

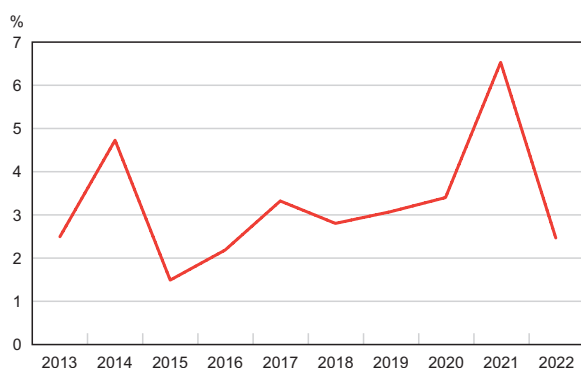
2. National Output and Income

In 2022, Taiwan's economy grew at an annual rate of 2.45%. Domestic demand was the main growth engine, contributing 3.17 percentage points to real GDP growth. In terms of external demand, both export- and investment-derived demand caused import growth to outweigh the growth of exports, and thus net exports contributed -0.72 percentage points to real GDP growth. In the meantime, nominal GNI (gross national income, in US dollars) fell by 1.51%, and GNI per capita declined from US\$33,756 to US\$33,565 over the year 2022.

In the first quarter, real GDP growth reached 3.87%. Private consumption experienced lower growth because of higher inflation and multiple waves of the COVID-19 pandemic. Higher capital expenditures and continuing investment in major projects, such as green energy, provided growth momentum for private investment. Meanwhile, export growth momentum remained strong owing to increasing demand for traditional manufacturing goods and business opportunities arising from emerging technology applications. In the second quarter, real GDP growth declined slightly to 2.95%. As for private consumption, a lower base effect outweighed a decline in dining out and travel spending, resulting in moderate private consumption growth. Private investment growth remained strong, benefiting from production capacity expansion in the technology industry and continued investment in green energy infrastructure, transportation equipment, and energy-efficient production equipment. On the contrary, rising global inflationary pressures discouraged demand for end-consumer products, affecting the exports of related goods in supply chains and restraining export growth momentum.

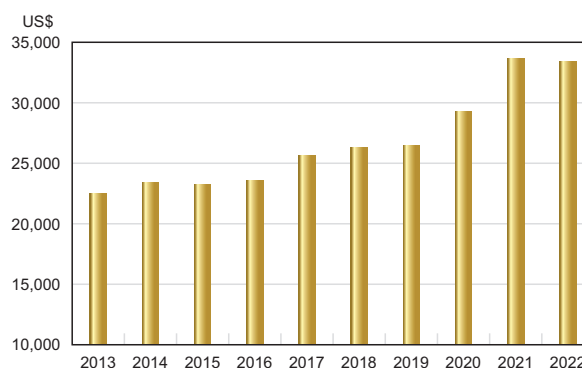
In the third quarter, growth in real GDP rose to 3.64%. Higher COVID-19 vaccine coverage and the diminishing impact of the pandemic, combined with the government's stimulus program for

Real Growth Rate of GDP



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2023.

Per Capita GNI



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2023.

domestic tourism, significantly boosted private consumption. Growth in private investment, on the other hand, slowed because of a higher base effect. Export growth momentum also waned in response to a slowdown in the global economy triggered by the ongoing war between Russia and Ukraine and the continued tightening of monetary policy in major economies. In the fourth quarter, real GDP contracted by 0.41%, the lowest growth since the first quarter of 2016. As the government gradually lifted COVID-19 restrictions, spending on domestic travel and outbound tourism increased remarkably and stimulated private consumption growth. In the meantime, major investment projects related to semiconductors and green energy continued to take place, resulting in another quarter of robust growth for private investment. On the other hand, exports declined owing to manufacturing inventory adjustments, China's zero-COVID policy, and weaker global demand.

