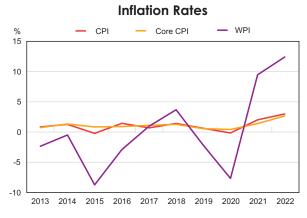
## 4. Prices

In 2022, Taiwan's WPI rose by 12.42%, the highest level since 1981, mainly reflecting soaring import prices owing to persistent supply chain bottlenecks and the ongoing Russia-Ukraine war pushing up international crude oil and other raw material prices. Headline inflation, measured by the CPI, increased by 2.95%, the highest increase since 2009, primarily driven by supply-side shocks such as price rises in food, fuels and lubricants, and durable goods, as well as higher prices of residential rent. The core CPI, which excludes fruit, vegetables, and energy, stood at 2.61%, also the largest increase since 2009.



Source: Price Statistics Monthly, DGBAS, Executive Yuan.

#### Marked Increase in Wholesale Prices

The WPI went up by 12.42% in 2022, the highest level since 1981. The marked increase reflected rising import prices of international raw materials such as crude oil and grains driven by lingering pandemic-related supply chain bottlenecks and the continued Russia-Ukraine war. In terms of monthly movements, the annual WPI inflation rate trended upwards from the beginning of the year because of higher import prices and reached an all-year high of 16.88% in May. Later, with price declines in international raw materials amid a slowing global economic expansion owing to largely synchronized monetary policy tightening by major economies, the increase in the annual WPI inflation rate abated and narrowed to 7.02% in December.

Broken down by the three major components of the WPI, the annual rates of change in prices for imports, domestic sales excluding imports, and exports picked up markedly in 2022 on account of continuously soaring prices of international raw materials.

Import prices, weighted at 34.10% of the WPI, rose by 9.12% in US dollar terms in 2022. As the NT dollar depreciated against the US dollar over 2022, the annual growth rate of import prices widened to a 16.07% increase in NT dollar terms, pushing up imported inflation pressures on domestic prices. Among the components of import prices in terms of the NT dollar, prices of raw materials went up by 20.56% and accounted for 15.27 percentage points in the import price increase, mainly boosted by

rising prices of mineral products, vegetable products, base metal products and chemical products. Prices of consumer goods and capital goods also rose by 5.46% and 1.01%, respectively.

Export prices, weighted at 40.20% of the WPI, increased by 5.37% in US dollar terms in 2022. Owing to the NT dollar depreciation against the US dollar, the annual change in export prices elevated to a 12.06% increase in terms of the NT dollar. Among the components of export prices in NT dollar terms, prices of raw materials moved up by 12.28%, contributing 10.70 percentage points to the export price increase and primarily reflecting higher prices of mineral products, chemical products, as well as base metal products. In addition, prices of consumer goods and capital goods rose by 14.21% and 7.21%, respectively.

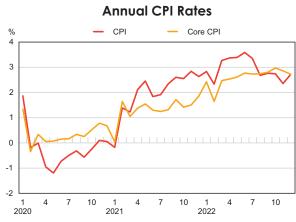
With import costs of primary commodities surging, prices of domestic sales excluding imports, weighted at 25.70% of the WPI, advanced by 8.37% in 2022. In terms of the basic groups, prices of manufacturing products rose by 7.07%, mainly attributable to higher prices of petroleum and coal products, electronic parts and components, chemical materials, and base metal products. Prices of water, electricity, and gas supply, and prices of agriculture, forestry, fishing, and animal husbandry products went up by 20.20% and 6.28%, respectively. Prices of quarrying and mining products registered an increase of 3.16%.

#### **Annual WPI Rates** WPI Domestic Sales Excluding Import Prices Export Prices (NT\$) Import Prices (NT\$) 25 20 15 10 5 0 -5 -10 -15 -20 2020

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

#### **Upside Pressures for Consumer Prices**

The CPI rose by 2.95% in 2022, the highest increase since 2009. From the beginning of the year, the CPI inflation rate trended up and reached 3.59% in June. The uptrend in CPI inflation was associated with an increase in domestic prices of food and oil related products boosted by the rise in imported raw material prices. Subsequently, as international prices of raw materials such as crude oil and grains softened and domestic prices of food such as vegetables and fruit posted smaller



Source: Price Statistics Monthly, DGBAS, Executive Yuan.

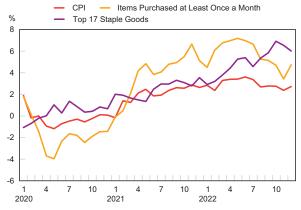
gains, the CPI inflation rate trended downwards and registered 2.35% in November. The CPI inflation rate moved up to 2.71% in December, mainly owing to rising prices of vegetables and fuels.

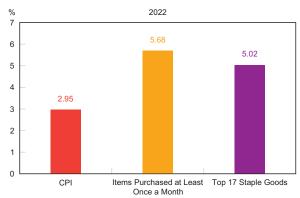
The core CPI inflation rate grew at an average pace of 2.61% year on year in 2022, the highest level since 2009. In terms of monthly movements, the core CPI annual growth rate displayed an uptrend and reached an all-year high of 2.97% in October. Later, the core inflation rate went down and recorded 2.72% in December, as prices of food away from home and durable goods rose at a softer pace.

