# BUREAU OF LABOR STATISTICS Import/Export Price Indexes

# How the Bureau of Labor Statistics Measures Price Change for Air Passenger Fares in the U.S. Import/Export Price Indexes

The Bureau of Labor Statistics (BLS) Import/Export Air Passenger Fares Indexes measure changes in airline fares for air passenger travel to and from the U.S. These indexes were first published in the mid-tolate 1980s and were among the first import/export services price indexes published by BLS. Originally, the air passenger fares indexes were published quarterly. BLS began publishing the air passenger fares indexes on a monthly basis beginning in March 2001. In the current month BLS publishes preliminary estimates for these indexes. These estimates can be revised in each of the three months after original publication. BLS also publishes international services price indexes for air freight. Historical data are available for crude oil tanker freight, education, ocean liner freight, and travel and tourism services.

The Import Air Passenger Fares Index measures changes in fares paid to foreign carriers by U.S. residents for international travel. The Export Air Passenger Fares Index measures changes in fares paid to U.S. carriers by foreign residents for international travel. U.S. and foreign residents are identified by a flight's point of origin, based on the assumption that most passengers purchase their tickets and begin travel in their country of residence. Regional groupings follow the definitions set by the U.S. Department of Transportation's World Area Codes. For example, the fare for a flight from New York to Paris on Air France would be included in the Import Air Passenger Fares Index, while the fare for a flight from Tokyo to Los Angeles on American Airlines would be included in the Export Air Passenger Fares Index. The U.S. Department of Commerce's Bureau of Economic Analysis (BEA) is a primary user of the Import and Export Air Passenger Fares Indexes. BEA uses these indexes to adjust the Balance of Payments Accounts and deflate the Gross Domestic Product.

## Sample Design and Selection

The Import Air Passenger Fares Index uses the U.S. Department of Transportation's Data Bank 1B (DB1B) as a primary sampling source. The DB1B includes ticket coupons as part of the U.S. Department of Transportation's Origin and Destination Survey (O&D) and provides data on passenger counts, revenues, origin and destination airports, and fare classes for international trips. Another source of information is the U.S. Department of Transportation's T-100 International Market file. Each air passenger item in the import index is selected by probability methods and is defined by the following characteristics: origin and destination airports, carrier name, fare class (business, first, or coach), and fare type (one-way or round-trip).

The Export Air Passenger Fares Index comprises a subset of data from the BLS Producer Price Index (PPI) Scheduled Passenger Air Transportation Index. The specific transactions selected adhere to the PPI's sampling methodology.

### **Pricing**

Pricing data for the Import Air Passenger Fares Index are obtained from an electronic reservations system that is widely used in the industry. Frequent flyer tickets and those sold by consolidators are excluded from this index. Prices for these items are collected during the first week of each calendar month. Taxes and fees are excluded from the Import Air Passenger Index.

Each import item is identified by a unique origin and destination airport, airline, fare class (business, first, or coach), fare type (one-way or round-trip), fare basis code, purchase requirements and restrictions, and routing code. For example, the BLS might track prices for a round-trip coach fare from Chicago's O'Hare Airport to London's Heathrow Airport on British Airways for a particular fare basis code with specific restrictions (such as 14-day advance purchase and weekday travel). If a sampled item is unavailable, a new item with similar characteristics replaces it in the index.

Pricing data for the Export Air Passenger Fares Index are obtained from data collected from air carriers by the BLS Producer Price Index. Most of the prices in this index are measured by the average revenue per passenger and include frequent flyer tickets as well as those sold by consolidators. Prices for most items are collected during the first 21 days of each calendar month. Taxes and fees are excluded from the Export Air Passenger Index.

Each export item is identified by a unique origin and destination airport, airline and

fare class. If a sampled item is unavailable, a new item with similar characteristics replaces it in the index.

### **Trade Value Weights**

The revenue weights used for index calculation are derived from the passenger count data of the Transportation Department's DB1B. The trade dollar value weights are updated annually with a two year lag.

### **Additional Information**

Additional information U.S. on the Import/Export Price Indexes can be found in "International Price Indexes." Handbook of Methods, Bulletin 2490 (Bureau of Labor Statistics, 1997), Chapter 15. This chapter also is available on the BLS Internet site (http://www.bls.gov/mxp) under the topic "Publications." You may contact the International Price Program of the BLS by telephone at (202) 691-7101 or by e-mail at mxpinfo@bls.gov.

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**Last Modified Date:** February 15, 2008