Expenditure Components of GDP

All expenditure components of GDP recorded positive growth in 2022. Among all the components, gross fixed capital formation was the primary source of economic growth and contributed 1.63 percentage points to real GDP growth for the year. Private consumption and exports of goods and services both contributed to real GDP growth by 1.60 percentage points. Government consumption, on the other hand, contributed slightly with 0.46 percentage points to real GDP growth. With respect to shares of GDP, exports of goods and services continued to account for the largest share of GDP at 71.99%, followed by private consumption at 45.52%, and gross fixed capital formation at 27.61%.

GDP by Expenditure

Unit: %

	2022			2021		
	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*	Share	Real Growth Rate	Contribution to Real Growth Rate of GDP*
Private Consumption	45.52	3.59	1.60	44.61	-0.35	-0.17
Government Consumption	13.73	3.44	0.46	13.51	3.69	0.51
Gross Fixed Capital Formation	27.61	6.24	1.63	26.11	14.46	3.50
Change in Inventory	0.17	--	-0.52	0.85	--	0.68
Exports of Goods and Services	71.99	2.41	1.60	66.42	17.27	10.03
(Less: Imports of Goods and Services)	59.02	4.50	2.32	51.50	18.06	8.02
Expenditure on GDP	100.00	2.45	2.45	100.00	6.53	6.53

Note: * Percentage point.

Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2023.

(1) Moderate Growth in Private Consumption

Despite a surge in COVID-19 cases in mid-April, the general public had grown to live with

COVID-19 while the impact of the pandemic diminished significantly. Given the change in the general public's attitude towards COVID-19 and a lower base effect, private consumption grew at an annual rate of 3.59% and contributed 1.60 percentage points to real GDP growth.

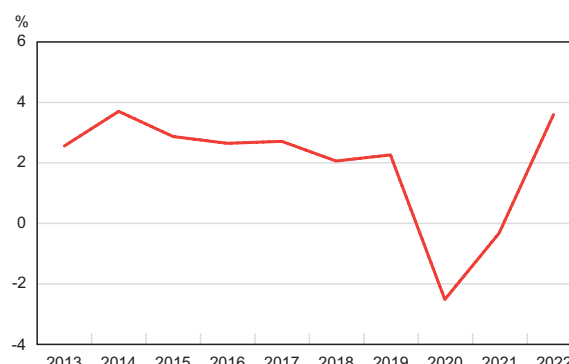
Although the government had loosened epidemic control measures and attempted to revitalize the economy with fiscal stimulus programs, consumer spending on transportation and leisure and entertainment were still affected by the recurring waves of the pandemic, resulting in weaker private consumption growth of 0.67% in the first quarter. In the second quarter, private consumption grew by 3.14%, even though local COVID-19 transmission dampened consumption expenditure for domestically-oriented services. In the third quarter, private consumption regained its growth momentum as the impact of the pandemic subsided. In the meantime, the government lifted pandemic-related restrictions and launched a stimulus program to promote domestic tourism, thereby pushing private consumption growth up to 7.52%. With the easing of border controls, consumer activities gradually returned to normal, and the demand for cross-border travel picked up. As a result, private consumption increased by 3.24% in the fourth quarter. Overall, private consumption growth in the second half of the year outperformed that of the first half of the year.

(2) Robust Expansion in Fixed Capital Formation

Fixed capital formation grew robustly at an annual rate of 6.24% and contributed 1.63 percentage points to real GDP growth. The growth was primarily driven by the procurement of transportation equipment, higher demand for 5G infrastructure investment, continuing investment in green energy-related projects, and increased capital expenditures by leading technology firms.

