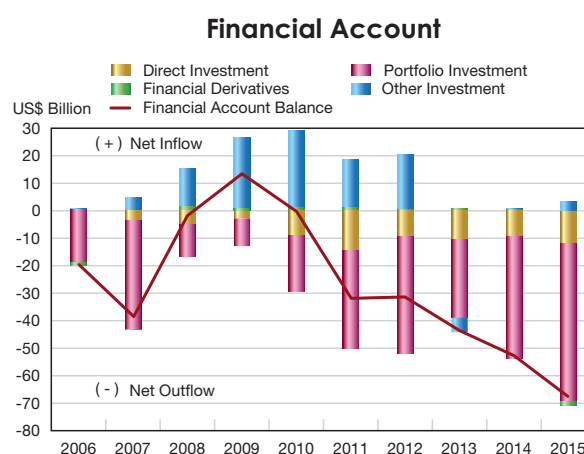
The capital account includes capital transfers (debt forgiveness, ownership transfers of fixed assets and migrants' transfers) and the acquisition and disposal of non-produced, non-financial assets. In 2015, the capital account posted a deficit slightly up by US\$6 million to US\$82 million owing to increased payments for acquisitions of non-produced, non-financial assets.

### Record-High Net Outflow in the Financial Account

The financial account for the year 2015 showed a record-high net outflow of US\$68,041 million. In terms of sub-categories, direct investment, portfolio investment, and financial derivatives registered net outflows of US\$12,358 million, US\$57,716 million, and US\$1,250 million, respectively; other investment registered a net inflow of US\$3,283 million.

#### (1) Direct Investment

Direct investment abroad by residents registered a net outflow of US\$14,773 million, an increase of US\$2,062 million compared with 2014. On the other hand, direct investment in Taiwan by non-residents registered a net inflow of US\$2,415 million, US\$424 million less than in the previous year. Based on approved cases, residents' direct investment in China and in other areas reported US\$10,398 million and US\$10,745 million, respectively, suggesting that China remained the major recipient of Taiwan's direct investment abroad. The main investment target sectors included banking and insurance, electronic parts and components, real estate, basic metal manufacturing, computers, electronics and optical products, and wholesale and retail.



Source: Balance of Payments, CBC, February 2016.



The main target sector for inbound investments by non-residents included banking and insurance, wholesale and retail, and real estate. Overall, direct investment exhibited a net outflow of US\$12,358 million in 2015, increasing by US\$2,486 million compared to 2014.

## (2) Portfolio Investment

In 2015, portfolio investment abroad by residents showed a net outflow of US\$56,535 million, mostly attributable to investment in foreign securities by life insurance companies. A substantial increase was recorded in insurance companies' holdings of foreign currency denominated international bonds (including Formosa bonds) issued by non-residents throughout the year, mainly because insurance companies' investments in international bonds were allowed to be excluded from the amount subject to the overseas investment ceiling. On the other hand, local portfolio investment by non-residents exhibited a net outflow of US\$1,181 million. This was because foreign investors reduced holdings of domestic debt securities. Meanwhile, a net inflow of US\$1,352 million was recorded in non-residents' equity securities investment. Overall, portfolio investment showed a net outflow of US\$57,716 million in 2015.

## (3) Financial Derivatives

Financial derivatives recorded a net outflow of US\$1,250 million, mainly owing to losses of the private and banking sectors from transactions of financial derivatives.

## (4) Other Investment

In 2015, other investment abroad by residents showed a net inflow of US\$15,375 million, mainly owing to withdrawal of overseas deposits by the private sector. On the other hand, other inward investment by non-residents showed a net outflow of US\$12,092 million, largely attributable to repayments for borrowings from overseas branches by the banking sector. As a consequence, other investment as a whole swung into a net inflow of US\$3,283 million in 2015.

## **Increase in Foreign Exchange Reserves**

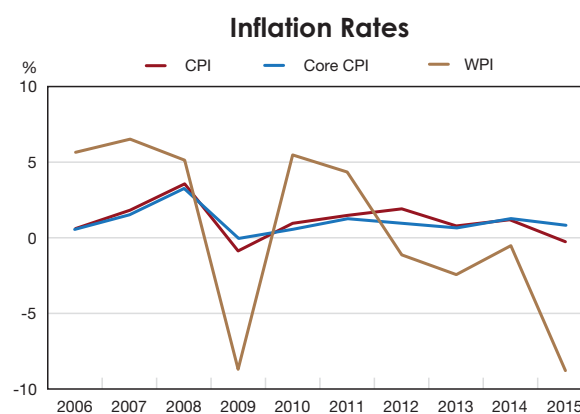
The foreign exchange reserve assets held by the CBC increased by US\$15,011 million as a result of the current account surplus.

