

**A Reconciliation between the Consumer Price Index and the Personal
Consumption Expenditures Price Index**

by

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Abstract

The Bureau of Labor Statistics (BLS) prepares the Consumer Price Index for All Urban Consumers (CPI-U), and the Bureau of Economic Analysis prepares the Personal Consumption Expenditures (PCE) chain-type price index. Both indexes measure the prices paid by consumers for goods and services. Because the two indexes are based on different underlying concepts, they are constructed differently, and tend to behave differently over time. From the first quarter of 2002 through the second quarter of 2007, the CPI-U increased 0.4 percentage point per year faster than the PCE price index. This paper details and quantifies the differences in growth rates between the CPI-U and the PCE price index; it provides a quarterly reconciliation of growth rates for the 2002:Q1-2007:Q2 time period.

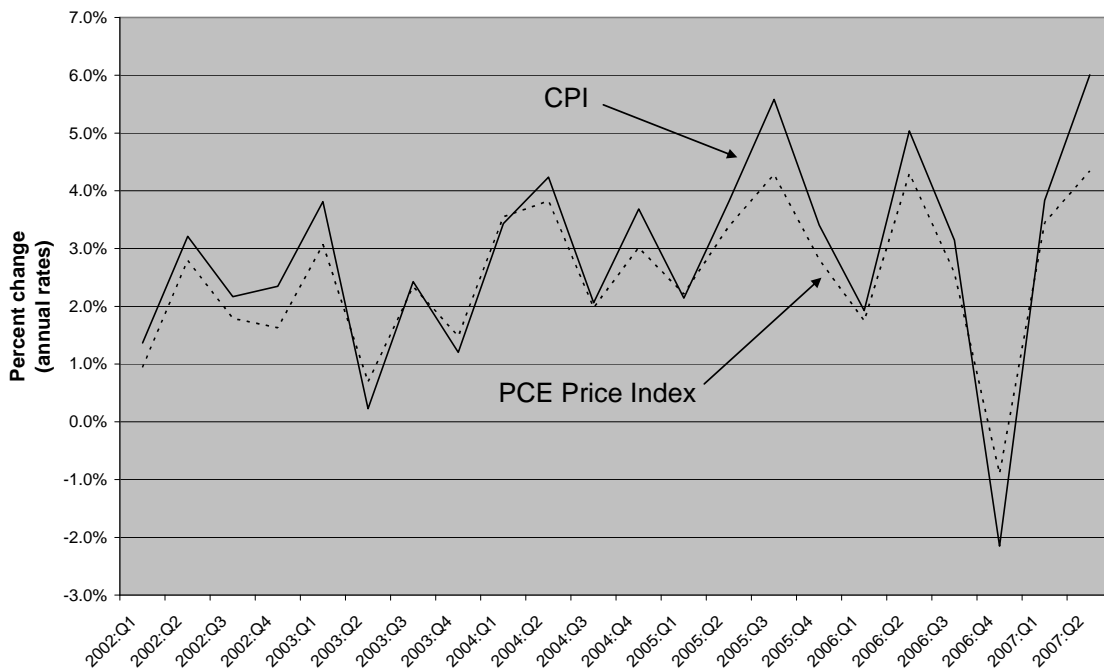
There are several factors that explain the differences in growth rates between the CPI and the PCE price index. First, the indexes are based on different index-number formulas. The CPI-U is based on a Laspeyres index; the PCE price index is based on a Fisher-Ideal index. Second, the relative weights assigned to the detailed item prices in each index are different because they are based on different data sources. The weights used in the CPI-U are based on a household survey, while the weights used in the PCE price index are based on business surveys. Third, there are scope differences between the two indexes—that is, there are items in the CPI-U that are out-of-scope of the PCE price index, and there are items in the PCE price index that are out-of-scope of the CPI-U. And finally, there are differences in the seasonal-adjustment routines and in the detailed price indexes used to construct the two indexes.

Over the 2002:Q1-2007:Q2 time period, this analysis finds that almost half of the 0.4 percentage point difference in growth rates between the CPI-U and the PCE price index was explained by differences in index-number formulas. After adjusting for formula differences, differences in relative weights—primarily “rent of shelter”—more than accounted for the remaining difference in growth rates. Net scope differences, in contrast, partly offset the effect of relative weight differences.

Introduction

In the United States, there are two primary measures of the prices paid by consumers for goods and services. One is the Consumer Price Index for All Urban Consumers (CPI-U, or henceforth CPI) prepared by the Bureau of Labor Statistics (BLS), and the other is the Personal Consumption Expenditures (PCE) chain-type price index prepared by the Bureau of Economic Analysis (BEA). These two price indexes have different purposes and uses; as a result, they are constructed differently and tend to behave differently over time.¹ Figure 1 shows the quarterly growth rates for the two indexes from the first quarter of 2002 through the second quarter of 2007. Although

Figure 1. The CPI and the PCE Price Index



¹ The CPI measures the change in prices paid by urban consumers for a market basket of consumer goods and services; it is primarily used as an economic indicator and as a means of adjusting current-period data for inflation. The PCE price index measures the change in prices paid for goods and services by the personal sector in the U.S. national income and product accounts; it is primarily used for macroeconomic analysis and forecasting.

the magnitude and direction of these differences vary over time, on average, the CPI grew 0.4 percentage point per year faster than the PCE price index over this period.

In recent years, there has been a growing interest in explaining the differences between the CPI and the PCE price index, in part, due to the important roles these indexes play in guiding economic policy. This paper provides a reconciliation of growth rates between the two indexes. It identifies four sources of difference. First, the CPI and the PCE price index are constructed using different index-number formulas. The CPI is based on a modified Laspeyres formula, while the PCE price index is based on a Fisher-Ideal formula. This difference is referred to as the “formula effect.” Second, the relative weights assigned to each of the detailed item prices in the CPI and in the PCE price index are based on different data sources. The relative weights used in the CPI are based primarily on household surveys, while the relative weights used in the PCE price index are based primarily on business surveys. These differences are referred to as the “weight effect.” Third, the CPI measures the out-of-pocket expenditures of all urban households, while the PCE price index measures the goods and services purchased by households and non-profit institutions serving households within the framework of the U.S. national income and product accounts (NIPAs). This conceptual difference implies that some items in the CPI are out-of-scope of the PCE price index, and even more importantly, some items in the PCE price index are out-of-scope of the CPI. These differences are referred to as the “scope effect.” Finally, there are a variety of remaining differences, consisting of seasonal-adjustment differences, price differences, and residual differences. Collectively, these are referred to as “other effects.”

This work is an extension of earlier work to detail and quantify the differences between the CPI and the PCE price index. In 1978, BEA decomposed changes in the CPI and the PCE implicit price deflator for the time period, 1970-1977.² Over that period, the CPI increased 0.5 percentage point per year more than the PCE deflator. Over half of the difference was determined to be the weight effect. The scope effect explained roughly 40 percent of the difference. Differences in the methodologies used by the BLS and the BEA to estimate price changes for owners' equivalent rent were an important part of the scope effect; these differences were partly offset by other scope differences.³ The formula effect and "other effects" were small and offsetting.⁴

In 1981, Triplett investigated the differences between the CPI and the PCE implicit price deflator for the 1972-1980 time period. Over that period, the CPI increased 104.6 percent, while the PCE deflator increased 84.9 percent. The difference between the two indexes was largely driven by differences in the methodologies for estimating price changes for owners' equivalent rent. In fact, these methodological differences accounted for about two-thirds of the difference in growth rates between the CPI and the PCE deflator. Most of the remaining difference was attributed to the weight effect.

² The PCE implicit price deflator was defined as the ratio of current-dollar PCE to constant (1972) dollar PCE.

³ Prior to 1983, the BLS used an asset approach to measure the price change for owners' equivalent rent; prior to 1983, the BEA used the CPI for residential rent to measure this price change. Since 1983, both the BLS and the BEA have used a rental-equivalence approach to measure the price change for owners' equivalent rent.

⁴ The formula effect was defined as the difference in growth rates between the "PCE chain index" and the PCE implicit price deflator. The PCE chain index was estimated using a chained Laspeyres price-index-number formula.

In 2002, Fixler and Jaditz analyzed the CPI and the PCE chain-type implicit price deflator for the time period, 1992:Q1-1997:Q2.⁵ Over that period, the CPI increased 14.1 percent, while the PCE deflator increased 12.5 percent. They identified and quantified differences using the formula, weight, scope, and price effects.⁶ Table 1 summarizes the Fixler-Jaditz results. Much of the difference in growth rates between the CPI and the

Table 1. Summary of Differences between the CPI and the PCE Implicit Price Deflator, 1992:Q1-1997:Q2

| | |
|---|--------------|
| (1) PCE chain-type implicit price deflator (percent change) | 12.5 |
| (2) <i>plus</i> : Formula effect (percentage points) | 0.86 |
| (3) <i>Equals</i> : PCE fixed-weight price index (percent change) | 13.3 |
| (4) <i>plus</i> : Price and weight effects (percentage points) | 1.80 |
| (5) <i>plus</i> : Scope effect (percentage points) | -1.01 |
| (6) <i>Equals</i> : CPI (percent change) | 14.1 |

Source: Fixler and Jaditz (2002), Table 9.

PCE deflator was attributed to the price and weight effects⁷. The formula effect also accounted for a large share of the difference. The scope effect partly offset the price and weight effects.

Johnson (2003) extended the Fixler-Jaditz methodology for the time period, 1997:Q4-2001:Q4. Table 2 summarizes Johnson's results. Most of the effects were similar in magnitude to the Fixler-Jaditz results; the formula effect was somewhat larger.⁸

⁵ Fixler and Jaditz completed their analysis in 1998; the resulting paper was published in 2002.

⁶ In general, a "price effect" accounts for differences that result from using different item-level price indexes to deflate comparable items in the CPI and the PCE price index.

⁷ Within the price and weight effect, much of the difference was attributed to the BEA's use of price measures other than item-level CPIs.

Table 2. Summary of Differences between the CPI and the PCE Implicit Price Deflator, 1997:Q4–2001:Q4

| | |
|---|--------------|
| (1) PCE chain-type implicit price deflator (percent change) | 7.2 |
| (2) <i>plus</i> : Formula effect (percentage points) | 1.82 |
| (3) <i>Equals</i> : PCE fixed-weight price index (percent change) | 9.1 |
| (4) <i>plus</i> : Price and weight effects (percentage points) | 1.79 |
| (5) <i>plus</i> : Scope effect (percentage points) | -1.06 |
| (6) <i>Equals</i> : CPI (percent change) | 9.8 |

Source: Estimates derived from Johnson (2003).

Drawing on this earlier research, this paper identifies a framework for quantifying the differences in growth rates between the CPI and the PCE price index on an ongoing basis. It consists of three sections. The first section provides a detailed discussion of the four sources of difference. The second section presents the reconciliation framework and discusses results for the time period, 2002:Q1-2007:Q2. The final section provides a summary and offers some concluding remarks.

