

Comparing U.S. and European inflation: the CPI and the HICP

An experimental U.S. consumer price index that uses the methods of the European Harmonized Index of Consumer Prices (HICP) tracks that index well; the new index also moves similarly to the trend of the U.S. Consumer Price Index for All Urban Consumers (CPI-U)

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This article introduces an experimental¹ consumer price index for the United States that follows, to the extent possible, the methods of the Harmonized Index of Consumer Prices (HICP), the European Union's (EU's) official price index. The U.S. HICP differs from the U.S. Consumer Price Index (CPI) in two major respects. First, the HICP includes the rural population in its scope. Second, and probably more importantly, the HICP excludes owner-occupied housing, in part because the methods for measuring price changes for owner-occupied housing are controversial and difficult. To construct the experimental U.S. HICP, the CPI first was expanded to cover the entire (noninstitutional) U.S. population and then was narrowed to remove the owner-occupied housing costs that the HICP excludes from its scope.

Price indexes, such as the CPI, are complex constructs that can be sensitive to decisions about their scope, the formulas by which they are calculated, and other factors that are under the control of the statistical agencies that disseminate them. Until recently, there was little standard international practice pertaining to CPI's, and in making decisions on how to structure their CPI's, the agencies often gave a low priority to international comparability. Virtually every country has a statistical agency that produces these indexes. Countries use CPI's for a variety of purposes, one of the chief ones of which is largely internal: as a mechanism for adjusting income payments such as

Social Security. For this purpose, international differences may be of little importance.

The lack of international comparability is more problematic, however, when CPI's are used as economic indicators or deflators for other series. As economic indicators, CPI's signify how well monetary authorities and other policymakers are controlling inflation. As deflators, CPI's are used to compute real (inflation-adjusted) versions of other economic series, such as gross domestic product and productivity measures. Differences in CPI methods can make cross-country comparisons of inflation or real economic series, such as real gross domestic product, less reliable. If, for example, there is reason to believe that differences in methods are causing one country's price index to appear low relative to another's (that is, the index would have risen more rapidly had the one country used the other country's index methods), then the first country will appear to be doing better at controlling inflation. At the same time, its economy will appear to be growing faster—its real (inflation-adjusted) growth rate will be rising faster—and so will its economy's productivity.

In recent years, the United States has outperformed Europe with respect to these growth indicators. Some believe that this difference in performance is due in part to differences between the U.S. and European CPI's and that the Nation's economic performance would appear less robust

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if the U.S. price index used European price index methods. BLS experimental indexes do not support this conclusion; in fact, for the period from December 1997 to December 2005, the U.S. HICP has risen more slowly than the official U.S. CPI has. In other words, the spread between the U.S. and the European economic performance would be even greater had the United States used an HICP. Of course, there are other differences—see later—that could not be accounted for, and these may be responsible for some of the apparent differences in the relative performance of the U.S. and European economies.

The need for international standards became particularly important in Europe as the countries on that continent joined to form the European Union (EU),² integrating their economies. Having a common measure of inflation is even more critical for the 12 EU countries³ that use the euro, the new monetary unit. To meet this need, Eurostat (the EU's statistical agency) developed the HICP, which is, by design, an internationally comparable measure of inflation. Eurostat developed the HICP's methods⁴ in consultation with the statistical agencies of the EU member states. The EU requires each member and each prospective member country to produce an HICP. (Many countries continue to produce their old consumer price indexes for internal purposes, such as adjusting pensions, and for historical continuity.) For admission to the EU, prospective members must meet "convergence criteria," including a price stability standard based on the HICP. The European Central Bank, which regulates the euro, uses the HICP to determine eurozone monetary policy.

An experimental CPI for the total United States

The objective in this study was to create an experimental HICP series for the United States that could be compared with the U.S. CPI and with the HICP's of Europe. The U.S. CPI underwent a major revision effective with the index for January 1998, so that formed the logical starting point for the experimental series to be described.

The Consumer Price Index for All Urban Consumers (CPI-U), the headline U.S. CPI, estimates price change for the non-institutional urban population.⁵ The CPI-U excludes the rural, nonmetropolitan population from coverage, due largely to the difficulty involved in sampling the remote and sparsely populated areas of the country. The European HICP estimates price change for the entire population, urban and rural. Before an HICP for the United States was constructed, an experimental CPI for the total U.S. population was created.⁶ Called the CPI-XT, this index was constructed out of a previously fashioned experimental index for the rural U.S. population, the CPI-XR, which was then combined with the CPI-U.

