In the original posting of this article, the data for charts 2 and 3 were inadvertently transposed. Both charts were corrected on April 27, 2007.

International comparisons of Harmonized Indexes of Consumer Prices

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In October 2006, the Bureau of Labor Statistics (BLS, the Bureau) introduced a new table to its Web site. The new table, "Harmonized index of consumer prices for selected countries and areas, percent change from same period of previous year, 2003–06," uses the methods of the European Union's Harmonized Index of Consumer Prices (HICP) to compare inflation rates of all G7 countries except Canada.[1] The table also displays data for two transnational aggregates, one for the European Union (EU) and the other for the Euro area.[2] The table, which is available at **http://www.bls.gov/fls/home.htm,** will be updated monthly on the same schedule as the BLS Employment Situation news release, which typically is issued on the first Friday of each month.[3] These harmonized indexes provide a better basis for international comparisons of inflation than the national CPI data published by each country.

Background

For many years, the Bureau has produced a monthly table showing the national Consumer Price Indexes (CPI's) for nine countries. The table contains percent changes as the national statistical agencies publish them.[4] Because each country produces its CPI with its own unique methods and concepts, the data presented in the table are not strictly comparable. The Bureau will continue to publish this table, in part because it covers additional countries.

The HICP is an internationally comparable measure of consumer price inflation.[5] The EU's statistical agency, Eurostat, developed the HICP's methods. The EU requires member countries and prospective member countries to produce an HICP. Most EU countries continue to produce their national CPI's for internal and historical purposes.[6] The growth of the EU and the integration of much of the European economy under a single currency necessitated a common measure of inflation among the member countries. Indeed, many EU programs and policies depend on such a measure. The European Central Bank, which manages the euro in the same manner that the Federal Reserve System manages the U.S. dollar, needs a comparable measure of inflation to conduct monetary policy. Also, having a common measure of inflation is needed for meaningful comparisons of countries' growth and productivity across the EU and, in addition, in comparing EU countries with other countries in the world. Eurostat publishes HICP data back to 1996 for each member state as well as aggregate indexes with varying geographical coverage.[7]

HICP for the United States

The Bureau recently published an experimental HICP series for the United States.[8] The most important difference between the U.S. CPI and the HICP is that the latter excludes owner-occupied housing from its scope. CPI methods for owner-occupied housing vary widely and the Europeans could not agree on which to use so they simply excluded this item from the HICP.[9] A second difference is that the HICP refers to the entire national population, whereas the U.S. CPI, the Consumer Price Index for All Urban Consumers (CPI-U), measures inflation for the 87 percent of U.S. population who live in urban areas. The Bureau created the experimental HICP for the United States by expanding the U.S. CPI's population coverage to the entire (noninstitutional) population and by excluding owner-occupied housing from its item coverage.

Although some minor differences remain between the experimental U.S. HICP and the European HICP's, the U.S. HICP is more comparable to its counterparts in other countries than the U.S. CPI is to other national CPI's. International comparisons of the HICP's are more meaningful than international comparisons of national CPI's. As the following information shows, the movement of the U.S. HICP has differed from that of the U.S. CPI in the past few years.

Japan

The main series of Japan's CPI that is published monthly (the General Index) includes all households with two or more persons, therefore excluding 1-person households.[10] In 2000, 1-person households made up 26.5 percent of all households in Japan, and this percentage increased over the period from 1980 to 2000.[11] The Japanese Statistics Bureau also calculates a CPI called General, excluding imputed rent. Although the index excluding imputed rent also excludes 1-person households, it is more closely comparable to the HICP

