# Economic Developments

# I. Economic Developments

### 1. Overview

Taiwan's economy advanced at a steady pace in 2017. Driven mainly by external demand amid continued global economic expansion, the annual GDP growth rate rose to 2.86%. The overall balance of payments recorded a surplus of US\$12,467 million, with a current account surplus and a net asset increase in the financial account. In terms of inflation, fuel and gas cost hikes in response to international energy price rises were partially offset by food price declines; the annual growth rate of the consumer price index (CPI) averaged 0.62% for the year as whole. Meanwhile, the unemployment rate went further down to 3.76%, the lowest in 17 years.

#### Steady Economic Growth

Although private consumption moderated, stable growth in private investment and exports supported the economy to expand by 2.64% in the first quarter of 2017. The second quarter saw economic growth inching down to 2.28% as private investment underperformed because of shrinking capital expenditure of semiconductor and aviation industries and lukewarm construction investment, in addition to slower export growth. Then, as exports firmed up on the back of a stronger global economy and private consumption gained momentum from a buoyant stock market and a mild wage increase, economic growth accelerated and reached an annual rate of 3.28% in the fourth quarter, the highest quarterly mark since the second quarter in 2015. Overall, while domestic demand kept steady, stronger external demand drove the economic growth rate to climb from 1.41% in 2016 to 2.86% in 2017, the fastest pace in three years.

In terms of GDP components by expenditure, exports registered faster growth on thriving trade activity, and imports increased along with greater domestic demand as well as export-derived demand; net external demand contributed 2.02 percentage points to GDP growth, serving as the mainstay for economic growth in 2017. On the other hand, private consumption grew steadily amid improved employment conditions. However, this was partially offset by negative growth in private investment, as machinery equipment investment slowed in the second half of the year owing to a higher base effect. As a result, domestic demand contributed only 0.83 percentage points to GDP growth.

Gross domestic saving and gross domestic investment both declined from the previous year. With the decrease in gross saving larger than investment, the excess saving rate dropped modestly to 13,90% in 2017 from 14,12% in 2016.

#### **Robust BOP Surplus**

Taiwan's balance of payments remained steady in 2017. The overall balance of payments recorded a surplus of US\$12,467 million, increasing from the previous year's US\$10,663 million, with a current account surplus of US\$84,086 million and a net asset increase of US\$68,640 million in the financial account.

In the current account, strong exports helped boost the goods trade surplus to a new record level at US\$81,035 million. The services account deficit shrank to US\$8,380 million as a result of increased income from professional and management consulting services and freight services. The primary income surplus narrowed to US\$15,506 million mainly on account of higher outward payments to non-residents' portfolio investment income. The secondary income deficit widened to US\$4,075 million. The ratio of current account surplus to GDP rose from 13.7% in 2016 to 14.7% in 2017.

In the financial account, portfolio investment recorded a net asset increase of US\$79,039 million. The net increase in portfolio investment abroad by residents was US\$82,924 million, mainly because of higher equity securities investment abroad by the private sector and pension funds and larger insurer investment in foreign securities. Local portfolio investment by non-residents grew a net US\$3,885 million mainly on account of increased foreign buying in the domestic stock market. Direct investment recorded a net asset increase of US\$8,102 million; both direct investment abroad by residents and inbound direct investment by non-residents fell markedly as a result of a higher base effect from cross-border mergers and acquisitions and share swap transactions. In terms of other investment, it posted a net asset decrease of US\$14,805 million, as increases in non-residents' bank deposits and foreign borrowing by the banking sector led foreign liabilities to build up faster.

#### Mild Inflation

While the global economic upturn sent oil and other international raw material prices on a rebound, the NT dollar appreciation against the US dollar eased rises in domestic import and export prices. On balance, Taiwan's wholesale price index edged up by 0.90% over the previous year, with the categories of imports and domestic sales excluding imports rising by 1.36% and 3.44%, respectively, and exports down by 1.46%.

In terms of consumer price trends, international energy price rises resulted in hikes in domestic fuel and gas fees. Prices for food away from home also rose as restaurants acted to cover higher staffing and food costs. Furthermore, cigarette prices increased as government raised the cigarette tax. However, the upside pressures were partially offset by vegetables and fruit price declines due to a higher base effect. For the year as a whole, the CPI annual growth rate averaged 0.62%, lower than the 1.32% registered the previous year. Core inflation (excluding fruit, vegetables, and energy prices) recorded a mild increase of 1.04%.

#### Unemployment Rate Declined Further; Wage Growth Increased

Over the course of year 2017, the unemployment rate broadly trended downwards amid steady economic growth and stood at 3.66% in December. For the year as a whole, the unemployment rate averaged 3.76%, the lowest in 17 years. The average labor force participation rate ticked up from 58.75% of 2016 to 58.83%.

The average number of employed persons increased by 85 thousand, or 0.75%, to 11.35 million in 2017. Employment in the services sector grew the most among all sectors, with an increase of 65 thousand workers or 0.98% from the previous year. Employment in the industrial sector gained the second most, hiring 20 thousand more persons with an increase of 0.49%. The agricultural sector lost one thousand employed persons, representing a decrease of 0.14%.

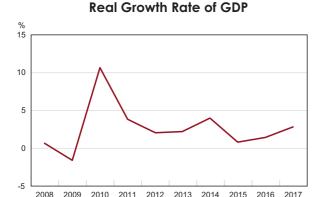
Average non-farm (industrial and services sectors) monthly earnings per employee grew by 2.46% year on year to NT\$49,989. Among the components, regular earnings increased by 1.82% to NT\$39,953; non-regular earnings rose by 5.07%, thanks to higher year-end and performance bonuses in reflection of better corporate profits since the latter half of 2016 and increased overtime pay in line with the labor law amendments. Adjusted for inflation, real monthly earnings increased by 1.83% to the new highest level of NT\$47,271. Real monthly regular earnings and non-regular earnings climbed by 1.20% and 4.42%, respectively.

Labor productivity indices of the industrial sector and the manufacturing industry grew by 1.37% and 2.10% over the previous year, respectively. Unit labor costs rose by 1.25% in the industrial sector and by 0.60% in manufacturing, reflecting a larger increase in total earnings over that in production.