The CPI is calculated in two stages.⁷ In simple terms, for the first stage the universe of consumer items available to urban households in the United States is partitioned into 8,018 discrete, exhaustive, mutually exclusive categories called *elementary aggregates*.⁸ The Bureau then collects a

sample of prices and produces price indexes for most elementary aggregates. (Price indexes for the unsampled elementary aggregates, which are not as important as the sampled ones, are imputed.) With the CPI for January 1999, the Bureau began using a geometric mean index formula for most elementary aggregates.

The second stage combines the price indexes for the elementary aggregates to form higher level indexes by using the elementary price indexes as if they were prices in an index-number formula. This higher level formula, a variant of the Laspeyres⁹ index formula, also is used for the elementary aggregates to which the geometric mean formula does not apply and was used for all elementary aggregates prior to 1999.

The Laspeyres formula requires a weight for each elementary aggregate, as well as a price index series. The Consumer Expenditure (CE) survey is the source of these weights. Although the survey covers the entire U.S. population, including those living in rural areas, the CPI-U's high-level weights use only the expenditures of CE survey respondents living in urban areas. For the 2001–02 and 2003–04 CPI weighting periods, the CE survey had already compiled rural expenditures, which the CPI then processed in the same way as it does those for the consumer urban weights.¹⁰ There is a weight for each of the 211 item strata for the rural areas in each of the 4 Census regions. These $211 \times 4 = 844$ weights were used to construct the experimental CPI for the rural United States set forth in this article.

Of course, an index series also was required for each rural elementary aggregate. Unlike weights, however, index series (estimates of price change) are not readily available for the rural aggregates. In short, the CPI does not collect prices in rural areas, so there are no elementary aggregates for them. Accordingly, as a proxy for the rural elementary aggregates, the 844 elementary aggregates for the small urban areas in each Census Bureau region were used.¹¹ For some item categories, these indexes may be quite reasonable: one could speculate that rural consumers often make their purchases in nearby small urban areas. This argument is less persuasive, however, for item categories such as rent and utilities.

The following tabulation compares the official CPI-U (rebased to December 2001 = 100) with the CPI-XR and the CPI-XT:¹²

December—	CPI-U	CPI-XR	CPI-XT
2001	100.0	100.0	100.0
2002	102.4	102.4	102.4
2003	104.3	103.9	104.3
2004	107.7	108.1	107.8
2005	111.4	112.5	111.5

The following tabulation compares the December-to-December percent changes of those same indexes (the entries

listed are the percent changes from the previous December):

December—	CPI-U	CPI-XR	CPI-XT
2002	2.4	2.4	2.4
2003	1.9	1.4	1.8
2004	3.3	4.1	3.4
2005	3.4	4.1	3.5

The CPI-XR is only about 11 percent of the CPI-XT and therefore has very little effect on the CPI-XT. CPI weights are expenditure weights, not population weights. The rural population spends less per capita on consumer items; consequently, the rural index has a disproportionately small influence on the total index.

The U.S. HICP

Once an index for the total U.S. population was derived, its item coverage was adjusted to correspond to that of the European index. Again, the major difference between the U.S. and European indexes is in the treatment of owner-occupied housing costs, a difficult and controversial part of any CPI. The issue can be summarized here, though only briefly.¹³ Most economists agree that a house (or any other type of housing unit) is a capital good and not a consumer good. Thus, expenditures to purchase or make major improvements to houses are investments and out of the scope of a CPI. Of course, on the one hand, homes provide the occupant with shelter, a valuable service that owner occupants would have to pay for if they did not own their homes; on the other hand, because they live in their homes instead of renting them out, owner occupants are foregoing income they could receive. To capture these countervailing ideas, the U.S. CPI uses a “rental equivalence” approach that estimates the changes in what owner occupants would pay to rent equivalent housing. Some European countries use this approach in their national CPI’s as well. Others use a variety of methods that usually include mortgage interest and taxes.

