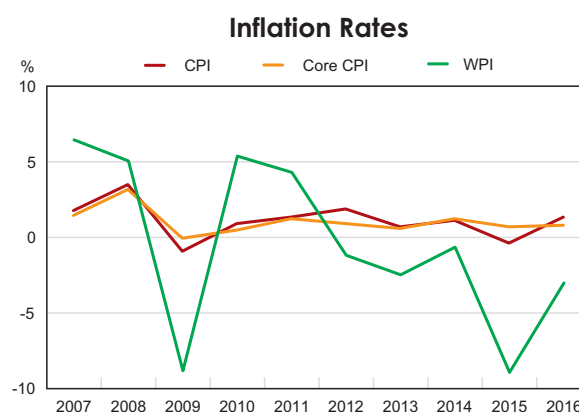


4. Prices

Taiwan's wholesale price index (WPI) fell by 2.99% in 2016, yet the pace of decline lessened remarkably compared with a decrease of 8.84% in 2015. The drop in WPI inflation was largely attributable to low international primary commodity prices owing to a moderate recovery in the global economy. Headline inflation, measured by the consumer price index (CPI), increased by 1.40% from the previous year's 0.31% decrease, mainly driven by a rise in food prices, though it was partly offset by reductions in energy prices. The core CPI, which excludes fruits, vegetables, and energy, rose mildly by 0.84%, slightly higher than the 0.79% increase a year before.



Source: Price Statistics Monthly, DGBAS, Executive Yuan.

Moderate Decline in Wholesale Prices

After the WPI experienced the largest decrease of 8.84% in 2015, the decline in the WPI narrowed to 2.99% in 2016. The deceleration mainly reflected low prices for international primary materials stemming from weak global demand. In terms of monthly movements, the pace of the decrease in the annual WPI inflation rate gradually abated in the first eleven months of the year. In December, however, the annual WPI inflation rate reversed to a 1.79% increase on account of the rebound in global oil prices.

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 decreased moderately in 2016, as international raw material prices remained at relatively low levels.

Import prices, weighted at 33.41% of the WPI, decreased by 4.68% in US dollar terms in 2016, mainly led by falling prices of imported raw materials, such as crude petroleum, liquefied natural gas, coal, integrated circuits, and cell phones and parts thereof. As the NT dollar depreciated against the US dollar over 2016, the annual change in import prices lessened to a 3.08% decrease in NT dollar terms. Among the components of import prices in terms of NT dollars, prices of raw materials and consumer goods declined by 4.62% and 0.09% and accounted for 3.47 percentage points and 0.01 percentage points in the import price decrease, respectively. In contrast, prices of capital goods rose by 2.91%, contributing 0.42 percentage points to the increase in import prices.

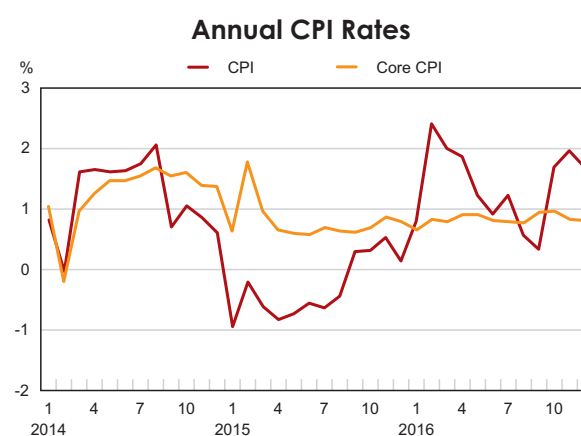
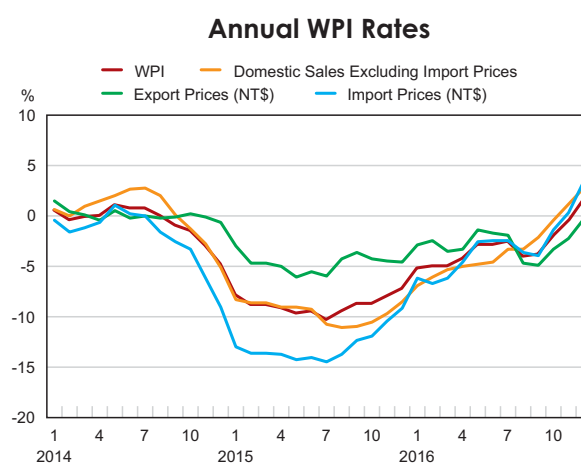
Export prices, weighted at 36.79% of the WPI, declined by 4.32% in US dollar terms in 2016. Owing to the depreciation of the NT dollar against the US dollar, export prices fell by 2.71% in terms of the NT dollar. Among the basic groups in NT dollar terms, prices of mineral products accounted for the largest decrease at 17.92%, primarily resulting from the declines in the prices of gasoline, diesel, and fuel oil. In addition, prices of primary metal products decreased by 4.52% on account of falling prices of iron and steel. On the contrary, prices of animal products rose by 7.47% in 2016, mainly attributable to a lower supply of fish.