Compared to major economies, Taiwan's inflation rate in 2022 was mild, reflecting the government's robust supply-side measures of price stabilization, the Bank's policy rate hikes, and spillover effects from the drastic tightening of monetary policy in major economies.

As prices of the items purchased at least once a month and of the top 17 staple goods rose by 5.68% and 5.02% in 2022, respectively, with both significantly outpacing the overall CPI inflation of 2.95%, consumers tended to be more conscious of the price uptrends.

# Annual Growth of CPI, Prices of the Top 17 Staple Goods, and Prices of the Items Purchased at Least Once a Month





Source: Price Statistics Monthly, DGBAS, Executive Yuan.

Source: Price Statistics Monthly, DGBAS, Executive Yuan.

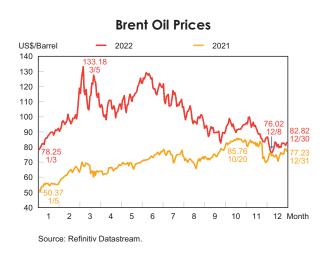
In 2022, the uptick in Taiwan's CPI was mainly attributable to rising prices of food, fuels and lubricants, and durable goods, which were induced by supply-side factors such as rises in import prices of raw materials including crude oil and grains, coupled with higher prices of residential rent. These four items accounted for 2.09 percentage points in the CPI inflation rate, contributing 71% to CPI inflation.

The main factors contributing to the rise of CPI inflation in 2022 were as follows:

(1) Prices of food went up by 5.66% and accounted for 1.39 percentage points in the CPI inflation rate, mainly because of global supply chain bottlenecks and the Russia-Ukraine war pushing up import

costs of grains and meats. Among the components of the food group, the rise in wages and higher raw food costs brought up prices of food away from home by 5.77%, contributing 0.56 percentage points to CPI inflation. With supply restrained by unfavorable weather conditions, prices of fruit moved up by 10.40%, contributing 0.22 percentage points to CPI inflation. With rising feed and production costs caused by surging imported grain prices, prices of meats, eggs, and cereals and cereal products rose by 5.70%, 26.39%, and 4.29%, and accounted for 0.14, 0.08, and 0.07 percentage points in the CPI inflation rate, respectively.

- (2) Reflecting the rise in housing prices, as well as higher prices of maintenance and repair of dwellings, prices of residential rent grew by 1.68%, contributing 0.25 percentage points to CPI inflation.
- (3) For 2022, Brent oil prices averaged US\$100.94 per barrel, increasing by 42.67% from the previous year. Despite imported oil prices surging, the government made efforts to lower the commodity tax rates on gasoline and diesel and implement a price stabilization mechanism through stateowned energy suppliers aiming at restraining oil price hikes. Consequently, domestic fuel and lubricant prices went up relatively mildly by 8.40% and accounted for 0.24 percentage points in the CPI inflation rate.



- (4) The rises in imported raw material costs, ocean freight rates, and wages, combined with the supply of domestic vehicles and home appliances constrained by global supply chain bottlenecks, pushed up prices of durable consumer goods by 2.00%, contributing 0.21 percentage points to CPI inflation.
- (5) Influenced by increasing costs resulting from shortages of raw materials such as base metals and plastics and the rise in wages, prices of vehicle parts and maintenance moved up by 4.97% and accounted for 0.09 percentage points in the CPI inflation rate.
- (6) Less discounts in clothing sales drove up prices of garments by 2.23%, accounting for 0.08 percentage points in the CPI inflation rate.
- (7) Owing to an upswing in construction costs of materials and services, prices of maintenance and repair of dwellings went up by 5.83%, contributing 0.07 percentage points to CPI inflation.
- (8) With soaring prices of toilet paper and napkins because of rising imported wood pulp and paper prices, as well as price hikes in toothpaste and shampoo, prices of cosmetic items rose by 1.99%, contributing 0.06 percentage points to CPI inflation.

- (9) As elevated international gold prices brought prices of gold ornaments and jewelry higher, prices of personal effects climbed by 2.56%, contributing 0.06 percentage points to CPI inflation.
- (10)An increase in accommodation and tour group fees on account of growing demand for travel amid the easing of the domestic pandemic-related restrictions and border reopening caused prices of entertainment services to grow by 1.91%, accounting for 0.06 percentage points in the CPI inflation rate.

### Percentage Changes in the Major Components of the CPI in 2022

ltem	Annual Rate of Change (%)	Contribution to CPI Inflation Rate (Percentage Point)
CPI	2.95	2.95
Food	5.66	1.39
Food Away from Home	5.77	0.56
Fruit	10.40	0.22
Meats	5.70	0.14
Eggs	26.39	0.08
Cereals & Cereal Products	4.29	0.07
Fish & Seafood	6.30	0.07
Cooked Food	6.25	0.05
Residential Rent	1.68	0.25
Fuels & Lubricants	8.40	0.24
Durable Consumer Goods	2.00	0.21
Vehicle Parts & Maintenance	4.97	0.09
Garments	2.23	0.08
Maintenance & Repair of Dwellings	5.83	0.07
Cosmetic Items	1.99	0.06
Personal Effects	2.56	0.06
Entertainment Services	1.91	0.06
Total		2.51
Others		0.44

Source: Price Statistics Monthly, DGBAS, Executive Yuan.