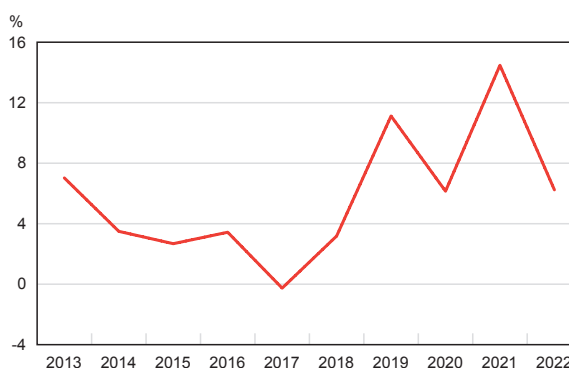
Driven by higher capital expenditures, stronger demand for transportation equipment, and continuing investments in 5G infrastructure and green energy-related projects, both machinery and equipment investment and

**Real Growth Rate
of Private Consumption Expenditure**



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2023.

**Real Growth Rate
of Fixed Capital Formation**



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2023.

transportation investment expanded at a healthy pace in the first half of the year. Gross fixed capital formation increased by 9.22% and 11.27% in the first two quarters, respectively. Nevertheless, growth in transportation investment and construction investment moderated in the second half of the year owing to a higher base effect. The fixed capital formation growth rates for the last two quarters of the year were 1.96% and 3.31%, respectively.

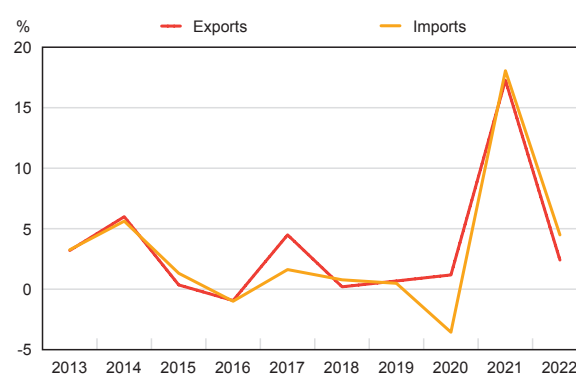
In terms of the type of fixed capital formation, machinery and equipment investment achieved a double-digit growth rate of 11.00% in 2022, while construction investment grew moderately at an annual rate of 2.24%. On the other hand, transportation investment increased by 1.23%. Lastly, investment in intellectual property remained relatively stable and expanded by 6.07% for the entire year.

(3) Mild Growth in Real Exports

Rising global inflation and tighter monetary policy in major economies led to a slowdown in global demand. As a result, exports of goods and services grew mildly at an annual rate of 2.41% for the entire year, significantly lower than the 17.27% of the previous year. On balance, exports of goods and services contributed 1.60 percentage points to real GDP growth in 2022.

Exports performed vigorously in the first half of the year, driven by emerging technology applications, digital transformation, and stronger demand for traditional manufacturing goods, with growth rates of 8.98% and 4.78% in the first two quarters, respectively. In the second half of the year, global inflation remained elevated because of the ongoing war between Russian and Ukraine. In response, major central banks continued to tighten monetary policy, which consequently tempered global economic growth. Of note, growth in exports declined to 2.15% in the third quarter as demand for traditional manufacturing goods and electronic products fell sequentially. In the fourth quarter, widespread COVID-19 infections in China set back global economic growth further. Thus, demand for consumer electronics reduced perceptibly, leading firms to destock. Against this backdrop, exports decreased notably by 5.14%.

Real Growth Rates of Exports and Imports



Source: *Statistical Abstract of National Income*, DGBAS, Executive Yuan, February 2023.

Turning to imports of goods and services, the combination of strong demand for capital equipment and an increase in export-derived demand caused imports to rise by 4.50% for the entire year.

Subtle Changes in National Saving Rate and Domestic Investment Rate

The national saving rate (the ratio of national savings to GNI measured at current prices) declined slightly from 42.91% in 2021 to 41.33% in 2022, reflecting a recovery in consumption expenditures as the impact of the pandemic grew weak. Meanwhile, growth momentum in private investment remained strong; therefore, the domestic investment rate (the ratio of domestic investment to GDP measured at current prices) edged up to 27.78% in 2022, slightly higher than the 26.96% of the previous year.