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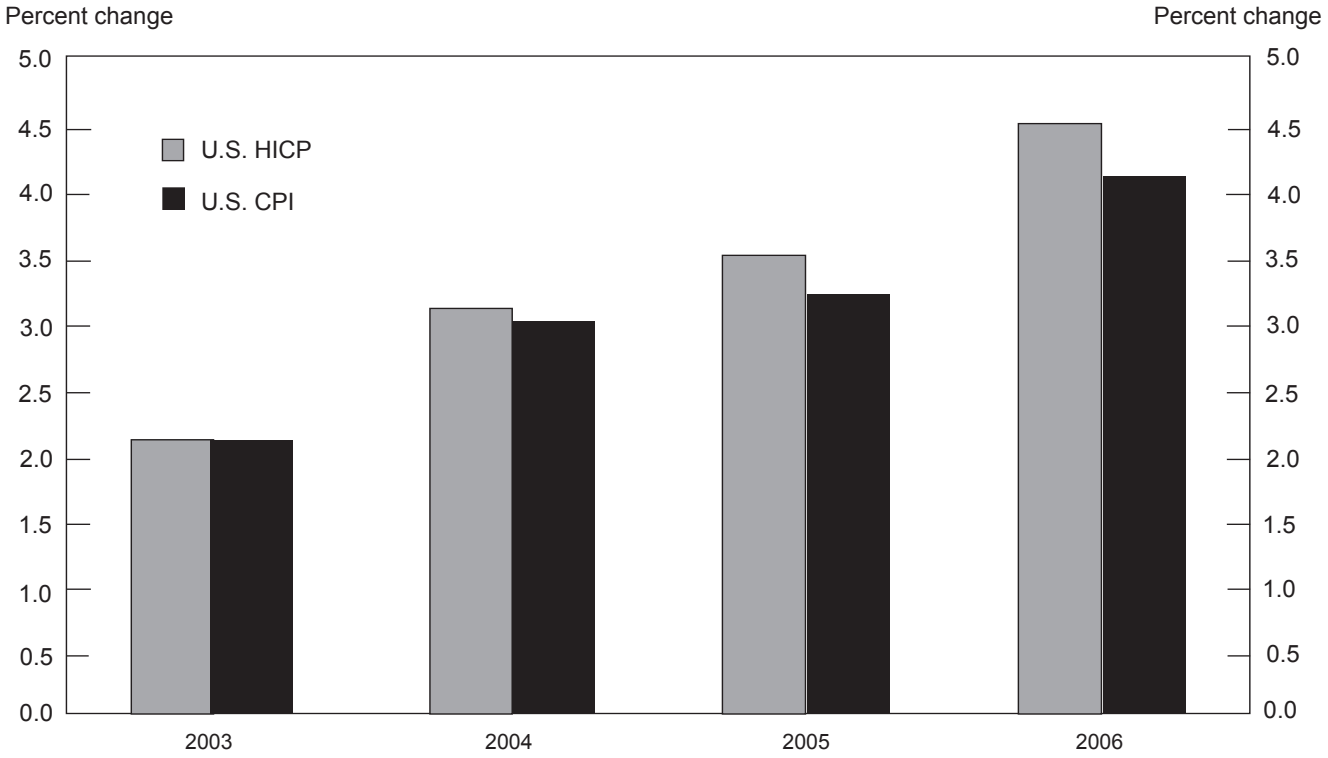
Chart 1. **Trends in U.S. Harmonized Indexes of Consumer Prices (HICP) and Consumer Price Index (CPI), 2003–06, percent change from previous year**



NOTE: Percent changes calculated from July to July.
SOURCE: U.S. Bureau of Labor Statistics.

Table 1. **Relative importance and percent changes for selected expenditure categories in the CPI-U**

Expenditure category	Relative importance, December 2005	Unadjusted percent change from July 2005–July 2006
All items	100.000	4.1
Housing	42.380	4.1
Lodging away from home	2.611	4.7
Owner's equivalent rent of primary residence	23.442	3.7
Transportation	17.415	8.4
Motor fuel	4.191	29.4
Airline fare	.673	5.4

than the General Index.[12]

Data

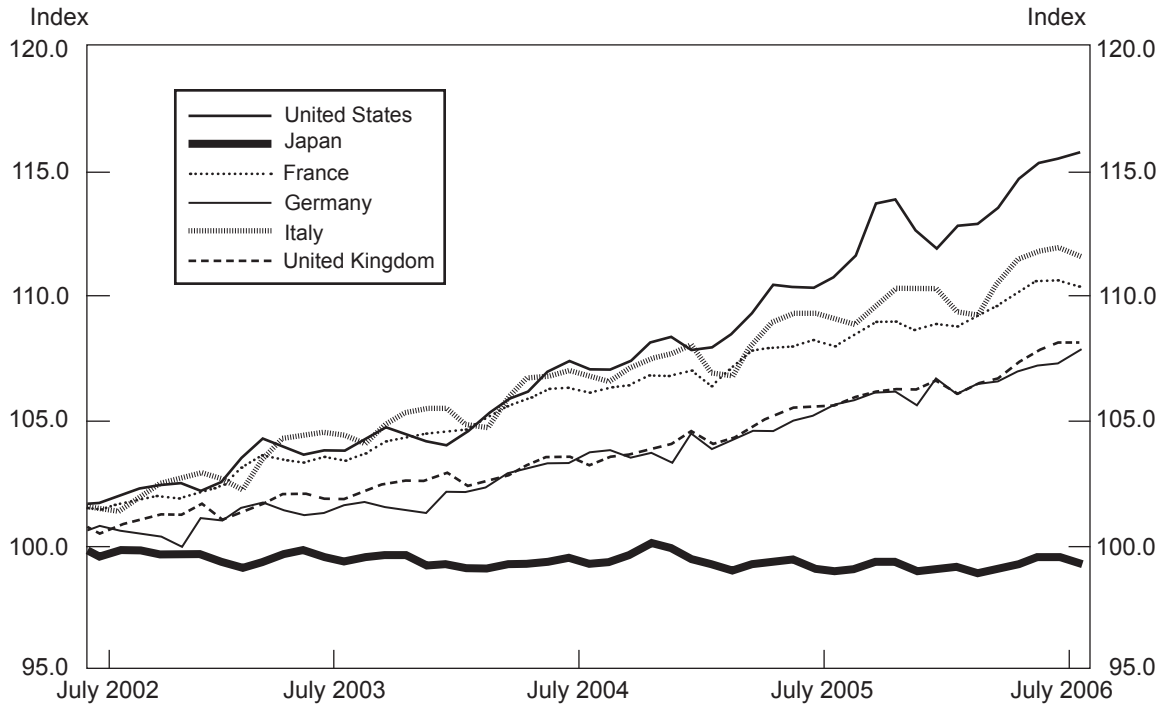
Although HICP data for the EU countries are available from 1996 to the present, and comparable data are available for Japan as far back as 1946, HICP data for the United States are available only beginning in December 2001.[13]