To date, the Europeans have not been able to agree on how to measure owner-occupied housing costs. Consequently, they have simply ruled all owner expenses (except for minor repairs and maintenance) entirely out of the scope of the HICP.¹⁴ For purposes of comparability in this article, the stratum for *owners’ equivalent rent of primary residence* has been removed from the U.S. HICP, along with the part of the *lodging while out of town* stratum that represents *owners’ equivalent rent of secondary residences*.¹⁵

Some other differences between European and U.S. methods are summarized in exhibit 1.¹⁶ The U.S. CPI uses a geometric formula for most elementary aggregates, whereas many European countries choose an arithmetic formula, which tends to rise more rapidly. (HICP rules allow either formula.) The U.S. CPI also may quality adjust for changes in consumer products and may introduce new products

into the pricing samples more aggressively. The Europeans approach some kinds of insurance differently. For example, they use a premiums-net-of-claims-paid approach; by contrast, the U.S. CPI uses gross premiums for household and vehicle insurance.¹⁷ Future versions of the U.S. HICP may be able to adopt additional measures which would allow that index to follow the European methodology more closely.

In addition, differences between American and European societies can be important sources of differences in the movement of indexes, even when identical index methods are used. One obvious example is that, because Americans pay for a much larger portion of medical care expenses themselves, medical care has a much larger importance in the U.S. indexes. By contrast, Europeans generally receive much of their medical care through government programs, which are out of the scope of both CPI’s and HICP’s. Americans also pay a larger share of education costs than Europeans do: college tuition and other education costs have been some of the fastest-rising components of the U.S. CPI in recent years.

U.S. inflation as measured by the U.S. HICP

Table 1 compares U.S. CPI’s and HICP’s for the period from December 1997 through December 2005. Before 2002, a period for which rural weights are lacking, the comparison is for the urban population only. Starting with data for January 2002, the comparison is for the total population.¹⁸

From December 1997 through December 2005, the experimental U.S. HICP rose 20.8 percent. Over the same period, the experimental CPI-XT grew by 22.1 percent, slightly more than the official CPI-U’s 21.7 percent. Thus, inflation as measured by the HICP is lower than inflation as measured by the CPI. The index for *owners’ equivalent rent* rose 26.0 percent over the period from December 1997 to December 2004, so leaving that stratum out of the calculation reduced the HICP’s percentage growth. Over the same period, the index for *lodging while out of town* rose 20.2 percent, so reducing its CPI weight for the HICP had relatively little effect on the difference between the two.

Table 2 uses the U.S. item classification scheme to provide weight shares¹⁹ for the CPI-U, CPI-XR, CPI-XT, and U.S. HICP-T for the current (since January 2004) and previous (January 2002 through December 2003) CPI weight regimes. The table, which gives weighting information for the eight CPI major groups of item strata and for selected smaller groups and strata, shows that rural spending patterns are rather different from those of the urban population. For example, the rural population devotes a larger share of its consumer spending to *transportation* and a smaller share to *shelter*. These differences are likely the result of differences in overall price levels and in relative prices, as well as in income, lifestyles, and tastes.

Table 3 classifies consumer goods and services according to the Classification of Individual Consumption by Purpose (COICOP) scheme, which the HICP uses. At the first level, the

Exhibit 1. Comparison of European HICP with U.S. HICP and U.S. CPI-U

Missing information			
Category	European HICP	U.S. HICP	CPI-U
Definition	Measure of the average change in the prices of goods and services available for purchase in the economic territory of the member State for purposes of directly satisfying consumers' needs	Measure of the average change over time in the prices of consumer items—that is, goods and services that people buy for day-to-day living	Measure of the average change over time in the prices of consumer items—that is, goods and services that people buy for day-to-day living
Geographic and population coverage	All households in the territory of the member State	Noninstitutional population of the United States	Noninstitutional urban population of the United States
Item coverage	Private consumption, except owner-occupied housing, gambling, lotteries, and life insurance	Private consumption, except owner-occupied housing, gambling, lotteries, and life insurance	Includes owner-occupied housing and excludes gambling, lotteries, and life insurance
Formula	Laspeyres	Laspeyres	Laspeyres
Weight update interval	At least 5 yearly updates, annual review	Biennial	Biennial
Elementary aggregate formula	Ratio of geometric to arithmetic mean	Weighted geometric or arithmetic mean	Weighted geometric or arithmetic mean
Classification	Classification of individual consumption by purpose (COICOP)	COICOP (2-digit level)	U.S. CPI item classification structure
Level of detail	94 classes, 160 subindexes	12 classes (2-digit COICOP)	211 item strata, 38 index areas

Table 1. Four price indexes, 1997–2005

[December 2001 = 100]

