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# New International Evidence on Food Consumption Patterns

A Focus on Cross-Price Effects Based  
on 2005 International Comparison  
Program Data

Birgit Meade, Anita Regmi, James L. Seale, Jr.,  
and Andrew Muhammad





United States Department of Agriculture

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### Abstract

Cross-price elasticities are updated in this report, using the World Bank's 2005 International Comparison Program (ICP) data for 9 major consumption categories across 144 countries. The 2005 ICP offers the most recent consistent data set for such a large number of countries. The consumption categories are: food, beverage and tobacco; clothing and footwear; gross rent, fuel, and power; house furnishings and operations; medical and health; transport and communications; recreation; education; and "other." Cross-price elasticities also are calculated and reported for a two-good demand system based on food and nonfood items. To our knowledge, the cross-country cross-price elasticity estimates in this report represent the only available consistent elasticity estimates for this large a number of countries and consumption categories, updated from earlier estimates based on 1996 ICP data.

**Keywords:** Cross-country demand analysis, cross-price elasticities, 2005 International Comparison Program data, ICP, Florida model, Frisch elasticity, complete demand analysis, food demand

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### What Is the Issue?

Estimates of consumers' responses to changes in prices help policymakers assess future demand for goods and services, as well as the corresponding need for transportation and infrastructure facilities. An understanding of demand and consumption trends across countries and the ability to predict potential shifts in demand for different products is essential for decisionmakers involved in the agricultural, manufacturing, education, health, and energy sectors.

This report presents updated estimates of cross-price elasticities (the price change of one good impacting quantity demanded of another) for 2005 across countries based on a methodology presented by Regmi and Seale (2010) together with their estimates for 1996. The 2005 data from the World Bank's International Comparison Program offers the most recent consistent data set for such a large number of countries. Demand elasticities tend to change as income levels change, and the 9 years between this updated set of estimates and their original calculation were a period of rapid economic growth, especially in many lower income countries. To our knowledge, the elasticity estimates from this report represent the only available consistent cross-country cross-price elasticity estimates for this large a number of countries (144) over this number of consumption categories (9).

### What Did the Study Find?

#### Results from the two-good demand system:

- The cross-price elasticities in the two-good (food and nonfood) demand system indicate that cross-price elasticity for food with respect to change in nonfood price is higher in middle-income countries than in low- and high-income countries. The poorest countries have relatively low budget shares for nonfood. All spending must be considered as essential, which means that movement across spending categories will be minimal. High-income countries, however, have relatively large nonfood budgets. At the same time, their food needs are generally met, which makes food spending less responsive to nonfood price changes.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

- Uncompensated nonfood cross-price elasticities are much larger in magnitude than the food cross-price elasticities—6 times larger for low-income countries and 2.7 and 2.4 times larger for middle- and high-income countries. This finding implies that food price changes can have a relatively large impact on nonfood spending.

#### **Results from the nine-good demand system:**

- Within a country grouping, compensated cross-price elasticities for the nine-good demand system are biggest in magnitude for the “recreation” consumption category followed by “other,” and “medical and health.” These categories can be considered luxury goods, which means that the spending increase for these categories is proportionately larger than the price increase of the other good. Necessities, such as food, experience relatively smaller changes in spending in response to the price change in another good. The cross-price elasticity for education declined in magnitude for all income groups and is now the second lowest, after food, which indicates that it is considered a necessity by consumers.
- The low-income group has the strongest response to food-price changes, with demand changes for most spending categories more than twice as strong as that of middle-income countries and on average close to four times as strong as that of high-income countries. This strong response can be explained by this group’s relatively high food-budget share.

These elasticity estimates can be used as inputs in large multicountry models.

#### **How Was the Study Conducted?**

This study uses the methodology presented in Regmi and Seale (2010) to derive cross-price elasticities based on 2005 ICP data. Cross-price elasticities are calculated for a 2-good, food-nonfood pairing as well as for 9 major consumption categories from the World Bank’s 2005 ICP data across 144 countries: food, beverages, and tobacco (for the first time includes food consumed away from home); clothing and footwear; gross rent, fuel, and power; house furnishings and operations (includes spending on household equipment and maintenance); medical and health; transport and communications; recreation; education; and other.” (“Other” includes expenditures for grooming services, jewelry, and other miscellaneous expenditures.)

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### Introduction

In a related ERS report, *International Evidence on Food Consumption Patterns*, Muhammad, Seale, Meade, and Regmi (hereafter cited as MSMR, 2011) fit a 2-stage demand system to 2005 International Comparison Program (ICP) data of 144 countries for 9 aggregate consumer goods and 8 disaggregated food categories (see appendix figure 1). That report is an update to similar work done in 2003 by Seale, Regmi, and Bernstein, based on 1996 ICP data. The model's parameters are estimated with maximum likelihood (ML) correcting for group heteroskedasticity (MSMR, 2011; pp. 11-12). From the parameter estimates, income and three types of own-price elasticities of demand are calculated and reported for all nine goods in the first stage (MSMR, 2011; appendix tables 1-4), while income and Frisch own-price elasticities of demand are reported for the eight food categories in the second stage (MSMR, 2011; appendix tables 5 and 6). Using the 2005 ICP data, Gao (2012) also estimated income and price elasticities across the ICP countries using a modeling framework similar to MSMR (2011). However, no study has presented cross-price elasticities using the 2005 ICP data.

Regmi and Seale (2010) were the first to calculate and report cross-price elasticities of demand for more than two goods across a large number of countries using the ICP data. Among earlier studies based on ICP data, Theil, Chung, and Seale (hereafter cited as TCS, 1989) and Seale and Theil (1991) calculate and report cross-price elasticities of demand using the ICP data for a two-good demand system, food and nonfood, on a country-by-country basis.<sup>1</sup> No other study has reported and calculated cross-price elasticities of demand for more than these two goods across countries using the ICP data.

This report presents cross-price elasticities of demand, based on 2005 ICP data, thus updating cross-price elasticity estimates based on 1996 ICP data by Regmi and Seale (2010). Earlier estimates of income and own-price elasticities from MSMR (2011) and Seale et al. (2003) and cross-price elasticity estimates based on the 1996 ICP from Regmi and Seale (2010) have been widely used as input into economic models such as USDA's Baseline, the Global Trade Analysis Project (GTAP) model created at Purdue University, the International Food Policy Research Institute's (IFPRI) International Model for Policy Analysis of Agricultural Commodities and Trade (IMPACT) model

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<sup>1</sup>Theil and Finke (1985) (also in Theil, 1987; table 2-10, p. 67) calculate cross-price elasticities of demand for food and nonfood for 13 real (1975) per capita income levels expressed as a percentage of that of the United States, basing their calculations on parameter estimates of Finke, Rosalsky, and Theil (1983), while Seale and Theil, 1991, base theirs on parameter estimates of Fiebig, Seale, and Theil (1988).



and others (Winters, 2005; von Braun, 2007; Hertel and Winters, 2006; Valenzuela, Anderson, and Hertel, 2007). While providing valuable input to these economic models, the cross-price elasticities presented in this report have the additional advantage of being estimated using the same model used by Regmi and Seale (2010) and with data collected using a methodology consistent to that used in the earlier rounds of ICP. Thus, the results provide a unique and consistent set of cross-country price elasticities that are comparable across countries and time periods.

In this report, we present a method for calculating cross-country, cross-price elasticities of demand based on the parameter estimates of the Florida model (TCS, 1989) and real per capita income across a large and diverse set of countries. The Florida model is a two-stage demand model developed by Theil et al. (1989) at the University of Florida based on Working's model from 1943, a type of model that can be used to generate systems of demand equations that can be estimated over broadly defined groups of commodities. First, this is done for a 2-good demand system, food and nonfood, for the 144 countries in the 2005 ICP (table 1). Of the 144 countries in the 2005 ICP, 99 also participated in the 1996 ICP. The cross-price elasticity estimates are compared over the two periods for these countries.

Next, cross-price elasticities are calculated and reported for 9 broad consumption categories: food, beverage and tobacco; clothing and footwear; gross rent, fuel, and power; house furnishings and operations (which includes spending on household equipment and its maintenance); medical and health; transport and communications; recreation; education; and "other" across the same 144 countries. The resulting cross-price elasticities of demand included in this report represent a consistent set of cross-country, cross-price elasticities for this large a number of countries and consumption categories.

After a brief discussion of the ICP and the 2005 ICP data, the Florida model is presented followed by a section presenting three types of price elasticity measures and their formulation based on parameter estimates of the Florida model. Estimation results for the cross-price elasticities of demand are presented for a two-good system, food and nonfood, and for a nine-good system while focusing on income groupings. We close with some concluding observations. Cross-price elasticities of demand for the 9-good system for each of the 144 countries are reported in the appendix.

## Data

The current study is based on 2005 ICP data, which are fully described in MSMR (2011). The 2005 ICP included 146 countries divided into 6 regions: 5 geographic regions—Africa (48 countries included), Asia Pacific (24 countries), West Asia (10 countries), South America (10 countries), and the Commonwealth of Independent States (CIS) (10 countries), plus the Organisation for Economic Co-operation and Development (OECD) and other European countries (44 countries) (see appendix table 1). Two countries, Greece and Comoros, were excluded from the estimation procedure due to data issues. Therefore, a total of 144 countries is used in the current analysis. The analysis concentrates on nine broad consumption categories, comparable to the earlier rounds of the ICP, and they include: food, beverage, and tobacco; clothing and footwear; gross rent, fuel, and power; house furnishings and operations; medical and health; transportation and communication; recreation; education; and other items. Minor differences are noted between the 1996 and the 2005 ICP rounds in the labeling of consumption categories. Additionally, a significant difference is that the 2005 ICP for the first time included food consumed away from home in the food, beverage, and tobacco category (also referred to as food). The nine consumption categories used in this analysis are the same categories analyzed in Muhammad et al.'s first stage of the two-stage complete demand model (see box, "2005 International Comparison Program Data," p. 4)

The 144 countries in the 2005 ICP data are divided into low-, middle-, and high-income countries based on their real per capita gross domestic product (GDP) relative to that of the United States, which has the highest GDP of all 144 countries. Low-income countries represent those with real per capita income less than 15 percent of the U.S. level, middle-income countries represent those with real per capita income equal to or greater than 15 percent but less than 45 percent of the U.S. level, and high-income countries represent those with real per capita income equal to or greater than 45 percent of the U.S. level (see map in box, "International Comparison Program Data," p. 4).<sup>2</sup> This criterion for grouping indicates that the majority of Sub-Saharan African countries, poor transition economies such as Mongolia and Moldova, and low-income Middle Eastern and Asian countries such as Nepal and Yemen fall within the low-income group. High-income countries include most Western European countries, Australia, New Zealand, Canada, and the United States. Middle-income countries include many Latin American countries, North African countries, and better-off transition economies such as Estonia, Hungary, and Slovenia. Per capita income of the 77 countries in the low-income group is on average 5.8 percent of the U.S. per capita income. The 38 middle-income countries have a per capita income level of 25.8 percent of that of the United States, and high-income countries' (29 countries) incomes are on average 63.8 percent of U.S. income. Food budget shares are highest for the low-income group with 48.5 percent, decreasing to 30.7 percent for middle income countries and to 20.4 percent for the high-income group.<sup>3</sup>

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<sup>2</sup>Note that this classification is merely done to facilitate analysis and is not based on any generally accepted criterion for classification. Since the classification is based on the ICP data used in this analysis, some countries may be in a group with which they normally would not be associated.