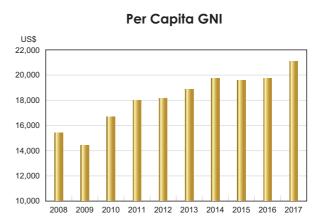
# 2. National Output and Income

In 2017, Taiwan's external trade gathered steam amid a robust recovery in the global economy, while domestic demand witnessed mild expansion. Private consumption rose at a steady pace, and, despite a slight contraction seen in private investment, investments by general government and public enterprises both exhibited positive growth. For the year as a whole, real GDP expanded at an annual growth rate of 2.86%, higher than the 1.41% in the previous year.

In the first quarter, with decelerated growth in private consumption, steady expansion in private investment supported by increased capital spending by the semiconductor industry, and upticks in exports and net proceeds from merchanting amid a gradually improved global business climate, real GDP recorded a solid growth rate of 2.64%. In the second quarter, declining capital outlays in the semiconductor and aviation industries and the slack in the construction industry resulted in a slowdown in private investment. Exports registered weaker growth owing to decreases in the number of inbound visitors and in net proceeds from merchanting. Therefore, real GDP growth moderated to 2.28%, the lowest level over the year. In the third quarter, dragged by a reduction in investment in the semiconductor industry and a higher base effect, private investment decreased significantly. Nevertheless, a booming domestic stock market and increased new car sales helped push up private consumption. Strong growth in exports on account of the acceleration in the global economic recovery further boosted real GDP growth to 3.18%. In the fourth quarter, because private consumption continued to grow thanks to strong stock market activity and rising wages and exports were bolstered by greater demand in the semiconductor and machinery industries, real GDP rose by 3.28%, the highest level over the year. Meanwhile, amid a solid recovery in the domestic economy, per capita GNI (gross national income) in nominal terms increased from US\$19,720 to US\$21,094.



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2018.



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2018.

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

All expenditure components of GDP except for government consumption and fixed capital formation exhibited higher growth rates than those in the previous year. Among them, exports of goods and services remained the primary source of economic growth and recorded a substantial contribution of 4.66 percentage points to GDP growth for the year. Private consumption also contributed 1.23 percentage points to GDP growth in 2017. Gross fixed capital formation made zero contribution to GDP growth, mainly caused by a downturn in machinery and equipment investment by the private sector. Meanwhile, growth in government consumption moved from positive to negative territory and hence dragged GDP growth down by 0.15 percentage points. With respect to shares of GDP, exports of goods and services still accounted for the largest share of GDP at 65.19%, followed by private consumption at 53.00% and gross fixed capital formation at 20.53% for the year.

#### **GDP** by Expenditure

Unit: %

	2017			2016			
	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*	
Private Consumption	53.00	2.34	1.23	52.66	2.32	1.21	
Government Consumption	14.08	-1.06	-0.15	14.38	3.72	0.52	
Gross Fixed Capital Formation	20.53	0.01	0.00	20.90	2.27	0.47	
Change in Inventory	-0.26	-	-0.26	-0.09	-	-0.26	
Exports of Goods and Services	65.19	7.43	4.66	62.80	1.93	1.24	
(Less : Imports of Goods and Services)	52.54	5.20	2.64	50.64	3.45	1.77	
Expenditure-based GDP	100.00	2.86	2.86	100.00	1.41	1.41	

Note: \* Percentage point.

Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2018.

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

In 2017, private consumption grew by 2.34%, slightly higher than that of the previous year, and contributed 1.23 percentage points to GDP growth. Higher corporate profits, an improving employment situation, and a buoyant stock market caused disposable income and financial wealth to increase. This, combined with a growing number of citizens traveling abroad, pushed up overall consumer spending.

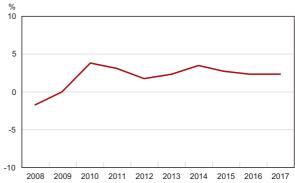
Influenced by weaker new car sales and negative growth in retail sales, private consumption posted slower expansion of 1.81% and 2.05% in the first and second quarters, respectively. In the third quarter, vigorous stock market activity and stronger new car sales and retail sales led private consumption to pick up by 2.62%. In the fourth quarter, private consumption further advanced by

2.89%, reflecting increased employment, steady growth in wages, a significant rise in the number of citizens traveling abroad, and higher trading volumes in the stock market.

#### (2) Sluggish Growth in Fixed Capital Formation

In 2017, fixed capital formation displayed lackluster growth, primarily because of stagnated construction investment, affected by a downturn in the housing market, and negative growth in machinery and equipment investment in the second half of the year resulting from a higher

# Real Growth Rate of Private Consumption Expenditure



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2018.

base effect. Therefore, fixed capital formation grew by a mere 0.01% year on year and made nearly nil contribution to real GDP growth. In the first quarter, despite a decline in construction investment, the semiconductor industry continued to expand capacity in advanced manufacturing and airline companies increased investment in aircraft purchases, driving fixed capital formation to rise by 4.82%, the highest level over the year. In the second quarter, as the aviation industry reduced capital outlays and construction investment contracted further, fixed capital formation growth slowed to an annual rate of 0.80%. Subsequently, growth in machinery and equipment investment turned negative because of a higher base effect, leading fixed capital formation to shrink by 2.73% and 2.18% in the last two quarters, respectively.

Regarding expenditure by type of purchaser, in spite of falling construction investment, investment by the private sector rose by 3.89% in the first quarter on account of an uptick in machinery and equipment investment. In the second quarter, with deceleration in transportation and construction investment, growth in private investment declined to 0.26%. In the second half of the year, investment by the private sector dropped by 4.35% and 3.01% in the last two quarters, mainly reflecting a higher base effect. For the year as a whole, growth in private investment went down to negative 0.89%, lower than the 2.77% registered in 2016. On the other hand, investment by public enterprises displayed an annual growth rate of 0.62% because strong growth in construction investment partly offset a decline in transportation investment. Investment by general government registered positive growth for the second consecutive year with a year-on-year increase of 5.22% on the back of the government's active implementation of various industrial development programs as well as a lower base effect.