December—	CPI-U (1997–2001) and CPI-XT (2002–05)		HICP-U (1997–2001) and HICP-T (2002–05)	
	Level	Percent change	Level	Percent change
1997	91.3	...	92.6	...
1998	92.8	1.6	93.7	1.2
1999	95.2	2.7	96.2	2.7
2000	98.5	3.4	99.2	3.1
2001	100.0	1.6	100.0	.8
2002	102.4	2.4	102.2	2.2
2003	104.3	1.8	104.1	1.8
2004	107.8	3.4	107.9	3.7
2005	111.5	3.5	111.9	3.8

Table 2. Biennial weights (relative importances) for the U.S. indexes (CPI-U, CPI-XR, CPI-XT, and HICP-T) for 1999–2000 and 2001–02¹

Group	1999–2000				2001–02			
	CPI-U	CPI-XR	CPI-XT	U.S. HICP-T ²	CPI-U	CPI-XR	CPI-XT	U.S. HICP-T ²
All items	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Food and beverages	15.45	15.96	15.51	20.16	15.08	15.59	15.13	20.14
Food	14.43	15.17	14.51	18.86	14.09	14.86	14.17	18.86
Food at home	8.34	9.48	8.46	11.00	8.06	9.01	8.17	10.87
Food away from home	6.10	5.69	6.05	7.86	6.02	5.85	6.00	7.99
Alcoholic beverages	1.02	.80	.99	1.29	.99	.73	.96	1.28
Housing	40.04	34.79	39.45	21.29	41.79	36.39	41.19	21.72
Shelter	30.64	24.37	29.94	8.93	32.38	25.31	31.59	8.95
Rent of primary residence	6.13	2.62	5.73	7.45	5.98	2.73	5.62	7.48
Lodging away from home	2.97	1.80	2.84	1.00	3.22	2.36	3.12	.97
Hotels and motels79	.59	.77	1.00	.74	.66	.73	.97
Owners' equivalent of secondary residences	2.17	1.21	2.06	.00	2.48	1.70	2.40	.00
Household insurance35	.46	.37	.47	.37	.48	.38	.51
Owners' equivalent rent of primary residence	21.20	19.49	21.01	.00	22.81	19.74	22.47	.00
Fuels and utilities	4.38	5.40	4.49	5.84	4.64	5.58	4.75	6.32
Household furnishings and operations ...	5.02	5.02	5.02	6.53	4.77	5.51	4.85	6.46
Apparel	4.82	4.24	4.75	6.17	4.32	3.87	4.27	5.68
Transportation	17.77	21.33	18.17	23.62	17.32	21.50	17.78	23.67
Private transportation	16.52	20.59	16.98	22.07	16.21	20.89	16.73	22.27
New and used motor vehicles	8.84	10.99	9.08	11.80	8.69	11.30	8.98	11.95
Motor fuel	3.18	4.48	3.33	4.33	3.16	4.53	3.31	4.41
Public transportation	1.25	.73	1.19	1.55	1.11	.60	1.05	1.40
Medical care	5.56	7.41	5.77	7.50	5.78	7.97	6.03	8.03
Recreation	6.12	6.68	6.19	8.05	5.98	5.98	5.98	7.96
Education and communication	6.07	5.18	5.97	7.76	6.00	5.01	5.89	7.84
Education	2.55	1.50	2.43	3.16	2.56	1.42	2.43	3.23
Communication	3.52	3.68	3.54	4.60	3.44	3.60	3.46	4.61
Other goods and services	4.16	4.40	4.19	5.45	3.73	3.68	3.73	4.96

¹ The CPI weights are based on biennial periods: the 2002–03 weights use 1999–2000 expenditures, and the 2004–05 weights use 2001–02 expenditures. Relative importances are expenditures of each item as a percent of total expenditures.

² The U.S. HICP-T is defined as the CPI-XT, excluding *owners' equivalent rent of primary residence* and *owners' equivalent rent of secondary residence*.

table defines 12 two-digit categories that are similar to the 8 major groups of the U.S. classification system. In this study, these 2-digit-level index series were calculated for the experimental U.S. HICP.