Sources of difference

This section describes four sources of difference—or “effects”—used to explain the variation in growth rates between the CPI and the PCE price index. While there are a large number of effects that may be more-or-less important in explaining differences in growth rates for a given time period, the four effects identified below were determined to

⁸ In addition to these reconciliations, there have been several papers comparing the CPI and the PCE price index. See, for example, Todd E. Clark, “A Comparison of the CPI and the PCE Price Index,” Federal Reserve Bank of Kansas City, Economic Review, Third Quarter 1999, pp. 15-29; Charles L. Schultze and Christopher Mackie, editors, “At What Price? Conceptualizing and Measuring Cost-of-Living and Price Indexes,” national Research Council Panel on Conceptual, Measurement, and Other Statistical Issues in Developing Cost-of-Living Indexes, Washington, DC, National Academy Press; David E. Lebow and Jeremy B. Rudd, “Measurement Error in the CPI: Where Do We Stand?” *Journal of Economic Literature*, March 2003, pp. 159-201. Consumer expenditures were compared in Thesia I. Garner, George Janini, William Passero, Laura Paszkiewicz, and Mark Vendemia, “The CE and the PCE: a comparison,” *Monthly Labor Review*, September 2006, Vol. 129, Number 9, pp. 20-46.

be important for reconciling the CPI and PCE price measures over a long time period and on an ongoing basis. It is important to keep in mind that there is no “best” set of effects. Likewise, there is no best way of estimating a particular effect and no best order in which to estimate the separate effects. These choices require weighing a variety of factors, including accuracy, transparency, and computational simplicity.

Formula effect. The CPI and the PCE price index are based on different price-index-number formulas. The CPI is based on a modified Laspeyres formula, while the PCE price index is based on a Fisher-Ideal formula. A Laspeyres price relative is defined as

$$L_{t,t+1} = \sum_i (p^i_{t+1} q^i_t) / \sum_i (p^i_t q^i_t),$$

where p^i_t is the price of item i in period t , and q^i_t is the quantity of item i in period t .⁹ If t is set equal to a specific base period, say $t = 0$, then the resulting index is referred to as a fixed-weight Laspeyres price index—

$$\text{Fixed-weight } L_t = \sum_i (p^i_t q^i_0) / \sum_i (p^i_0 q^i_0).$$

The CPI is based on the fixed-weight Laspeyres price index, where the base period is updated every two years.¹⁰

The PCE price index is based on a Fisher-Ideal price-index-number formula.

First, note that a Paasche price relative is defined as

$$P_{t,t+1} = \sum_i (p^i_{t+1} q^i_{t+1}) / \sum_i (p^i_t q^i_{t+1}).$$

The Fisher-Ideal price relative follows as the geometric mean of the Laspeyres and

⁹ In this paper, the term “price relative” refers to an aggregate measure of price change between two adjacent periods.

¹⁰ Because the base period is necessarily updated with a time lag, the CPI is said to be based on a “modified” Laspeyres index.

Paasche price relatives—that is,

$$F_{t,t+1} = (L_{t,t+1} \cdot P_{t,t+1})^{1/2}.$$

In general, the Paasche price relative is less than the Laspeyres price relative, implying that the Fisher-Ideal price relative is generally less than the Laspeyres price relative.

Next, a Fisher-Ideal chain-type price index is obtained by multiplicatively “chaining” the Fisher-Ideal price relatives—that is,

$$\text{Chained } F_{t+1} = (\text{chained } F_t) \cdot (F_{t,t+1}).$$

The PCE price index is based on the Fisher-Ideal chain-type price index.

The fundamental difference between the fixed-weight Laspeyres price index and the Fisher-Ideal chain-type price index involves the extent to which the two indexes reflect consumer substitution among detailed items as the relative prices of those items change. In theory, the Fisher-Ideal price index is the preferred index because it better reflects this substitution; in this regard, the Fisher-Ideal index is referred to as a “superlative” index.¹¹ In practice, the Fisher-Ideal index is difficult to implement because it requires expenditure data for the most recent time period for which the index is being estimated. It is often the case that these data are not available. For example, data on household consumer expenditures that are used to estimate the CPI are not available for the most current time period. Therefore, the Laspeyres index—with regular base-period updates—provides a practical alternative to the Fisher-Ideal index.

It also should be noted that the BLS publishes the Chained Consumer Price Index for All Urban Consumers. This price index, like the PCE chain-type price index, is based

¹¹ The Fisher-Ideal index is just one example of a superlative index; another example is the Tornqvist index. Both of these indexes possess a number of desirable properties that make them preferred over the fixed-weight Laspeyres index. See Diewert (1976) for a discussion of superlative index numbers.

on a superlative index-number formula that better reflects consumer substitution among item categories.¹² Because both the Chained CPI and the PCE chain-type price index are based on superlative index-number formulas, they tend to behave more similarly over time. The two indexes still diverge because of scope, weight, and other effects.

To estimate the formula effect, the detailed price and quantity data used to estimate the PCE price index were re-aggregated using the Laspeyres price-index formula. The base periods used in this calculation were consistent with the base periods used to estimate the CPI: Estimates for 2002-2003 were prepared using a 1999-2000 base period, estimates for 2004-2005 used a 2001-2002 base period, and estimates for 2006 used 2003-2004 base period. The formula effect was estimated as the percentage-point difference in growth rates between the PCE chain-type price index and the PCE fixed-weight price index.

From the outset, the formula effect was expected to be negative because the Fisher-Ideal price relative (on which the PCE chain-type price index is based) is generally less than the Laspeyres price relative (on which the PCE fixed-weight price index is based). In addition, the formula effect was expected to be more important for those categories in which there were large relative price changes—for example, categories such as gasoline and computers.

Weight effect. The relative weights assigned to comparable item prices in the CPI and in the PCE price index differ because these weights are based on different data sources. The relative weights used in the CPI are based on the *Consumer Expenditure Survey*, a household survey conducted for the BLS by the Census Bureau. The relative

¹² The Chained Consumer Price Index for All Urban Consumers is based on the Tornqvist chain-type price index. For more information on the Chained Consumer Price Index for All Urban Consumers, go to http://www.bls.gov/cpi/super_paris.pdf.

weights used in the PCE price index are based primarily on business surveys—for example, the Census Bureau’s annual and monthly retail trade surveys, the *Service Annual Survey*, and the *Quarterly Services Survey*. The differences in response rates and response quality between household and business surveys are well known.¹³ These issues, such as “recall bias,” may play a key role in explaining differences in the resulting weights. In addition, there are differences in *total* consumer spending which may also impact the relative weights. (Appendix Table A provides a detailed inventory of the weight differences between the CPI and the PCE price index.)

To estimate the weight effect, the differences in the relative weights between comparable items in the PCE *fixed-weight* price index and the CPI are calculated. These differences are then multiplied by the growth rates in the corresponding item price indexes to yield percentage-point contributions. That is, the weight effect is computed as

$$(W_{PCE}^i - W_{CPI}^i) \cdot [(p_{t+1}^i / p_t^i) - 1],$$

where W_{PCE}^i is the average relative weight for item i in the PCE fixed-weight price index; W_{CPI}^i is the average relative weight for item i in the CPI; and p_t^i is the price for item i used in both the CPI and PCE price index calculations.¹⁴ It is important to note that weight differences resulting from different base periods are not accounted for in the weight effect; these differences are accounted for in the formula effect.

¹³ See Garner et. al. (2006) for a thorough examination of the differences between the *Consumer Expenditure Survey* and the expenditure surveys used to estimate the PCE price index.

¹⁴ Symmetric to the weight effect is a “price effect.” It is estimated as

$$W^i \cdot [(p_{PCE, t+1}^i / p_{PCE, t}^i) - 1] - [(p_{CPI, t+1}^i / p_{CPI, t}^i) - 1],$$

where W^i is the average relative weight used for item i in the CPI calculation; $p_{PCE, t}^i$ is the price for item i used in the PCE price index calculation; and $p_{CPI, t}^i$ is the price for item i used in the CPI calculation. Empirically, the price effect is small; for this analysis, it is included in “other effects.”

Scope effect. The CPI measures the out-of-pocket expenditures of all urban households, while the PCE price index measures the goods and services purchased by individuals and non-profit institutions within the framework of the NIPAs. As such, there are items in the CPI that can be viewed as out-of-scope for the PCE price index, and there are items in the PCE price index that can be viewed as out-of-scope for the CPI. For example, medical care services included in the CPI consist only of those services directly purchased by consumers. On the other hand, medical care services in the PCE price index include those services directly purchased by consumers *and* those services paid for on behalf of consumers—for example, medical care services paid for by employers through employer-provided health insurance and medical care services paid for by governments through programs such as Medicare and Medicaid. (Appendix Table A provides a detailed inventory of the scope differences between the CPI and the PCE price index.)

The scope effect adjusts for items that are not comparable between the CPI and the PCE price index using a two-stage approach. First, the percentage-point contributions to the growth in the PCE fixed-weight price index for those items that are out-of-scope for the CPI are calculated. Second, the percentage-point contributions to growth in the CPI for those items that are out-of-scope for the PCE price index are calculated. As will be discussed in the next section, the reconciliation algorithm begins with the PCE price index and ends with the CPI; therefore, the contributions for PCE items that are out-of-scope for the CPI enter the reconciliation with negative sign, and the contributions for CPI items that are out-of-scope for the PCE price index enter with positive sign. A “net” scope effect is also calculated as the difference between the contributions for CPI items

that are out-of-scope for the PCE price index and the contributions for PCE items that are out-of-scope for the CPI.

Other effects. There are a variety of remaining differences—including seasonal-adjustment differences, price differences, and residual differences—that must be taken into account for a complete reconciliation of the CPI and the PCE price index.

Seasonal-adjustment differences result from two factors: Differences in revision cycles and differences in aggregation. First, the BLS and the BEA revision cycles differ. For example, in February 2007, the BLS revised the CPI seasonal factors for the time period, 2002-2006. In July 2007, BEA revised the NIPAs for the time period, 2004-2006; however, because of the BEA’s revision policy of only revising the three most recent years during an annual revision, the revised seasonal-adjustment factors for 2002-2003 were not incorporated into the PCE price index. Second, the BEA and the BLS aggregation procedures differ. The BEA uses the detailed, item-level CPI price indexes (and their associated seasonal-adjustment factors) in constructing the PCE price index. In contrast, the BLS uses 73 “selected CPI components” (and their associated seasonal-adjustment factors) in constructing the seasonally-adjusted CPI. Because the selected CPI components are seasonally adjusted independently of the item-level CPI price indexes, there are often differences in the seasonal-adjustment factors used in the CPI and the PCE price index. An adjustment is made to account for these differences.