## 4. Prices

Taiwan's inflation fell into negative territory in 2015, largely driven by the steep decline in international commodity prices resulting from subdued global economic growth. The wholesale price index (WPI) decreased markedly by 8.84%, posting the biggest drop on record. Headline inflation, measured by the consumer price index (CPI), fell by 0.31% compared with the 1.20% increase in the previous year. The deceleration was mainly caused by falling energy prices and slack domestic demand, though it was partly offset by a rise in food prices. However, the core CPI, which excludes fruits, vegetables, and energy, rose mildly by 0.79% compared with a 1.26% increase over 2014.

### Sharp Decline in Wholesale Prices

The WPI fell by 8.84% in 2015, the largest decline in history, mainly reflecting lower prices for international primary materials stemming from sluggish global demand. In terms of monthly movements, the annual WPI inflation rate displayed a downward trend in the first seven months of the year, and fell to an all-year low of -10.23% in July. Afterwards, the decrease narrowed to 7.29% in December.



Source: *Price Statistics Monthly*, DGBAS, Executive Yuan.

Broken down by the three major components of the WPI, the annual rates of change in prices for imports, exports, and domestic sales excluding imports all declined substantially in 2015, mainly on account of marked drops in international raw material prices.

Import prices fell by 16.86% in US dollar terms in 2015, mainly attributed to the continuous plunge in prices of imported raw materials, such as crude petroleum, liquefied natural gas, iron and steel, copper, and electronic parts and components. As the NT dollar depreciated against the US dollar over 2015, the annual change in import prices alleviated to a 12.94% decline in NT dollar terms. Among the components of import prices in terms of NT dollars, prices of raw materials, capital goods and consumer goods declined by 15.90%, 3.39%, and 1.14% and accounted for 12.40 percentage points, 0.44 percentage points, and 0.10 percentage points in the import price decrease, respectively.

Export prices in US dollar terms dropped by 8.96% in 2015. Owing to the depreciation of the NT dollar against the US dollar, export prices fell by 4.67% in terms of the NT dollar. In NT dollar

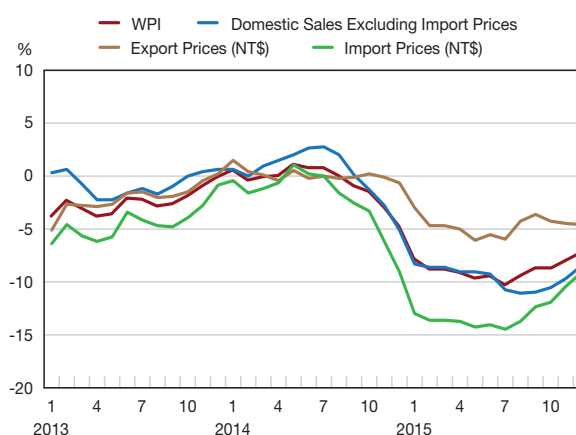
terms, among the basic groups, prices of mineral products accounted for the largest decline at 36.25%, contributing 2.11 percentage points to the decrease in export prices. This was primarily driven by plunging prices of gasoline, diesel, and fuel oil. In addition, prices of chemical materials, plastics and rubber products, and primary metal products decreased by 16.24%, 9.37%, and 6.56%, respectively, reflecting the weakness in raw material prices.

With declining import costs of primary commodities, prices of domestic sales excluding imports went down by 9.55% in 2015. In terms of the basic groups, prices of water supply, electricity and gas showed the largest decline at 12.01%, mainly attributable to the rebates of electricity charges at the beginning of the year as well as two rounds of reductions in electricity prices effective in April and October based on the new electricity pricing adjustment mechanism, together with falling gas prices. Prices of manufacturing products and quarrying and mineral products fell by 10.21% and 2.69%, respectively. In contrast, prices of agriculture, forestry and livestock products rose by 1.32% on account of rising prices of vegetables resulting from the shortage of supply caused by typhoons and torrential rain in the second half of the year.

### Slight Decrease in Consumer Prices

The CPI dropped by 0.31% in 2015, the first yearly decline since 2010. In the first eight months of the year, monthly CPI inflation rates stayed in negative territory, mostly driven by a slump in

**Annual WPI Rates**



Source: Price Statistics Monthly, DGBAS, Executive Yuan.