Prices of domestic sales excluding imports, weighted at 29.8% of the WPI, fell by 3.23% in 2016, reflecting declining import costs of primary commodities. In terms of the basic groups, prices of water supply, electricity and gas registered the largest decline at 11.86%, largely attributable to a reduction in electricity prices effective in April based on the new electricity pricing adjustment mechanism, together with falling gas prices. Prices of quarrying and mineral products and manufacturing products dropped by 5.15% and 3.25%, respectively. On the other hand, prices of agriculture, forestry and livestock products rose by 9.00%, driven by rising prices of vegetables and fruits stemming from the shortage of supply caused by cold weather and typhoons.

Modest Increase in Consumer Prices

Compared with a slight decrease of 0.31% in the previous year, the CPI rose by 1.40% in 2016. Owing to rising prices of vegetables and fruits affected by weather-related disruptions, the annual rate of change in the CPI in the first quarter climbed to 1.75%. From April onwards, the pace of monthly CPI inflation rates slackened and slowed to an all-year low of 0.33% in September. Afterwards, it went up to 1.97% in November, as prices of vegetables and fruits soared following typhoons and heavy rainfall. At the end of the year, the CPI edged down to 1.69%.

The core CPI inflation rate averaged 0.84% in 2016. Reflecting the slow pace of the recovery in the domestic economy, monthly core CPI inflation rates remained moderate between 0.65% to 0.96%.



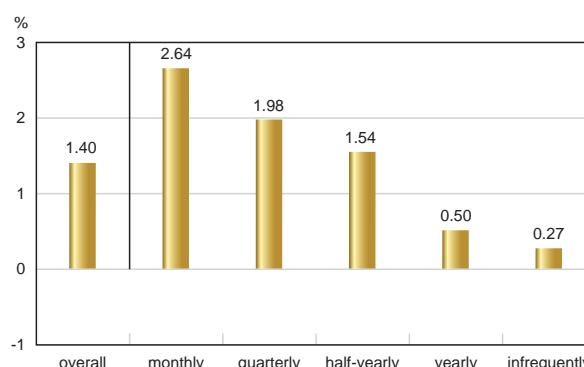
With respect to frequency of purchase, CPI items can be categorized into five groups (monthly, quarterly, half-yearly, yearly and infrequently). Among these five groups, prices for the most frequently purchased goods and services increased at an annual rate of 2.64%, higher than the overall CPI inflation of 1.40%. Soaring food prices, registering a growth rate of 5.24%, constituted the main cause of the uptrend and thus had a far larger impact on consumers' perceptions of price rises.

In terms of CPI movements for households in three disposable income groups, CPI and food prices for the lowest income group both advanced at a higher rate than those of general households as the lowest income group spent a greater share of income on food.