There are two comparable items used to construct the PCE price index for which the BEA does not use an item-level CPI. The price index used to deflate passenger air transportation is an implicit price deflator based on passenger revenues and the number of miles traveled by passengers. Also, the gasoline price index used to construct the PCE

price index differs from the gasoline price index used to construct the CPI because of mandated pollution control measures.¹⁵ In these cases, an adjustment is made to account for price differences.¹⁶

Finally, there are remaining sources of difference between the CPI and the PCE price index that are not addressed by this analysis. In general, these differences are small. They are computed residually and provide a “balancing item” for the reconciliation.

Reconciliation

This section presents the reconciliation of the CPI and the PCE price index for the time period, 2002:Q1-2007:Q2.¹⁷ Table 3 presents the results on a quarterly basis. Notice that the reconciliation begins with the growth rate in the PCE chain-type price index and ends with the growth rate in the CPI.¹⁸ The reconciliation algorithm is summarized in the following seven steps.

- i. The quarterly growth rates (at annual rates) in the PCE chain-type price index (line 1) and the quarterly growth rates (at annual rates) in the CPI (line 29) are calculated for the time period, 2002:Q1-2007:Q2.
- ii. The formula effect is estimated. Line 2 shows the percentage-point contribution of the formula effect to the growth rate in the PCE chain-type

¹⁵ In the CPI, mandated pollution control regulations, such as improving auto emissions, are considered price increases. In the PCE price index, these are considered quality changes. See <http://www.bls.gov/cpi/cpitreat.pdf> for more information on how mandated pollution control regulations are treated in the CPI.

¹⁶ See footnote 14.

¹⁷ Data for 2002:Q2 are based on the “preliminary” GDP estimate that was released on August 30, 2007.

¹⁸ An alternative would be to begin with the growth rate in the CPI and end with the growth rate in the PCE price index. Either way is correct; there is no “best” starting point for the reconciliation.

Table 3. Quarterly Reconciliation between the CPI and the PCE price index, 2002:Q1-2007:Q2

| Line | | 2002 | | | |
|------|--|--------------|--------------|--------------|--------------|
| | | I | II | III | IV |
| 1 | PCE chain-type price index (percent change at annual rates) | 0.9 | 2.8 | 1.8 | 1.7 |
| 2 | Less: Formula effect (percentage points) | -0.08 | -0.17 | -0.14 | -0.08 |
| 3 | Gasoline & oil | 0.02 | -0.04 | 0.00 | -0.01 |
| 4 | Computers peripherals & software | -0.06 | -0.04 | -0.05 | -0.08 |
| 5 | Video and audio goods | -0.01 | -0.01 | -0.02 | -0.02 |
| 6 | Tobacco products | 0.00 | -0.02 | -0.02 | 0.01 |
| 7 | Medical care services | 0.00 | 0.01 | 0.02 | 0.03 |
| 8 | Electricity, gas, fuel oil and other household fuels | 0.02 | -0.01 | 0.00 | -0.01 |
| 9 | Housing | -0.01 | -0.01 | -0.01 | -0.02 |
| 10 | Food | -0.01 | 0.00 | 0.00 | -0.01 |
| 11 | Other | -0.03 | -0.04 | -0.05 | 0.03 |
| 12 | Equals: PCE fixed-weight price index (percent change at annual rates) | 1.0 | 3.0 | 1.9 | 1.7 |
| 13 | Less: Weight effect (percentage points) | -0.30 | -0.65 | -0.49 | -0.54 |
| 14 | Rent | -0.57 | -0.47 | -0.43 | -0.40 |
| 15 | Gasoline & oil | 0.08 | -0.36 | -0.03 | -0.10 |
| 16 | Electricity, gas, fuel oil and other household fuels | 0.08 | 0.00 | 0.00 | -0.06 |
| 17 | Other | 0.11 | 0.19 | -0.02 | 0.03 |
| 18 | Less: Scope effect--PCE items out-of-scope of the CPI (percentage points) | 0.33 | 0.50 | 0.67 | 0.36 |
| 19 | Physicians | -0.13 | 0.01 | 0.04 | 0.04 |
| 20 | Hospitals and nursing homes | 0.32 | 0.23 | 0.32 | 0.34 |
| 21 | Services furnished without payment by financial intermediaries except life insurance and pension plans | 0.08 | 0.02 | -0.03 | -0.03 |
| 22 | Foreign travel by U.S. residents | 0.00 | 0.10 | 0.16 | -0.03 |
| 23 | Other | 0.06 | 0.13 | 0.18 | 0.04 |
| 24 | Plus: Scope effect--CPI items out-of-scope of the PCE price index (percentage points) | 0.24 | 0.23 | 0.27 | 0.28 |
| 25 | Physicians | 0.03 | 0.01 | 0.08 | 0.06 |
| 26 | Hospitals and related services | 0.13 | 0.14 | 0.11 | 0.14 |
| 27 | Other | 0.09 | 0.08 | 0.08 | 0.08 |
| 28 | Less: Other effects | -0.12 | 0.11 | -0.15 | -0.19 |
| 29 | Equals: CPI (percent change at annual rates) | 1.3 | 3.2 | 2.2 | 2.4 |

Table 3. Quarterly Reconciliation between the CPI and the PCE price index, 2002:Q1-2007:Q2

| Line | | 2003 | | | |
|------|--|--------------|--------------|--------------|--------------|
| | | I | II | III | IV |
| 1 | PCE chain-type price index (percent change at annual rates) | 3.1 | 0.7 | 2.4 | 1.5 |
| 2 | Less: Formula effect (percentage points) | -0.25 | -0.03 | -0.18 | -0.11 |
| 3 | Gasoline & oil | -0.08 | 0.04 | -0.03 | 0.01 |
| 4 | Computers peripherals & software | -0.05 | -0.07 | -0.09 | -0.03 |
| 5 | Video and audio goods | -0.02 | -0.02 | -0.03 | -0.01 |
| 6 | Tobacco products | 0.00 | 0.01 | -0.01 | 0.00 |
| 7 | Medical care services | 0.02 | 0.06 | 0.04 | 0.04 |
| 8 | Electricity, gas, fuel oil and other household fuels | -0.05 | 0.02 | 0.00 | 0.00 |
| 9 | Housing | -0.02 | -0.01 | -0.02 | -0.02 |
| 10 | Food | -0.01 | -0.01 | -0.02 | -0.05 |
| 11 | Other | -0.03 | -0.04 | -0.03 | -0.04 |
| 12 | Equals: PCE fixed-weight price index (percent change at annual rates) | 3.3 | 0.7 | 2.5 | 1.6 |
| 13 | Less: Weight effect (percentage points) | -1.11 | -0.15 | -0.50 | -0.15 |
| 14 | Rent of shelter | -0.38 | -0.21 | -0.28 | -0.36 |
| 15 | Gasoline & oil | -0.45 | 0.30 | -0.19 | 0.08 |
| 16 | Electricity, gas, fuel oil and other household fuels | -0.22 | -0.18 | 0.01 | 0.04 |
| 17 | Other | -0.06 | -0.06 | -0.04 | 0.08 |
| 18 | Less: Scope effect--PCE items out-of-scope of the CPI (percentage points) | 0.51 | 0.81 | 0.79 | 1.02 |
| 19 | Physicians | -0.04 | 0.18 | 0.10 | 0.05 |
| 20 | Hospitals and nursing homes | 0.40 | 0.27 | 0.29 | 0.31 |
| 21 | Services furnished without payment by financial intermediaries except life insurance and pension plans | -0.02 | -0.02 | -0.02 | 0.00 |
| 22 | Foreign travel by U.S. residents | 0.09 | 0.12 | 0.02 | 0.09 |
| 23 | Other | 0.08 | 0.27 | 0.40 | 0.57 |
| 24 | Plus: Scope effect--CPI items out-of-scope of the PCE price index (percentage points) | 0.18 | 0.12 | 0.24 | 0.33 |
| 25 | Physicians | 0.02 | 0.03 | 0.03 | 0.05 |
| 26 | Hospitals and related services | 0.09 | 0.06 | 0.13 | 0.10 |
| 27 | Other | 0.07 | 0.03 | 0.08 | 0.18 |
| 28 | Less: Other effects | 0.27 | -0.08 | 0.05 | -0.13 |
| 29 | Equals: CPI (percent change at annual rates) | 3.8 | 0.2 | 2.4 | 1.2 |

Table 3. Quarterly Reconciliation between the CPI and the PCE price index, 2002:Q1-2007:Q2

| Line | | 2004 | | | |
|------|--|--------------|--------------|--------------|--------------|
| | | I | II | III | IV |
| 1 | PCE chain-type price index (percent change at annual rates) | 3.5 | 3.8 | 2.0 | 3.0 |
| 2 | Less: Formula effect (percentage points) | -0.07 | -0.12 | -0.16 | -0.21 |
| 3 | Gasoline & oil | -0.02 | -0.03 | 0.00 | -0.03 |
| 4 | Computers peripherals & software | -0.02 | -0.02 | -0.03 | -0.06 |
| 5 | Video and audio goods | -0.01 | -0.02 | -0.02 | -0.01 |
| 6 | Tobacco products | 0.00 | 0.00 | -0.01 | 0.00 |
| 7 | Medical care services | 0.02 | 0.01 | 0.01 | 0.00 |
| 8 | Electricity, gas, fuel oil and other household fuels | -0.01 | 0.00 | -0.01 | -0.03 |
| 9 | Housing | -0.01 | -0.01 | -0.01 | -0.01 |
| 10 | Food | 0.00 | -0.01 | -0.01 | -0.02 |
| 11 | Other | -0.02 | -0.04 | -0.07 | -0.05 |
| 12 | Equals: PCE fixed-weight price index (percent change at annual rates) | 3.6 | 4.0 | 2.1 | 3.3 |
| 13 | Less: Weight effect (percentage points) | -0.51 | -0.96 | -0.57 | -0.86 |
| 14 | Rent of shelter | -0.29 | -0.44 | -0.35 | -0.30 |
| 15 | Gasoline & oil | -0.31 | -0.35 | -0.01 | -0.27 |
| 16 | Electricity, gas, fuel oil and other household fuels | -0.11 | -0.06 | -0.10 | -0.09 |
| 17 | Other | 0.21 | -0.12 | -0.12 | -0.20 |
| 18 | Less: Scope effect--PCE items out-of-scope of the CPI (percentage points) | 1.21 | 1.08 | 0.80 | 0.80 |
| 19 | Physicians | 0.13 | 0.03 | 0.03 | 0.04 |
| 20 | Hospitals and nursing homes | 0.40 | 0.36 | 0.30 | 0.31 |
| 21 | Services furnished without payment by financial intermediaries except life insurance and pension plans | 0.03 | 0.15 | 0.03 | 0.06 |
| 22 | Foreign travel by U.S. residents | 0.08 | 0.09 | 0.08 | 0.09 |
| 23 | Other | 0.58 | 0.45 | 0.36 | 0.30 |
| 24 | Plus: Scope effect--CPI items out-of-scope of the PCE price index (percentage points) | 0.35 | 0.25 | 0.24 | 0.26 |
| 25 | Physicians | 0.10 | 0.07 | 0.04 | 0.05 |
| 26 | Hospitals and related services | 0.08 | 0.07 | 0.08 | 0.08 |
| 27 | Other | 0.17 | 0.11 | 0.12 | 0.14 |
| 28 | Less: Other effects | -0.22 | -0.16 | 0.03 | -0.10 |
| 29 | Equals: CPI (percent change at annual rates) | 3.5 | 4.3 | 2.1 | 3.7 |