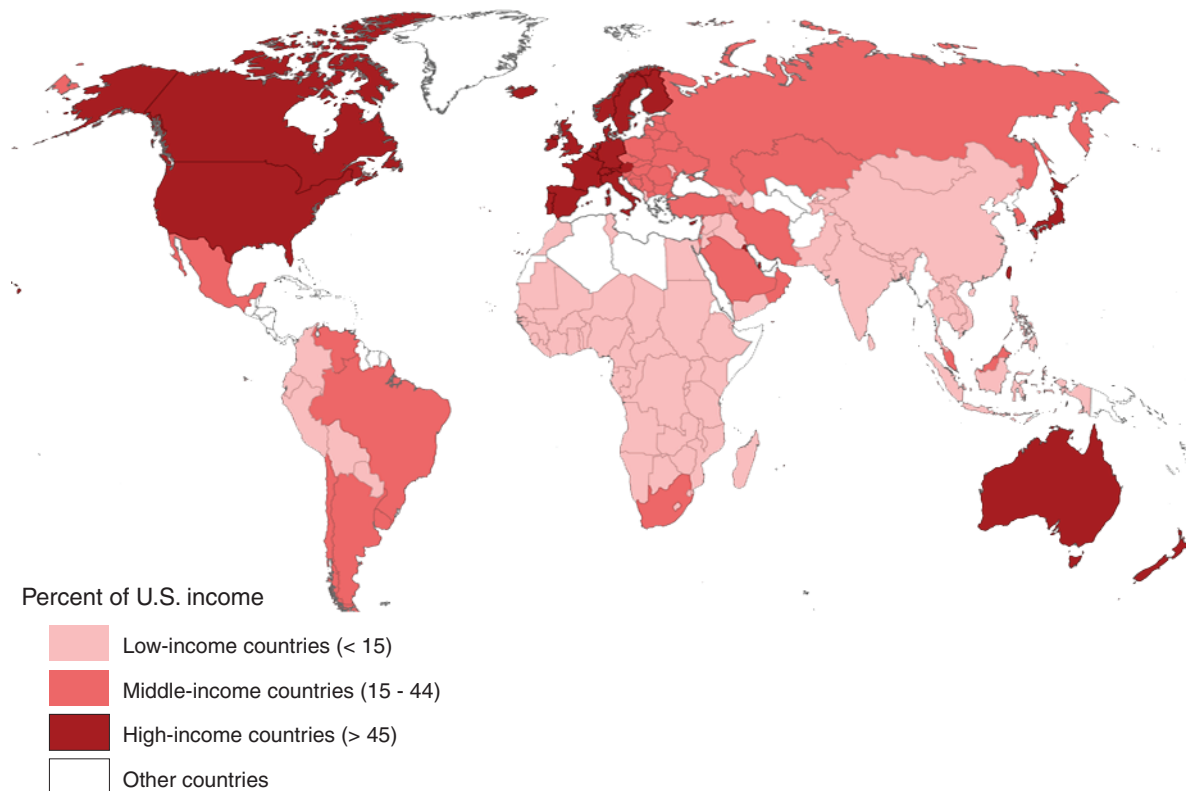
<sup>3</sup>For more detail on budget shares for all consumption categories, see MSMR (2011), table 2, p. 5.

## International Comparison Program Data

The 2005 International Comparison Program data cover 146 countries that account for more than 95 percent of the world's population and 98 percent of the world's nominal gross domestic product (GDP) (World Bank, 2008). The map below highlights the countries covered in the 2005 ICP. A list of those countries is provided in appendix table 1. Most of the countries included in this round for the first time are low-income countries in Africa. The number of African countries included more than doubled from 22 to 48. Several new Asian countries have been included, most notably China and India. In Latin America, Colombia has been added while 12 Caribbean countries were excluded. Turkmenistan and Uzbekistan are no longer included in the Commonwealth of Independent States. In West Asia, Iraq and Kuwait were added and the Eurostat/Organisation for Economic Co-operation and Development group added Cyprus and Malta in addition to Croatia, Bosnia and Herzegovina, Montenegro, and Serbia.

Comparing expenditures across countries is difficult due to differences in currency. Using exchange rates to convert expenditures to a single currency may not always be desirable since exchange rates fail to account for the fact that services are cheaper in developing countries. The 2005 ICP uses a new methodology to compare relative price levels and GDP levels across the 146 countries included in this round. This discussion draws heavily on Diewert (2010), who provides detailed methodological information on the 2005 ICP. In earlier rounds, one product list was used for all countries covered, and prices for these products needed to be collected. However, consumption varies sufficiently across regions making such a common product list quite impractical. For the 2005 round, each of the six regions was able to develop its own product lists and determine its purchasing power parity (PPP) and volume shares independently. Later, the regional results were linked into a global world comparison model which left the regional relative parities intact. The linking was accomplished by a methodology using 18 ring countries, thus providing representatives from each region.

### Countries covered in the 2005 International Comparison Program, by income group



Source: USDA, Economic Research Service analysis based on World Bank, 2005 International Comparison Program data.

Table 1

**Cross-price elasticities in a 2-good demand system, 144 countries from 2005 International Comparison Program**

| Country                       | Food    |         | Nonfood |         |
|-------------------------------|---------|---------|---------|---------|
|                               | Slutsky | Cournot | Slutsky | Cournot |
| <b>Low-income countries</b>   |         |         |         |         |
| Congo, Democratic Republic of | 0.230   | 0.009   | 0.659   | -0.393  |
| Burundi                       | 0.268   | -0.007  | 0.550   | -0.343  |
| Liberia                       | 0.275   | -0.010  | 0.532   | -0.336  |
| Zimbabwe                      | 0.285   | -0.014  | 0.508   | -0.325  |
| Ethiopia                      | 0.293   | -0.017  | 0.489   | -0.317  |
| Niger                         | 0.293   | -0.017  | 0.488   | -0.316  |
| Guinea-Bissau                 | 0.294   | -0.017  | 0.487   | -0.316  |
| Mozambique                    | 0.301   | -0.021  | 0.468   | -0.308  |
| Malawi                        | 0.307   | -0.023  | 0.455   | -0.302  |
| Rwanda                        | 0.309   | -0.024  | 0.451   | -0.300  |
| Angola                        | 0.314   | -0.026  | 0.437   | -0.295  |
| Chad                          | 0.315   | -0.027  | 0.435   | -0.294  |
| Gambia, The                   | 0.316   | -0.027  | 0.433   | -0.293  |
| Central African Republic      | 0.317   | -0.027  | 0.432   | -0.292  |
| Mali                          | 0.317   | -0.027  | 0.432   | -0.292  |
| Tanzania                      | 0.318   | -0.028  | 0.429   | -0.291  |
| Sierra Leone                  | 0.321   | -0.029  | 0.422   | -0.288  |
| Guinea                        | 0.321   | -0.029  | 0.421   | -0.288  |
| Burkina Faso                  | 0.323   | -0.030  | 0.417   | -0.286  |
| Uganda                        | 0.326   | -0.032  | 0.408   | -0.282  |
| Madagascar                    | 0.327   | -0.032  | 0.408   | -0.282  |
| Zambia                        | 0.327   | -0.032  | 0.407   | -0.282  |
| Congo, Republic of            | 0.328   | -0.032  | 0.404   | -0.281  |
| Togo                          | 0.329   | -0.033  | 0.401   | -0.280  |
| Nepal                         | 0.333   | -0.034  | 0.393   | -0.276  |
| Ghana                         | 0.334   | -0.035  | 0.389   | -0.274  |
| Benin                         | 0.337   | -0.036  | 0.382   | -0.272  |
| Mauritania                    | 0.337   | -0.037  | 0.381   | -0.271  |
| Bangladesh                    | 0.339   | -0.037  | 0.378   | -0.270  |
| Côte d'Ivoire                 | 0.339   | -0.037  | 0.377   | -0.269  |
| Laos                          | 0.339   | -0.037  | 0.376   | -0.269  |
| Kenya                         | 0.343   | -0.039  | 0.367   | -0.266  |
| Djibouti                      | 0.343   | -0.039  | 0.367   | -0.265  |
| Nigeria                       | 0.344   | -0.040  | 0.364   | -0.264  |
| Senegal                       | 0.344   | -0.040  | 0.364   | -0.264  |
| Cambodia                      | 0.347   | -0.041  | 0.357   | -0.261  |
| Cameroon                      | 0.349   | -0.042  | 0.351   | -0.259  |
| São Tomé and Príncipe         | 0.350   | -0.042  | 0.349   | -0.258  |
| India                         | 0.351   | -0.043  | 0.345   | -0.257  |
| Yemen                         | 0.352   | -0.043  | 0.344   | -0.256  |
| Vietnam                       | 0.352   | -0.043  | 0.343   | -0.256  |
| Mongolia                      | 0.353   | -0.044  | 0.342   | -0.255  |
| Iraq                          | 0.354   | -0.044  | 0.338   | -0.253  |

—continued

Table 1

**Cross-price elasticities in a 2-good demand system, 144 countries from 2005 International Comparison Program—Continued**

| Country                               | Food    |         | Nonfood |         |
|---------------------------------------|---------|---------|---------|---------|
|                                       | Slutsky | Cournot | Slutsky | Cournot |
| <b>Low-income countries—continued</b> |         |         |         |         |
| Bhutan                                | 0.355   | -0.045  | 0.334   | -0.252  |
| China                                 | 0.357   | -0.046  | 0.331   | -0.251  |
| Sudan                                 | 0.360   | -0.047  | 0.322   | -0.247  |
| Lesotho                               | 0.361   | -0.048  | 0.317   | -0.245  |
| Tajikistan                            | 0.361   | -0.048  | 0.317   | -0.245  |
| Maldives                              | 0.365   | -0.050  | 0.306   | -0.241  |
| Morocco                               | 0.366   | -0.051  | 0.304   | -0.240  |
| Pakistan                              | 0.367   | -0.051  | 0.301   | -0.238  |
| Indonesia                             | 0.368   | -0.052  | 0.296   | -0.236  |
| Kyrgyzstan                            | 0.368   | -0.052  | 0.295   | -0.236  |
| Philippines                           | 0.369   | -0.052  | 0.294   | -0.236  |
| Cape Verde                            | 0.369   | -0.052  | 0.293   | -0.236  |
| Bolivia                               | 0.369   | -0.052  | 0.293   | -0.235  |
| Namibia                               | 0.371   | -0.054  | 0.286   | -0.232  |
| Sri Lanka                             | 0.372   | -0.054  | 0.283   | -0.231  |
| Botswana                              | 0.373   | -0.054  | 0.281   | -0.230  |
| Gabon                                 | 0.373   | -0.055  | 0.278   | -0.229  |
| Azerbaijan                            | 0.374   | -0.055  | 0.277   | -0.229  |
| Syria                                 | 0.374   | -0.055  | 0.275   | -0.228  |
| Equatorial Guinea                     | 0.376   | -0.057  | 0.267   | -0.225  |
| Paraguay                              | 0.377   | -0.057  | 0.264   | -0.224  |
| Fiji                                  | 0.378   | -0.058  | 0.260   | -0.222  |
| Swaziland                             | 0.378   | -0.058  | 0.256   | -0.221  |
| Moldova                               | 0.379   | -0.059  | 0.254   | -0.220  |
| Egypt                                 | 0.379   | -0.059  | 0.252   | -0.219  |
| Ecuador                               | 0.380   | -0.060  | 0.247   | -0.217  |
| Jordan                                | 0.380   | -0.060  | 0.246   | -0.217  |
| Georgia                               | 0.381   | -0.060  | 0.245   | -0.216  |
| Thailand                              | 0.381   | -0.060  | 0.243   | -0.215  |
| Colombia                              | 0.381   | -0.060  | 0.242   | -0.215  |
| Albania                               | 0.381   | -0.061  | 0.240   | -0.214  |
| Tunisia                               | 0.382   | -0.061  | 0.238   | -0.213  |
| Peru                                  | 0.382   | -0.061  | 0.235   | -0.212  |
| Armenia                               | 0.383   | -0.062  | 0.232   | -0.211  |
| Low-income group average              | 0.345   | -0.041  | 0.354   | -0.261  |
| <b>Middle-income countries</b>        |         |         |         |         |
| Venezuela                             | 0.383   | -0.063  | 0.225   | -0.208  |
| Malaysia                              | 0.383   | -0.063  | 0.224   | -0.208  |
| Ukraine                               | 0.384   | -0.063  | 0.223   | -0.207  |
| Brazil                                | 0.384   | -0.063  | 0.220   | -0.206  |
| Montenegro                            | 0.384   | -0.064  | 0.219   | -0.206  |

