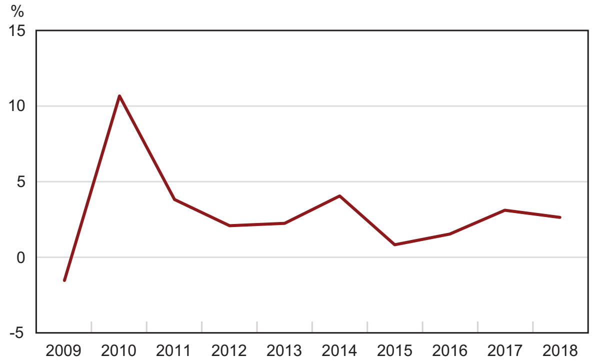
2. National Output and Income

In 2018, Taiwan's economy experienced a modest growth rate of 2.63%, slightly lower than the 3.08% of the previous year. Domestic demand made an appreciable contribution of 2.81 percentage points to real GDP growth in 2018, supported by a steady increase in private consumption and noticeable improvements in government consumption and fixed capital formation. In terms of external demand, the growth of exports was outpaced by a larger increase in imports owing to rising demand derived from exports and fixed capital formation, leading to a negative contribution of 0.18 percentage points to real GDP growth.

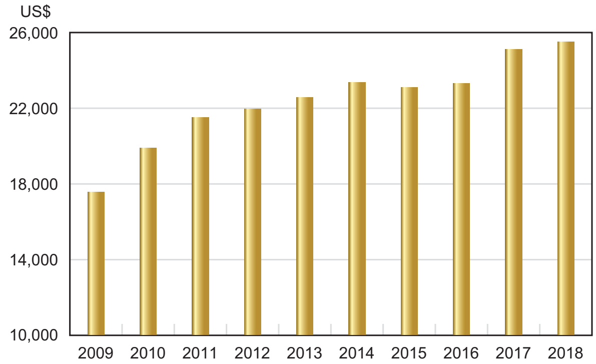
In the first quarter, strong export growth was led by advanced technology applications, higher demand for machinery, and favorable conditions in the semiconductor market. Although private consumption, as well as exports, grew at a robust pace, sluggish growth in private investment resulted in a real GDP growth rate of 3.15%. In the second quarter, despite a slight contraction in private investment, with the support of private and government consumption and external demand, economic growth reached its annual peak of 3.29%. In the third quarter, private investment recorded positive growth, underpinned by increases in semiconductor equipment procurement and construction investment. Meanwhile, public sector pension reform, weak consumer sentiment, and other factors contributed to a decline in private consumption growth. Deterioration in export growth on account of US-China trade tensions and a global economic slowdown further weakened real GDP growth to 2.38%. As the economy proceeded to the fourth quarter, weaker consumer sentiment and a dismal stock market dampened growth in private consumption. Cautious spending on capital equipment by the semiconductor and aviation industries caused private investment to contract. Against the background of tepid domestic demand and a slowing global economy, real GDP

Real Growth Rate of GDP



Source: *Statistical Abstract of National Income,* DGBAS, Executive Yuan, February 2019.

Per Capita GNI



Source: *Statistical Abstract of National Income,* DGBAS, Executive Yuan, February 2019.

in the fourth quarter grew by 1.78%, the lowest level over the year. In the meantime, nominal GNI (gross national income) grew at an annual rate of 0.73% and per capita GNI increased from US$25,055 to US$25,456.

Expenditure Components of GDP

All expenditure components of GDP recorded positive growth in 2018. Among all the components, exports of goods and services remained the primary source of economic growth and contributed 2.38 percentage points to GDP growth for the year. Private consumption, on the other hand, contributed 1.08 percentage points to GDP growth in 2018. Government consumption and gross fixed capital formation improved from the previous year and contributed to GDP growth by 0.49 and 0.43 percentage points, respectively. With respect to shares of GDP, exports of goods and services accounted for the largest share of GDP at 66.75%, followed by private consumption at 53.72% and gross fixed capital formation at 20.99%.