Table 3. Quarterly Reconciliation between the CPI and the PCE price index, 2002:Q1-2007:Q2

| Line | | 2005 | | | |
|------|--|--------------|--------------|--------------|--------------|
| | | I | II | III | IV |
| 1 | PCE chain-type price index (percent change at annual rates) | 2.2 | 3.4 | 4.3 | 2.8 |
| 2 | Less: Formula effect (percentage points) | -0.11 | -0.26 | -0.53 | -0.24 |
| 3 | Gasoline & oil | 0.00 | -0.05 | -0.23 | 0.06 |
| 4 | Computers peripherals & software | -0.04 | -0.04 | -0.06 | -0.05 |
| 5 | Video and audio goods | -0.03 | -0.02 | -0.03 | -0.03 |
| 6 | Tobacco products | -0.02 | 0.00 | -0.02 | -0.01 |
| 7 | Medical care services | 0.02 | 0.00 | 0.00 | 0.00 |
| 8 | Electricity, gas, fuel oil and other household fuels | -0.01 | -0.02 | -0.06 | -0.10 |
| 9 | Housing | -0.01 | -0.01 | -0.02 | -0.01 |
| 10 | Food | 0.01 | -0.01 | 0.01 | -0.01 |
| 11 | Other | -0.03 | -0.11 | -0.13 | -0.09 |
| 12 | Equals: PCE fixed-weight price index (percent change at annual rates) | 2.3 | 3.6 | 4.8 | 3.1 |
| 13 | Less: Weight effect (percentage points) | -0.47 | -0.79 | -1.29 | -1.11 |
| 14 | Rent of shelter | -0.41 | -0.35 | -0.35 | -0.39 |
| 15 | Gasoline & oil | 0.08 | -0.32 | -0.84 | 0.14 |
| 16 | Electricity, gas, fuel oil and other household fuels | -0.12 | -0.16 | -0.24 | -0.68 |
| 17 | Other | -0.02 | 0.04 | 0.15 | -0.18 |
| 18 | Less: Scope effect--PCE items out-of-scope of the CPI (percentage points) | 0.84 | 0.92 | 0.80 | 0.91 |
| 19 | Physicians | 0.12 | 0.06 | 0.05 | 0.05 |
| 20 | Hospitals and nursing homes | 0.33 | 0.28 | 0.32 | 0.41 |
| 21 | Services furnished without payment by financial intermediaries except life insurance and pension plans | 0.02 | 0.14 | 0.15 | 0.15 |
| 22 | Foreign travel by U.S. residents | 0.05 | 0.13 | 0.04 | -0.08 |
| 23 | Other | 0.33 | 0.31 | 0.24 | 0.37 |
| 24 | Plus: Scope effect--CPI items out-of-scope of the PCE price index (percentage points) | 0.28 | 0.23 | 0.19 | 0.22 |
| 25 | Physicians | 0.06 | 0.06 | 0.04 | 0.03 |
| 26 | Hospitals and related services | 0.10 | 0.07 | 0.06 | 0.10 |
| 27 | Other | 0.12 | 0.10 | 0.09 | 0.09 |
| 28 | Less: Other effects | 0.07 | -0.12 | -0.11 | 0.07 |
| 29 | Equals: CPI (percent change at annual rates) | 2.1 | 3.9 | 5.6 | 3.4 |

Table 3. Quarterly Reconciliation between the CPI and the PCE price index, 2002:Q1-2007:Q2

| Line | | 2006 | | | |
|------|--|--------------|--------------|--------------|-------------|
| | | I | II | III | IV |
| 1 | PCE chain-type price index (percent change at annual rates) | 1.7 | 4.3 | 2.6 | -0.9 |
| 2 | Less: Formula effect (percentage points) | -0.09 | -0.19 | -0.13 | 0.05 |
| 3 | Gasoline & oil | 0.03 | -0.13 | -0.02 | 0.18 |
| 4 | Computers peripherals & software | -0.03 | -0.05 | -0.03 | -0.02 |
| 5 | Video and audio goods | -0.02 | -0.02 | -0.03 | -0.04 |
| 6 | Tobacco products | 0.00 | 0.00 | 0.00 | 0.00 |
| 7 | Medical care services | -0.01 | -0.01 | 0.00 | 0.00 |
| 8 | Electricity, gas, fuel oil and other household fuels | 0.02 | 0.06 | 0.00 | 0.02 |
| 9 | Housing | -0.01 | 0.00 | 0.00 | 0.00 |
| 10 | Food | 0.00 | 0.00 | -0.01 | -0.01 |
| 11 | Other | -0.07 | -0.05 | -0.03 | -0.07 |
| 12 | Equals: PCE fixed-weight price index (percent change at annual rates) | 1.8 | 4.5 | 2.7 | -1.0 |
| 13 | Less: Weight effect (percentage points) | -0.61 | -1.07 | -0.82 | 0.42 |
| 14 | Rent of shelter | -0.50 | -0.73 | -0.69 | -0.63 |
| 15 | Gasoline & oil | 0.13 | -0.59 | -0.09 | 0.77 |
| 16 | Electricity, gas, fuel oil and other household fuels | -0.14 | 0.23 | 0.03 | 0.03 |
| 17 | Other | -0.09 | 0.02 | -0.06 | 0.25 |
| 18 | Less: Scope effect--PCE items out-of-scope of the CPI (percentage points) | 0.56 | 0.82 | 0.72 | 0.73 |
| 19 | Physicians | -0.04 | 0.05 | 0.09 | 0.04 |
| 20 | Hospitals and nursing homes | 0.27 | 0.32 | 0.33 | 0.28 |
| 21 | Services furnished without payment by financial intermediaries except life insurance and pension plans | -0.06 | -0.01 | -0.07 | 0.15 |
| 22 | Foreign travel by U.S. residents | -0.03 | 0.14 | 0.05 | -0.06 |
| 23 | Other | 0.42 | 0.32 | 0.33 | 0.32 |
| 24 | Plus: Scope effect--CPI items out-of-scope of the PCE price index (percentage points) | 0.14 | 0.23 | 0.22 | 0.20 |
| 25 | Physicians | -0.01 | 0.03 | 0.03 | 0.05 |
| 26 | Hospitals and related services | 0.12 | 0.12 | 0.09 | 0.07 |
| 27 | Other | 0.04 | 0.11 | 0.14 | -0.01 |
| 28 | Less: Other effects | 0.11 | -0.12 | -0.11 | 0.24 |
| 29 | Equals: CPI (percent change at annual rates) | 1.9 | 5.0 | 3.1 | -2.1 |

Table 3. Quarterly Reconciliation between the CPI and the PCE price index, 2002:Q1-2007:Q2

| Line | | 2007 | |
|------|--|--------------|--------------|
| | | I | II |
| 1 | PCE chain-type price index (percent change at annual rates) | 3.5 | 4.2 |
| 2 | Less: Formula effect (percentage points) | -0.21 | -0.49 |
| 3 | Gasoline & oil | -0.06 | -0.27 |
| 4 | Computers peripherals & software | -0.01 | -0.03 |
| 5 | Video and audio goods | -0.04 | -0.03 |
| 6 | Tobacco products | -0.03 | 0.00 |
| 7 | Medical care services | 0.02 | 0.00 |
| 8 | Electricity, gas, fuel oil and other household fuels | -0.02 | -0.02 |
| 9 | Housing | -0.01 | 0.00 |
| 10 | Food | 0.01 | 0.00 |
| 11 | Other | -0.06 | -0.13 |
| 12 | Equals: PCE fixed-weight price index (percent change at annual rates) | 3.7 | 4.7 |
| 13 | Less: Weight effect (percentage points) | -0.74 | -1.48 |
| 14 | Rent of shelter | -0.55 | -0.40 |
| 15 | Gasoline & oil | -0.17 | -0.75 |
| 16 | Electricity, gas, fuel oil and other household fuels | -0.21 | -0.07 |
| 17 | Other | 0.19 | -0.25 |
| 18 | Less: Scope effect--PCE items out-of-scope of the CPI (percentage points) | 1.05 | 0.58 |
| 19 | Physicians | 0.49 | 0.01 |
| 20 | Hospitals and nursing homes | 0.27 | 0.23 |
| 21 | Services furnished without payment by financial intermediaries except life insurance and pension plans | -0.08 | 0.01 |
| 22 | Foreign travel by U.S. residents | 0.04 | 0.09 |
| 23 | Other | 0.33 | 0.24 |
| 24 | Plus: Scope effect--CPI items out-of-scope of the PCE price index (percentage points) | 0.35 | 0.26 |
| 25 | Physicians | 0.13 | 0.03 |
| 26 | Hospitals and related services | 0.10 | 0.12 |
| 27 | Other | 0.17 | 0.09 |
| 28 | Less: Other effects | -0.14 | -0.12 |
| 29 | Equals: CPI (percent change at annual rates) | 3.9 | 6.0 |

- price index. Lines 3-11 show the percentage-point contributions of selected categories to the growth rate in the PCE chain-type price index.
- iii. The weight effect is estimated. Line 13 shows the percentage-point contribution of the weight effect to the growth rate in the PCE *fixed-weight* price index. Lines 14-17 show the percentage-point contributions of selected categories to the growth rate in the PCE fixed-weight price index.
 - iv. The PCE portion of the scope effect is estimated. Line 18 shows the percentage-point contribution to the growth rate in the PCE fixed-weight price index for those items that are out-of-scope for the CPI. Lines 19-23 show the percentage-point contributions for selected components.
 - v. The CPI portion of the scope effect is estimated. Line 24 shows the percentage-point contribution to the growth rate in the CPI for those items that are out-of-scope for the PCE price index. Lines 25-27 show the percentage-point contributions for selected components.
 - vi. “Other effects” are estimated. Line 28 shows the percentage point contributions of seasonal-adjustment differences, price differences, and other differences.
 - vii. Finally, the growth rate in the CPI is *equal* to the growth rate in the PCE chain-type price index *less* the formula effect, *less* the weight effect, *less* the PCE portion of the scope effect, *plus* the CPI portion of the scope effect, *less* “other effects.”