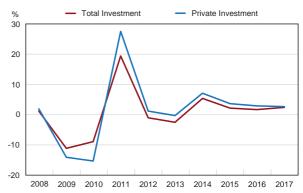
In terms of the type of capital formation, the stagnant housing market dragged growth in construction investment down to negative 0.11% for 2017. Meanwhile, though experiencing negative growth in the second quarter, transportation investment recorded a marked increase of 18.61% for

the second half of the year, and 7.19% for the entire year, mainly attributable to a pickup in capital spending by airline companies on aircraft purchases and the replacement of buses and trucks for commercial purposes. With regard to machinery and equipment investment, despite exhibiting significant growth in the first half of the year, it posted a negative growth rate of 11.84% in the second half of the year, and negative 3.24% for the entire year, primarily influenced by a reduction in capital outlays by major semiconductor manufacturers. Investment in intellectual property was relatively stable, registering an annual growth rate of 3.07% in 2017.

#### (3) Moderate Expansion in Exports and Imports

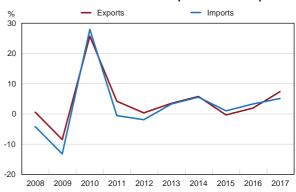
Amid a gradual recovery in the global economy, external trade saw vigorous growth, mainly bolstered by stronger foreign demand and an increase in net proceeds from merchanting. Exports of goods and services posted an annual growth rate of 7.43%, much higher than the 1.93% of the previous year, and contributed 4.66 percentage points to real GDP growth.

#### Real Growth Rate of Fixed Investment



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2018.

#### **Real Growth Rates of Exports and Imports**



Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2018.

In the first quarter, on the back of mounting demand for electronic parts and components and rising prices of international raw materials, exports of goods and services grew substantially by 7.34%. In the second quarter, notwithstanding a continuous upturn in exports of goods, decreases in the number of inbound visitors and in net proceeds from merchanting led growth in exports of goods and services to reduce to 5.08%, the lowest level over the year. In the third quarter, boosted by a strengthening global economy, exports of electronic parts and components advanced further by 9.32%, and exports of most other products also registered positive growth. In addition, upticks in net proceeds from merchanting and in the number of tourists from abroad drove growth in exports of goods and services to a yearly high of 11.28%. In the fourth quarter, exports of machinery went up by 13.96%, while exports of electronic parts and components, rubber and plastic products, and base metals also displayed robust growth, driving exports of goods and services to rise at an annual rate of 6.00%.

Driven by solid expansion in exports, import demand also increased in 2017. With higher prices of international raw materials and strong export-derived demand, imports of goods and services advanced by 5.2% for the entire year, subtracting 2.64 percentage points from economic growth.

#### Modest Downtrend in National Saving Rate

As the gradual recovery in the domestic economy underpinned by a pickup in external demand boosted private consumption, national consumption (including both private consumption and government consumption expenditures) went

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Source: Statistical Abstract of National Income, DGBAS, Executive Yuan, February 2018.

up by a modest 1.78% in nominal terms for the year, higher than the GNI growth rate of 1.09%. As a consequence, the national saving rate (the ratio of national saving to GNI measured at current prices) slightly fell from 34.31% in 2016 to 33.68% in 2017. The excess saving ratio, defined as the excess of national saving over gross domestic investment to GNI, slid from 14.12% in 2016 to 13.90% in 2017, reflecting a greater decrease in national saving than that in domestic investment.

# 3. Balance of Payments

In 2017, Taiwan's current account registered a record surplus of US\$84,086 million, which accounted for 14.7% of nominal GDP, up from 13.7% in the previous year, as a result of a wider goods trade surplus and a narrower deficit on trade in services. The financial account posted a net asset increase of US\$68,640, reaching a new high as investment in foreign securities by residents exhibited record-high net outflows. The overall balance of payments recorded a surplus of US\$12,467

#### **Balance of Payments**

Unit: US\$ Million

	(1) 2017	(2) 2016	(1)-(2)
A. Current Account	84,086	72,786	11,300
Goods: credit (exports)	349,808	309,941	39,867
Goods: debit (imports)	268,773	239,326	29,447
Balance on Goods	81,035	70,615	10,420
Services: credit (exports)	45,071	41,360	3,711
Services: debit (imports)	53,451	51,699	1,752
Balance on Services	-8,380	-10,339	1,959
Primary income: credit	35,021	29,469	5,552
Primary income: debit	19,515	13,824	5,691
Balance on primary income	15,506	15,645	-139
Secondary Income: credit	7,248	6,944	304
Secondary Income: debit	11,323	10,079	1,244
Balance on secondary income	-4,075	-3,135	-940
B. Capital Account	-12	-9	-3
C. Financial Account	68,640	55,773	12,867
Direct investment: assets	11,357	17,884	-6,527
Equity and investment fund shares	10,541	16,851	-6,310
Debt instruments	816	1,033	-217
Direct investment: liabilities	3,255	9,231	-5,976
Equity and investment fund shares	4,749	7,312	-2,563
Debt instruments	-1,494	1,919	-3,413
Portfolio investment: assets	82,924	81,463	1,461
Equity and investment fund shares	16,634	6,445	10,189
Debt securities	66,290	75,018	-8,728
Portfolio investment: liabilities	3,885	2,643	1,242
Equity and investment fund shares	4,052	5,325	-1,273
Debt securities	-167	-2,682	2,515
Financial derivatives: assets	-11,489	-11,153	-336
Financial derivatives: liabilities	-7,793	-8,925	1,132
Other investment: assets	11,512	-7,352	18,864
Other investment: liabilities	26,317	22,120	4,197
D. Net Errors and Omissions	-2,967	-6,341	3,374
E. Reserves and Related Items*	12,467	10,663	1,804

Note: \* Excluding valuation changes in exchange rates. Source: Balance of Payments, CBC, February 2018.

million, which was reflected in the increase in foreign reserve assets held by the CBC.