GDP by Expenditure

Unit: %

	2018			2017		
	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*
Private Consumption	53.72	2.05	1.08	52.94	2.54	1.34
Government Consumption	14.51	3.51	0.49	14.07	-0.63	-0.09
Gross Fixed Capital Formation	20.99	2.10	0.43	20.48	-0.12	-0.02
Change in Inventory	0.34	-	0.80	-0.24	-	-0.14
Exports of Goods and Services	66.75	3.66	2.38	64.89	7.43	4.66
(Less : Imports of Goods and Services)	56.31	4.90	2.55	52.14	5.28	2.66
Expenditure-based GDP	100.00	2.63	2.63	100.00	3.08	3.08

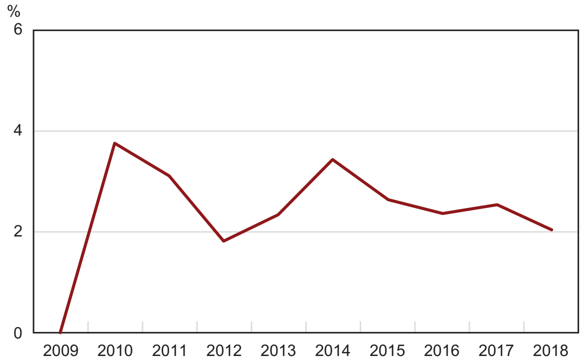
Note: * Percentage point.
Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2019.

(1) Mild Expansion in Private Consumption

Private consumption grew by 2.05% in 2018, slightly lower than that of the previous year, and contributed 1.08 percentage points to GDP growth. The growth momentum was mainly driven by stable wage increases, an improvement in the employment situation, and higher trading volumes in the stock market. Yet, several unfavorable conditions emerged towards the second half of the year, putting downward pressure on overall consumer spending.

Growth in private consumption slowed gradually over the year with the first two quarters registering the highest growth in 2018 at 2.55% and 2.29%, respectively. In the second half of 2018, private consumption growth appeared less promising on account of a number of cyclical and structural factors, such as public sector pension reform, lower trading volumes in the stock market, and anemic performances of new vehicle sales and smartphone sales. In addition, disruptions in global financial markets, partly triggered by US-China trade tensions, held down consumer sentiment in Taiwan, thereby softening private consumption. Given the above reasons, private consumption growth in the third and fourth quarters dropped to 1.69% and 1.67%, respectively.

Real Growth Rate of Private Consumption Expenditure



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2019.

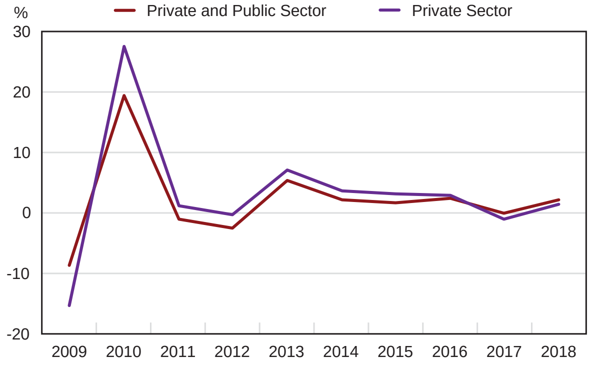
(2) Modest Growth in Fixed Capital Formation

Fixed capital formation grew at a modest rate of 2.10% for the entire year, supported by construction investment and machinery and equipment investment. In the first and second quarters of 2018, fixed capital formation grew by 0.36% and 0.02%, respectively, restrained by a higher base effect and a reduction in machinery and equipment investment. Nevertheless, growth rebounded to 5.51% in the third quarter owing to higher demand for semiconductor equipment, stable growth in construction investment, and a lower base effect. In the fourth quarter, the semiconductor industry and the aviation industry became more cautious when making decisions on capital expenditure. Prudent spending by businesses partially offset the growth in construction investment, leading to a growth rate of 2.29% in gross fixed capital formation.