Highlights of the reconciliation can be seen on Table 4. This table presents average annual estimates for the time period, 2002:Q1-2007:Q2. From the fourth quarter of 2001 through the second quarter of 2007, the PCE chain-type price index (line 1) increased at an average annual rate of 2.5 percent, while the CPI (line 32) increased at an average annual rate of 2.9 percent.

Over that time period, the formula effect (line 2) contributed -0.17 percentage point to the 2.5-percent growth rate in the PCE chain-type price index.¹⁹ As expected, the formula effect was negative, reflecting differences between the fixed-weight Laspeyres price index and the Fisher-Ideal chain-type price index.²⁰ Also, as expected, the formula effect had a larger impact for those categories with large relative price changes—for example, gasoline and oil (line 3) and computers, peripherals, and software (line 4). After adjusting for the formula effect, the PCE *fixed-weight* price index increased at an average annual rate of 2.7 percent (line 12).

The weight effect (line 13) contributed -0.66 percentage point to the 2.7-percent growth in the PCE *fixed-weight* price index. Within the weight effect, the rent of shelter category (line 14)—which includes owners' equivalent rent—made the largest contribution. The relative weight for rent of shelter in the CPI is consistently and significantly higher than its relative weight in the PCE price index.²¹

¹⁹ Recall that the base periods used to estimate the formula effect are consistent with the base periods used to construct the CPI.

²⁰ Again, the BLS does publish another measure of price change, called the Chained Consumer Price Index for All Urban Consumers (C-CPI-U), which employs a superlative index-number formula. The C-CPI-U moves more similarly to the PCE chain-type price index. For example, from the fourth quarter of 2001 through the fourth quarter of 2005 (the last date for which final C-CPI-U data have been published), both the C-CPI-U and the PCE chain-type price index increased 2.5 percent at an annual rate.

²¹ The relative weight for rent of shelter in the CPI is about 32 percent; its relative weight in the PCE price index is about 15 percent. While the data sources for expenditure estimates for rent of shelter and for

Table 4. Reconciliation between the CPI and the PCE price Index, 2002:Q1-2007:Q2

| Line | | 2002:Q1-2007:Q2 |
|------|--|-----------------|
| 1 | PCE chain-type price index (average annual percent change) | 2.5 |
| 2 | Less: Formula effect (percentage points) | -0.17 |
| 3 | Gasoline & oil | -0.03 |
| 4 | Computers peripherals & software | -0.04 |
| 5 | Video and audio goods | -0.02 |
| 6 | Tobacco products | -0.01 |
| 7 | Medical care services | 0.01 |
| 8 | Electricity, gas, fuel oil and other household fuels | -0.01 |
| 9 | Housing | -0.01 |
| 10 | Food | -0.01 |
| 11 | Other | -0.05 |
| 12 | Equals: PCE fixed-weight price index (average annual percent change) | 2.7 |
| 13 | Less: Weight effect (percentage points) | -0.66 |
| 14 | Rent of shelter | -0.43 |
| 15 | Gasoline & oil | -0.14 |
| 16 | Electricity, gas, fuel oil and other household fuels | -0.09 |
| 17 | Other | 0.00 |
| 18 | Less: Scope effect--PCE items out-of-scope of the CPI (percentage points) | 0.77 |
| 19 | Physicians | 0.06 |
| 20 | Hospitals and nursing homes | 0.31 |
| 21 | Services furnished without payment by financial intermediaries except life insurance and pension plans | 0.03 |
| 22 | Foreign travel by U.S. residents | 0.06 |
| 23 | Other | 0.31 |
| 24 | Plus: Scope effect--CPI items out-of-scope of the PCE price index (percentage points) | 0.24 |
| 25 | Physicians | 0.05 |
| 26 | Hospitals and related services | 0.10 |
| 27 | Other | 0.09 |
| 28 | Less: Other effects | -0.04 |
| 29 | Seasonal adjustment effect | -0.03 |
| 30 | Price effect | -0.01 |
| 31 | All other effects | 0.00 |
| 32 | Equals: CPI (average annual percent change) | 2.9 |

The scope effect consists of two parts. First, items in the PCE price index that are out-of-scope for the CPI (line 18) contributed 0.77 percentage point to the 2.7-percent growth in the PCE fixed-weight price index. Second, items in the CPI that are out-of-scope for the PCE price index (line 24) contributed 0.24 percentage point to the 2.9-percent growth in the CPI. Because the first part of the scope effect enters the reconciliation with negative sign and the second part enters with positive sign, the net contribution of the scope effect was -0.53 percentage point.

Within the scope effect, the components that made the largest contributions were related to medical care services. These included physician services (line 19 and line 25), hospitals and nursing homes (line 20), and hospitals and related services (line 26). For the CPI, medical care services include only those services directly purchased by consumers. For the PCE price index, medical care services include those services purchased directly by consumers and those services paid for on behalf of consumers—for example, medical care services paid for by employers through employer-provided health insurance and medical care services paid for by governments through programs such as Medicare and Medicaid. This difference in concept for medical care services accounted for a large portion of the total scope effect.

Finally, “other effects” (line 28) was negligible over the period—making only a small negative contribution to the 2.7-percent growth rate in the PCE fixed-weight price

owners’ equivalent rent differ in the CPI and the PCE, the aggregate estimates for expenditures in each are similar. The relative weight of rent of shelter is larger in the CPI than in the PCE because total consumer expenditures (for non-rent of shelter components) reported in the *Consumer Expenditure Survey* are less than those estimated from business surveys used to prepare the PCE price index. Differences in total expenditure estimates can be attributed to both the different expenditure survey methods used, as well as differences in scope. See Garner et al (2006) for a thorough description of the differences between expenditure estimates derived from the *Consumer Expenditure Survey* and those estimated for the PCE price index.

index. As mentioned above, this effect includes seasonal-adjustment differences, price differences, and residual differences.

Summary and conclusions

While both the CPI and the PCE price index provide a measure of the change in prices paid by consumers for goods and services, differences in formulas, weights, scope, and other estimating methods cause the two indexes to behave differently over time. This paper summarizes the differences between the two indexes and provides a reconciliation of growth rates for the 2002:Q1-2007:Q2 time period.

Table 5 provides a summary of the reconciliation. For comparability with Table 1

Table 5. Summary of Differences between the CPI and the PCE Chain-type Price Index, 2002:Q1–2007:Q2

| | |
|--|--------------|
| (1) PCE chain-type price index (average annual percent change) | 2.5 |
| (2) <i>plus</i> : Formula effect (percentage points) | 0.17 |
| (3) <i>Equals</i> : PCE fixed-weight price index (average annual percent change) | 2.7 |
| (4) <i>plus</i> : Weight effect (percentage points) | 0.66 |
| (5) <i>plus</i> : Net scope effect (percentage points) | -0.53 |
| (6) <i>plus</i> : Other effects (percentage points) | 0.04 |
| (7) <i>Equals</i> : CPI (average annual percent change) | 2.9 |

and Table 2, Table 5 combines each estimated effect and the sign with which that effect enters the reconciliation into a single estimate.

The PCE price index increased at an average annual rate of 2.5 percent over the period, while the CPI increased at an average annual rate of 2.9 percent—a difference of 0.4 percentage point. The formula effect explained almost half of this growth-rate

difference. After adjusting for formula differences, the weight effect more than accounted for the remaining difference in growth rates between the CPI and the PCE fixed-weight price index. The large weight effect was primarily explained by the larger relative weight for rent of shelter in the CPI than in the PCE price index. The scope effect, in contrast, partly offset the weight effect. “Other effects” had only a minor impact over the period.

Again, it is worth noting that there is no unique way to decompose the differences between the CPI and PCE price index; using different reconciliation algorithms leads to different results. For example, comparing the CPI and the Chained-Consumer Price Index for All Urban Consumers from the fourth quarter of 2001 through the fourth quarter of 2005 (the last year for which final data for the chained CPI have been published) essentially estimates the formula effect last, rather than first. In that case, the formula effect is -0.33 percentage point (2.46 percent minus 2.79 percent), compared with -0.17 percentage point. The reconciliation algorithm selected for this analysis was determined to be the most relevant for reconciling the CPI and PCE price measures over a long time period and on an ongoing basis. It is possible, however, that sources of difference will change over time, either because of structural changes in the economy or because of changes in data sources and estimation procedures. The BLS and the BEA will continue to review differences between the CPI and the PCE price index and will adjust the reconciliation procedures as needed.

In July 2009, BEA plans to introduce a new classification structure for the PCE estimates as part of the 2009 Comprehensive Revision of the NIPAs. The new PCE classification structure will be more closely aligned with the Classification of Individual

Consumption by Purpose (COICOP) and with the Classification of Total Outlays of Non-Profit Institutions (COPNI). Both the COICOP and the COPNI are recommended by the 1993 *System of National Accounts*. This new PCE classification structure will improve the consistency between detailed PCE items and detailed CPIs used for deflation. While the impact of this new classification on the reconciliation process is not yet known, it is expected that small differences—currently being captured as part of weight effects and “other effects”—will be reduced.

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Appendix Table A. Relative Weights for CPI and PCE Categories, December 2005 (2003-2004 Weights)