#### **Wider Current Account Surplus**

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

#### (1) Goods

In 2017, Taiwan's external merchandise trade was spurred by the accelerated recovery of the global economy. The value of exports, on a BOP basis, surged at the fastest pace in five years, increasing by 12.9% to US\$349,808 million from 2016, reflecting the rising volumes and prices of export commodities. Among the components,

#### **Current Account** ■ Goods Services Primary Income US\$ Billion Secondary Income Current Account Balance 110 100 (+) Surplus 90 80 70 60 50 40 30 20 10 0 -10 -20 -30 2010 2011 2012 2013 2014 2008 2009 2015 2016 2017

Source: Balance of Payments, CBC, February 2018.

net exports of goods under merchanting grew by 22.3% to US\$14,829 million. The value of imports increased by 12.3% to US\$268,773 million. Overall, as the increase in exports outpaced that in imports, the trade surplus expanded from US\$70,615 million to US\$81,035 million in the year, hitting a new record high.

According to customs statistics, the value of exports increased by 13.2% to US\$317,381 million on a free on board (FOB) basis, and the value of imports increased by 12.5% to US\$259,499 million on a cost, insurance, and freight (CIF) basis. The top five trading partners of Taiwan in 2017 were Mainland China including Hong Kong (hereafter is this chapter referred to as Mainland China), ASEAN, the US, Europe and Japan.

In terms of Taiwan's trade with Mainland China, the value of exports amounted to US\$130,280 million in 2017, 16.0% higher than the previous year. As a manufacturing hub of the world, Mainland China remained Taiwan's largest export market, with the share of total exports rising to 41.0% in 2017. Of all major export products, parts of electronic products (especially integrated circuits) maintained a leading role, contributing 7.8 percentage points to the growth in Taiwan's exports to Mainland China. Imports from Mainland China grew by 13.8% to US\$51,562 million in 2017. With a share of 19.9%, Mainland China continued to be Taiwan's largest import partner. The trade surplus with Mainland China increased to US\$78,718 million in 2017. As a result, Mainland China remained the largest source of Taiwan's trade surplus.

Exports to the ASEAN economies increased by 14.2% to US\$58,584 million in 2017, with a combined share of 18.5%. Imports from these countries increased by 14.4% to US\$31,058 million, with a share of 12.0% of total imports. The bilateral trade between Taiwan and the ASEAN heated up, and the

exports and imports of parts of electronic products increased greatly. In sum, the trade surplus with the ASEAN increased to US\$27,526 million, with Singapore, Vietnam, and the Philippines being the second, third, and fourth largest sources of Taiwan's trade surplus, respectively.

Exports to the US grew by 10.3% to US\$36,976 million, though comprising a smaller share of 11.7% in Taiwan's total exports compared to a year ago. Boosted by greater consumer demand for newer models of gaming laptops and commercial computers, information, communication & audio-video products exported to the US increased by 16.8% over the previous year. Imports from the US rose by 5.6% to US\$30,210 million, but its share in total imports fell to 11.6%. The trade surplus with the US, Taiwan's fifth largest surplus source, increased to US\$6,766 million.

The steady recovery in Europe, coupled with a stronger euro, led our exports to Europe to increase by 11.2% to US\$29,162 million, yet its share of total exports declined to 9.2%. Exports of machinery and base metals performed particularly well among major products, growing by 22.5% and 16.1% from a year earlier, respectively. Imports from Europe increased by 8.7% to US\$31,452 million, though its share of total imports decreased to 12.1%. Consequently, Taiwan's trade deficit with Europe shrank to US\$2,290 million in 2017.

Exports to Japan increased by 6.3% to US\$20,787 million, with its share declining to 6.5%. Exports of machinery and base metals made the biggest contribution to total exports. Imports from Japan increased by 3.3% to US\$41,950 million, with the share dropping to 16.2% of total imports. Japan remained Taiwan's second largest source of imports in 2017. To sum up, the trade deficit with Japan

#### Trade in Goods by Country

Unit: %

	2017			2016			
	Amount (US\$ Million)	Share	Annual Change	Amount (US\$ Million)	Share	Annual Change	
Exports							
Mainland China (including Hong Kong)	130,280	41.0	16.0	112,277	40.1	-0.2	
ASEAN	58,584	18.5	14.2	51,291	18.3	-0.7	
US	36,976	11.7	10.3	33,523	12.0	-3.0	
Europe	29,162	9.2	11.2	26,221	9.4	1.0	
Japan	20,787	6.5	6.3	19,551	7.0	-0.2	
Rest of the World	41,592	13.1	11.0	37,459	13.4	-8.8	
Total	317,381	100.0	13.2	280,321	100.0	-1.8	
Imports							
Mainland China (including Hong Kong)	51,562	19.9	13.8	45,321	19.7	-3.0	
Japan	41,950	16.2	3.3	40,622	17.6	4.5	
Europe	31,452	12.1	8.7	28,924	12.5	1.5	
ASEAN	31,058	12.0	14.4	27,155	11.8	-6.5	
US	30,210	11.6	5.6	28,597	12.4	-2.1	
Rest of the World	73,267	28.2	22.2	59,949	26.0	-7.6	
Total	259,499	100.0	12.5	230,568	100.0	-2.8	

Source: Monthly Statistics of Exports and Imports, Ministry of Finance.

widened to US\$21,163 million.

#### (2) Services

Since 2016, the adoption of BPM6 has led Taiwan's services account to run deficits instead of surpluses as under previous manuals, because merchanting was reclassified from services to goods. In 2017, services receipts slightly increased by US\$3,711 million to US\$45,071 million, mainly owing to increased receipts of professional and management consulting services (which is under other business services). Services payments increased by US\$1,752 million to US\$53,451 million, due to rising travel payments. In all, the services deficit narrowed to US\$8,380 million.

Of the various components of the services account, manufacturing services on physical inputs owned by others (reflected by the receipts of a resident providing a nonresident with the services of processing, assembly, labeling, or packing on goods owned by the nonresident) increased by US\$551 million to US\$2,586 million in 2017. On the debit side, payments for manufacturing services (a resident's payments to a nonresident for providing these services for the resident who is also the owner of the goods concerned) decreased by US\$86 million to US\$3,411 million. In total, net manufacturing payments decreased from US\$1,462 million to US\$825 million.