Regarding expenditure by type of purchasers, a higher base effect led to negative growth in machinery and equipment investment in the first half of 2018, offsetting growth in transportation investment and construction investment. Consequently, private sector investment in the first and second quarters grew by 0.62% and -0.12%, respectively. In spite of contracted transportation investment, private investment rose by 5.48% in the third quarter, on account of a lower base effect and an uptick in equipment expenditure by major semiconductor manufacturers. Subsequently, reductions in machinery and equipment investment and transportation investment partially offset the gains from construction investment, dragging growth in private investment down to a yearly low of -0.44%. For the year as a whole, growth in private investment reached 1.46%, higher than the -1.09% of 2017. Investment by public enterprises, on the other hand, performed extremely well because of robust growth in transportation investment and con struction investment, leading to a growth rate of 13.56%. Finally, investment by general government recorded positive growth for the third consecutive year with an annual rate of 1.82% on the back of the government's active implementation of the Forward-Looking Infrastructure Development Program.

In terms of the type of capital formation, construction investment grew at a steady pace, with an annual growth rate of 3.31% in 2018. Meanwhile, growth in transportation investment had a strong start in the first half of the year, but softened over the second half of 2018 as the aviation industry cut back on its capital expenditure. For the entire year, transportation investment shrank by 0.01%. With regard to machinery and equipment investment, a substantial contraction appeared in the first half of 2018 because of a higher base effect. However, growth managed to maintain at a positive rate of 1.57% for the entire year, primarily influenced by a surge in capital expenditure by major semiconductor manufacturers in the third quarter and a steady increase in public investment in the second half of the year. Investment in intellectual property remained relatively stable and rose by 1.59% for the year as a whole.

Real Growth Rate of Fixed Capital Formation



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2019.

Real Growth Rates of Exports and Imports

Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2019.

(3) Soft Growth in Exports and Imports

Taiwan's exports benefited from solid global economic growth and the development of advanced technology applications in 2018. Exports of goods and services grew at an annual rate of 3.66% and contributed 2.38 percentage points to real GDP growth.

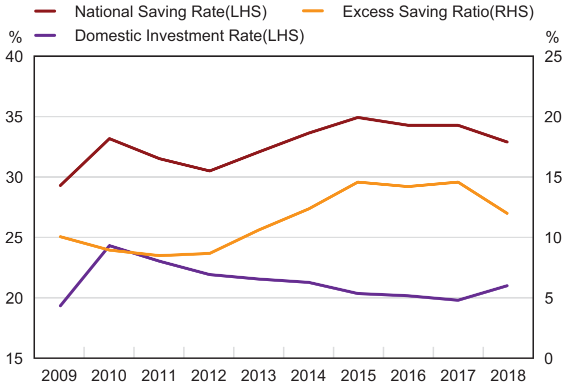
In the first quarter, higher demand for machinery and favorable conditions in the semiconductor market drove exports to rise by 6.42%, the highest level over the year. In the second quarter, exports of goods continued to grow, yet a slowdown in exports of services caused by a decline in the number of tourists from abroad led growth in exports of goods and services to slightly decrease to 6.33%. In the third quarter, given a higher base effect from the previous year, growth in exports of goods and services fell sharply to 1.35%. In the fourth quarter, growth in exports of goods and services further declined to a yearly low of 1.29% as a result of US-China trade tensions and the weak performance of smartphone sales.

As for the imports of goods and services, notwithstanding limited growth in capital equipment imports, higher prices of international raw materials and strong export-derived demand caused imports to advance by 4.90% for the entire year.

Moderate Decline in Excess Saving Ratio

Private consumption continued to gain growth momentum as a result of improving labor market conditions and wage hikes. National consumption in nominal terms (including consumption by both the private and government sectors) went up by 3.43% over the year, with private consumption and government consumption increasing by 3.07% and 4.76%, respectively. Nominal GNI, in contrast, had a marginal increase of 0.73%. As a consequence, the national saving rate (the ratio of national saving to GNI measured at current prices) fell slightly from 34.29% in 2017 to 32.91% in 2018. Meanwhile, domestic investment as a share of GNI moved upward by a small margin, from 19.72% in 2017 to 20.95% in 2018. Overall, the excess saving ratio, defined as the excess of gross national saving over gross domestic investment to GNI, slid from 14.57% in 2017 to 11.96% in 2018.

National Saving Rate, Domestic Investment Rate, and Excess Saving Ratio



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2019.