The main factors contributing to the rise of CPI inflation in 2016 were as follows:

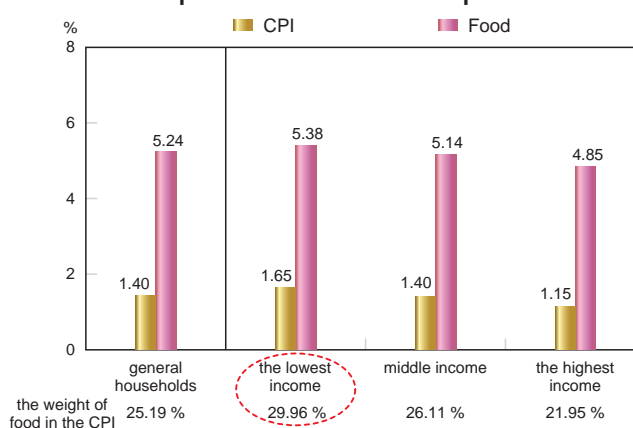
- (1) Owing to crop damage caused by severe coldness and typhoons, prices of vegetables and fruits moved up by 22.46% and 18.81%, and accounted for 0.60 percentage points and 0.47 percentage points in CPI inflation, respectively.
- (2) Despite the declines in oil, electricity and gas costs, higher raw food prices such as vegetables, fish & seafood, and pork & chicken, together with a rise in wages, pushed up the prices of food away from home by 1.48%, contributing 0.16 percentage points to CPI inflation.
- (3) Prices of residential rent continued a mild uptrend and went up by 0.82%, contributing 0.15 percentage points to CPI inflation.
- (4) With the supply of global fisheries constrained by climate change, along with increasing demand from developing countries, prices of fish and shellfish increased at an annual rate of 4.71% in 2016, accounting for 0.08 percentage points in CPI inflation.

Annual CPI Rates by Frequency of Purchase in 2016



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

Annual CPI Rates for Households in Different Disposable Income Groups in 2016

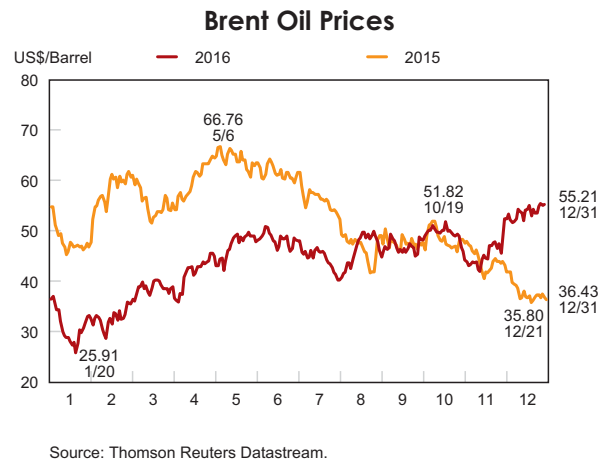


Note: The lowest, middle and the highest household income groups refer to households in the lowest 20 percent, the middle 60 percent, and the highest 20 percent classified by disposable income levels.

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

The main factors contributing to downward pressure on the CPI in 2016 were as follows:

- (1) Following the shrinkage in crude oil production in the US, some temporary supply disruptions in oil-producing countries, such as Canada and Nigeria, and the production cuts agreed by OPEC members and several other major producers in November, international petroleum prices rebounded from a yearly low recorded in early 2016 and showed an upward trend to the year end. However, average Brent oil prices still fell by 16.44% compared with 2015. Reflecting lower imported costs for petroleum and natural gas, prices for domestic oil and gas dropped by 5.88% and 15.47% and accounted for 0.16 and 0.13 percentage points in the CPI decrease, respectively.
- (2) Affected by a reduction in electricity prices in April, electricity prices went down by 6.11%, subtracting 0.13 percentage points from CPI inflation.



Percentage Changes in the Major Components of the CPI in 2016

Item	Annual Rate of Change (%)	Contribution to CPI Inflation Rate (Percentage Point)
CPI	1.40	1.40
Food	5.24	1.44
Vegetables	22.46	0.60
Fruits	18.81	0.47
Food away from Home	1.48	0.16
Fish & Shellfish	4.71	0.08
Residential Rent	0.82	0.15
Total		1.59
Fuels & Lubricants	-5.88	-0.16
Gas	-15.47	-0.13
Electricity	-6.11	-0.13
Total		-0.42
Others		0.23

Source: Price Statistics Monthly, DGBAS, Executive Yuan.