—continued



Table 1

**Cross-price elasticities in a 2-good demand system, 144 countries from 2005 International Comparison Program—Continued**

| Country                                  | Food    |         | Nonfood |         |
|--|---------|---------|---------|---------|
|  | Slutsky | Cournot | Slutsky | Cournot |
| <b>Middle-income countries—continued</b> |         |         |         |         |
| South Africa                             | 0.384   | -0.064  | 0.214   | -0.204  |
| Macedonia                                | 0.384   | -0.065  | 0.208   | -0.201  |
| Turkey                                   | 0.384   | -0.065  | 0.206   | -0.201  |
| Bosnia and Herzegovina                   | 0.384   | -0.066  | 0.201   | -0.199  |
| Serbia                                   | 0.384   | -0.066  | 0.199   | -0.198  |
| Belarus                                  | 0.384   | -0.066  | 0.199   | -0.198  |
| Romania                                  | 0.384   | -0.066  | 0.197   | -0.197  |
| Saudi Arabia                             | 0.384   | -0.066  | 0.197   | -0.197  |
| Uruguay                                  | 0.384   | -0.066  | 0.195   | -0.197  |
| Mauritius                                | 0.384   | -0.066  | 0.195   | -0.197  |
| Chile                                    | 0.384   | -0.066  | 0.195   | -0.196  |
| Kazakhstan                               | 0.384   | -0.067  | 0.192   | -0.195  |
| Russia                                   | 0.384   | -0.067  | 0.188   | -0.194  |
| Argentina                                | 0.384   | -0.067  | 0.186   | -0.193  |
| Bulgaria                                 | 0.383   | -0.067  | 0.184   | -0.192  |
| Oman                                     | 0.383   | -0.067  | 0.182   | -0.191  |
| Iran                                     | 0.382   | -0.068  | 0.175   | -0.189  |
| Latvia                                   | 0.381   | -0.068  | 0.168   | -0.186  |
| Mexico                                   | 0.380   | -0.068  | 0.167   | -0.185  |
| Lebanon                                  | 0.380   | -0.069  | 0.164   | -0.184  |
| Poland                                   | 0.377   | -0.069  | 0.154   | -0.180  |
| Croatia                                  | 0.376   | -0.069  | 0.153   | -0.180  |
| Macao                                    | 0.376   | -0.069  | 0.153   | -0.180  |
| Lithuania                                | 0.376   | -0.069  | 0.153   | -0.180  |
| Estonia                                  | 0.375   | -0.069  | 0.149   | -0.178  |
| Brunei Darussalam                        | 0.373   | -0.069  | 0.145   | -0.177  |
| Slovakia                                 | 0.372   | -0.069  | 0.144   | -0.176  |
| Hungary                                  | 0.372   | -0.069  | 0.143   | -0.176  |
| South Korea                              | 0.369   | -0.069  | 0.136   | -0.173  |
| Bahrain                                  | 0.369   | -0.069  | 0.136   | -0.173  |
| Czech Republic                           | 0.363   | -0.069  | 0.127   | -0.170  |
| Slovenia                                 | 0.360   | -0.069  | 0.123   | -0.168  |
| Israel                                   | 0.359   | -0.069  | 0.121   | -0.168  |
| Middle-income group average              | 0.379   | -0.067  | 0.178   | -0.190  |
| <b>High-income countries</b>             |         |         |         |         |
| Portugal                                 | 0.356   | -0.068  | 0.117   | -0.166  |
| Qatar                                    | 0.355   | -0.068  | 0.116   | -0.165  |
| Singapore                                | 0.354   | -0.068  | 0.114   | -0.165  |
| Malta                                    | 0.350   | -0.068  | 0.111   | -0.164  |
| Kuwait                                   | 0.349   | -0.068  | 0.109   | -0.163  |
| New Zealand                              | 0.341   | -0.067  | 0.102   | -0.160  |
| Finland                                  | 0.339   | -0.066  | 0.100   | -0.159  |

—continued

Table 1

**Cross-price elasticities in a 2-good demand system, 144 countries from 2005 International Comparison Program—Continued**

| Country                                | Food    |         | Nonfood |         |
|--|---------|---------|---------|---------|
|  | Slutsky | Cournot | Slutsky | Cournot |
| <b>High-income countries—continued</b> |         |         |         |         |
| Taiwan                                 | 0.338   | -0.066  | 0.099   | -0.159  |
| Spain                                  | 0.335   | -0.066  | 0.096   | -0.158  |
| Italy                                  | 0.333   | -0.066  | 0.095   | -0.158  |
| Ireland                                | 0.331   | -0.065  | 0.093   | -0.157  |
| Denmark                                | 0.331   | -0.065  | 0.093   | -0.157  |
| Sweden                                 | 0.329   | -0.065  | 0.091   | -0.156  |
| Hong Kong                              | 0.328   | -0.065  | 0.090   | -0.156  |
| Australia                              | 0.325   | -0.064  | 0.088   | -0.155  |
| Cyprus                                 | 0.324   | -0.064  | 0.088   | -0.155  |
| Belgium                                | 0.324   | -0.064  | 0.088   | -0.155  |
| Japan                                  | 0.323   | -0.064  | 0.087   | -0.155  |
| France                                 | 0.321   | -0.064  | 0.085   | -0.154  |
| Germany                                | 0.316   | -0.063  | 0.082   | -0.153  |
| Canada                                 | 0.315   | -0.063  | 0.082   | -0.153  |
| Iceland                                | 0.314   | -0.063  | 0.081   | -0.152  |
| Netherlands                            | 0.313   | -0.063  | 0.081   | -0.152  |
| Norway                                 | 0.313   | -0.063  | 0.081   | -0.152  |
| United Kingdom                         | 0.307   | -0.062  | 0.077   | -0.151  |
| Switzerland                            | 0.306   | -0.062  | 0.076   | -0.150  |
| Austria                                | 0.301   | -0.061  | 0.073   | -0.149  |
| Luxembourg                             | 0.264   | -0.054  | 0.056   | -0.143  |
| United States                          | 0.239   | -0.050  | 0.047   | -0.139  |
| High-income group average              | 0.323   | -0.064  | 0.090   | -0.155  |

Source: USDA, Economic Research Service calculations based on World Bank, 2005 International Comparison Program data.

## Methodology

The Florida model is used to estimate demand across the 144 ICP countries. The underlying methodology evolved from a series of studies going back to the 1970s when Clements and Theil (1979) and Suhm (1979) first applied a cross-country demand system to ICP data.<sup>4</sup> While other models have been used for cross-country demand analysis, the Florida model is selected both for its comparable ease of estimation and theoretical properties. For instance, the linear expenditure system (LES) model and the Rotterdam model (first proposed by Barten (1964) and Theil (1965)) assume that marginal shares are constant. Thus, an extra dollar of income would lead to the same increase in food expenditures (or any other category) for all countries rich and poor. This is not the case with the Florida model, in which estimates are consistent with behavior observed in rich and poor countries. Seale and Regmi (2006) provide an extensive discussion as to why the Florida model is best suited for cross-country demand analysis and a detailed critique of the shortcomings of other models used for similar analysis. The following model and price elasticities are identical to those presented in the original cross-price elasticity report by Regmi and Seale (2010). As discussed by Seale, Regmi, and Bernstein (2003) and elaborated in the next section, calculating price elasticities using the Slutsky price estimates (income compensated price effects) results in price elasticities that are not consistent with demand behavior across rich and poor countries.<sup>5</sup> Therefore this paper, similar to Regmi and Seale (2010), uses the Frisch elasticity estimates to calculate the compensated and uncompensated cross-price elasticities.

The Florida model, developed by TCS (1989), is derived from Working's (1943) model by incorporating prices. Their starting point is rewriting Working's model as a cross-country demand system,

$$w_{ic} = \alpha_i + \beta_i \ln E_c + \varepsilon_{ic} \quad (1)$$

where  $w_{ic} = E_{ic}/E_c$  is the budget share of good  $i$  ( $= 1, \dots, n$ ) in country  $c$  ( $= 1, \dots, N$ ) where  $E_{ic}$  is expenditure on good  $i$  in  $c$ ,  $E_c = \sum_{i=1}^n E_{ic}$  is total nominal consumption expenditure,  $\varepsilon_{ic}$  is a random error term, and  $\alpha$  and  $\beta_i$  are parameters to be estimated. Since the budget shares summed across all  $n$  goods equal 1, the  $\alpha$ s and  $\beta$ s are thus subject to the adding-up conditions,

$$\sum_{i=1}^n \alpha_i = 1 \text{ and } \sum_{i=1}^n \beta_i = 0. \quad (2)$$

For a given country  $c$ , multiplying equation (1) by  $E$  we obtain  $E_i = \alpha_i E + \beta_i E \log E$ , which when differentiated with respect to  $E$  and using equation (1), gives the marginal budget share,  $\theta_i$ ,

$$\theta_i = \frac{dE_i}{dE} = \alpha_i + \beta_i (1 + \log E) = w_i + \beta_i. \quad (3)$$

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<sup>4</sup>See Regmi and Seale (2010), pp. 2-3, for a review of earlier cross-country demand system work.

<sup>5</sup>Note that the Slutsky elasticities do not account for the income effect of a price change. When considering food demand, this would not be an issue for rich countries since the income effect is small due to food expenditures accounting for a small share of total income. For poor countries, however, the income effect of a price change is significant. Thus, the Slutsky elasticities would underestimate actual consumer responsiveness.

Equations (1) and (3) show that both the budget and marginal share are functions of income such that, when income changes,  $w_i$  and  $\theta_i$  change.<sup>6</sup>

Let  $Q_c$  represent the real income per capita in country  $c$ . TCS substitute  $Q_c$  for  $E_c$  in equation (1) and, using equations (1) and (3), note that the budget and marginal shares of good  $i$  in  $c$  may be written, respectively, as

$$w_{ic} = \alpha_i + \beta_i q_c + \varepsilon_{ic} \quad \text{where } q_c = \log Q_c \quad (4)$$

$$\theta_{ic} = \alpha_i + \beta_i q_c^* \quad \text{where } q_c^* = 1 + q_c \quad (5)$$

The next step is to incorporate prices. Let  $p_{ic}$  and  $p_{id}$  be the domestic-currency price of good  $i$  in country  $c$  and in country  $d$ , respectively, where  $c \neq d$ . Given differences in currencies and units of measurement across countries, prices  $p_{ic}$  and  $p_{id}$  will have different dimensions. However, for cross-country analyses one needs to have prices for all countries in the same dimension. The solution is to use relative instead of absolute prices. To extend equation (1) to include prices and still have fixed parameters (i.e.,  $\alpha$  and  $\beta_i$ ), one must select a particular set of relative prices. TCS chose to deflate the absolute price of  $i$  in  $c$  by the geometric mean price of  $i$  across all  $N$  countries, that is,

$$\log \bar{p}_i = \frac{1}{N} \sum_{c=1}^N \log p_{ic}.^7 \quad (6)$$

The model that emerges has the budget share on the left and is polynomial in the parameters:

$$w_{ic} = \text{LINEAR} + \text{QUADRATIC} + \text{CUBIC} + \varepsilon_{ic}, \quad \text{where} \quad (7)$$

LINEAR = Real-income term,

$$= \alpha_i + \beta_i q_c, \quad (7a)$$

QUADRATIC = Pure-price term,

$$= (\alpha_i + \beta_i q_c) \left[ \log \frac{p_{ic}}{\bar{p}_i} - \sum_{j=1}^n (\alpha_j + \beta_j q_c) \log \frac{p_{jc}}{\bar{p}_j} \right], \quad (7b)$$

CUBIC = Substitution term,

$$= \phi (\alpha_i + \beta_i q_c^*) \left[ \log \frac{p_{ic}}{\bar{p}_i} - \sum_{j=1}^n (\alpha_j + \beta_j q_c^*) \log \frac{p_{jc}}{\bar{p}_j} \right], \quad (7c)$$

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<sup>6</sup>The exception to this is when a good has unitary elasticity; as incomes increase, expenditure on the good increases in the same proportion so that  $w_{ic}$  is unchanged.

<sup>7</sup>Theil and Seale (1987) justify the choice of converting the absolute prices into relative prices by dividing each absolute price by the geometric mean price by proving that the geometric mean price point across countries has a minimum mean-squared distance property.

and  $q_c$  is the natural logarithm of  $Q_c$  (real per capita income),  $q_c^* = 1 + q_c$ ,  $P_{ic}$  is the price of good  $i$  in  $c$ ,  $\bar{p}_i$  is the geometric mean price of good  $i$  across all countries such that  $\log \bar{p}_i = \frac{1}{N} \sum_{c=1}^N \log p_{ic}$ ,  $\alpha_i$ ,  $\beta_i$  and  $\phi$  (the income flexibility, defined as the inverse of the marginal utility of income put into elasticity form)<sup>8</sup> are parameters to be estimated, and  $\varepsilon_1$  is a random error term. As before, the  $\alpha$ s and  $\beta$ s are subject to the adding-up conditions,  $\sum_{i=1}^n \alpha_i = 1$  and  $\sum_{i=1}^n \beta_i = 0$ . Homogeneity can be imposed by subtracting the  $n^{\text{th}}$  relative price from all other  $n-1$  relative prices, that is,  $x_{ic} = \log \frac{P_{ic}}{\bar{p}_i} - \log \frac{P_{nc}}{\bar{p}_n}$ , and replacing the relative price terms in equation (7b) and (7c) with  $x_{ic}$ .