Comparing U.S. and European inflation

Each European country produces its own national HICP. Eurostat combines national HICP's to produce HICP's for multinational

Table 3. Relative importances of the EICP¹ and the U.S. HICP-T

Code	Category	European Index of Consumer Prices (EICP), 2001	U.S. HICP-T biennial expenditure weights, ² 1999–2000	European Index of Consumer Prices (EICP), 2003	U.S. HICP-T biennial expenditure weights, ² 2001–02
cp00	All-items HICP	100.00	100.00	100.00	100.00
cp01	Food and nonalcoholic beverages	16.00	10.83	15.49	10.71
cp02	Alcoholic beverages, tobacco, and narcotics	4.28	1.99	4.28	1.92
cp03	Clothing and footwear	7.25	5.86	7.21	5.45
cp04	Housing, water, electricity, gas, and other fuels	15.12	13.09	14.55	13.59
cp05	Furnishings, household equipment, and routine maintenance of the house	7.70	6.19	7.48	6.12
cp06	Health	3.66	7.01	3.66	7.49
cp07	Transport	15.08	20.44	14.70	20.34
cp08	Communications	2.71	3.40	2.98	3.49
cp09	Recreation and culture	10.67	9.54	10.61	9.36
cp10	Education	1.00	2.85	1.10	2.93
cp11	Restaurants and hotels	9.49	9.35	9.79	9.44
cp12	Miscellaneous goods and services	7.05	9.44	8.16	9.15

¹ The EICP is the HICP for the 25 countries constituting the European Union beginning May 1, 2004, or the EU25. The EICP is based on the expenditure weight year.

² The U.S. HICP-T is based on biennial periods: indexes for January 2002

through December 2003 are based on expenditure weights for 1999 and 2000; indexes for January 2004 through December 2005 are based on expenditure weights for 2001 and 2002.

groups. A country's weight is its share (within the multinational group) of private domestic consumption expenditures—a component of a country's gross domestic product. The European Index of Consumer Prices (EICP) is the aggregate price index for the entire EU.²⁰ Eurostat also produces indexes for other European areas and groups of countries, such as the eurozone, and then publishes these HICP's in its monthly press release, *Statistics in Focus: Economy and Finance*. Included in the release are the U.S. and Japanese CPI's, which, Eurostat notes, are not strictly comparable to the HICP. Table 4 compares the U.S. CPI-U, the U.S. HICP-T, and the EICP.²¹

The chief sources of greater measured inflation in the United States are motor fuels, gasoline, and medical services and drugs. All of these U.S. indexes have higher weights, and all exhibit greater price increases, than their European counterparts. Off-

setting this relationship a bit, tobacco and alcohol rose more rapidly in the European index and have more weight there as well.

IN SUM, THE DIFFERENCES BETWEEN THE MEASURES should not be overstated. Although there were some noticeable differences for individual years, the two U.S. measures moved similarly over the period of study. Nor were differences between the United States and Europe particularly striking. The fact that the period of study was one of comparatively mild inflation may have something to do with the relative similarity of the measures. The Bureau plans to continue producing the experimental measures, and the conclusions arrived at in this article may be revisited, especially if the underlying inflation situation changes. □

Table 4. Three price indexes, 1997–2005

[December 2001 = 100]

December—	U.S. CPI-U		U.S. HICP-T		EICP	
	Level	Percent change	Level	Percent change	Level	Percent change
1997	91.3	—	92.6	—	91.9	—
1998	92.8	1.6	93.7	1.2	93.3	1.5
1999	95.2	2.7	96.2	2.7	95.4	2.2
2000	98.5	3.4	99.2	3.1	98.0	2.7
2001	100.0	1.6	100.0	.8	100.0	2.1
2002	102.4	2.4	102.2	2.2	102.1	2.1
2003	104.3	1.9	104.1	1.8	104.1	1.9
2004	107.7	3.3	107.9	3.7	106.6	2.4
2005	111.4	3.4	111.9	3.8	108.8	2.1

SOURCES: Bureau of Labor Statistics, Eurostat.

Notes

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¹ The Bureau of Labor Statistics 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. To obtain experimental series referred to in this article, contact either of the authors.

² Until April 30, 2004, the EU consisted of 15 countries, called the “EU15”: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. On May 1, 2004, the Union admitted 10 additional countries (Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, and Slovenia), thereby becoming the “EU25.”

³ This group is the European Monetary Union (EMU), or, less formally, the “eurozone,” and consists of the EU15, less Denmark, Sweden, and the United Kingdom. The 10 countries that joined the EU in 2004 will join the EMU and adopt the euro between 2006 and 2010.

⁴ See W. Erwin Diewert, “Harmonized Indexes of Consumer Prices: Their Conceptual Foundations,” *Zeitschrift für Volkswirtschaft und Statistik* 2002, vol. 138, no. 4, pp. 547–637. Available in English on the Internet at www.econ.ubc.ca/diewert/harindex.pdf. (See also “Annex 1: The Harmonized Indices of Consumer Prices (European Union),” in *The Consumer Price Index Manual: Theory and Practice* (Geneva, International Labor Office, 2004).)

