Currency Exchange Rates of Major Economies

The substantial depreciation of the euro and yen against the dollar from 2011 to 2016 reduced the value of the eurozone’s and Japan’s economic activities in dollar terms relative to their value in local currency terms. Economic activities such as GDP and industry output, denominated in local currencies, had a higher growth rate than these activities denominated in dollars (Figure 6-A).
FIGURE 6-A

Growth in output of selected categories of industries, by selected country or economy: 2011–16

Commercial KI services

Country or economy

United States  EU (Eurozone)  Japan

Percent change

Dollar terms  Local currency terms

HT manufacturing

Country or economy

United States  EU (Eurozone)  Japan

Percent change

Dollar terms  Local currency terms
International comparisons of industry, trade, investment, and other global economic activities often use current dollars at market exchange rates. Most global economic activities are dollar denominated, which facilitates comparison. In addition, many economists believe that market exchange rates reflect, at least to some degree, differences in economic performance among various countries (Balke, Ma, and Wohar 2013:2).

However, fluctuations in exchange rates may also reflect factors other than economic performance. Governments influence the level of their exchange rate indirectly through macroeconomic policies and directly through buying and selling currencies. In addition, factors such as political instability or the short-term effects of global financial events on a country’s economy can cause currency fluctuations that are unrelated to enduring differences in national economic performance. Comparing economic data from different countries in current dollar terms provides a broadly indicative reflection of a country’s relative economic performance.

**Note(s)**
Output of HT manufacturing industries is on a value-added basis. Value added is the amount contributed by a country, firm, or other entity to the value of a good or service and excludes purchases of domestic and imported materials and inputs. HT manufacturing industries include aerospace; communications; computers; pharmaceuticals; semiconductors; and testing, measuring, and control instruments and are based on a former classification by the Organisation for Economic Co-operation and Development. The EU (Eurozone) consists of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, the Netherlands, Portugal, Slovakia, Spain, and Sweden.

**Source(s)**

*Science and Engineering Indicators 2018*
Between 2011 and 2016, the exchange rates of the world's four largest economies—China, the EU member countries that use the euro (the eurozone), Japan, and the United States—exhibited some fluctuations (Figure 6-B) with substantial depreciation of the euro (26%) and Japanese yen (36%) against the dollar. The yuan's exchange rate, which is controlled by China's government, showed little change against the dollar.

**FIGURE 6-B**

U.S. dollar exchange rate with selected currencies: 2011–16

*Note(s)*

Currency value is expressed as an index of 100 in 2011.

*Source(s)*


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