The Florida model under the condition of preference independence has Slutsky price terms as follows,

$$\begin{aligned} \pi_{jc} &= \phi \theta_{ic} (1 - \theta_{ic}) & i = j \\ &= -\phi \theta_{ic} \theta_{jc} & i \neq j \end{aligned} \quad (8)$$

with  $\theta_{ic}$  defined  $\phi$  as above. Symmetry of the Slutsky coefficients implies that

$$\pi_{jc} = \pi_{ic} = -\phi \theta_{ic} \theta_{jc} \quad (9)$$

The linear term in the model, equation (7a), represents the effect of a change in real (per capita) income (i.e., the per capita volume of total consumption expenditure) on the budget share. In the case where all countries face the same set of prices, the quadratic and cubic terms vanish, leaving the linear term. It is also the budget share of the Florida model evaluated at geometric mean prices,

$$\bar{w}_{ic} = \alpha_i + \beta_i q_c \quad (10)$$

The quadratic term, equation (7b), (quadratic because it contains products of the  $\alpha$ s and the  $\beta$ s) is the pure-price term and shows how an increase in price  $p_{ic}$  results in a higher budget share on good  $i$ , even if the volume of total expenditure stays the same. The cubic term, equation (7c), (cubic because it involves  $\phi$  as well as the  $\alpha$ s and  $\beta$ s) is the substitution term and recognizes that consumers will not consume the same quantities but will react to the higher price by substituting away from good  $i$  toward other (now) relatively cheaper goods. The expressions in brackets in both (7b) and (7c) are deflated logarithmic price ratios, with the deflators being weighted means of those logarithmic ratios. The weights, however, are different in (7b) and (7c). In the former, the weights are budget shares ( $\bar{w}_{ic} = \alpha_i + \beta_i q_c$ ) of equation (10) while the latter weights are marginal shares ( $\alpha_i + \beta_i q_c^*$ ),

$$\bar{\theta}_{ic} = (\alpha_i + \beta_i q_c^*), \quad (11)$$

both evaluated at geometric mean price,  $\bar{p}$ .

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<sup>8</sup>Frisch (1932, p. 15) refers to the reciprocal of  $\phi$ , that is  $\phi^{-1} = \frac{d\mu}{dE} \frac{E}{\mu}$  where  $\mu$  represents the marginal utility of income, as the flexibility of the marginal utility of income, or income flexibility.



## Three Types of Price Elasticities

A price elasticity measures the percent change in the quantity demanded of good  $i$  in response to a 1-percent change in the price of good  $j$ . When  $i$  is equal (not equal) to  $j$ , the price elasticity is referred to as an own-price (cross-price) elasticity of demand. Three prominent types of price elasticities are the Frisch, Slutsky, and Cournot price elasticities, and these three measures differ depending upon assumptions concerning income after a price change. The Frisch price elasticity is the result of compensating the consumer's income after a price change in such a way that the consumer's marginal utility of income is constant. The Slutsky price elasticity results from compensating the consumer's income after a price change so that the consumer's real income is constant. The Cournot price elasticity is based on constraining the consumer's nominal income to remain unchanged after a change in price. The Slutsky and Hicksian price elasticities are also referred to as the income-compensated price elasticities. However, the Slutsky and Hicksian compensation methods differ. The Slutsky (Hicksian) compensation keeps real income constant after a price change by the amount necessary to allow the consumer to continue consuming the same bundle of goods (remain on the same indifference curve) that existed prior to the price change (Friedman, 1976; pp. 50-54). The Cournot price elasticity is sometimes referred to as the uncompensated or ordinary price elasticity that is derived from the ordinary or Marshallian demand curve.

To calculate any of these elasticities based on the Florida model, one starts with the model's estimated parameters ( $\alpha$ ,  $\beta$ , and  $\phi$ ) and real per capita income in all countries relative to that of the United States normalized to equal 1.<sup>9</sup> When evaluated at geometric mean prices,  $\bar{p}$ , the budget share of good  $i$  in country  $c$ , written in terms of the parameters of the Florida model, is

$$\bar{w}_{ic} = \alpha_i + \beta_i q_c, \quad (12)$$

while the marginal share for good  $i$  in country  $c$  is

$$\bar{\theta}_{ic} = \frac{\partial(p_{ic}q_{ic})}{\partial Q_c} = \bar{w}_{ic} + \beta_i = \alpha_i + \beta_i q_c^*, \quad (13)$$

and the income elasticity of demand for good  $i$  in country  $c$  is

$$\bar{\eta}_{ic} = \frac{\partial q_{ic}}{\partial Q_c} \frac{Q_c}{q_{ic}} = \frac{\partial(\log q_{ic})}{\partial(\log Q_c)} = \frac{\bar{\theta}_{ic}}{\bar{w}_{ic}} = \frac{\alpha_i + \beta_i q_c^*}{\alpha_i + \beta_i q_c}. \quad (14)$$

Equations (12), (13), and (14) demonstrate that budget shares, marginal shares, and income elasticities are functions of income; when income changes, budget shares, marginal shares, and income elasticities change.<sup>10</sup>

The Frisch price elasticity, written in terms of the Florida model's parameters, is

$$F_{ijc} = \phi \frac{\bar{\theta}_{ic}}{\bar{w}_{ic}} = \phi \frac{\bar{w}_{ic} + \beta_i}{\bar{w}_{ic}} = \phi \left( \frac{\alpha_i + \beta_i q_c^*}{\alpha_i + \beta_i q_c} \right) \quad i = j \quad (15)$$

$$= 0 \quad i \neq j$$

<sup>9</sup>See TCS (1989), pp. 110-111, for the derivation of the three types of own-price elasticities.

<sup>10</sup>The exception to this is when a good has unitary elasticity; the proportional change in the quantity demanded of the good is equal to the proportional change in income so that  $\bar{w}_{ic}$  and  $\bar{\theta}_{ic}$  are unchanged.

The Frisch own-price elasticity,  $F_{iic}$ , exists but Frisch cross-price elasticities vanish because of the assumption of preference independence (TCS, 1989; p.117). However, the Slutsky and Cournot own- and cross-price elasticities of demand can be written in terms of the Frisch own-price elasticity.

The Slutsky price parameters may be calculated from the Florida model's estimated parameters for each country using equations (8), that is,

$$\begin{aligned}\pi_{ijc} &= \phi(\alpha_i + \beta_i q_c^*) (1 - (\alpha_i + \beta_i q_c^*)) & i = j \\ &= -\phi(\alpha_i + \beta_i q_c^*) (\alpha_j + \beta_j q_c^*) & i \neq j\end{aligned}\quad (16)$$

The Slutsky price elasticity for a given good  $i$  with respect to a price change in good  $j$  in country  $c$  can be stated as the ratio of the coefficient of the Slutsky matrix and the corresponding budget share (Frisch, 1959; TCS, 1989, pp. 155). Written in terms of parameters of the Florida model and the Frisch own-price elasticity, the Slutsky price elasticity is

$$\begin{aligned}S_{ijc} &= F_{iic} (1 - \bar{\theta}_{ic}) = F_{iic} (1 - (\alpha_i + \beta_i q_c^*)) & i = j \\ &= -F_{iic} \bar{\theta}_{jc} = F_{iic} (\alpha_j + \beta_j q_c^*) & i \neq j\end{aligned}\quad (17)$$

The Cournot price elasticity may be written in terms of Florida model's parameters and the Frisch own-price elasticity or in terms of its parameters,

$$\begin{aligned}C_{ijc} &= F_{iic} (1 - \bar{\theta}_{ic}) - \bar{\theta}_{ic} = F_{iic} (1 - (\alpha_i + \beta_i q_c^*)) - (\alpha_i + \beta_i q_c^*) & i = j \\ &= -F_{iic} \bar{\theta}_{jc} - \frac{\bar{\theta}_{ic} \bar{w}_{jc}}{\bar{w}_{ic}} = F_{iic} (\alpha_j + \beta_j q_c^*) - \frac{(\alpha_i + \beta_i q_c^*) (\alpha_j + \beta_j q_c^*)}{(\alpha_i + \beta_i q_c^*)} & i \neq j\end{aligned}\quad (18)$$

or in terms of the Slutsky price elasticity,

$$\begin{aligned}&= S_{iic} - (\alpha_i + \beta_i q_c^*) & i = j \\ &= S_{ijc} - \frac{(\alpha_i + \beta_i q_c^*) (\alpha_j + \beta_j q_c^*)}{(\alpha_i + \beta_i q_c^*)} & i \neq j\end{aligned}\quad (19)$$

Note that the Cournot price elasticity is equal to the substitution effect as measured by the Slutsky price elasticity and an additional term measuring the income effect. Accordingly, the Cournot own-price elasticity is larger in absolute value than the Slutsky own-price elasticity. Under preference independence, all Slutsky cross-price elasticities are positive. If the income effect is greater (less) than the substitution effect, the Cournot cross-price elasticities will be negative (positive); if the effects are equal, the elasticities will equal zero.

## Empirical Results

MSMR (2011) calculate and report income and three types of own-price elasticities of demand as well as marginal shares for 9 goods across the 144 countries participating in the 2005 ICP data round. The cross-price elasticities of demand are not reported in their study. In this section, we examine a two-good demand system, food and nonfood, calculate the cross-price elasticities for the system using the parameter estimates from MSMR (2011), and compare our results with those of Regmi and Seale (2010). Finally, we calculate and report Slutsky and Cournot cross-price elasticities of demand for the 9-good system across 144 countries using equations (18) and (19). The minimal requirements for these calculations are parameter estimates from the Florida model and the natural log of real per capita incomes of the 144 countries relative to that of the United States (normalized to equal 1). The parameters are those estimated by MSMR (2011; table 3, p. 12). All elasticities are calculated at geometric mean prices.

### Cross-price elasticities in a two-good demand system

In a two-good demand system, the Slutsky cross-price terms of the two goods are equal to the negative of the corresponding Slutsky own-price terms. Theory suggests that the Slutsky (income compensated) price effects sum to zero. In a two-good world, the cross-price effect would have to equal the negative of the own-price effect for this condition to be satisfied. Consequently, the difference in the Slutsky elasticities for food and nonfood for a given country is due to the difference in the food and nonfood budget shares. Note that the Cournot cross-price elasticities are based on the uncompensated price effects, which include both the substitution and income effect of a price change and do not necessarily sum to zero. The cross-price elasticity calculations are based on the  $\phi$  estimate and  $\alpha$  and  $\beta$  estimates for food from MSMR (2011; table 3, p. 12), where the corresponding estimates for nonfood are  $1 - \alpha$  and  $-\beta$ , respectively. This result is directly obtained from the adding-up conditions previously discussed in equation (2).

The cross-price elasticities for food and nonfood (with respect to changes in nonfood and food prices, respectively) across the 144 countries are reported in table 1. The Slutsky cross-price elasticities are positive, indicating a substitute relationship between food and nonfood, which is likely the case with only two goods and when the income effect of a price change is not considered. The Slutsky cross-price elasticity for food demand with respect to change in nonfood price is higher in the middle-income countries than in the low- and high-income countries. In fact, the lowest income countries—the Democratic Republic of Congo and Burundi—and the highest income country—the United States—have the lowest cross-price elasticity (between 0.23 and 0.24). This elasticity first rises with income to 0.38, the elasticity for 17 middle-income countries such as South Africa, Russia, and Argentina, to name just a few. As income levels increase further, the elasticity declines until it reaches 0.24 for the United States. This relatively low Slutsky food cross-price elasticity with respect to changes in nonfood prices has to be explained differently depending on income level. The poorest countries have relatively low budget shares for nonfood. All spending must be considered as essential, which means that movement across spending categories will be minimal. High-income countries, however, have relatively large nonfood budgets. At the same time, their food needs are generally met, which makes food spending less responsive to nonfood price changes.

It is interesting to note that the Slutsky nonfood cross-price elasticity (in response to a 1-percent increase in the price of food) decreases dramatically in magnitude within the low-income country

group alone, from a high of 0.66 in the Democratic Republic of Congo to 0.23 in Armenia. Also, for the 37 poorest of the low-income countries, the nonfood cross-price elasticity is larger than the food cross-price elasticity. In the case of the Democratic Republic of Congo, the nonfood elasticity is almost three times the food cross-price elasticity (0.23). Cameroon marks the turning point where both cross-price elasticities are almost identical (0.349 and 0.351), which is close to the low-income group average. However, as incomes increase, the nonfood cross-price elasticity with respect to a change in the price of food declines markedly. For the average middle-income countries, nonfood cross-price elasticity is less than one-half of the food cross-price elasticity. For high-income countries, the nonfood cross-price elasticity is less than one-third of the food cross-price elasticity, on average, and for the United States, the highest income country, the nonfood cross-price elasticity is less than one-fifth of the food cross-price elasticity. The smaller impact on nonfood spending in high-income countries can be partly explained by the relatively small budget share of food spending. The low-income response is almost four times as big, a reflection of the much larger budget share dedicated to food.