In terms of maintenance and repair services n.i.e. (not included elsewhere), which covers maintenance and repair work for or by nonresidents on ships, aircraft, and other transport equipment, the receipts increased by US\$486 million to US\$1,318 million, while the payments increased by US\$114 million to US\$974 million. For the first time, the balance of maintenance and repair services, which recorded a net payment of US\$28 million in 2016, turned into a net receipt of US\$344 million in 2017.

Transport receipts increased by US\$1,093 million to US\$9,916 million, reflecting increases in international freight fares received by domestic carriers. Transport payments increased by US\$294 million to US\$11,248 million, resulting from an increase in foreign port charges. Overall, net transport payments decreased from US\$2,131 million to US\$1,332 million.

Even though the number of inbound visitors reached a record high in 2017, travel receipts decreased by US\$1,042 million to US\$12,333 million, owing to diminishing average daily expenditures per inbound visitor and shortened average length of stay. Meanwhile, travel payments increased by US\$1,373 million to its highest-ever level of US\$17,947 million. This was mainly due to a 7.3% increase in the number of outbound travelers. In sum, the deficit on the travel account exhibited a record high of US\$5,614 million.

Other services receipts increased by US\$2,623 million to US\$18,918 million, mainly attributable to an increase in receipts of professional and management consulting services (which is under

other business services). Though charges for intellectual property n.i.e. substantially decreased, increases in expenditures on financial, computer and information, insurance and pension services led other services payments to increase by US\$57 million to US\$19,871 million. In all, the deficit in other services shrank to US\$953 million in 2017.

#### (3) Primary Income

Primary income consists of compensation of employees, investment income, and other primary income. In 2017, primary income receipts increased by US\$5,552 million to US\$35,021 million, mainly caused by increases in residents' direct investment income and in interest received by domestic banks. Meanwhile, primary income payments amounted to US\$19,515 million, US\$5,691 million more than the previous year, mostly attributable to an increase in dividends from equity securities paid to nonresidents. Consequently, the surplus on the primary income account narrowed to US\$15,506 million for the year of 2017.

#### (4) Secondary Income

Secondary income receipts grew by US\$304 million year on year to US\$7,248 million in 2017, mainly owing to increases in receipts of gifts and samples, default penalties, and allowances from overseas relatives. Secondary income payments increased by US\$1,244 million to US\$11,323 million, owing to an increase in outward remittances by cross-border workers. Consequently, the deficit on the secondary income account widened to US\$4,075 million for the year of 2017.

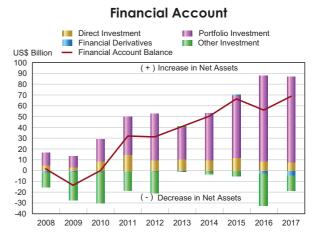
#### Slightly Higher Capital Account Deficit

The capital account includes capital transfers and the acquisition and disposal of non-produced,

non-financial assets. In 2017, the capital account deficit widened by US\$3 million to US\$12 million.

#### Net Asset Increase in Financial Account

The financial account showed an increase of US\$68,640 million in net assets. In terms of subcategories, direct investment and portfolio investment exhibited increases of US\$8,102 million and US\$79,039 million in net assets, respectively. Financial derivatives and other investment exhibited decreases of US\$3,696 million and US\$14,805 million in net assets, respectively.



Source: Balance of Payments, CBC, February 2018.

#### (1) Direct Investment

Direct investment abroad by residents exhibited a decrease of US\$11,357 million in assets, and direct investment in Taiwan by nonresidents showed a decrease of US\$3,255 million in liabilities. Overall, the net assets in direct investment amounted to US\$8,102 million, US\$551 million less than the previous year.

#### (2) Portfolio Investment

In 2017, portfolio investment abroad by residents increased by US\$82,924 million. Of the components, equity and investment fund shares increased by US\$16,634 million, as residents and pension funds increased holdings of foreign equity securities. Debt securities increased by US\$66,290 million, mainly because insurance companies expanded their investment in debt securities.

On the other hand, local portfolio investment by nonresidents increased by US\$3,885 million. Of the components, equity and investment fund shares increased by US\$4,052 million, and debt securities decreased by US\$167 million. The main reason was that foreign investors increased holdings of Taiwanese stocks and reduced holdings of government bonds.

Overall, portfolio investment showed an increase of US\$79,039 million in net assets in 2017.

#### (3) Financial Derivatives

Assets in financial derivatives decreased by US\$11,489 million, principally because of gains on transactions of financial derivatives received by banks and other financial corporations.

Liabilities in financial derivatives decreased by US\$7,793 million, mainly because of losses on transactions of financial derivatives paid by banks.

#### (4) Other Investment

In 2017, other investment abroad by residents increased by US\$11,512 million. Of the components, currency and deposits increased by US\$16,860 million as a result of growing bank deposits with overseas branches; loans decreased by US\$1,044 million because of a reduction in outstanding overseas short-term lending; trade credit decreased by US\$2,535 million; other accounts receivable decreased by US\$1,775 million, owing to a drop in banks' accounts receivable from nonresidents.

Moreover, other inward investment by nonresidents increased by US\$26,317 million. Of the components, currency and deposits increased by US\$14,888 million, because of growing deposits from nonresidents and overseas branches; loans increased by US\$11,902 million, owing to expanded short-term external borrowing by banks; trade credit increased by US\$3,379 million; other accounts payable decreased by US\$3,852 million, owing to falling banks' accounts payable to non-residents.

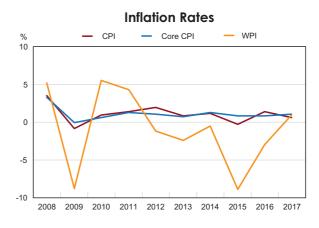
As a consequence, other investment showed a decrease of US\$14,805 million in net assets in 2017.

#### Increase in Foreign Exchange Reserves

The foreign exchange reserve assets held by the CBC increased by US\$12,467 million, mainly attributable to an increase in the investment income on foreign reserve assets.