| Line | PCE Title | CPI Title | PCE | CPI | PCE less CPI |
|------|---|--|----------------|----------------|----------------|
| 1 | Personal Consumption Expenditures | All Items | 100.000 | 100.000 | ..... |
| 2 | Total PCE Comparable | Total CPI Comparable | 75.651 | 93.616 | -17.965 |
| 3 | # | Food and beverages * | 13.158 | 14.648 | -1.489 |
| 4 | People food | Food at home | 6.821 | 7.988 | -1.167 |
| 5 | Alcoholic beverages purchased for off-premise consumption | Alcoholic beverages at home | 1.005 | 0.716 | 0.289 |
| 6 | # | Food away from home * | 4.776 | 5.550 | -0.774 |
| 7 | Meals at other eating places | Full service meals and snacks | 2.062 | 2.594 | -0.532 |
| 8 | # | Limited service meals and snacks | 2.400 | 2.702 | -0.302 |
| 9 | Meals at limited service eating places | ..... | 2.377 | ..... | ..... |
| 10 | Meals at drinking places | ..... | 0.023 | ..... | ..... |
| 11 | # | Food at employee sites and schools | 0.314 | 0.254 | 0.060 |
| 12 | Elementary and secondary school lunch | ..... | 0.080 | ..... | ..... |
| 13 | Higher education school lunch | ..... | 0.100 | ..... | ..... |
| 14 | Food furnished to employees | ..... | 0.134 | ..... | ..... |
| 15 | Other alcoholic beverages | Alcoholic beverages away from home | 0.556 | 0.393 | 0.163 |
| 16 | # | Housing * | 23.318 | 41.936 | -18.618 |
| 17 | # | Shelter | 14.889 | 32.259 | -17.370 |
| 18 | Housing * | Rent of shelter | 14.714 | 31.884 | -17.170 |
| 19 | Owner-occupied nonfarm dwellings--space rent | Owners equivalent rent of primary residence | 10.869 | 23.442 | -12.572 |
| 20 | # | Rent of primary residence | 3.070 | 5.832 | -2.762 |
| 21 | Tenant occupied mobile homes | ..... | 0.077 | ..... | ..... |
| 22 | Tenant occupied stationary homes | ..... | 2.978 | ..... | ..... |
| 23 | Clubs and fraternity housing | ..... | 0.009 | ..... | ..... |
| 24 | Tenant group room & board | ..... | 0.005 | ..... | ..... |
| 25 | Tenant group employee lodging | ..... | 0.001 | ..... | ..... |
| 26 | # | Housing at school, excluding board | 0.179 | 0.151 | 0.028 |
| 27 | Higher education housing | ..... | 0.176 | ..... | ..... |
| 28 | Elementary and secondary education housing | ..... | 0.003 | ..... | ..... |
| 29 | Hotels and motels | Other lodging away from home including hotels and motels | 0.596 | 2.460 | -1.864 |
| 30 | Household insurance premiums | Tenants and household insurance | 0.175 | 0.375 | -0.200 |
| 31 | Household utilities | Fuels and utilities | 3.607 | 5.371 | -1.764 |
| 32 | # | Fuels | 2.828 | 4.494 | -1.666 |
| 33 | Fuel oil and coal | Fuel oil and other fuels | 0.314 | 0.339 | -0.025 |
| 34 | Fuel oil | Fuel oil | 0.183 | 0.232 | -0.049 |
| 35 | Liquefied petroleum gas & other fuel, & farm fuel | Other household fuels | 0.131 | 0.107 | 0.024 |
| 36 | Electricity & gas | Gas (piped) and electricity | 2.514 | 4.155 | -1.641 |
| 37 | Electricity | Electricity | 1.580 | 2.625 | -1.045 |
| 38 | Natural gas | Utility (piped) gas service | 0.934 | 1.530 | -0.596 |
| 39 | Water and other sanitary services | Water and sewer and trash collection services | 0.779 | 0.877 | -0.098 |
| 40 | Water and sewerage maintenance | Water and sewerage maintenance | 0.621 | 0.655 | -0.034 |
| 41 | Refuse collection | Garbage and trash collection | 0.158 | 0.222 | -0.064 |
| 42 | # | Household furnishings and operations * | 4.822 | 4.307 | 0.515 |

Appendix Table A. Relative Weights for CPI and PCE Categories, December 2005 (2003-2004 Weights)

| Line | PCE Title | CPI Title | PCE | CPI | PCE less CPI |
|------|--|---|---------------|---------------|---------------|
| 43 | # | Window and floor coverings and other linens | 0.745 | 0.377 | 0.368 |
| 44 | Floor coverings | Floor coverings | 0.232 | 0.050 | 0.182 |
| 45 | Blinds, rods, and other | Window coverings | 0.071 | 0.100 | -0.029 |
| 46 | Semidurable house furnishings | Other linens | 0.442 | 0.227 | 0.215 |
| 47 | Furniture, including mattresses and bedsprings | Furniture and bedding | 0.863 | 1.013 | -0.150 |
| 48 | Kitchen and other household appliances | Appliances * | 0.485 | 0.332 | 0.153 |
| 49 | # | Major appliances | 0.426 | 0.192 | 0.234 |
| 50 | Major household appliances | ..... | 0.350 | ..... | ..... |
| 51 | Tenant landlord durables | ..... | 0.076 | ..... | ..... |
| 52 | Small electric appliances | Other appliances | 0.059 | 0.140 | -0.081 |
| 53 | # | Other household equipment and furnishings | 0.981 | 0.635 | 0.346 |
| 54 | Clocks, lamps, and furnishings | Clocks, lamps, and decorator items | 0.372 | 0.356 | 0.016 |
| 55 | Flowers seeds and potted plants | Indoor plants and flowers | 0.222 | 0.104 | 0.118 |
| 56 | China, glassware, tableware, and utensils | Dishes and flatware, nonelectric cookware and tableware | 0.387 | 0.175 | 0.212 |
| 57 | Hand tools | Tools, hardware, outdoor equipment and supplies | 0.161 | 0.579 | -0.418 |
| 58 | Tools, hardware and supplies | Tools, hardware and supplies | 0.137 | 0.208 | -0.071 |
| 59 | Outdoor equipment and supplies | Outdoor equipment and supplies | 0.024 | 0.371 | -0.347 |
| 60 | Cleaning and polishing preparations, and miscellaneous household supplies and paper products | Housekeeping supplies | 0.872 | 0.841 | 0.031 |
| 61 | Cleaning preparations | Household cleaning products | 0.433 | 0.372 | 0.061 |
| 62 | Paper products | Household paper products | 0.328 | 0.203 | 0.125 |
| 63 | Lighting supplies | Miscellaneous household products | 0.111 | 0.266 | -0.155 |
| 64 | # | Household operations * | 0.715 | 0.530 | 0.185 |
| 65 | Domestic service, cash | Domestic services | 0.220 | 0.247 | -0.027 |
| 66 | Moving and storage | Moving, storage, freight expense | 0.163 | 0.081 | 0.082 |
| 67 | # | Repair of household items | 0.092 | 0.126 | -0.034 |
| 68 | Electrical repair | ..... | 0.055 | ..... | ..... |
| 69 | Reupholstery and furniture repair | ..... | 0.037 | ..... | ..... |
| 70 | Household operation services nec | Unsamped household operations | 0.240 | 0.076 | 0.164 |
| 71 | # | Apparel | 4.217 | 3.786 | 0.431 |
| 72 | Clothing for males | Men's and boys' apparel | 1.130 | 0.915 | 0.216 |
| 73 | Clothing for females | Women's and girls' apparel | 1.695 | 1.612 | 0.084 |
| 74 | Shoes | Footwear | 0.622 | 0.759 | -0.137 |
| 75 | Clothing for infants | Infants' and toddlers' apparel | 0.131 | 0.183 | -0.052 |
| 76 | Jewelry and watches | Jewelry and watches | 0.639 | 0.318 | 0.321 |
| 77 | # | Transportation * | 12.991 | 16.759 | -3.768 |
| 78 | # | Private transportation * | 12.266 | 15.770 | -3.504 |
| 79 | # | New and used motor vehicles | 4.433 | 7.656 | -3.223 |
| 80 | # | New vehicles | 3.199 | 5.154 | -1.955 |
| 81 | # | New cars and trucks | 3.068 | 5.051 | -1.983 |
| 82 | New autos | New cars | 1.172 | 2.127 | -0.955 |
| 83 | New trucks | New trucks | 1.896 | 2.924 | -1.028 |
| 84 | Motorcycles | New motorcycles | 0.131 | 0.103 | 0.028 |

Appendix Table A. Relative Weights for CPI and PCE Categories, December 2005 (2003-2004 Weights)

| Line | PCE Title | CPI Title | PCE | CPI | PCE less CPI |
|------|---|--|--------------|--------------|--------------|
| 85 |# | Used cars and trucks | 0.808 | 1.799 | -0.991 |
| 86 | Net transactions in used autos | ..... | 0.373 | ..... | ..... |
| 87 | Net transactions in used trucks | ..... | 0.435 | ..... | ..... |
| 88 | Motor vehicle leasing | Leased cars and trucks | 0.319 | 0.613 | -0.294 |
| 89 | Motor vehicle rental | Car and truck rental | 0.107 | 0.090 | 0.017 |
| 90 | Gasoline and other motor fuel | Motor fuel | 3.268 | 4.191 | -0.923 |
| 91 | Tires, accessories and parts | Motor vehicle parts and equipment | 0.709 | 0.362 | 0.347 |
| 92 | Tires and tubes | Tires | 0.288 | 0.217 | 0.072 |
| 93 |# | Vehicle accessories other than tires | 0.421 | 0.146 | 0.276 |
| 94 | Accessories and parts | Vehicle parts and equipment other than tires | 0.372 | 0.112 | 0.261 |
| 95 | Lubricants | Motor oil, coolant, and other fluids | 0.049 | 0.034 | 0.015 |
| 96 | Motor vehicle repair | Motor vehicle maintenance and repair | 1.720 | 1.131 | 0.589 |
| 97 | Motor vehicle insurance premiums | Motor vehicle insurance | 1.838 | 2.301 | -0.463 |
| 98 |# | Motor vehicle fees * | 0.298 | 0.129 | 0.169 |
| 99 |# | Parking and other fees * | 0.298 | 0.129 | 0.169 |
| 100 |# | Parking fees and tolls | 0.298 | 0.129 | 0.169 |
| 101 | Other motor vehicle services | ..... | 0.221 | ..... | ..... |
| 102 | Bridge, tunnel, ferry, and road tolls | ..... | 0.077 | ..... | ..... |
| 103 |# | Public transportation * | 0.725 | 0.989 | -0.264 |
| 104 | Airline | Airline fare | 0.398 | 0.673 | -0.275 |
| 105 |# | Other intercity transportation * | 0.038 | 0.065 | -0.027 |
| 106 | Bus | Intercity bus fares | 0.031 | 0.025 | 0.006 |
| 107 | Railway | Intercity train fares | 0.007 | 0.040 | -0.033 |
| 108 | Purchased local transportation | Intracity transportation | 0.176 | 0.248 | -0.072 |
| 109 | Other public transportation services | Unsampled public transportation | 0.113 | 0.003 | 0.110 |
| 110 |# | Medical care * | 5.950 | 2.641 | 3.309 |
| 111 |# | Medical care commodities | 3.033 | 1.457 | 1.576 |
| 112 | Prescription drugs | Prescription drugs and medical supplies | 2.636 | 1.025 | 1.611 |
| 113 |# | Nonprescription drugs and medical supplies | 0.397 | 0.432 | -0.035 |
| 114 | Nonprescription drugs | Internal and respiratory over-the-counter drugs | 0.337 | 0.296 | 0.041 |
| 115 | Medical supplies | Nonprescription medical equipment and supplies | 0.060 | 0.136 | -0.076 |
| 116 | Medical care services * | Medical care services * | 2.917 | 1.184 | 1.733 |
| 117 |# | Professional services * | 2.917 | 1.184 | 1.733 |
| 118 | Dentists | Dental services | 1.019 | 0.704 | 0.315 |
| 119 |# | Eyeglasses and eye care | 0.368 | 0.226 | 0.142 |
| 120 | Ophthalmic products and orthopedic appliances | ..... | 0.288 | ..... | ..... |
| 121 | Eye examinations | ..... | 0.080 | ..... | ..... |
| 122 | All other professional medical svcs | Services by other medical professionals | 1.530 | 0.254 | 1.276 |
| 123 |# | Recreation * | 6.223 | 5.160 | 1.063 |
| 124 |# | Video and audio * | 1.626 | 1.697 | -0.070 |
| 125 | Televisions | Televisions | 0.150 | 0.164 | -0.014 |
| 126 | Cable television | Cable and satellite television and radio service | 0.676 | 1.145 | -0.469 |
| 127 | Video equipment and media | Other video equipment | 0.109 | 0.047 | 0.062 |