For the United States, the HICP increased faster than the CPI in each year from July 2003 to July 2006. (See chart 1.)

When owner-occupied housing is removed to create the HICP, the other index components take on a larger relative importance. The index for owner-occupied housing has been increasing more slowly than the indexes for other CPI components, such as energy or transportation. When these other items account for a larger

Chart 2. Harmonized Indexes of Consumer Prices for selected countries, July 2002–July 2006

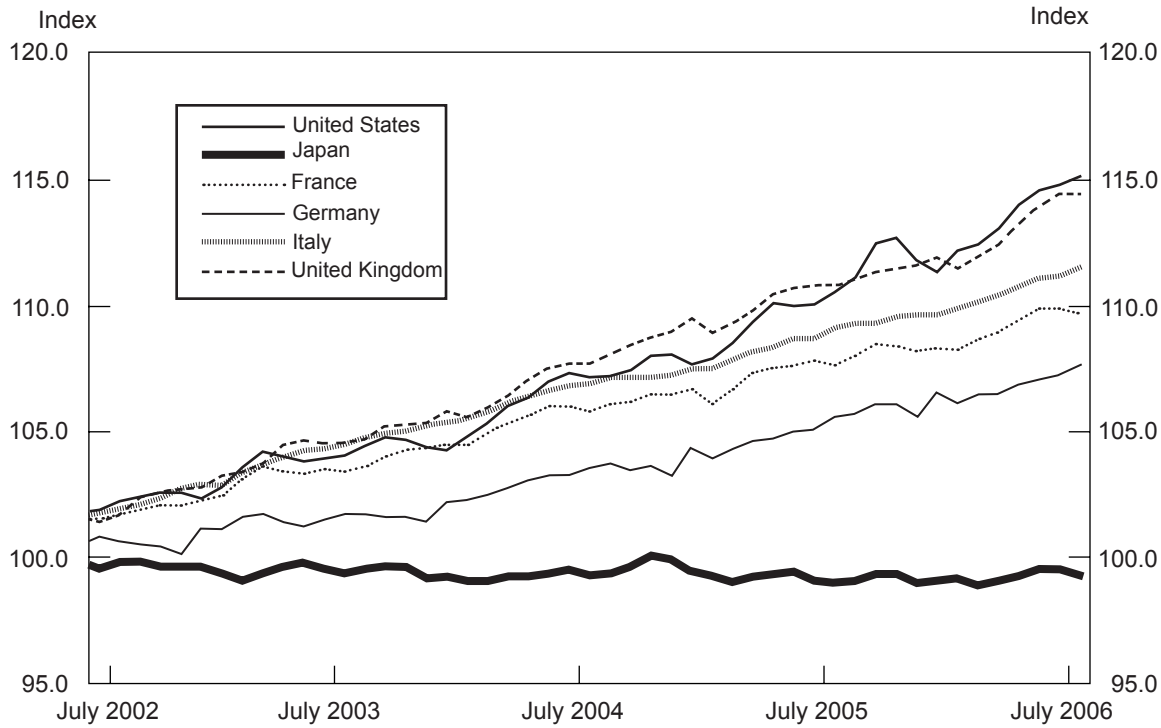
[December 2001 = 100]



SOURCE: U.S. Bureau of Labor Statistics, Japanese Statistics Bureau, and Eurostat.