## 4. Prices

Taiwan's wholesale price index (WPI) rose by 0.90% in 2017, returning to positive territory for the first time since 2012. The increase in WPI inflation was largely driven by rising international oil prices amid a moderate recovery in the global economy. However, NT dollar appreciation against the US dollar led import and export prices in NT dollar terms to grow at a slower pace, which partly offset the WPI increase. Headline inflation, measured by the consumer price index (CPI), expanded mildly at an annual rate of 0.62% in 2017, down from a rise of 1.39%



Source: Price Statistics Monthly, DGBAS, Executive Yuan.

over 2016, mainly caused by fuel and gas price hikes and an increase in cigarette prices, though these were partly offset by reductions in vegetables and fruit prices owing to a higher base effect. The core CPI, which excludes fruit, vegetables, and energy, rose by 1.04%, 0.20 percentage points higher than the previous year.

#### Moderate Increase in Wholesale Prices

Compared with a decline of 2.98% in 2016, the WPI climbed to 0.90% in 2017, the first yearly increase since 2012. The rise was mainly attributable to a pickup in international oil prices underpinned by the global economic recovery. In terms of monthly movements, the annual WPI inflation rate generally displayed a downtrend in the first half of the year and fell to an all-year low of -1.74% in June. Afterwards, it went up to 1.92% in September on account of the rebound in international raw material prices. Subsequently, the pace of the increase in the annual WPI inflation rate gradually abated and the rise was 0.31% in December.

Broken down by the three major components of the WPI, the annual rates of change in prices for imports and domestic sales excluding imports both increased moderately in 2017, reflecting a continued upturn in global oil prices in the second half of the year, whereas the annual growth rate of export prices stayed in negative territory.

Import prices, weighted at 33.41% of the WPI, rose by 7.41% in US dollar terms in 2017. As the NT dollar appreciated against the US dollar over 2017, which helped ease the pressure on imported inflation, the annual change in import prices narrowed to a 1.36% increase in NT dollar terms. Among

the components of import prices in terms of NT dollars, prices of raw materials rose by 3.40% and accounted for 2.52 percentage points in the import price increase, mainly driven by rising prices of mineral products and base metals. In contrast, prices of capital goods and consumer goods went down by 5.89% and 2.50% and subtracted 0.89 percentage points and 0.27 percentage points from the import price increase, respectively.

Export prices, weighted at 36.79% of the WPI, expanded by 4.47% in US dollar terms in

# Annual WPI Rates - WPI - Domestic Sales Excluding Import Prices % - Export Prices (NT\$) - Import Prices (NT\$) 10 5 0 -5 -10 -15 -20 1 4 7 10 1 4 7 10 1 4 7 10 2015 2016 2017

Source: Price Statistics Monthly, DGBAS, Executive Yuan.

2017. As a result of the NT dollar appreciation against the US dollar, the annual change in export prices reversed to a 1.46% decrease in terms of the NT dollar, largely affected by lower prices for optical products as well as machinery and electrical equipment.

With rising import costs of primary commodities, prices of domestic sales excluding imports, weighted at 29.8% of the WPI, moved up by 3.44% in 2017. In terms of the basic groups, prices of manufacturing products showed the largest increase at 4.90%, primarily attributable to higher cigarette prices reflecting the cigarette tax hike effective in June, along with rising prices of base metals. On the other hand, prices of agriculture, forestry, fishing, and animal husbandry products dropped by 4.80%, mostly influenced by falling prices of vegetables and fruit on account of a higher base effect resulting from unfavorable weather conditions in the previous year.

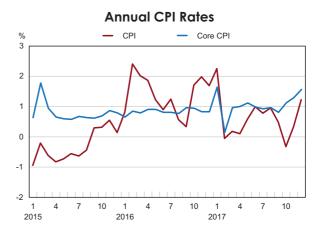
#### Mild Increase in Consumer Prices

The CPI rose by 0.62% in 2017, lower than the 1.39% increase in the previous year. From the beginning of this year, the annual CPI inflation rate trended downward and eased to 0.10% in April as a result of a slump in vegetables and fruit prices caused by favorable weather conditions. From May onwards, monthly movements of CPI inflation exhibited an uptrend and edged up to 0.96% in August, as prices of vegetables soared because of weather-related disruptions. Subsequently, the pace of CPI growth slackened and slowed to an all-year low of -0.33% in October, mainly dragged down by a marked drop in prices of vegetables and fruit owing to a higher base effect stemming from severe crop damage caused by typhoons in 2016. Afterwards, it moved up to 1.22% in December, as the base effect from last year's higher vegetable prices dissipated, and prices of cigarettes, fuel, and food away from home increased.

The core CPI inflation rate grew at an average pace of 1.04% year on year in 2017, indicating mild inflationary pressures. 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 to September, monthly core CPI inflation rates hovered between 0.81% and 1.11%. Later, the core inflation rate stepped up and registered 1.57% in December, mainly influenced by higher cigarette prices.

Taiwan's CPI inflation recorded a mere 0.62% gain in 2017, the second lowest in eight years. The mild increase was largely attributed to the following factors:



Source: Price Statistics Monthly, DGBAS, Executive Yuan.

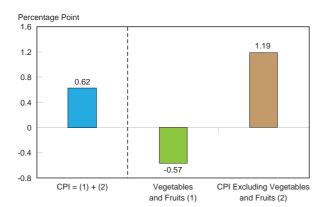
#### (1) A higher comparison base of vegetables and fruit prices

Compared with a spike in crop prices caused by severe coldness and typhoons in 2016, the absence of major crop damage amid relatively stable weather conditions this year resulted in falling prices of vegetables and fruit, subtracting 0.57 percentage points from CPI inflation, which largely offset the CPI increase.

#### (2) A stronger NT dollar mitigating imported inflationary pressures

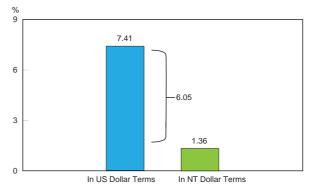
As the NT dollar appreciated by 6.17% against the US dollar over 2017, the annual change in import prices in NT dollar terms was 6.05 percentage points lower than that in US dollar terms. This difference is estimated to have dragged the CPI inflation rate down by 0.36 percentage points.