### Number of Price-Rising and Price-Falling Items in Each Month of 2015

(Compared with the Same Month of 2014)

	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Rising	233 (65.3%)	205 (66.7%)	218 (69.9%)	229 (69.2%)	209 (68.0%)	220 (66.5%)	218 (68.0%)	231 (68.7%)	233 (67.7%)	247 (71.6%)	256 (72.5%)	233 (71.4%)
Same	9 (2.5%)	8 (2.1%)	12 (3.3%)	10 (3.2%)	12 (3.2%)	11 (3.2%)	13 (3.3%)	11 (2.9%)	9 (2.6%)	11 (2.7%)	12 (2.9%)	13 (3.2%)
Falling	124 (32.2%)	153 (31.2%)	135 (26.9%)	126 (27.6%)	144 (28.8%)	134 (30.4%)	135 (28.6%)	124 (28.4%)	125 (29.7%)	108 (25.8%)	98 (24.6%)	121 (25.4%)

Notes: 1. There are 370 items of goods and services selected in the CPI basket.

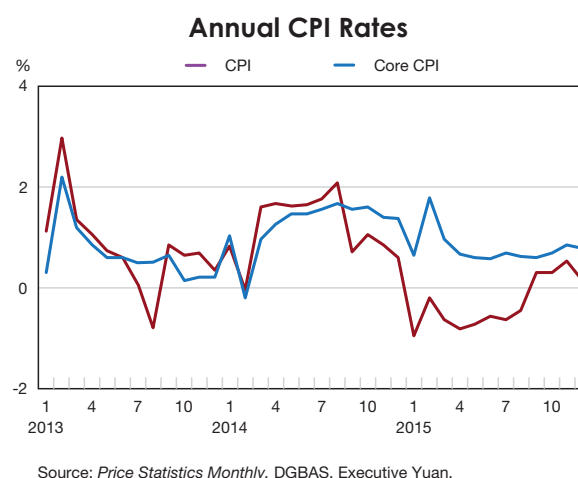
2. The total number of items per month is less than 370 as the number of fruit items not in season is excluded.

3. Numbers in brackets indicate the weight of each category as a percentage of all items.

Source: Price Statistics Monthly, DGBAS, Executive Yuan.

energy prices reflecting the weakening of global oil prices, as well as sluggish domestic demand. From September onwards, monthly CPI inflation rates turned positive and edged up to 0.14% in December, as prices of vegetables and fruits soared because of weather-related disruptions.

The CPI inflation rate was negative in 2015, mainly caused by considerable falls in energy prices. However, the number and weight of price-rising items significantly exceeded those of price-falling ones, indicating that overall prices did not broadly decline.



Compared to the slight downtrend in CPI, the core CPI inflation rate rose modestly by 0.79% in 2015. In the first two months of the year, the rate fluctuated on account of the seasonal factor of the Lunar New Year holidays. From March onwards, monthly core CPI inflation rates hovered between 0.50% to 1.00%.

In 2015, Taiwan's CPI inflation was substantially held down by falling energy prices, primarily caused by the pass-through effect arising from the slump in imported oil prices and accounting for 1.39 percentage points in the CPI decrease. The main factors contributing to the decrease of CPI inflation in 2015 were as follows:

- (1) In early 2015, international petroleum prices rebounded and peaked in May, but the uptrend was later reversed and decelerated sharply through the second half of the year because of weak demand affected by lackluster global economic growth and abundant supply of oil from OPEC and non-OPEC countries. Compared with 2014, average international petroleum prices fell significantly by 46.96%. As a result, the large decline in import costs for petroleum and natural gas lowered domestic oil and gas prices, which dropped by 24.99% and 22.25% and accounted for 0.90 and 0.25 percentage points in the CPI decrease, respectively.
- (2) Affected by the rebates of electricity charges at the beginning of the year, as well as two rounds of reductions in electricity prices taking effect in April and October, electricity prices moved down by 10.27%, subtracting 0.24 percentage points from CPI inflation.

The main upward factors contributing to CPI inflation in 2015 were as follows:

- (1) With the supply constrained by unfavorable weather conditions such as typhoons as well as heavy rainfall, prices of vegetables rose by 15.59% and accounted for 0.36 percentage points in CPI inflation.

- (2) Despite the declines in oil, electricity and gas costs, higher raw food prices such as pork, chicken and vegetables pushed up the prices of food away from home by 2.25%, contributing 0.23 percentage points to CPI inflation.
- (3) Prices of residential rent continued a mild upward trend and rose by 0.88%, contributing 0.16 percentage points to CPI inflation.
- (4) Owing to a shortage of supply caused by a bird flu outbreak at the beginning of 2015 and the deferred effect from infected piglets since 2014, along with higher demand for pork on account of the substitution effect resulting from the bird flu outbreak, prices of meat increased by 3.23%.
- (5) Prices of education and entertainment services grew by 0.47%, mainly because of an increase in tour group fees.