The Cournot cross-price elasticities take into account the income effect of a price change and are markedly different from the corresponding Slutsky elasticities. For countries with all income levels, the income effect (resulting in a decline in demand as real income shrinks due to a higher price) is larger than the substitution effect, resulting in negative elasticities. While the Cournot elasticities for food follow a similar pattern as the Slutsky food elasticities in that they are higher for middle-income countries, they are very small in magnitude, indicating changes in nonfood prices have a relatively small effect on food consumption regardless of country and income level. The substitution effect is smaller, but similar in magnitude to the opposing income effect, thus resulting in very small negative elasticities. On average, the elasticities range from -0.041 for low-income countries to -0.067 for middle-income countries and -0.064 for high-income countries. The elasticity is less than 0.01 (in absolute values) for Liberia, Burundi, and the Democratic Republic of Congo, the three lowest income countries included in this study. Considering that food is a necessity, the relatively inelastic Cournot cross-price elasticity estimates are consistent with our expectations.

The Cournot nonfood cross-price elasticities (in response to a change in food prices) are much larger in magnitude, on average, more than 6 times larger than the Cournot food cross-price elasticities for low-income countries and 2.7 and 2.4 times larger for middle- and high-income countries. If food prices increase, all countries respond strongly by reducing their spending on nonfood items. The response is the strongest among the lowest income countries where food budget shares are the highest.

## Comparing 2005 results with 1996 and 1980 results

How do these results compare with those of Regmi and Seale (2010)? First, two major differences exist between the data used for the analysis. As mentioned, there were more countries in our data (114 in the 1996 ICP versus 144 in the 2005 ICP). Most of the newly added countries were lower income Sub-Saharan African countries, while a number of middle-income countries (15 countries), most notably several Caribbean countries, were not included in the 2005 round. The second major difference is the inclusion of “food away from home” in the food spending category.<sup>11</sup>

Despite some changes in the composition of the three income groups over time, their average income levels relative to the United States have stayed fairly stable (table 2). Given that U.S. per capita income increased by more than 20 percent between 1996 and 2005, stable group income

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<sup>11</sup>“Food away from home” was included under “recreation” expenditure in the previous rounds of ICP.

shares imply that incomes grew at similar rates in countries of all income levels. Food budget shares declined by 8.7 percent in low-income countries (from 53.3 to 48.6 percent) and by close to 11 percent in middle-income countries over the same time period. Contrary to this trend, the food budget share of high-income countries increased from 16.5 to 20.5 percent. We attribute this increase to the inclusion of the food-away-from-home category, which is a large budget component in many high-income countries. In the United States, food-away-from-home spending was estimated at more than 48 percent of total food expenditure in 2005 (USDA-ERS, table 13).

Comparisons between the Slutsky and Cournot nonfood cross-price elasticities in the two studies show similar patterns (fig. 1), where the lower income countries in both sets have greater cross-price elasticities (absolutely) than the high-income countries. However, Slutsky cross-price elasticities have declined between 1996 and 2005 for the lower income countries. This is a reasonable finding since income levels for most countries increased between 1996 and 2005 and, as income levels increase, one expects that response to price changes becomes less elastic (Timmer, 1981). While there is little change in middle-income countries, high-income nonfood cross-price elasticities were slightly higher in 2005 than in 1996, thus decreasing the range between the lowest and highest elasticity. It is interesting to note that a comparison between 1980<sup>12</sup> and 1996 cross-price elasticities showed the opposite trend: an increase for low-income countries and a decline for high-income countries (Regmi and Seale, 2010; p. 15). We attribute these higher nonfood cross-price elasticities in 2005 to larger food budgets in high-income countries due to the inclusion of away-from-home food spending, thus considerably increasing the budget share of food in this income group. As a result, a change in food prices necessarily has a stronger impact on nonfood spending, and the difference is most pronounced where the inclusion of away-from-home food spending is the greatest (i.e., in the higher income countries). 2005 Cournot cross-price elasticities are generally smaller in absolute value compared to 1996, thus reflecting increased income levels across all income groups.

We now turn to comparing over time the estimated Slutsky and Cournot cross-price elasticities for food with respect to nonfood price changes. Their patterns are generally similar in the two time periods, but certain differences exist (fig. 2).

Table 2

**Relative per capita income and food budget shares by income group, 2005 and 1996**

| 99 countries                            | 2005                      |                                       |                     | 1996                      |  |                     |
|---|---------------------------|---------------------------------------|---------------------|---------------------------|--|---------------------|
|   | Income per capita, US=100 | Food, beverages, tobacco budget share | Number of countries | Income per capita, US=100 | Food, beverages, tobacco budget share <sup>1</sup> | Number of countries |
| Low-income average<br>(44 countries)    | 7.0                       | 48.6                                  | 44                  | 7.9                       | 53.3   | 35                  |
| Middle-income average<br>(30 countries) | 26.5                      | 30.7                                  | 30                  | 25.2                      | 34.4   | 36                  |
| High-income average<br>(25 countries)   | 65.1                      | 20.5                                  | 25                  | 67.5                      | 16.5   | 28                  |

<sup>1</sup>Includes food-away-from-home expenditures.

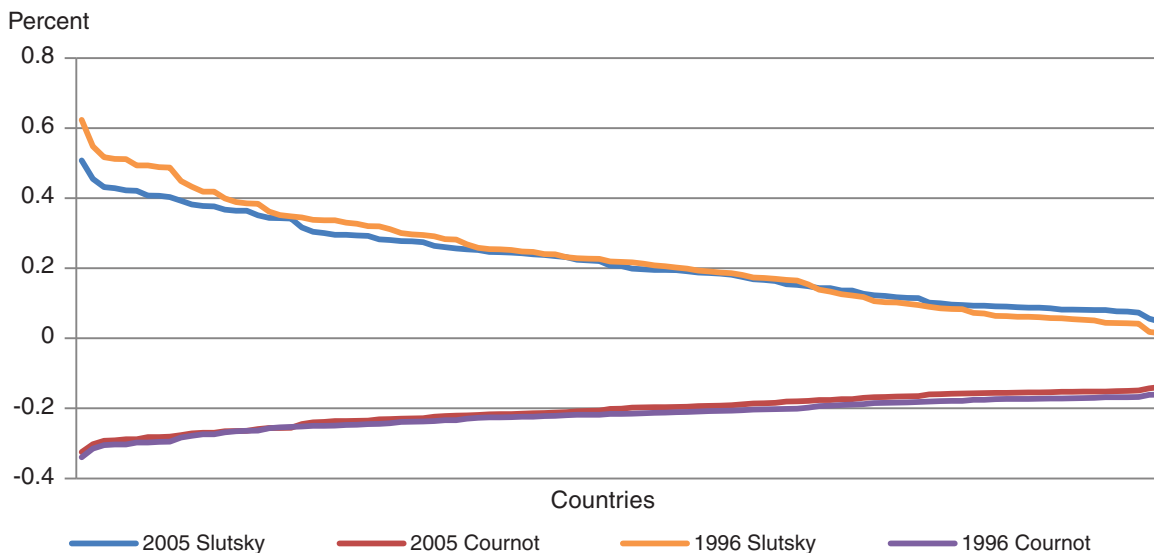
Source: USDA, Economic Research Service calculations based on World Bank, 1996 and 2005 International Comparison Program data.

<sup>12</sup>Among studies based on 1980 ICP data, TCS (1989) and Seale and Theil (1991) calculated and reported cross-price elasticities of demand for a two-good demand system (food and nonfood) on a country-by-country basis.



The values of the 2005 Slutsky cross-price elasticity are slightly lower than the 1996 estimates for the 60 countries in the lower income range of the sample. The difference is most pronounced for the

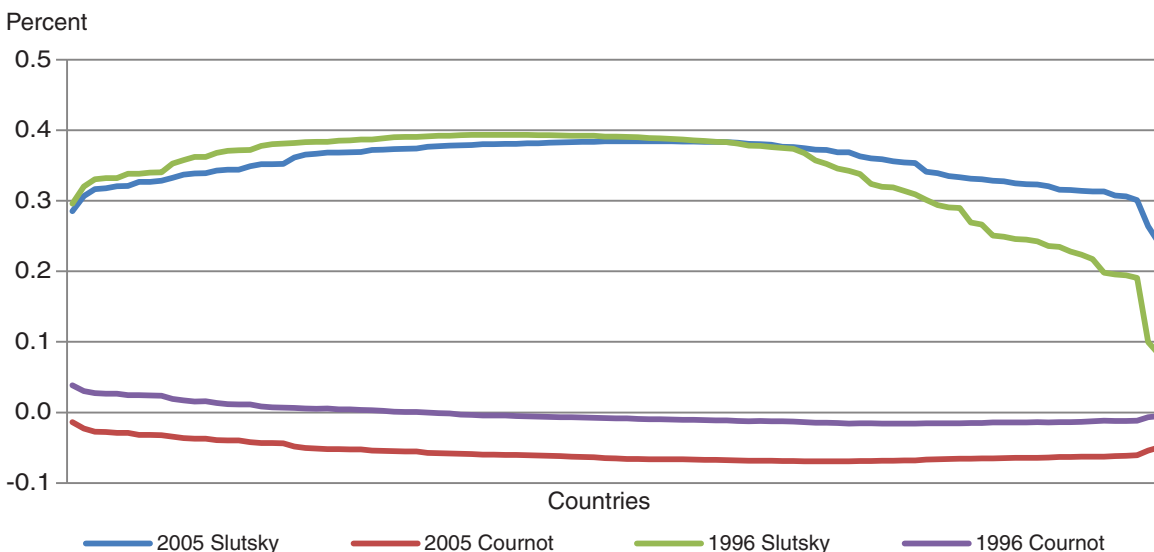
Figure 1  
**Nonfood cross-price elasticity with food price change**



Note: Ninety-nine countries are included in both data sets, plotted here in order of increasing per capita income. Country rankings differ between 1996 and 2005. Slutsky and Cournot are two leading price elasticity measurement methods.

Source: USDA, Economic Research Service calculations based on World Bank, 1996 and 2005 International Comparison Program data.

Figure 2  
**Food cross-price elasticity with nonfood price change**



Note: Ninety-nine countries are included in both data sets, plotted here in order of increasing per capita income. Country rankings differ between 1996 and 2005. Slutsky and Cournot are two leading price elasticity measurement methods.

Source: USDA, Economic Research Service calculations based on World Bank, 1996 and 2005 International Comparison Program data.

high-income countries in which elasticities are considerably higher in 2005 because of the aforementioned inclusion of spending on food away from home.

The corresponding Cournot cross-price elasticities for food demand with respect to nonfood price changes show a very similar pattern to those in 1996, with all falling below zero. In the 1996 ICP data, the lowest income countries exhibited a stronger substitution effect than income effect, leading to positive Cournot elasticities. In 2005, the income effect is stronger for all countries. In fact, the results are similar to those obtained based on the 1980 ICP, while slightly smaller in absolute value. Despite the differences noted between the 2005, 1996, and 1980 elasticities, the cross-price elasticities for a two-good demand system estimated with the 2005 ICP appear reasonable and offer sufficient support for estimating cross-price elasticities for the nine-good demand system.

## Cross-price elasticities in a nine-good demand system

The Slutsky and Cournot cross-price elasticities for each of the 9 aggregate goods with respect to a price change in each of the 8 other goods are presented for the 144 countries in the appendix tables 2-10. Simple averages of the estimated elasticities for low-, middle-, and high-income country groupings are presented in tables 3 and 4. Within a country grouping, the Slutsky cross-price elasticities for the nine-good demand system are biggest in magnitude for “recreation,” followed by “other,” and “medical and health.” These categories include items that can be described as luxury goods, which are treated differently than necessities, represented by food, clothing, and housing-related expenditures. Elasticities for necessities are much lower, and they are the lowest for food. Transport spending falls in between luxury goods and necessities.

The cross-price elasticity for education is now the second lowest, after food, for all income groups, which appears to indicate that education expenditure is now considered a necessity (table 3). This is an interesting change compared to the estimates based on 1996 ICP data, and it is supported by the fact that, in some of the poorest countries covered by the 2005 ICP, school enrollments have grown significantly in recent years.