#### Contribution to CPI Inflation Rate in 2017



Source: Price Statistics Monthly, DGBAS, Executive Yuan.

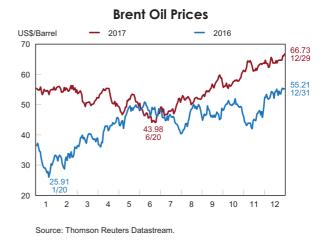
Annual Rates of Change in Import Prices in 2017



Source: Price Statistics Monthly, DGBAS, Executive Yuan.

The main factors contributing to the rise of CPI inflation in 2017 were as follows:

(1) From the beginning of 2017, international petroleum prices moved downward and fell to a yearly low in mid-June, primarily induced by surging oil production in the US, Libya, and Nigeria. In subsequent months, global oil prices rebounded and peaked at the year end resulting from intensified geopolitical tensions in the Middle East, the extension of an oil output-cut agreement among OPEC members



and non-OPEC oil producers, and supply-side disruptions in some oil-producing countries. Compared with 2016, the average Brent oil price rose by 23.76%. As a result, higher imported costs of petroleum and natural gas pushed up domestic oil and gas prices, which climbed by 9.36% and 9.92% and accounted for 0.23 and 0.07 percentage points in the CPI increase, respectively.

- (2) The rise in wages and higher raw food prices drove up prices of food away from home by 1.99%, contributing 0.21 percentage points to CPI inflation.
- (3) Residential rent prices continued to increase at a mild pace and advanced by 0.92%, accounting for 0.17 percentage points to CPI inflation.
- (4) The tax on cigarettes was substantially raised by NT\$20 per pack starting on June 20, leading prices of tobacco and betel nuts to surge by 8.09%, contributing 0.10 percentage points to CPI inflation.
- (5) A shortage of domestic aquaculture supply caused by extremely warm temperatures, combined with developing countries' rising demand for deep-sea fisheries, sent prices of fish and seafood 4.84% higher, accounting for 0.09 percentage points in CPI inflation.

The main factors contributing to downward pressure on the CPI in 2017 were as follows:

- (1) Reflecting a higher base effect and favorable weather conditions in the year, prices of vegetables and fruit declined by 14.51% and 3.23% in 2017, and accounted for -0.47 and -0.10 percentage points in CPI inflation, respectively.
- (2) Since a lingering effect of the reduction in electricity prices effective in April 2016 continued into March 2017, electricity prices moved down by 2.44%, subtracting 0.05 percentage points from CPI inflation.
- (3) As fees for internet and cell phones adjusted downward, communication fees fell by 1.48%, deducting 0.05 percentage points from the CPI inflation rate.

# Percentage Changes in the Major Components of the CPI in 2017

ltem	Annual Rate of Change (%)	Contribution to CPI Inflation Rate (Percentage Point)
CPI	0.62	0.62
Fuels & Lubricants	9.36	0.23
Food away from Home	1.99	0.21
Residential Rent	0.92	0.17
Tobacco & Betel Nuts	8.09	0.10
Fish & Seafood	4.84	0.09
Gas	9.92	0.07
Medical Care Services	2.23	0.06
Meat	2.31	0.05
Education & Entertainment Services	0.43	0.05
Total		1.03
Vegetables	-14.51	-0.47
Fruits	-3.23	-0.10
Electricity	-2.44	-0.05
Communication Fees	-1.48	-0.05
Total		-0.67
Others		0.26

Source: Price Statistics Monthly, DGBAS, Executive Yuan.

## 5. Labor Market

#### Increase in Employment

Since the beginning of year 2017, labor market conditions have improved significantly, thanks to continuous economic recovery. For the year as a whole, annual average employment was 11.35 million persons, an increase of 85 thousand persons or 0.75% from the previous year.

In terms of employment by sector, employment in the services sector increased by 65 thousand persons or 0.98%, while that in the industrial sector increased by 20 thousand persons or 0.49%. On the other hand, employment in the agricultural sector decreased by one thousand persons or 0.14%. Of total employment, the services sector accounted for 59.31%, up by 0.14 percentage points from the previous year, while the shares of the industrial and the agricultural sectors shrank to 35.79% and 4.90%, 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 etc.) increased by 50 thousand persons or 0.99%. Services and sales employment increased by 25 thousand persons or 1.13%, while employment of blue collar workers (skilled agricultural, forestry, fishing, and animal husbandry industries, craft and machinery related workers, etc.) increased by nine thousand persons or 0.22%.

#### Improvement in Unemployment

For year 2017, the unemployment rate in general exhibited a downward trend, except in February (due to a typical wave of post-Lunar New Year job switching) and in June to August (as

new graduates enter the job market) when seasonal factors resulted in higher unemployment. For the year as a whole, the unemployment rate was 3.76%, the lowest in 17 years.

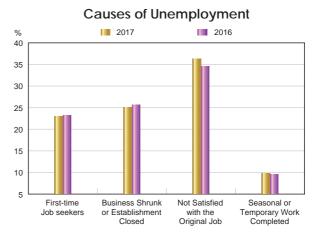
As labor market conditions improved, unemployment duration decreased by 0.85 weeks to 24.22 weeks. In terms of age, the unemployment duration of the age groups 15-24 and 45-64 increased by 0.01 and 0.24 weeks to 19.92 and 26.32 weeks, respectively, while that in the age group of 25-44 decreased by 1.54 weeks to 25.47

# Employment and Unemployment 1,000 Persons Employment (left) — Unemployment Rate (right) % 6,000 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Source: DGBAS, Executive Yuan.

weeks. The average number of the long-term unemployed (those who were unemployed for 53 weeks or more) was 63 thousand persons, a decrease of six thousand persons compared to that in the previous year.