Chart 3. National Consumer Price Indexes for selected countries, July 2002–July 2006

[December 2001 = 100]



SOURCE: U.S. Bureau of Labor Statistics, Japanese Statistics Bureau, and Eurostat.

percentage of the overall price index, the effect is an increase in the index.

In addition, the HICP includes the rural population; the weight for transportation is higher in rural areas than in urban areas. During the period covered, the index for transportation, which includes motor fuel and airline fares, increased rapidly. Overall, from July 2005 to July 2006, the CPI for transportation increased 8.4 percent, while the all-items CPI increased 4.1 percent. (See table 1.) As a result of both adjustments, the HICP increased more rapidly than the CPI from July 2002 to July 2006.

As the HICP indicates, measured prices in the United States rose more than prices in the other G7 countries over a recent 4-year period. (See chart 2.)

The U.S. HICP has experienced the greatest increase since July 2002 of any of the countries shown in the graph. The United States experienced price increases similar to that of Italy and France from July 2002 until the third quarter of 2004, at which point prices in the United States began increasing more rapidly. Germany and the United Kingdom both experienced inflation during this period, although to a lesser extent than the United States. By contrast, Japan's consumer prices were flat over this 4-year period.

When national CPI's are used to compare price changes among these countries, the results are different in some respects. (See chart 3.) In particular, the United Kingdom appears to be experiencing price increases similar to that in the United States; however, as stated earlier, this similarity is misleading because the concepts and methods of the U.S. and U.K. national CPI's differ.[14] The other countries' national CPI trends differ only slightly, on average, from their HICP trends. □

Notes

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[1] G7 countries include the following: the United States, Canada, Japan, France, Germany, Italy, and the United Kingdom. Canada is not included on the table because there is no Canadian price index comparable to the HICP at this time.

[2] The column entitled "European Union" refers to EU member countries as of May 1, 2004, also referred to as the EU-25. The EU-25 index is the household expenditure-weighted average for Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. The column entitled "Euro area-12" refers to the European Union member countries that have adopted the euro as the common currency. The index for this group is the household expenditure-weighted average for Austria, Belgium, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, and Spain.

[3] The table is available at **www.bls.gov/fls/home.htm.** For a schedule of upcoming releases, see **www.bls.gov/schedule/schedule/by_prog/empsit_sched.htm.**

[4] In some cases, percent changes published by the national statistical agencies are based on more precise index level data and, therefore, may differ slightly from the percent changes calculated by the BLS.

[5] For more information, see **www.epp.eurostat.ec.europa.eu/portal/page?_pageid=1996,45323734&_dad=portal&_schema=PORTAL&screen=welcomeref&open=/&product=EU_MASTER_prices&depth=2.**

[6] The European Union member countries are required to produce an HICP according to Article 121 of the Treaty of Amsterdam (Article 109j of the Treaty of the European Union).

[7] See note 5.

[8] The Bureau uses the term "experimental," in contrast to "official," to denote series that it produces outside of its regular production systems and, consequently, with less than full production quality. For security reasons, BLS researchers cannot produce experimental statistics until after the publication of the corresponding official statistics. For more information, see Walter Lane and Mary Lynn Schmidt, "Comparing U.S. and European inflation: the CPI and the HICP," *Monthly Labor Review*, May 2006, pp. 20–27.

[9] *Ibid.*

[10] Japan also calculates a supplementary index covering "total households" including 1-person households, but this index is calculated on an annual basis only and is not the index used in BLS international comparisons. This information was obtained from e-mail correspondence with the Japanese Bureau of Statistics, dated July 10, 2006.

[11] See Gary Martin and Vladimir Kats, "Families and work in transition in twelve countries, 1980–2001," *Monthly Labor Review*, September 2003, table 5, p. 12.

[12] Besides the exclusion of 1-person households, other differences may exist, for example, with respect to frequency of market basket weight changes, aggregation methods, and quality adjustments.

[13] For the period from December 1997 to December 2001, Consumer Price Index data excluding owner-occupied housing are available. However, these data are for the urban population only. Rural weights are first available for December 2001, the base month for the U.S. HICP.

[14] The index that the Bureau uses for the United Kingdom in international comparisons of national CPI'S is the Retail Price Index (RPI), which is the index that is most comparable to the U.S. CPI. In the United Kingdom, the HICP is known as the CPI. For more information on the differences between the U.K. CPI and the RPI, see **www.statistics.gov.uk/cci/nugget.asp?id=181.** For more information on the methodology of the RPI, see **www.statistics.gov.uk/cci/nugget.asp?id=22**.