The low-income countries have the strongest response to food price changes. Demand changes for most spending categories are more than twice as strong as those for the middle-income countries, and, on average, close to four times as strong as those for the high-income countries. The low-income countries’ strong response can be explained by this group’s relatively high food budget share. However, when relative prices change with respect to non-necessity goods, the Slutsky cross-price elasticities (except for food) are smaller in the low-income group and largest for the wealthiest countries (almost twice as big). In the case of food, the Slutsky cross-price elasticities of demand with respect to a change in the price of the necessities (food, clothing, housing, and education) are lowest in the high-income group and highest in the low-income group. Compared to 1996 ICP results, the Slutsky cross-price elasticities in response to a change in the price of food are higher in 2005 for low- and high-income countries, while they are somewhat lower in the middle-income countries. Inclusion of food-away-from-home spending most likely caused the increased response in high-income countries.

When relative price changes are not accompanied by compensating equivalent income changes, the resulting Cournot cross-price elasticities for the nine goods and three country groupings are presented in table 4. For the most part, we find that income effects outweigh substitution effects, thus resulting in negative elasticities. This is true for all elasticities of the high- and middle-income

Table 3

**Slutsky (compensated) cross-price and own-price elasticities for a nine-good demand system**

|   | Food,<br>beverages,<br>and<br>tobacco | Clothing<br>and<br>footwear | Gross<br>rent,<br>fuel, &<br>power | House<br>furnishings<br>and<br>operations | Medical<br>and<br>health | Transport<br>and<br>communi-<br>cations | Recre-<br>ation | Educa-<br>tion | Other  |
|---|---------------------------------------|-----------------------------|------------------------------------|---|--------------------------|---|-----------------|----------------|--------|
| <i>Average cross-price elasticities, average own-price elasticities on diagonal</i> |                                       |                             |                                    |   |                          |   |                 |                |        |
| <b>Low-income countries</b>   |                                       |                             |                                    |   |                          |   |                 |                |        |
| 1-percent price change in:  |                                       |                             |                                    |   |                          |   |                 |                |        |
| Food, beverages, and tobacco  | -0.345                                | 0.278                       | 0.309                              | 0.303                                     | 0.564                    | 0.351                                   | 0.900           | 0.268          | 0.591  |
| Clothing and footwear   | 0.032                                 | -0.670                      | 0.044                              | 0.043                                     | 0.076                    | 0.050                                   | 0.120           | 0.038          | 0.079  |
| Gross rent, fuel, and power   | 0.091                                 | 0.113                       | -0.662                             | 0.124                                     | 0.214                    | 0.142                                   | 0.333           | 0.109          | 0.221  |
| House furnishings & operations  | 0.031                                 | 0.038                       | 0.043                              | -0.731                                    | 0.073                    | 0.048                                   | 0.114           | 0.037          | 0.075  |
| Medical and health  | 0.030                                 | 0.038                       | 0.042                              | 0.041                                     | -1.290                   | 0.047                                   | 0.102           | 0.036          | 0.068  |
| Transport and communications  | 0.072                                 | 0.091                       | 0.101                              | 0.099                                     | 0.167                    | -0.776                                  | 0.258           | 0.087          | 0.172  |
| Recreation  | 0.029                                 | 0.037                       | 0.041                              | 0.040                                     | 0.067                    | 0.046                                   | -2.033          | 0.035          | 0.069  |
| Education   | 0.018                                 | 0.022                       | 0.025                              | 0.024                                     | 0.044                    | 0.028                                   | 0.069           | -0.660         | 0.045  |
| Other   | 0.045                                 | 0.056                       | 0.062                              | 0.061                                     | 0.098                    | 0.070                                   | 0.150           | 0.054          | -1.310 |
| <b>Middle-income countries</b>  |                                       |                             |                                    |   |                          |   |                 |                |        |
| 1-percent price change in:  |                                       |                             |                                    |   |                          |   |                 |                |        |
| Food, beverages, and tobacco  | -0.379                                | 0.148                       | 0.163                              | 0.161                                     | 0.201                    | 0.177                                   | 0.216           | 0.141          | 0.202  |
| Clothing and footwear   | 0.025                                 | -0.671                      | 0.041                              | 0.040                                     | 0.050                    | 0.044                                   | 0.054           | 0.036          | 0.051  |
| Gross rent, fuel, and power   | 0.086                                 | 0.126                       | -0.642                             | 0.137                                     | 0.171                    | 0.151                                   | 0.183           | 0.120          | 0.171  |
| House furnishings & operations  | 0.028                                 | 0.042                       | 0.046                              | -0.725                                    | 0.056                    | 0.050                                   | 0.061           | 0.040          | 0.057  |
| Medical and health  | 0.042                                 | 0.062                       | 0.068                              | 0.067                                     | -0.875                   | 0.074                                   | 0.090           | 0.059          | 0.084  |
| Transport and communications  | 0.079                                 | 0.117                       | 0.129                              | 0.127                                     | 0.158                    | -0.707                                  | 0.169           | 0.111          | 0.158  |
| Recreation  | 0.044                                 | 0.065                       | 0.072                              | 0.071                                     | 0.088                    | 0.078                                   | -0.933          | 0.062          | 0.088  |
| Education   | 0.013                                 | 0.019                       | 0.022                              | 0.021                                     | 0.026                    | 0.023                                   | 0.028           | -0.656         | 0.026  |
| Other   | 0.062                                 | 0.091                       | 0.101                              | 0.099                                     | 0.124                    | 0.109                                   | 0.132           | 0.087          | -0.837 |
| <b>High-income countries</b>  |                                       |                             |                                    |   |                          |   |                 |                |        |
| 1-percent price change in:  |                                       |                             |                                    |   |                          |   |                 |                |        |
| Food, beverages, and tobacco  | -0.323                                | 0.076                       | 0.084                              | 0.083                                     | 0.098                    | 0.089                                   | 0.102           | 0.072          | 0.098  |
| Clothing and footwear   | 0.018                                 | -0.671                      | 0.040                              | 0.039                                     | 0.046                    | 0.042                                   | 0.048           | 0.034          | 0.046  |
| Gross rent, fuel, and power   | 0.068                                 | 0.133                       | -0.632                             | 0.145                                     | 0.171                    | 0.157                                   | 0.178           | 0.127          | 0.171  |
| House furnishings & operations  | 0.022                                 | 0.044                       | 0.048                              | -0.721                                    | 0.056                    | 0.051                                   | 0.058           | 0.041          | 0.056  |
| Medical and health  | 0.039                                 | 0.075                       | 0.083                              | 0.082                                     | -0.810                   | 0.089                                   | 0.101           | 0.071          | 0.097  |
| Transport and communications  | 0.067                                 | 0.131                       | 0.144                              | 0.142                                     | 0.168                    | -0.678                                  | 0.175           | 0.124          | 0.168  |
| Recreation  | 0.042                                 | 0.083                       | 0.091                              | 0.090                                     | 0.106                    | 0.097                                   | -0.835          | 0.078          | 0.106  |
| Education   | 0.009                                 | 0.018                       | 0.020                              | 0.019                                     | 0.023                    | 0.021                                   | 0.024           | -0.653         | 0.023  |
| Other   | 0.057                                 | 0.112                       | 0.123                              | 0.121                                     | 0.143                    | 0.131                                   | 0.149           | 0.106          | -0.765 |

Source: USDA, Economic Research Service calculations using World Bank, 2005 International Comparison Program data.

groups with one exception for middle-income countries; the response to a 1-percent increase in the price of recreation leads to very slightly positive demand changes in all other eight spending categories. Low-income countries have positive demand changes in response to a 1-percent price increase of recreation, medical spending, and other.

All three categories have small budget shares for this income group and thus their income effects are also very small. The change in food price leads to the strongest demand responses in the remaining eight categories for all income groups, given that the food budget share is the most prominent within each group. However, absolute values are greatest for the lowest income countries and decline with income. This same trend holds for price changes in other necessities such as spending related to clothing, housing, and education. In general, 2005 Cournot cross-price elasticities in response to food price change are smaller in magnitude for all income groups than the elasticities based on the 1996 ICP. This change is most likely due to the inclusion of food consumed away from home.

Table 4

**Cournot (uncompensated) cross-price elasticities for a nine-good demand system**

|   | Food,<br>beverages,<br>and<br>tobacco | Clothing<br>and<br>footwear | Gross<br>rent,<br>fuel, &<br>power | House<br>furnishings<br>and<br>operations | Medical<br>and<br>health | Transport<br>and<br>communi-<br>cations | Recre-<br>ation | Educa-<br>tion | Other  |
|---|---------------------------------------|-----------------------------|------------------------------------|---|--------------------------|---|-----------------|----------------|--------|
| <i>Average cross-price elasticities, average own-price elasticities on diagonal</i> |                                       |                             |                                    |   |                          |   |                 |                |        |
| <b>Low-income countries</b>   |                                       |                             |                                    |   |                          |   |                 |                |        |
| 1-percent price change in:  |                                       |                             |                                    |   |                          |   |                 |                |        |
| Food, beverages, and tobacco  | -0.737                                | -0.206                      | -0.228                             | -0.224                                    | -1.164                   | -0.258                                  | -0.121          | -0.198         | -0.422 |
| Clothing and footwear   | -0.013                                | -0.726                      | -0.018                             | -0.018                                    | -0.100                   | -0.020                                  | 0.003           | -0.016         | -0.032 |
| Gross rent, fuel, and power   | -0.025                                | -0.031                      | -0.822                             | -0.033                                    | -0.206                   | -0.038                                  | 0.032           | -0.029         | -0.059 |
| House furnishings & operations  | -0.009                                | -0.011                      | -0.013                             | -0.786                                    | -0.074                   | -0.014                                  | 0.009           | -0.011         | -0.022 |
| Medical and health  | 0.005                                 | 0.006                       | 0.007                              | 0.006                                     | -1.344                   | 0.007                                   | 0.035           | 0.006          | 0.014  |
| Transport and communications  | -0.009                                | -0.012                      | -0.013                             | -0.013                                    | -0.101                   | -0.903                                  | 0.045           | -0.011         | -0.021 |
| Recreation  | 0.010                                 | 0.012                       | 0.013                              | 0.013                                     | -0.010                   | 0.015                                   | -2.086          | 0.011          | 0.025  |
| Education   | -0.008                                | -0.010                      | -0.012                             | -0.011                                    | -0.063                   | -0.013                                  | 0.000           | -0.692         | -0.021 |
| Other   | 0.007                                 | 0.009                       | 0.010                              | 0.010                                     | -0.033                   | 0.011                                   | 0.051           | 0.009          | -1.389 |
| <b>Middle-income countries</b>  |                                       |                             |                                    |   |                          |   |                 |                |        |
| 1-percent price change in:  |                                       |                             |                                    |   |                          |   |                 |                |        |
| Food, beverages, and tobacco  | -0.588                                | -0.158                      | -0.174                             | -0.172                                    | -0.214                   | -0.189                                  | -0.230          | -0.151         | -0.215 |
| Clothing and footwear   | -0.010                                | -0.723                      | -0.017                             | -0.017                                    | -0.021                   | -0.018                                  | -0.022          | -0.015         | -0.021 |
| Gross rent, fuel, and power   | -0.024                                | -0.035                      | -0.821                             | -0.038                                    | -0.048                   | -0.042                                  | -0.051          | -0.034         | -0.048 |
| House furnishings & operations  | -0.008                                | -0.012                      | -0.014                             | -0.783                                    | -0.017                   | -0.015                                  | -0.018          | -0.012         | -0.017 |
| Medical and health  | -0.002                                | -0.003                      | -0.003                             | -0.003                                    | -0.962                   | -0.003                                  | -0.004          | -0.003         | -0.004 |
| Transport and communications  | -0.014                                | -0.021                      | -0.024                             | -0.023                                    | -0.029                   | -0.871                                  | -0.031          | -0.020         | -0.029 |
| Recreation  | 0.001                                 | 0.001                       | 0.002                              | 0.002                                     | 0.002                    | 0.002                                   | -1.025          | 0.001          | 0.002  |
| Education   | -0.006                                | -0.009                      | -0.010                             | -0.010                                    | -0.013                   | -0.011                                  | -0.014          | -0.684         | -0.013 |
| Other   | -0.003                                | -0.004                      | -0.004                             | -0.004                                    | -0.005                   | -0.005                                  | -0.006          | -0.004         | -0.966 |
| <b>High-income countries</b>  |                                       |                             |                                    |   |                          |   |                 |                |        |
| 1-percent price change in:  |                                       |                             |                                    |   |                          |   |                 |                |        |
| Food, beverages, and tobacco  | -0.431                                | -0.132                      | -0.145                             | -0.143                                    | -0.169                   | -0.155                                  | -0.176          | -0.125         | -0.169 |
| Clothing and footwear   | -0.008                                | -0.722                      | -0.016                             | -0.016                                    | -0.019                   | -0.017                                  | -0.020          | -0.014         | -0.019 |
| Gross rent, fuel, and power   | -0.019                                | -0.038                      | -0.821                             | -0.041                                    | -0.049                   | -0.045                                  | -0.051          | -0.036         | -0.049 |
| House furnishings & operations  | -0.007                                | -0.013                      | -0.014                             | -0.783                                    | -0.017                   | -0.015                                  | -0.018          | -0.012         | -0.017 |
| Medical and health  | -0.004                                | -0.008                      | -0.009                             | -0.008                                    | -0.917                   | -0.009                                  | -0.010          | -0.007         | -0.010 |
| Transport and communications  | -0.014                                | -0.027                      | -0.029                             | -0.029                                    | -0.034                   | -0.863                                  | -0.035          | -0.025         | -0.034 |
| Recreation  | -0.002                                | -0.005                      | -0.005                             | -0.005                                    | -0.006                   | -0.006                                  | -0.952          | -0.005         | -0.006 |
| Education   | -0.005                                | -0.009                      | -0.010                             | -0.010                                    | -0.011                   | -0.010                                  | -0.012          | -0.679         | -0.011 |
| Other   | -0.006                                | -0.011                      | -0.012                             | -0.012                                    | -0.014                   | -0.013                                  | -0.015          | -0.011         | -0.923 |

Source: USDA, Economic Research Service calculations using World Bank, 2005 International Comparison Program data.