Appendix Table A. Relative Weights for CPI and PCE Categories, December 2005 (2003-2004 Weights)

| Line | PCE Title | CPI Title | PCE | CPI | PCE less CPI |
|------|---|---|-------|-------|-----------------|
| 128 |# | Video cassettes, discs, and other media including rental * | 0.129 | 0.089 | 0.040 |
| 129 | Video cassette rental | Rental of video tapes and disks | 0.129 | 0.089 | 0.040 |
| 130 | Audio equipment | Audio equipment | 0.281 | 0.079 | 0.202 |
| 131 | Records, tapes, & disks | Audio discs, tapes and other media | 0.229 | 0.095 | 0.134 |
| 132 | Radio and television repair | Unsampled video and audio | 0.052 | 0.078 | -0.026 |
| 133 |# | Pets, pet products and services * | 0.584 | 0.494 | 0.091 |
| 134 |# | Pets and pet products * | 0.313 | 0.229 | 0.085 |
| 135 | Pet food | Pet food | 0.313 | 0.229 | 0.085 |
| 136 |# | Pet services including veterinary | 0.271 | 0.265 | 0.006 |
| 137 | Pets and pets services excl veterinarians | Pet services | 0.061 | 0.064 | -0.003 |
| 138 | Veterinarians | Veterinarian services | 0.210 | 0.201 | 0.009 |
| 139 |# | Sporting goods | 0.968 | 0.673 | 0.295 |
| 140 |# | Sports vehicles including bicycles | 0.444 | 0.399 | 0.045 |
| 141 | Recreational vehicles | ..... | 0.175 | ..... | ..... |
| 142 | Bicycles | ..... | 0.054 | ..... | ..... |
| 143 | Pleasure boats and aircraft | ..... | 0.215 | ..... | ..... |
| 144 |# | Sports equipment | 0.524 | 0.274 | 0.250 |
| 145 | Guns | ..... | 0.027 | ..... | ..... |
| 146 | Sporting equipment | ..... | 0.339 | ..... | ..... |
| 147 | Sport supplies, including ammunition | ..... | 0.158 | ..... | ..... |
| 148 |# | Photography | 0.239 | 0.179 | 0.060 |
| 149 |# | Photographic equipment and supplies | 0.081 | 0.092 | -0.011 |
| 150 | Photographic equipment | Photographic equipment | 0.039 | 0.041 | -0.002 |
| 151 | Film and photo supplies | Film and photographic supplies | 0.042 | 0.051 | -0.009 |
| 152 | Photographic services | Photographers and film processing | 0.158 | 0.087 | 0.071 |
| 153 | Film developing | Film processing | 0.073 | 0.050 | 0.023 |
| 154 | Photo studios | Photographer fees | 0.085 | 0.037 | 0.048 |
| 155 |# | Other recreational goods | 0.612 | 0.386 | 0.227 |
| 156 | Toys, dolls, and games | Toys | 0.478 | 0.264 | 0.215 |
| 157 |# | Sewing machines, fabric and supplies | 0.080 | 0.072 | 0.008 |
| 158 | Sewing goods for females | ..... | 0.073 | ..... | ..... |
| 159 | Sewing goods for males | ..... | 0.007 | ..... | ..... |
| 160 | Musical instruments | Music instruments and accessories | 0.054 | 0.050 | 0.004 |
| 161 |# | Recreation services * | 1.257 | 1.416 | -0.159 |
| 162 | Bowling and billiards | Club membership dues and fees for participant sports | 0.037 | 0.507 | -0.470 |
| 163 | Admissions to specified spectator amusements | Admissions | 0.475 | 0.688 | -0.213 |
| 164 |# | Admission to movies, theaters, concerts, and other recurring events | 0.279 | 0.551 | -0.272 |
| 165 | Motion picture theaters | ..... | 0.125 | ..... | ..... |
| 166 | Legitimate theaters and opera, and entertainments of nonprofit institutions (except athletes) | ..... | 0.154 | ..... | ..... |
| 167 | Spectator sports | Admission to sporting events | 0.196 | 0.137 | 0.059 |
| 168 |# | Unsampled recreation services | 0.745 | 0.221 | 0.524 |
| 169 | Sightseeing | ..... | 0.068 | ..... | ..... |

Appendix Table A. Relative Weights for CPI and PCE Categories, December 2005 (2003-2004 Weights)

| Line | PCE Title | CPI Title | PCE | CPI | PCE less CPI |
|------|---|---|--------------|--------------|---------------|
| 170 | Private flying | ..... | 0.006 | ..... | ..... |
| 171 | Other commercial participant amusements | ..... | 0.253 | ..... | ..... |
| 172 | Sporting & recreational camps | ..... | 0.024 | ..... | ..... |
| 173 | High school recreation | ..... | 0.006 | ..... | ..... |
| 174 | Commercial amusement nec, except internet service providers | ..... | 0.388 | ..... | ..... |
| 175 | # | Recreational reading materials | 0.937 | 0.317 | 0.620 |
| 176 | Magazines, newspapers, and sheet music | Newspapers and magazines | 0.472 | 0.187 | 0.285 |
| 177 | Books and maps | Recreational books | 0.465 | 0.130 | 0.335 |
| 178 | # | Education and communication * | 4.021 | 5.438 | -1.417 |
| 179 | # | Education * | 1.711 | 2.439 | -0.728 |
| 180 | Writing equipment | Educational books and supplies | 0.041 | 0.196 | -0.155 |
| 181 | # | Tuition, other school fees, and childcare | 1.670 | 2.243 | -0.573 |
| 182 | Public higher education | College tuition and fees | 0.760 | 1.462 | -0.702 |
| 183 | Child care | Child care and nursery school | 0.428 | 0.716 | -0.288 |
| 184 | Commercial and vocational schools | Technical and business school tuition and fees | 0.482 | 0.065 | 0.417 |
| 185 | # | Communication * | 2.310 | 2.999 | -0.689 |
| 186 | # | Postage and delivery services * | 0.135 | 0.169 | -0.034 |
| 187 | Postage | Postage | 0.135 | 0.169 | -0.034 |
| 188 | # | Information and information processing * | 2.175 | 2.830 | -0.655 |
| 189 | Telephone services | Telephone services | 1.541 | 2.246 | -0.705 |
| 190 | Local telephone | Land-line telephone services, local charges | 0.643 | 0.749 | -0.106 |
| 191 | Long distance telephone | Land-line telephone services, long distance charges | 0.332 | 0.681 | -0.349 |
| 192 | Intrastate toll calls | Land-line intrastate toll calls | 0.099 | 0.289 | -0.190 |
| 193 | Interstate toll calls | Land-line interstate toll calls | 0.233 | 0.392 | -0.159 |
| 194 | Cellular telephone | Wireless telephone services | 0.566 | 0.816 | -0.250 |
| 195 | # | Information technology, hardware and services * | 0.634 | 0.584 | 0.050 |
| 196 | Computers and peripherals | Personal computers and peripheral equipment | 0.322 | 0.236 | 0.086 |
| 197 | Software | Computer software and accessories | 0.126 | 0.041 | 0.085 |
| 198 | Internet service providers | Internet services and electronic information providers | 0.186 | 0.307 | -0.121 |
| 199 | # | Other goods and services * | 5.772 | 3.248 | 2.524 |
| 200 | Tobacco products | Tobacco and smoking products | 1.133 | 0.710 | 0.423 |
| 201 | # | Personal care * | 4.639 | 2.537 | 2.102 |
| 202 | # | Personal care products | 0.733 | 0.705 | 0.028 |
| 203 | # | Hair, dental, shaving, and miscellaneous personal care products | 0.477 | 0.369 | 0.108 |
| 204 | Gynecological goods | ..... | 0.047 | ..... | ..... |
| 205 | Other person hygiene goods | ..... | 0.430 | ..... | ..... |
| 206 | # | Cosmetics, perfume, bath, nail preparations and implements | 0.256 | 0.336 | -0.080 |
| 207 | Soap | ..... | 0.064 | ..... | ..... |
| 208 | Cosmetics & perfumes | ..... | 0.192 | ..... | ..... |
| 209 | # | Personal care services * | 0.584 | 0.675 | -0.091 |
| 210 | Barbershops, beauty parlors, and health clubs | Haircuts and other personal care services | 0.584 | 0.675 | -0.091 |
| 211 | # | Miscellaneous personal services * | 3.053 | 0.986 | 2.067 |

Appendix Table A. Relative Weights for CPI and PCE Categories, December 2005 (2003-2004 Weights)

| Line | PCE Title | CPI Title | PCE | CPI | PCE less CPI |
|------|---|---|-------|--------------|-----------------|
| 212 | # | Legal services | 1.086 | 0.298 | 0.788 |
| 213 | Legal services | ..... | 1.030 | ..... | ..... |
| 214 | Personal business services nec | ..... | 0.056 | ..... | ..... |
| 215 | Funeral & burial expenses | Funeral expenses | 0.203 | 0.187 | 0.016 |
| 216 | # | Laundry and dry cleaning services | 0.138 | 0.283 | -0.145 |
| 217 | Drycleaning | ..... | 0.099 | ..... | ..... |
| 218 | Rug and furniture cleaning | ..... | 0.039 | ..... | ..... |
| 219 | # | Apparel services other than laundry and dry cleaning | 0.637 | 0.033 | 0.604 |
| 220 | Shoe repair | ..... | 0.006 | ..... | ..... |
| 221 | Laundry and garment repair | ..... | 0.089 | ..... | ..... |
| 222 | Other personal care services | ..... | 0.542 | ..... | ..... |
| 223 | # | Financial services | 0.989 | 0.185 | 0.804 |
| 224 | # | Checking account and other bank services | 0.865 | 0.060 | 0.805 |
| 225 | Commercial bank service charges on deposit accounts | ..... | 0.289 | ..... | ..... |
| 226 | Commercial bank other fee income | ..... | 0.302 | ..... | ..... |
| 227 | Charges and fees of other depository institutions | ..... | 0.274 | ..... | ..... |
| 228 | Tax return preparation services | Tax return preparation and other accounting fees | 0.124 | 0.125 | -0.001 |
| 229 | # | Miscellaneous personal goods * | 0.269 | 0.171 | 0.098 |
| 230 | Stationery and writing supplies | Stationery, stationery supplies, gift wrap | 0.221 | 0.158 | 0.063 |
| 231 | # | Luggage | 0.048 | 0.013 | 0.035 |
| 232 | Luggage for males | ..... | 0.013 | ..... | ..... |
| 233 | Luggage for females | ..... | 0.035 | ..... | ..... |
| 234 | ..... | Total CPI Noncomparable | ..... | 6.384 | ..... |
| 235 | ..... | Food and beverages | ..... | 0.403 | ..... |
| 236 | ..... | Food away from home | ..... | 0.403 | ..... |
| 237 | ..... | Food from vending machines and mobile vendors | ..... | 0.126 | ..... |
| 238 | ..... | Other food away from home | ..... | 0.277 | ..... |
| 239 | ..... | Housing | ..... | 0.444 | ..... |
| 240 | ..... | Household furnishings and operations | ..... | 0.444 | ..... |
| 241 | ..... | Appliances * | ..... | 0.007 | ..... |
| 242 | ..... | Unsampled appliances | ..... | 0.007 | ..... |
| 243 | ..... | Tools, hardware, outdoor equipment and supplies | ..... | 0.188 | ..... |
| 244 | ..... | Unsampled tools, hardware, outdoor equipment and supplies | ..... | 0.188 | ..... |
| 245 | ..... | Household operations | ..... | 0.249 | ..... |
| 246 | ..... | Gardening and lawncare services | ..... | 0.249 | ..... |
| 247 | ..... | Transportation | ..... | 0.656 | ..... |
| 248 | ..... | Private transportation | ..... | 0.558 | ..... |
| 249 | ..... | New and used motor vehicles | ..... | 0.202 | ..... |
| 250 | ..... | Unsampled new and used motor vehicles | ..... | 0.202 | ..... |
| 251 | ..... | Motor vehicle fees | ..... | 0.356 | ..... |
| 252 | ..... | State and local registration and license | ..... | 0.311 | ..... |
| 253 | ..... | Parking and other fees * | ..... | 0.033 | ..... |
| 254 | ..... | Automobile service clubs | ..... | 0.033 | ..... |
| 255 | ..... | Unsampled motor vehicle fees | ..... | 0.012 | ..... |