### Percentage Changes in the Major Components of the CPI in 2015

Item	Annual Rate of Change (%)	Contribution to CPI Inflation Rate (Percentage Point)
CPI	-0.31	-0.31
Vegetables	15.59	0.36
Food away from Home	2.25	0.23
Residential Rent	0.88	0.16
Meat	3.23	0.07
Education & Entertainment Services	0.47	0.06
Total		0.88
Fuels & Lubricants	-24.99	-0.90
Gas	-22.25	-0.25
Electricity	-10.27	-0.24
Total		-1.39
Others		0.20

Source: *Price Statistics Monthly*, DGBAS, Executive Yuan.

## 5. Public Finance of the Central Government

For the year 2015, central government revenue increased by 9.2%, whereas central government expenditure slightly expanded by 2.3%, causing the overall central government deficit to markedly decrease to NT\$11.0 billion from NT\$127.1 billion in 2014.

### Significant Increase in Central Government Revenue

In 2015, central government revenue grew by NT\$158.9 billion to NT\$1,885.3 billion. Of its various components, tax revenue remained the major source, with a share of 77.7% of the total revenue, exhibiting robust growth of NT\$121.7 billion or 9.1% from the previous year and registering a record-high level. This positive result was principally attributable to the rising profits of enterprises and higher salaries for individuals in 2014, resulting from a steady domestic economic recovery in that year.

Surpluses of public enterprises and public utilities, accounting for 12.6% of the total revenue, slightly decreased by NT\$3.4 billion or 1.4% in 2015. Fees, fines and indemnities increased by NT\$36.6 billion or 43.7%, primarily owing to the fees that the national treasury received from the 4G mobile-phone service license auction.

### Total Revenue and Expenditure of the Central Government

Unit: NT\$ Billion

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*
Total Revenue	1,546.4	1,635.5	1,640.9	1,553.7	1,497.4	1,671.3	1,668.3	1,730.5	1,726.4	1,885.3
(Ratio to GDP : %)	12.2	12.2	12.5	12.0	10.6	11.7	11.4	11.4	10.7	11.3
Total Expenditure	1,529.8	1,552.0	1,617.7	1,714.8	1,654.4	1,734.4	1,882.4	1,855.9	1,853.5	1,896.3
(Ratio to GDP : %)	12.1	11.6	12.3	13.2	11.7	12.1	12.8	12.2	11.5	11.4
Surplus/Deficit	16.6	83.5	23.2	-161.1	-157.0	-63.1	-214.1	-125.4	-127.1	-11.0
(Ratio to GDP : %)	0.1	0.6	0.2	-1.2	-1.1	-0.4	-1.5	-0.8	-0.8	-0.1
Debt Repayment	65.0	6.0	65.0	65.0	66.0	66.0	94.0	77.0	64.0	66.0
Financing:	63.9	0.0	41.8	226.1	224.2	129.1	308.1	202.4	191.7	77.0
Debt Financing	63.9	0.0	0.0	164.5	224.2	129.1	288.1	202.4	191.7	77.0
Surplus of Previous Fiscal Years	0.0	0.0	41.8	61.6	0.0	0.0	20.0	0.0	0.0	0.0
Memorandum:										
Tax Dependency Ratio (%)**	71.5	77.9	76.8	61.3	65.4	69.4	64.9	65.6	72.5	77.3
Debt Dependency Ratio (%)***	4.2	0.0	0.0	9.6	13.6	7.4	15.3	10.9	10.3	4.1

Notes: \* The figures for 2014 and the previous years are final audit accounts; the figures for 2015 are final accounts.

\*\* Tax dependency ratio is defined as the ratio of annual tax revenue to total expenditure.

\*\*\* Debt dependency ratio is defined as the ratio of annual revenues from government bonds and borrowing from banks to total government expenditure.

Sources: 1. Department of Statistics, MOF.

2. DGBAS, Executive Yuan.

## Modest Growth in Central Government Expenditure

Central government expenditure rose by NT\$42.8 billion to NT\$1,896.3 billion. In terms of share in total expenditure, social welfare, and education, science & culture remained the largest two categories, accounting for 23.2% and 20.0%, respectively. In addition, national defense and economic development made up shares of 16.1% and 13.6%, respectively.

Social welfare expenditure expanded by NT\$28.0 billion or 6.8%, mainly because the government set aside expenditures to address the 2013 and 2014 shortfall of its mandatory outlay for the national health insurance program and to supplement insufficient funds for the national pension fund in 2014. Meanwhile, expenditure on education, science & culture increased by NT\$15.1 billion or 4.1%, mostly related to the disbursement of more capital to the National Science and Technology Development Fund. Furthermore, national defense expenditure grew by NT\$14.0 billion or 4.8%, whereas economic development expenditure declined by NT\$10.4 billion or 3.9%.