## Conclusion

Cross-price elasticities of demand based on 2005 ICP data are presented using the same approach that was applied to 1996 ICP data, found in Regmi and Seale (2010). Two sets of cross-price elasticities, Slutsky (compensated) and Cournot (uncompensated), are calculated for two-good and nine-good demand systems based on the 2005 ICP data across 144 countries. The compensated Slutsky elasticities are calculated assuming that real income levels remain unchanged, and the uncompensated Cournot elasticities are calculated assuming that nominal incomes remain unchanged. The consumption categories of the two-good demand system are food and nonfood, while the categories of the nine-good demand system are: food, beverage, and tobacco; clothing and footwear; gross rent, fuel, and power; house furnishings and operations; education; medical and health; transport and communications; recreation; and other.

Comparisons of the elasticities from the two-good demand system with elasticities estimated using the 1996 ICP data by Regmi and Seale (2010) show that consumer demand had become less elastic in 2005 with respect to relative price changes. We attribute this change to income growth in all income groups. However, high-income country results are strongly affected by the new definition of food, which in the 2005 ICP for the first time includes food-away-from-home expenditures. Given that this spending category makes up a considerable part of per capita food budgets in high-income countries, our estimates reflect this change: food cross-price elasticities with nonfood price changes for high-income countries are higher in 2005 than in 1996. However, in the poorest countries in the sample, where real income growth was pronounced during this period and away-from-home food spending was small, relative price changes sometimes lead to lower cross-price elasticities in 2005 than those calculated in 1996. In contrast, countries at all income levels tended to register higher cross-price elasticities in 2005 than in 1996 with respect to food price changes for the other eight consumption groups.

The estimates from this report represent consistent cross-country cross-price elasticity estimates for a large number of countries (144) and consumption categories (9). These cross-price elasticities together with the income and own-price elasticities presented by MSMR (2011) are useful inputs into global trade and demand models that benefit from using elasticities that were estimated consistently across countries.

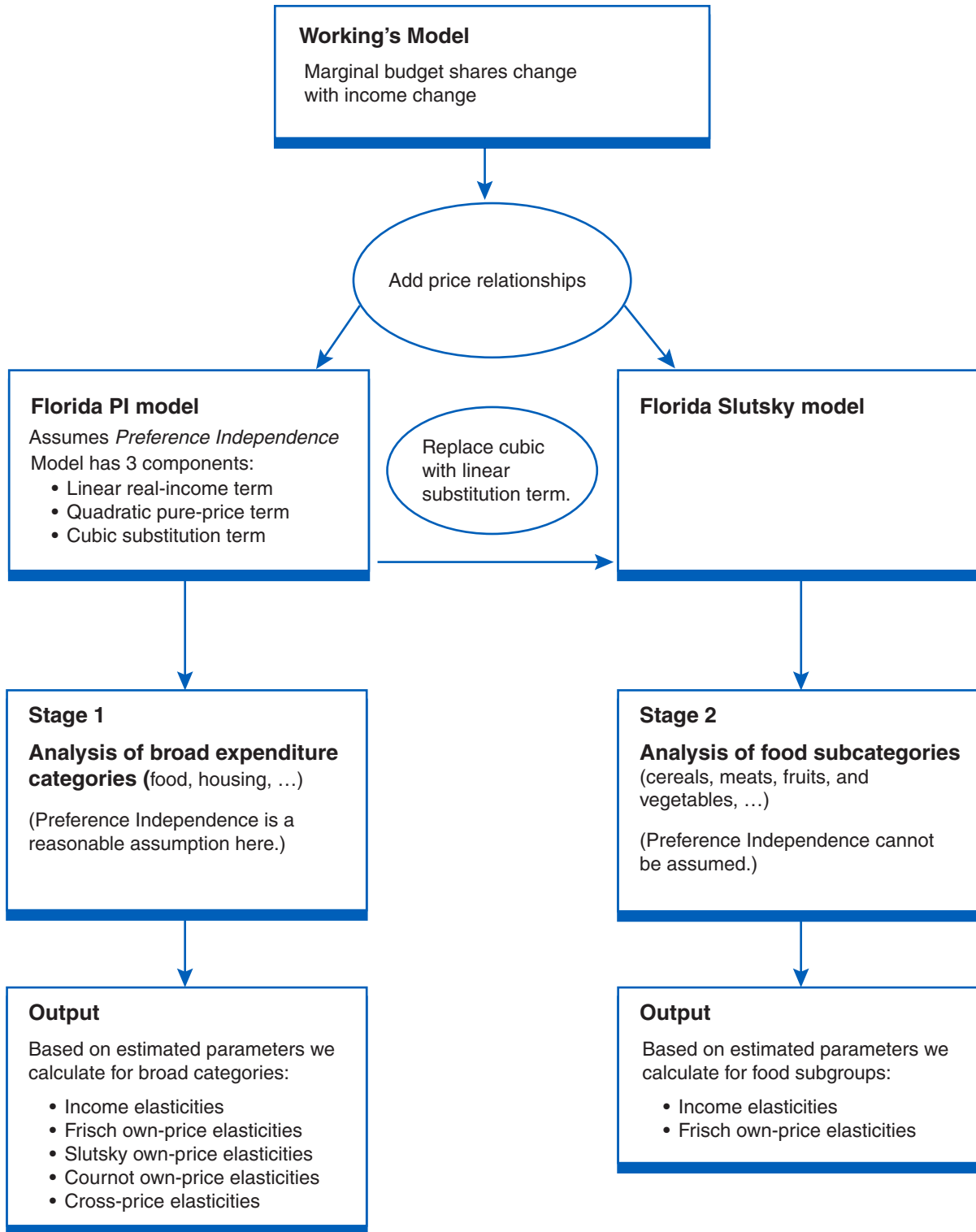
## References

- Clements, K.W., and H. Theil. 1979. *A Cross-Country Analysis of Consumption Patterns*, Report No. 7924, Center for Mathematical Studies in Business and Economics, University of Chicago, Chicago, IL.
- Diewert, E. 2008. "New Methodological Developments for the International Comparison Program," *Review of Income and Wealth*. Vol. 56(s1): S11-S31.
- Fiebig, D.G., J.L. Seale, Jr., and H. Theil. 1988. "Cross-Country Demand Analysis Based on Three Phases of the International Comparison Project," in J. Salazar-Carrillo and D.S. Prosada-Rao (eds.), *World Comparison of Incomes, Prices, and Product*. Amsterdam: Elsevier Science Publishers B.V. (Nort-Hilland), pp. 225-35.
- Finke, R., M.C. Rosalsky, and H. Theil. 1983. "A New Cross-Country Tabulation of Income Elasticities of Demand," *Economics Letters*, Vol. 12: 391-96.
- Frisch, R. 1932. *New Methods of Measuring Marginal Utility*, Tübingen: Mohr.
- Frisch, R. 1959. "A Complete Scheme for Computing All Direct and Cross Demand Elasticities in a Model with Many Sectors," *Econometrica*, Vol. 27(2): 177-196.
- Friedman, M. 1976. *Price Theory*, Chicago: Aldine Publishing Co.
- Gao, G. 2012. "World Food Demand," *American Journal of Agricultural Economics*, Vol. 94(1): 25-51.
- Hertel, T.W., and L.A. Winters. 2006. *Poverty and the WTO: Impacts of the Doha Development Agenda*, World Bank Publications.
- Muhammad, A., J.L. Seale, Jr., B. Meade, and A. Regmi. 2011 (revised 2013). *International Evidence on Food Consumption Patterns*, U.S. Department of Agriculture, Economic Research Service, Technical Bulletin No. 1929.
- Regmi, A., and Seale, J.L., Jr. 2010. *Cross-Price Elasticities of Demand Across 114 Countries*, U.S. Department of Agriculture, Economic Research Service, Technical Bulletin No. 1925.
- Seale, J.L., Jr., and Regmi, A. 2006. "Modeling International Consumption Patterns," *Review of Income and Wealth*, Vol. 52: 603-24.
- Seale, J.L., Jr., A. Regmi, and J. Bernstein. 2003. *International Evidence on Food Consumption Patterns*, U.S. Department of Agriculture, Economic Research Service, Technical Bulletin No. 1904.
- Seale, J.L., Jr., and H. Theil. 1991. "Income and Price Sensitivity in Demand Systems, Part II: Price Sensitivity," in T.J. Kaul and J.K. Sengupta (eds.) *Economic Models, Estimation, and Socioeconomic System*, Amsterdam: Elsevier (North-Holland) Science Publishers, B.U.
- Suhm, F.E., 1979. *A Cross-Country Analysis of Divisia Covariances of Prices and Quantities Consumed*, manuscript, University of Chicago, Chicago, IL.



- Timmer, C.P. 1981. "Is There Curvature in the Slutsky Matrix?" *Review of Economics and Statistics*, Vol. 63: 395-402.
- Theil, H. 1987. "Evidence on International Consumption Patterns," in Henri Theil and Kenneth W. Clements (eds.) *Applied Demand Analysis*, Ballinger Publishing Co., Cambridge, MA, pp. 37-100.
- Theil H., C.F. Chung, and J.L. Seale, Jr. 1989. *International Evidence on Consumption Patterns*, JAI Press, Inc., Greenwich, CT.
- Theil, H., and R. Finke. 1985. "Income and Price Elasticities of Demand at Low Levels of Real Income," *Economics Letters*, Vol. 18: 1-5.
- Theil, H., and J.L. Seale, Jr. 1987. "Measuring the Distance between Relative Price Vectors of Different Countries," *Economics Letters*, Vol. 24: 371-74.
- United States Department of Agriculture, Economic Research Service. Per capita food expenditures data product. Downloaded January 23, 2013 at <http://www.ers.usda.gov/data-products/food-expenditures.aspx>.
- Valenzuela, E., K. Anderson, and T. Hertel. 2007. "Impacts of Trade Reform: Sensitivity of Model Results to Key Assumptions," *International Economics and Economic Policy*, Vol. 4: 395-420.
- von Braun, J. 2007. *The World Food Situation: New Driving Forces and Required Actions*, International Food Policy Research Institute, Food Policy Report No. 18, Washington, DC.
- Winters, L.A. 2005. "The European Agricultural Trade Policies and Poverty," *European Review of Agricultural Economics*, Vol. 32 (3): 319-46.
- Working, H. 1943. "Statistical Laws of Family Expenditure," *Journal of the American Statistical Association*, Vol. 38: 43-56.

Appendix figure 1  
**Derivation of the Florida model and relationships**



Source: USDA, Economic Research Service.