Appendix Table A. Relative Weights for CPI and PCE Categories, December 2005 (2003-2004 Weights)

| Line | PCE Title | CPI Title | PCE | CPI | PCE less CPI |
|------|-----------|---|-------|--------------|-----------------|
| 256 | | Public transportation * | ..... | 0.098 | ..... |
| 257 | | Other intercity transportation * | ..... | 0.098 | ..... |
| 258 | | Ship fares | ..... | 0.098 | ..... |
| 259 | | Medical care | ..... | 3.579 | ..... |
| 260 | | Medical care services * | ..... | 3.579 | ..... |
| 261 | | Physicians' services | ..... | 1.631 | ..... |
| 262 | | Hospital and related services | ..... | 1.576 | ..... |
| 263 | | Health insurance | ..... | 0.373 | ..... |
| 264 | | Recreation | ..... | 0.477 | ..... |
| 265 | | Video and audio | ..... | 0.086 | ..... |
| 266 | | Video cassettes, discs, and other media including rental | ..... | 0.086 | ..... |
| 267 | | Video cassettes and discs, blank and prerecorded | ..... | 0.086 | ..... |
| 268 | | Pets, pet products and services | ..... | 0.146 | ..... |
| 269 | | Pets and pet products | ..... | 0.146 | ..... |
| 270 | | Pets, pet supplies, and accessories | ..... | 0.146 | ..... |
| 271 | | Sporting goods | ..... | 0.009 | ..... |
| 272 | | Unsampled sporting goods | ..... | 0.009 | ..... |
| 273 | | Photography | ..... | 0.002 | ..... |
| 274 | | Unsampled photography | ..... | 0.002 | ..... |
| 275 | | Other recreational goods | ..... | 0.018 | ..... |
| 276 | | Unsampled recreation commodities | ..... | 0.018 | ..... |
| 277 | | Recreation services | ..... | 0.216 | ..... |
| 278 | | Fees for lessons or instructions | ..... | 0.216 | ..... |
| 279 | | Recreational reading materials | ..... | 0.001 | ..... |
| 280 | | Unsampled recreational reading materials | ..... | 0.001 | ..... |
| 281 | | Education and communication | ..... | 0.609 | ..... |
| 282 | | Education | ..... | 0.527 | ..... |
| 283 | | Tuition, other school fees, and childcare | ..... | 0.527 | ..... |
| 284 | | Elementary and high school tuition and fees | ..... | 0.395 | ..... |
| 285 | | Unsampled tuition, other school fees, and childcare | ..... | 0.132 | ..... |
| 286 | | Communication | ..... | 0.082 | ..... |
| 287 | | Postage and delivery services | ..... | 0.015 | ..... |
| 288 | | Delivery services | ..... | 0.015 | ..... |
| 289 | | Information and information processing | ..... | 0.067 | ..... |
| 290 | | Information technology, hardware and services | ..... | 0.067 | ..... |
| 291 | | Telephone hardware, calculators, and other consumer information items | ..... | 0.057 | ..... |
| 292 | | Unsampled information and information processing | ..... | 0.010 | ..... |
| 293 | | Other goods and services | ..... | 0.216 | ..... |
| 294 | | Personal care | ..... | 0.216 | ..... |
| 295 | | Personal care products | ..... | 0.005 | ..... |
| 296 | | Unsampled personal care products | ..... | 0.005 | ..... |
| 297 | | Miscellaneous personal services * | ..... | 0.186 | ..... |
| 298 | | Care of invalids and elderly at home | ..... | 0.105 | ..... |

Appendix Table A. Relative Weights for CPI and PCE Categories, December 2005 (2003-2004 Weights)

| Line | PCE Title | CPI Title | PCE | CPI | PCE less CPI |
|------|--------------------------------------|------------------------------|---------------|-------|-----------------|
| 299 | ..... | Unsampled items | ..... | 0.081 | ..... |
| 300 | ..... | Miscellaneous personal goods | ..... | 0.024 | ..... |
| 301 | ..... | Infants' equipment | ..... | 0.024 | ..... |
| 302 | Total PCE Noncomparable | ..... | 24.349 | ..... | ..... |
| 303 | Food and beverages | ..... | 0.006 | ..... | ..... |
| 304 | Food on farms | ..... | 0.006 | ..... | ..... |
| 305 | Housing | ..... | 0.084 | ..... | ..... |
| 306 | Shelter | ..... | 0.062 | ..... | ..... |
| 307 | Rent of shelter | ..... | 0.169 | ..... | ..... |
| 308 | Rental value farm housing | ..... | 0.169 | ..... | ..... |
| 309 | Less: Hh insure benefits | ..... | 0.107 | ..... | ..... |
| 310 | Household furnishings and operations | ..... | 0.022 | ..... | ..... |
| 311 | Household operations | ..... | 0.022 | ..... | ..... |
| 312 | Domestic service in kind | ..... | 0.022 | ..... | ..... |
| 313 | Apparel | ..... | 0.005 | ..... | ..... |
| 314 | Military clothing | ..... | 0.005 | ..... | ..... |
| 315 | Transportation | ..... | -0.585 | ..... | ..... |
| 316 | Private transportation | ..... | -0.585 | ..... | ..... |
| 317 | New and used motor vehicles | ..... | 0.547 | ..... | ..... |
| 318 | Used cars and trucks | ..... | 0.547 | ..... | ..... |
| 319 | Used auto margin | ..... | 0.339 | ..... | ..... |
| 320 | Employee reimbursement | ..... | -0.022 | ..... | ..... |
| 321 | Used truck margin | ..... | 0.230 | ..... | ..... |
| 322 | Less: MV insurance benefits | ..... | 1.132 | ..... | ..... |
| 323 | Medical care | ..... | 14.551 | ..... | ..... |
| 324 | Medical care services | ..... | 14.551 | ..... | ..... |
| 325 | Physicians | ..... | 3.840 | ..... | ..... |
| 326 | Home health care | ..... | 0.714 | ..... | ..... |
| 327 | Medical laboratories | ..... | 0.278 | ..... | ..... |
| 328 | Hospitals & nursing homes | ..... | 8.099 | ..... | ..... |
| 329 | Health insurance | ..... | 1.620 | ..... | ..... |
| 330 | Recreation | ..... | 1.415 | ..... | ..... |
| 331 | Recreation services | ..... | 1.415 | ..... | ..... |
| 332 | Clubs and fraternal organizations | ..... | 0.277 | ..... | ..... |
| 333 | Casino gambling | ..... | 0.844 | ..... | ..... |
| 334 | Pari-mutuel net receipts | ..... | 0.069 | ..... | ..... |
| 335 | Lotteries | ..... | 0.225 | ..... | ..... |
| 336 | Education and communication | ..... | 1.306 | ..... | ..... |
| 337 | Education | ..... | 1.306 | ..... | ..... |
| 338 | Private higher education | ..... | 0.782 | ..... | ..... |
| 339 | Private lower education | ..... | 0.524 | ..... | ..... |
| 340 | Other goods and services | ..... | 7.567 | ..... | ..... |
| 341 | Personal care | ..... | 7.567 | ..... | ..... |
| 342 | Miscellaneous personal services | ..... | 7.567 | ..... | ..... |

Appendix Table A. Relative Weights for CPI and PCE Categories, December 2005 (2003-2004 Weights)

| Line | PCE Title | CPI Title | PCE | CPI | PCE less CPI |
|------|--|-----------|--------|-------|-----------------|
| 343 | Financial services | ..... | 4.786 | ..... | ..... |
| 344 | Brokerage & invest counsel | ..... | 1.002 | ..... | ..... |
| 345 | Com bank fees on fiduciary accounts | ..... | 0.187 | ..... | ..... |
| 346 | Services furnished without payment by financial intermediaries | ..... | 2.382 | ..... | ..... |
| 347 | Expense of handling life insurance | ..... | 1.184 | ..... | ..... |
| 348 | Money orders | ..... | 0.031 | ..... | ..... |
| 349 | Labor union expenses | ..... | 0.169 | ..... | ..... |
| 350 | Profession assoc expenses | ..... | 0.089 | ..... | ..... |
| 351 | Employment agency fees | ..... | 0.039 | ..... | ..... |
| 352 | Classified ads | ..... | 0.014 | ..... | ..... |
| 353 | Foundations and nonprofit research | ..... | 0.202 | ..... | ..... |
| 354 | Political organizations | ..... | 0.035 | ..... | ..... |
| 355 | Museums and libraries | ..... | 0.114 | ..... | ..... |
| 356 | Foundations to religion and welfare | ..... | 0.158 | ..... | ..... |
| 357 | Social welfare | ..... | 1.282 | ..... | ..... |
| 358 | Religion | ..... | 0.684 | ..... | ..... |
| 359 | Net foreign travel | ..... | -0.070 | ..... | ..... |
| 360 | Net foreign remittances | ..... | 0.065 | ..... | ..... |

Aggregate not published by BEA
 * Excludes noncomparable items
 nec Not elsewhere classified