## Total Revenue and Expenditure of the Central Government by Category

Unit: NT\$ Billion

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*
Total Revenue	1,546.4	1,635.5	1,640.9	1,553.7	1,497.4	1,671.3	1,668.3	1,730.5	1,726.4	1,885.3
Taxes	1,094.3	1,208.7	1,243.0	1,051.6	1,082.4	1,203.4	1,222.1	1,218.0	1,343.4	1,465.1
Surpluses of Public Enterprises and Public Utilities	289.1	271.5	253.4	318.7	264.8	264.7	262.5	251.0	241.0	237.6
Fees, Fines and Indemnities	79.0	81.1	83.1	78.1	81.6	81.0	108.2	197.3	83.7	120.3
Proceeds from Sales of Properties and Recalled Capital	58.5	51.3	40.0	53.7	46.7	64.0	60.1	52.3	43.7	49.3
Others	25.5	22.9	21.4	51.6	21.9	58.2	15.4	11.9	14.6	13.0
Total Expenditure	1,529.8	1,552.0	1,617.7	1,714.8	1,654.4	1,734.4	1,882.4	1,855.9	1,853.5	1,896.3
General Administration	167.3	168.2	170.8	168.8	170.2	176.4	176.2	172.7	174.2	177.2
National Defense	237.1	256.7	282.4	291.2	276.8	284.2	303.4	289.0	291.4	305.4
Education, Science & Culture	303.1	308.7	310.3	326.4	342.7	356.2	358.9	355.7	364.6	379.7
Economic Development	197.0	193.3	203.6	244.4	194.5	217.1	263.9	258.3	269.0	258.6
Social Welfare	303.3	305.1	298.4	320.2	327.4	348.5	420.1	438.9	411.7	439.7
Community Development & Environmental Protection	20.4	19.4	13.5	21.4	9.0	6.6	15.9	15.9	16.1	15.9
Retirement & Compassionate Aid	134.7	134.6	133.8	133.4	134.5	138.5	138.3	132.8	134.6	138.4
Interest Payments	125.2	124.0	117.4	116.7	109.8	111.8	114.5	117.4	115.1	111.7
General Subsidies and Other Expenditure	41.7	42.0	87.5	92.3	89.5	95.1	91.2	75.2	76.8	69.7

Note: \* The figures for 2014 and the previous years are final audit accounts; the figures for 2015 are final accounts.

Sources: 1. Department of Statistics, MOF.

2. DGBAS, Executive Yuan.

## Reduction in Fiscal Deficit

The fiscal deficit, defined as expenditure minus revenue, decreased to NT\$11.0 billion in 2015. This, combined with debt repayment, represented that the central government needed to finance NT\$77.0 billion for 2015.

## Rising Tax Dependency and Lessening Debt Dependency

The tax dependency ratio, defined as the ratio of annual tax revenue to total central government

expenditure, rose from 72.5% in 2014 to 77.3% in 2015, indicating that tax revenue grew faster than central government expenditure.

With respect to the debt dependency ratio, defined as the ratio of revenues from government bonds and borrowing to total central government expenditure, it reduced significantly from 10.3% in the previous year to 4.1% in 2015, primarily reflecting the decrease in demand for debt financing in line with the shrinkage of the fiscal deficit.

### Lower Debt-to-GDP Ratio

The total outstanding debt of the central government grew by NT\$21.8 billion to a record-high level of NT\$5,302.4 billion at the end of 2015. However, the ratio of outstanding central government debt to GDP decreased from 32.8% in 2014 to 31.7% in 2015, reflecting higher growth in domestic production.

### Public Debt of the Central Government

Unit: NT\$ Billion

End of Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015*
Outstanding Debt	3,622.7	3,718.2	3,778.3	4,126.9	4,537.1	4,755.3	5,001.0	5,151.2	5,280.6	5,302.4
(Ratio to GDP : %)	28.7	27.7	28.7	31.8	32.1	33.2	34.1	33.8	32.8	31.7

Note: \* The figures for 2014 and the previous years are final audit accounts; the figures for 2015 are final accounts.

Sources: 1. Department of Statistics, MOF.

2. DGBAS, Executive Yuan.



## 6. Labor Market

The unemployment rate dropped to 3.62% in May 2015, the lowest since February 2001. However, it gradually climbed up as an economic slowdown loomed large from June onwards. Eventually it came to 3.87 percent in December. For the year as a whole, the unemployment rate averaged 3.78%, still the lowest since 2001. Meanwhile, the broadly-defined unemployment rate went down by 0.16 percentage points from the previous year to 4.98%. While there were improvements in labor market conditions, structural unemployment problems still existed. For example, the unemployment rates of young people and of highly educated persons both stayed elevated, while the labor force participation rate for males between ages 45 to 64 remain depressed.

