Seasonal Adjustment of Trade in Goods and Services by Selected Countries and World Areas

Frequently Asked Questions

Why do the U.S. Bureau of Economic Analysis (BEA) and the U.S. Census Bureau publish seasonally adjusted export/import data by geography in the monthly <u>U.S. International Trade in Goods and Services</u> release?

Publishing seasonally adjusted trade data by geography allows data users to better assess underlying patterns in geographic time series data by removing predictable seasonal patterns specific to each country or world area.

Prior to March 2014, the Census Bureau published not seasonally adjusted data for selected countries and world areas. In March 2014, the Census Bureau introduced seasonally adjusted statistics by geography for trade in goods on a Census basis. In June 2014, BEA introduced seasonally adjusted statistics by geography for trade in goods on a balance of payments (BOP) basis and for trade in services.

Why are a limited number of countries/world areas being adjusted?

The selected countries and world areas represent the major trading partners of the United States and account for more than two-thirds of trade in goods and services.

Why are statistics on seasonally adjusted trade in goods and services only available at a quarterly frequency?

Seasonally adjusted statistics by geography for trade in goods on a BOP basis and for trade in services are only available at a quarterly frequency because the source data are not available at the level of detail necessary to produce at a monthly frequency.

However, seasonally adjusted statistics by geography for trade in goods on a Census basis are available monthly in exhibit 19 of the monthly U.S. International Trade in Goods and Services release.

How does BEA seasonally adjust export/import data by geography?

The geographic seasonal adjustments are developed and applied directly at the country and world area level. This differs from seasonal adjustments in other BEA data on trade in goods and services, which are applied to detailed end-use commodity data for goods and to detailed service-type data for services.

The seasonal adjustment procedure (X-13ARIMA-SEATS) is based on a model that estimates the period-to-period movements as percentages above or below the general level of each series (unlike other methods that redistribute the actual series values over the calendar year).

Will additional seasonally adjusted countries and areas be made available?

The initial list included 18 countries and areas. In June 2016, the area grouping "Newly Industrialized Countries" was removed and three countries—Hong Kong, Singapore, and Taiwan—were added.

BEA and the Census Bureau periodically reevaluate the list of selected countries and areas and may make further additions or modifications at a future date.

Are these statistics available as a time series?

Statistics for seasonally adjusted trade in goods and services are available beginning with first quarter 1999 in a historical time series file that is updated quarterly in March, June, September, and December.

Do the seasonal adjustments account for moving holidays, such as Chinese New Year and Easter?

Yes. Due to the geographic nature of many moving holidays, BEA reviews the country and world area data for moving holiday effects and includes them in seasonal adjustment models as appropriate.

How do the seasonally adjusted statistics on trade in goods in exhibit 20a of the U.S. International Trade in Goods and Services release differ from the statistics on trade in goods in exhibit 19?

The statistics in exhibit 20a reflect trade in goods on a BOP basis while the statistics in exhibit 19 reflect trade in goods on a Census basis. Goods on a Census basis are adjusted by BEA to a BOP basis to align the data with the concepts and definitions used to prepare the international and national economic accounts.

To derive the seasonally adjusted statistics by geography for trade in goods on a BOP basis, these BOP adjustments are applied to the not seasonally adjusted data on trade in goods on a Census basis, and the BOP basis totals for the selected countries and world areas are then directly seasonally adjusted.

Are the seasonally adjusted statistics on trade in goods and services in exhibit 20 of the U.S. International Trade in Goods and Services release the same as the statistics on trade in goods and services in tables 2.2 and 3.2 of the U.S. International Transactions Accounts?

The statistics in exhibits 20a and 20b of the U.S. International Trade in Goods and Services release are consistent with the statistics in tables 2.2 and 3.2, respectively, of the U.S. International Transactions Accounts (ITAs).

The countries and areas shown in these two releases differ somewhat. The U.S. International Trade in Goods and Services release includes the following world areas that are not included in the ITAs: CAFTA-DR (Dominican Republic-Central America-United States Free Trade Agreement) and South/Central America. ITA tables 2.2 and 3.2 do not include these areas because they are not part of the standard presentation of geography for the ITAs.

ITA tables 2.2 and 3.2 also show a total for exports and imports of goods/services, derived from the seasonally adjusted statistics by commodity and by service type, and a residual, calculated as the difference between the by-commodity/by-service type seasonally adjusted total and the sum of the individual countries and the "all other countries" aggregate. The seasonally adjusted country and world area data do not sum to the seasonally adjusted by-commodity/by-service type totals because the seasonally adjusted country and world area data and the by-commodity/by-service type totals are derived from different aggregations of the export and import data and from different seasonal adjustment models.