In terms of causes of unemployment, total unemployment in year 2017 was 443 thousand persons, a decrease of 17 thousand persons or 3.52% from the previous year, mainly because unemployment of experienced job seekers decreased by 12 thousand persons or 3.31%. Among them, people who lost their jobs because

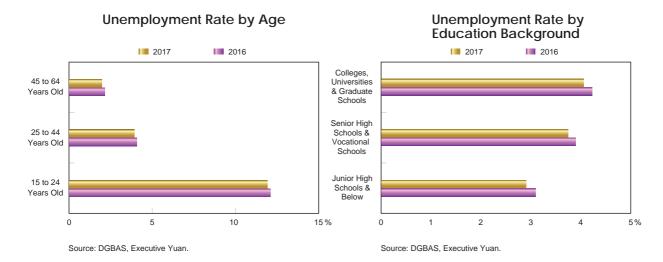


Source: DGBAS, Executive Yuan.

business shrunk or establishment closed made up a major portion of the decrease in such unemployment. This type of unemployment decreased by seven thousand persons or 5.98%, and made up a smaller share of 25.63% of total unemployment, compared to 26.30% in the previous year. Those unemployed who were not satisfied with their original jobs still accounted for the largest share of total unemployment, with the number up by one thousand persons or 0.95% from the previous year.

In terms of age groups, in year 2017 the unemployment rate of the age group 15-24 was 11.92%, which was a decrease of 0.20 percentage points from the previous year. Yet, it was still the highest among all the age groups. The unemployment rates of the age groups 25-44 and 45-64 decreased by 0.15 and 0.16 percentage points from the previous year, respectively, reaching 3.93% and 1.99%.

In terms of educational background, the unemployment rate of people with a college degree or above decreased to 4.06%, which was 0.17 percentage points lower than the previous year.

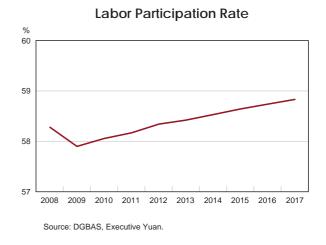


However, the unemployment rate of this group was still the highest among all the groups. The unemployment rate of people with a junior high school degree or below dropped to 2.90%, while that of people with a senior high school or vocational school diploma decreased to 3.74%, down by 0.19 and 0.16 percentage points compared to the previous year, respectively.

#### Increase in Labor Participation Rate

The labor force (employed and unemployed combined) in 2017 increased by 68 thousand persons or 0.58% to 11.80 million persons, while the labor force participation rate reached 58.83%, a 0.08 percentage point increase compared to the previous year.

In terms of gender, the male labor force participation rate was 67.13%, an increase of 0.08 percentage points from the year before, while the female rate also rose by 0.12 percentage points to 50.92%, reflecting effective



government efforts in promoting gender equality, improving work environment, and facilitating female employment in recent years.

In terms of age groups, the labor participation rates of all age groups went up in 2017, with those of the 16-24, 25-44, and 45-64 age groups increasing by 1.31, 0.44, and 0.40 percentage points to 32.68%, 88.26%, and 62.82%, respectively. Although Taiwan's total labor force participation rate has increased since year 2000, it is still lower than those of the United States (62.9%), Japan (60.5%), South Korea (63.2%), and Singapore (67.7%). The main reasons behind the low rate are the extension of schooling and early retirement. To address the issue of an aging population in Taiwan, in recent years the government has actively promoted employment of middle-aged workers and enhanced the program of diverse youth employment.

In terms of educational background, the labor force participation rates of those with a junior high school or below degree and those with a senior high school or vocational school diploma increased by 0.20 and 0.18 percentage points to 40.57% and 62.24%, respectively, while the participation rate of those of people with a college degree or above decreased by 0.62 percentage points to 66.67%.

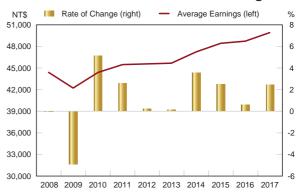
#### Increase in Earnings and Labor Productivity

The average monthly earnings per worker of the non-farm sector was NT\$49,989 in 2017, a 2.46% increase from the previous year. After adjustment for inflation, the average real monthly earnings

increased by 1.83% to NT\$47,271, an all-time high. Thanks to an economic pickup since the second half of 2016, firms increased their payouts of year-end bonuses and performance bonuses. There was also an increase in overtime pay after the amendment to the *Labor Standards Act*. These two factors are the main causes behind the rise in monthly earnings.

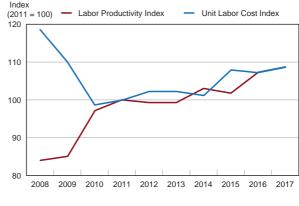
In terms of major sectors, the average monthly earnings of industrial sector and services sector workers both increased by 2.46% to NT\$48,187 and NT\$51,374, respectively, and their real earnings also both increased by 1.83%. The electricity and gas supply sector had the highest average monthly earnings with NT\$94,551, the financial and insurance activities sector came in second place with NT\$86,294, while education services sector workers earned only NT\$25,288, the lowest among all sectors. The accommodation and food service activities sector saw the second lowest earnings with NT\$33,527. In terms of growth rate, all sectors except the construction sector posted increases in average monthly earnings. The mining and

# Average Earnings of Non-farm Workers and Their Rates of Change



Source: DGBAS, Executive Yuan.

# Labor Productivity and Unit Labor Cost of Industrial Sector



Source: DGBAS, Executive Yuan.

quarrying sector registered the largest increase at 7.45% and, the real estate activities sector was in second place with an increase of 4.85%.

As growth in total production outpaced that in total working hours, labor productivity of the industrial and the manufacturing sectors increased by 1.37% and 2.10%, respectively. In the manufacturing sector, the repair and installation of industrial machinery and equipment sector saw the highest increase in labor productivity with 15.47%, and the wholesale of food, beverages and tobacco sector came in second with 13.79%. Since the increase in total earnings was higher than that in production, unit labor costs of the industrial and manufacturing sectors increased by 1.25% and 0.60%, respectively, compared to those of the previous year. Unit labor cost of the manufacture of wearing apparel and clothing accessories sector increased the most, by 17.10%, followed by that of the extraction of crude petroleum and natural gas sector at 10.40%.