The labor force participation rate was 58.65% in 2015, climbing by 0.11 percentage points from the previous year to a record high since 1996. As the work environment improved, there was a continued increase in the number of female employees in the labor market. As a consequence, the female labor force participation rate continued rising and reached a historical high of 50.74% in 2015. On the other hand, the labor force participation rate of males gradually decreased in the past twenty years. Increasing industrial offshoring, slow industrial transformation, and skill mismatch were the main reasons behind this decline.

Annual average employment in 2015 was 11.20 million persons, an increase of 119 thousand persons or 1.08% from the previous year. In terms of employment by major sector, employment in the services sector grew by 83 thousand persons or 1.26%. Employment in the industrial and agriculture sectors also increased by 31 thousand and 7 thousand persons, respectively, or 0.76% and 1.18%, respectively.

The average monthly earnings per worker of the non-farm sector (the industrial and services sectors combined) was NT\$48,490 in 2015, a 2.52% increase from 2014. Average real monthly earnings also increased by 2.83%, the fastest pace in the past five years. Compared to the other Asian Tigers, Taiwan registered the second highest increase in average real monthly earnings, next only to Singapore.

Because the decrease in total production exceeded that in total working hours, labor productivity of the industrial sector and the manufacturing industry decreased 1.29% and 0.91%, respectively. On the other hand, given an increase in total earnings and a decrease in production, unit labor costs in the industrial and services sectors increased by 6.61% and 6.22%, respectively.

## Employment Continued to Improve

Annual average employment in 2015 was 11.20 million persons, an increase of 119 thousand persons or 1.08% from the previous year. On the other hand, the annual growth rate of employment gradually slowed to 0.82% in December from 1.22% in March, in contrast to the month-by-month uptrend in 2014.

In terms of employment by major sectors, employment in the agricultural sector in 2015 increased 7 thousand persons or 1.18%.

Employment in the industrial sector increased 31 thousand persons or 0.76%. Within this sector, manufacturing and construction employment increased by 17 and 14 thousand people, respectively. Employment in the services sector grew by 83 thousand persons or 1.26%. Among which, employment in accommodation and food services increased by 21 thousand, while wholesale and retail added 17 thousand jobs. Of total employment, the services sector accounted for 59.02%, rising slightly by 0.11 percentage points from a year before, while the agricultural and industrial sectors made up of 4.95% and 36.03%, respectively.

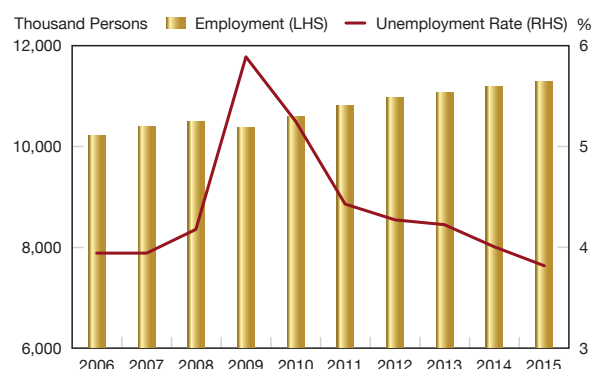
In terms of employed persons by occupation, employment of white collar workers (legislators, senior officials, managers, professionals, technicians, associate professionals, and clerical support workers) increased 63 thousand persons or 1.27%. Services and sales workers increased 15 thousand persons or 0.69%. Employment of blue collar workers (skilled agricultural, forestry, fishing, and animal husbandry industries, craft and machinery related workers etc.) increased 41 thousand persons or 1.04%. These numbers indicated that professionals and technical skills were in great demand.

## Unemployment Rate Gradually Increased

As employment increased, the unemployment rate dropped to 3.62% in May 2015, the lowest since February 2001. However, it gradually climbed up from June onwards as the economy began to slow down in the second quarter. The unemployment rate reached 3.87% in December and averaged 3.78% for the year as a whole. It was still the lowest yearly average since 2001.

Unemployment duration decreased to 24.95 weeks, shorter than the year before by 0.94 weeks. The average number of the long-term unemployed (those who were unemployed for 53 weeks or more) was 69 thousand people, a drop of 5 thousand persons from the previous year. Males made up 62.52% of the long-term unemployed, while 66.77% were in the age group between 25 and 44

## Employment and Unemployment Rate



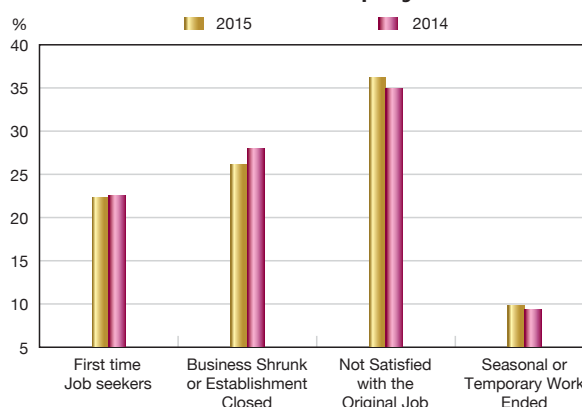
Source: DGBAS, Executive Yuan.

and 52.98% had a college degree or above. This indicates long-term unemployment remained a serious problem for males, those aged 25-44, and those with a higher education.