⁵ As of 1990, the noninstitutional urban and metropolitan populations made up about 87 percent of the total U.S. population.

⁶ The HICP covers all (institutional and noninstitutional) households (consisting of either individuals or a group) within the boundaries of a country. The HICP covers all income levels, nationalities, and residence statuses. The U.S. CPI-XT covers all income levels, nationalities, and residence statuses of the urban and rural populations, but not the institutional population, which is about 2.8 percent, mostly residents of nursing homes, military bases, and prisons.

⁷ For an explanation of U.S. CPI methods, see *BLS Handbook of Methods*, chapter 17, “The Consumer Price Index,” on the Internet at www.bls.gov/cpi/home.htm.

⁸ An elementary aggregate is an item category (item stratum) in an index area. The U.S. CPI’s item classification system defines 211 item strata covering all consumer items within the scope of the index. The CPI’s geographic classification system defines 38 urban areas spread across the four U.S. Census regions (Northeast, Midwest, South, and West). (Note that $211 \times 38 = 8,018$.)

The Bureau of Labor Statistics calls the elementary aggregates *basic indexes* to emphasize the fact that the U.S. CPI constructs these indexes out of (lower level) weights. Most other countries’ CPI’s use unweighted formulas to construct indexes for their elementary aggregates.

⁹ The *Consumer Price Index Manual: Theory and Practice* calls this index formula a *Lowe* index. (See chapter 15.)

¹⁰ Unfortunately, CPI expenditure weight processing of rural CE data did not begin until the CE survey for 1999, when the CPI’s processing system changed to accommodate biennial updating of the weights. CPI weights for the period ending December 2001 use data from the 1993, 1994, and 1995 CE surveys. Consequently, because the amount of processing would have been prohibitive, rural weights for pre-2002 index periods were not obtained for this article.

¹¹ In the Northeast region, small urban places are rare, so small metropolitan areas were used instead.

¹² Monthly data were calculated for all series presented and are available on request. For brevity, only the December data are shown in this article.

¹³ For a more complete discussion, see “Consumer Price Indexes for Rent and Rental Equivalence,” a *CPI Fact Sheet* on the subject, on the Internet at www.bls.gov/cpi/cpifact6.htm.

¹⁴ There is some concern in Europe that, because the share of households that are owner-occupied varies widely from country to country, omitting owner-occupied housing costs while including renter-occupied housing costs weakens the international comparability of the HICP. (See Ane-Kathrine Christensen, Julien Dupont,

and Paul Schreyer, “International Comparability of the Consumer Price Index: Owner-Occupied Housing,” paper presented at the OECD Conference on Inflation Measures, Paris, June 21–22, 2005, for more on this point.)

¹⁵ Comparing the weight shares for the CPI-XT and the HICP in table 2 on page 25 shows how these removals increased the importance of the nonhousing items.

¹⁶ This exhibit is an adaptation of a table from Henning Ahnert and Mariagnese Branchi, “The HICP as an Anchor for European Price Statistics,” paper presented at OECD Conference on Inflation Measures: Too High—Too Low—Internationally Comparable? Paris, June 2005. The table compares the HICP with the national price indexes of the EU members. The HICP column in the exhibit is identical to its counterpart in Ahnert and Branchi’s table.

¹⁷ The U.S. CPI nets insurance reimbursements out of the weights for repairs and replacement purchases, rather than from the weights for household and vehicle insurance premiums. Like the HICP, the U.S. CPI also nets out health insurance reimbursements from the weights for

health insurance premiums (and not those of health care providers, such as hospitals).

¹⁸ An earlier, preliminary version of the U.S. HICP was made available to the public. That version, which consisted of the CPI-U less the stratum for *owners’ equivalent rent of primary residence*, rose 16.3 percent between December 1997 and December 2004.

¹⁹ The expenditure shares from the 2001 and 2002 CE surveys are the basis of the weights for the indexes from January 2004 through December 2005; those from the 1999 and 2000 CE surveys are the basis for the indexes from January 2002 through December 2003. When updated for price change to the December before their first use in the index, the expenditure shares are the initial weights for each weight regime. The CPI production system routinely updates shares, but the index simulation system presented here does not, because it works at a more aggregated level.

²⁰ The EICP covered the EU15 until April 2004 and the EU25 thereafter.

²¹ All series were rebased to December 2001. The CPI-U is published on a 1982–84 = 100 basis, the EICP on a 1996 = 100 basis.