In terms of causes of unemployment, total unemployment decreased by 17 thousand people or 3.64% from the year before, mainly because involuntary unemployment from business curtailed or establishments closed fell by 12 thousand persons or 9.55%. The ratio of such unemployment to total unemployment dropped to 26.28%, compared to 28.00% the previous year. People who quit their jobs to seek other job opportunities made up a major portion of the unemployed. The ratio increased to 36.53%, indicating greater willingness for job change as employment opportunities increased.

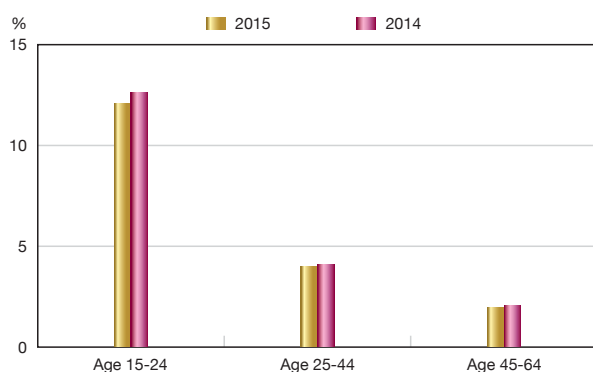
In terms of age groups, the unemployment rate of the age group of 15-24 decreased by 0.58 percentage points to 12.05%, mainly because unemployment by business curtailed or establishments closed fell by 2 thousand persons. This indicated that government policy measures to increase youth employment were effective. However, the youth unemployment rate was still 3.19 times as high as the total unemployment rate. This number was higher than those in other countries such as Japan, South Korea, and the United States and therefore has room for improvement in the future. The unemployment rates of the age groups of 25-44 and 45-64 were 3.95% and 1.99%, respectively,

### Causes of Unemployment



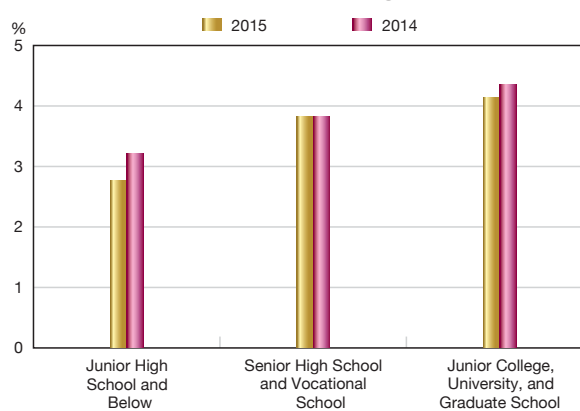
Source: DGBAS, Executive Yuan.

### Unemployment Rate by Age



Source: DGBAS, Executive Yuan.

### Unemployment Rate by Educational Background



Source: DGBAS, Executive Yuan.

representing year-on-year declines of 0.18 and 0.10 percentage points. As population aging has become more apparent in recent years, how to promote employment of middle aged and the elderly persons should be made an urgent policy priority.

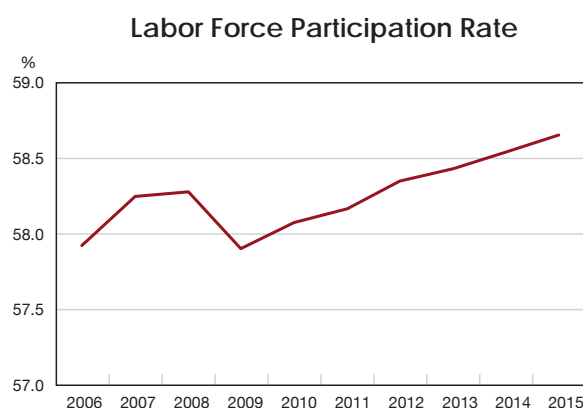
In terms of educational background, unemployment of people with a junior high school degree or below decreased by 11 thousand persons or 16.46%, and the unemployment rate dropped to 2.77%. The unemployment rate of people with a college degree or above also fell to 4.13%, representing a decrease in number by 6 thousand people, or 2.41%. However, for people with a middle high school or vocational school degree, unemployment rose by 1 thousand persons or 0.48%, and the unemployment rate stayed unchanged at 3.83%.

### Labor Force Participation Rate Rose

The labor force (employed and unemployed combined) grew slightly by 103 thousand persons or 0.89% to 11.64 million in 2015.

The labor force participation rate reached 58.65%, 0.11 percentage points higher than the year before. In terms of gender, the male labor force participation rate increased by 0.13 percentage points from the preceding year to 66.91%, while the female rate also rose to 50.74%, up by 0.10 percentage points over the previous year. Such improvement reflected government efforts to promote gender equality and to improve the work environment. The fact that the female labor force played an increasingly significant role in economic development was also an important factor.

In terms of age group, the labor force participation rates of all age groups went up. The 16-24, 25-44 and 45-64 age groups saw their rate go up by 0.88, 0.55, and 0.24 percentage points to the levels of 30.24%, 87.40% and 61.89%, respectively. However, in the past 20 years or so, while the 45-64 age group maintained a similar labor force participation rate at about 61%, it was mostly because the female labor force participation rate in that group went up by 11 percentage points, as opposed to a 7 percentage points drop in the male labor force participation rate. This indicated increasing industrial offshoring, slow industrial transformation, and skill mismatch of that age group caused many male workers to drop out of the labor market.



Source: DGBAS, Executive Yuan.

## Real Earnings of Non-farm Workers Increased

The average monthly earnings per worker of the non-farm sector reached NT\$48,490 in 2015, a 2.52% increase from the year before. After adjustment for inflation, the average real monthly earnings also increased by 2.83%.

In terms of major sectors, the average monthly earnings of industrial sector workers increased by 2.99% over the previous year to NT\$46,735 and their earnings in real terms also increased by 3.31%. Meanwhile, the average monthly earnings of services sector workers increased by 2.14% to NT\$49,861 and their real earnings also went up 2.46%. The electricity and gas supply sector enjoyed the highest average monthly earnings with NT\$96,444, while education services received only NT\$24,302, the lowest among all sectors.

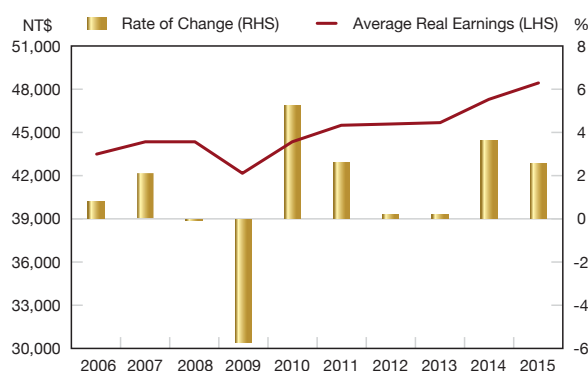
In terms of growth rate, as demand for health care services increased due to population aging and awareness of preventive health care, health care and social assistance workers' earnings enjoyed the largest increase at 4.57%. The manufacturing sector came in second with a 3.48% increase, while other services workers' earnings decreased by 1.60%.

## Labor Productivity Decreased and Unit Labor Cost Increased

As the decrease in total production outpaced that in total working hours, labor productivity of the industrial sector and the manufacturing industry went down by 1.29% and 0.91%, respectively. In manufacturing, the leather, fur and related products sector registered the largest decrease in labor productivity of 25.63%, followed by a 6.62% decrease in basic metals manufacturing.

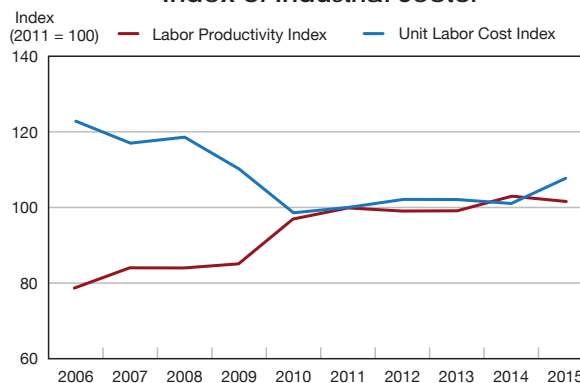
Since total earnings enjoyed positive growth while production decreased, unit labor costs of the industrial and manufacturing sectors increased by 6.61% and 6.22%, respectively. Of all the manufacturing sectors, manufacturing of wood and of products of wood and bamboo experienced the largest increase in unit labor costs of 13.84%, and computers, electronic and optical products manufacturing came in second with an increase of 11.82%.

## Average Real Earnings of Non-farm Workers and Their Rate of Change



Source: DGBAS, Executive Yuan.

## Labor Productivity and Unit Labor Cost Index of Industrial Sector



Source: DGBAS, Executive Yuan.