Appendix table 1

**Countries in the 2005 International Comparison Program (ICP) Round**

| Latin America | Asia              | Africa               | West Asia    | Commonwealth<br>of<br>Independent States | Europe / Organisation<br>for Economic<br>Co-operation<br>and Development |
|---------------|-------------------|----------------------|--------------|--|--|
| Argentina**   | Bangladesh*       | Angola               | Bahrain*     | Armenia*                                 | Belgium**  |
| Bolivia**     | Bhutan            | Burundi              | Iraq         | Azerbaijan*                              | Denmark**  |
| Brazil**      | Brunei Darussalam | Benin*               | Jordan*      | Belarus*                                 | Germany*   |
| Chile**       | Cambodia          | Burkina Faso         | Kuwait       | Georgia*                                 | Spain**  |
| Colombia      | China             | Botswana**           | Lebanon*     | Kazakhstan*                              | France**   |
| Ecuador**     | Fiji*             | Central African Rep. | Oman*        | Kyrgyz Rep.*                             | Ireland**  |
| Peru**        | Hong Kong**       | Côte d'Ivoire*       | Qatar*       | Moldova*                                 | Italy**  |
| Paraguay**    | India             | Cameroon*            | Saudi Arabia | Tajikistan*                              | Luxembourg**   |
| Uruguay*      | Indonesia**       | Congo, Rep.*         | Syria*       | Ukraine*                                 | Netherlands**  |
| Venezuela**   | Iran*             | Comoros              | Yemen*       | Russia*                                  | Austria**  |
|               | Lao PDR           | Cape Verde           |              |  | Portugal**   |
|               | Macao             | Djibouti             |              |  | Finland**  |
|               | Malaysia          | Egypt*               |              |  | Sweden*  |
|               | Maldives          | Ethiopia             |              |  | United Kingdom**   |
|               | Mongolia*         | Gabon*               |              |  | Cyprus   |
|               | Nepal*            | Ghana                |              |  | Czech Republic*  |
|               | Pakistan**        | Gambia, The          |              |  | Estonia*   |
|               | Philippines**     | Guinea-Bissau        |              |  | Hungary**  |
|               | Singapore*        | Equatorial Guinea    |              |  | Latvia*  |
|               | Sri Lanka**       | Guinea*              |              |  | Lithuania*   |
|               | Taiwan            | Kenya*               |              |  | Malta  |
|               | Thailand*         | Liberia              |              |  | Poland**   |
|               | Vietnam*          | Lesotho              |              |  | Slovakia*  |
|               |                   | Morocco**            |              |  | Slovenia*  |
|               |                   | Madagascar**         |              |  | Bulgaria*  |
|               |                   | Mali*                |              |  | Romania*   |
|               |                   | Mozambique           |              |  | Turkey*  |
|               |                   | Mauritania           |              |  | Iceland*   |
|               |                   | Mauritius*           |              |  | Norway**   |
|               |                   | Malawi*              |              |  | Switzerland*   |
|               |                   | Namibia              |              |  | Croatia  |
|               |                   | Niger                |              |  | Macedonia*   |
|               |                   | Nigeria**            |              |  | Albania*   |
|               |                   | Rwanda               |              |  | Bosnia &<br>Herzegovina  |
|               |                   | Sudan                |              |  | Montenegro   |
|               |                   | Senegal**            |              |  | Serbia   |
|               |                   | Sierra Leone*        |              |  | Australia*   |

—continued

**Countries in the 2005 International Comparison Program (ICP) Round—Continued**

| Latin America | Asia | Africa                | West Asia | Commonwealth<br>of<br>Independent States | Europe / Organisation<br>for Economic<br>Co-operation<br>and Development |
|---------------|------|-----------------------|-----------|--|--|
|               |      | São Tomé and Príncipe |           |  | New Zealand*   |
|               |      | Swaziland*            |           |  | Japan**  |
|               |      | Chad                  |           |  | Korea**  |
|               |      | Togo                  |           |  | Canada*  |
|               |      | Tunisia**             |           |  | Mexico*  |
|               |      | Tanzania**            |           |  | United States**  |
|               |      | Uganda                |           |  | Israel**   |
|               |      | South Africa          |           |  |  |
|               |      | Congo, Dem. Rep.      |           |  |  |
|               |      | Zambia**              |           |  |  |
|               |      | Zimbabwe*             |           |  |  |

\* Denotes countries (59) present in the 1996 ICP and not in the 1980 ICP.

\*\* Denotes countries (40) present both in the 1996 and the 1980 ICP.

Countries from 1996 missing in 2005 are Greece, Turkmenistan, Uzbekistan, and 12 countries from the Caribbean. Greece is not available at the basic heading but is included at the aggregate level by the World Bank.

**Yellow: included for the first time in the 2005 International Comparison Program.**

Source: USDA, Economic Research Service calculations based on 2005 International Comparison Program data.

**Cross-price elasticities with respect to change in food price, 144 countries in 2005**

| Country                     | Clothing & footwear |         | Gross rent, fuel, & power |         | House furnishings & operations |         | Medical care |         |
|-----------------------------|---------------------|---------|---------------------------|---------|--------------------------------|---------|--------------|---------|
|                             | Slutsky             | Cournot | Slutsky                   | Cournot | Slutsky                        | Cournot | Slutsky      | Cournot |
| <b>Low-income countries</b> |                     |         |                           |         |                                |         |              |         |
| Congo, Democratic Republic  | 0.451               | -0.268  | 0.506                     | -0.301  | 0.493                          | -0.294  | 0.731        | -0.435  |
| Burundi                     | 0.401               | -0.250  | 0.448                     | -0.280  | 0.438                          | -0.274  | 0.651        | -58.846 |
| Liberia                     | 0.392               | -0.247  | 0.438                     | -0.276  | 0.428                          | -0.270  | 3.485        | -2.197  |
| Zimbabwe                    | 0.378               | -0.242  | 0.422                     | -0.270  | 0.413                          | -0.264  | 1.674        | -1.071  |
| Ethiopia                    | 0.368               | -0.238  | 0.410                     | -0.266  | 0.402                          | -0.260  | 1.244        | -0.806  |
| Niger                       | 0.367               | -0.238  | 0.410                     | -0.265  | 0.401                          | -0.260  | 1.220        | -0.791  |
| Guinea-Bissau               | 0.366               | -0.238  | 0.409                     | -0.265  | 0.400                          | -0.260  | 1.201        | -0.779  |
| Mozambique                  | 0.355               | -0.234  | 0.396                     | -0.261  | 0.388                          | -0.255  | 0.978        | -0.643  |
| Malawi                      | 0.348               | -0.231  | 0.387                     | -0.257  | 0.379                          | -0.252  | 0.870        | -0.578  |
| Rwanda                      | 0.345               | -0.230  | 0.384                     | -0.256  | 0.376                          | -0.251  | 0.839        | -0.559  |
| Angola                      | 0.337               | -0.227  | 0.375                     | -0.253  | 0.367                          | -0.247  | 0.759        | -0.511  |
| Chad                        | 0.335               | -0.226  | 0.373                     | -0.252  | 0.366                          | -0.247  | 0.748        | -0.505  |
| Gambia, The                 | 0.334               | -0.226  | 0.372                     | -0.251  | 0.364                          | -0.246  | 0.736        | -0.498  |
| Central African Republic    | 0.333               | -0.225  | 0.371                     | -0.251  | 0.363                          | -0.246  | 0.729        | -0.494  |
| Mali                        | 0.333               | -0.225  | 0.371                     | -0.251  | 0.363                          | -0.246  | 0.728        | -0.493  |
| Tanzania                    | 0.331               | -0.225  | 0.369                     | -0.250  | 0.361                          | -0.245  | 0.715        | -0.486  |
| Sierra Leone                | 0.327               | -0.223  | 0.364                     | -0.249  | 0.357                          | -0.244  | 0.686        | -0.469  |
| Guinea                      | 0.326               | -0.223  | 0.363                     | -0.248  | 0.356                          | -0.243  | 0.681        | -0.466  |
| Burkina Faso                | 0.324               | -0.222  | 0.360                     | -0.247  | 0.353                          | -0.242  | 0.664        | -0.456  |
| Uganda                      | 0.318               | -0.220  | 0.353                     | -0.245  | 0.347                          | -0.240  | 0.629        | -0.436  |
| Madagascar                  | 0.317               | -0.220  | 0.353                     | -0.245  | 0.346                          | -0.240  | 0.627        | -0.435  |
| Zambia                      | 0.317               | -0.220  | 0.353                     | -0.244  | 0.346                          | -0.240  | 0.625        | -0.433  |
| Congo, Republic             | 0.315               | -0.219  | 0.350                     | -0.243  | 0.343                          | -0.239  | 0.613        | -0.427  |
| Togo                        | 0.313               | -0.218  | 0.348                     | -0.243  | 0.342                          | -0.238  | 0.605        | -0.422  |
| Nepal                       | 0.308               | -0.216  | 0.342                     | -0.240  | 0.336                          | -0.236  | 0.579        | -0.407  |
| Ghana                       | 0.305               | -0.215  | 0.339                     | -0.239  | 0.332                          | -0.235  | 0.566        | -0.399  |
| Benin                       | 0.300               | -0.214  | 0.334                     | -0.237  | 0.328                          | -0.233  | 0.547        | -0.389  |
| Mauritania                  | 0.300               | -0.213  | 0.333                     | -0.237  | 0.327                          | -0.233  | 0.544        | -0.387  |
| Bangladesh                  | 0.298               | -0.213  | 0.331                     | -0.236  | 0.324                          | -0.232  | 0.535        | -0.382  |
| Côte d'Ivoire               | 0.297               | -0.212  | 0.330                     | -0.236  | 0.324                          | -0.231  | 0.532        | -0.381  |
| Laos                        | 0.297               | -0.212  | 0.330                     | -0.236  | 0.323                          | -0.231  | 0.532        | -0.380  |
| Kenya                       | 0.290               | -0.210  | 0.322                     | -0.233  | 0.316                          | -0.229  | 0.508        | -0.367  |
| Djibouti                    | 0.290               | -0.210  | 0.322                     | -0.233  | 0.316                          | -0.229  | 0.506        | -0.366  |
| Nigeria                     | 0.288               | -0.209  | 0.320                     | -0.232  | 0.314                          | -0.228  | 0.501        | -0.363  |
| Senegal                     | 0.288               | -0.209  | 0.320                     | -0.232  | 0.314                          | -0.228  | 0.500        | -0.363  |
| Cambodia                    | 0.283               | -0.207  | 0.314                     | -0.230  | 0.309                          | -0.226  | 0.483        | -0.354  |
| Cameroon                    | 0.279               | -0.206  | 0.310                     | -0.229  | 0.304                          | -0.224  | 0.470        | -0.346  |
| São Tomé and Príncipe       | 0.278               | -0.205  | 0.308                     | -0.228  | 0.303                          | -0.224  | 0.465        | -0.344  |
| India                       | 0.275               | -0.204  | 0.305                     | -0.227  | 0.300                          | -0.223  | 0.457        | -0.340  |
| Yemen                       | 0.274               | -0.204  | 0.304                     | -0.226  | 0.299                          | -0.222  | 0.454        | -0.338  |
| Vietnam                     | 0.274               | -0.204  | 0.304                     | -0.226  | 0.298                          | -0.222  | 0.454        | -0.338  |
| Mongolia                    | 0.273               | -0.204  | 0.303                     | -0.226  | 0.297                          | -0.222  | 0.450        | -0.336  |

—continued

**Cross-price elasticities with respect to change in food price, 144 countries in 2005—Continued**

| Country                               | Clothing & footwear |         | Gross rent, fuel, & power |         | House furnishings & operations |         | Medical care |         |
|---------------------------------------|---------------------|---------|---------------------------|---------|--------------------------------|---------|--------------|---------|
|                                       | Slutsky             | Cournot | Slutsky                   | Cournot | Slutsky                        | Cournot | Slutsky      | Cournot |
| <b>Low-income countries—continued</b> |                     |         |                           |         |                                |         |              |         |
| Iraq                                  | 0.270               | -0.202  | 0.299                     | -0.225  | 0.294                          | -0.221  | 0.442        | -0.331  |
| Bhutan                                | 0.267               | -0.201  | 0.296                     | -0.224  | 0.291                          | -0.220  | 0.434        | -0.328  |
| China                                 | 0.265               | -0.201  | 0.294                     | -0.223  | 0.288                          | -0.218  | 0.427        | -0.324  |
| Sudan                                 | 0.259               | -0.198  | 0.287                     | -0.220  | 0.282                          | -0.216  | 0.411        | -0.315  |
| Lesotho                               | 0.255               | -0.197  | 0.283                     | -0.219  | 0.278                          | -0.215  | 0.402        | -0.311  |
| Tajikistan                            | 0.255               | -0.197  | 0.282                     | -0.218  | 0.277                          | -0.215  | 0.401        | -0.310  |
| Maldives                              | 0.247               | -0.194  | 0.273                     | -0.215  | 0.269                          | -0.211  | 0.382        | -0.300  |
| Morocco                               | 0.245               | -0.194  | 0.272                     | -0.214  | 0.267                          | -0.211  | 0.379        | -0.299  |
| Pakistan                              | 0.243               | -0.193  | 0.269                     | -0.214  | 0.265                          | -0.210  | 0.373        | -0.296  |
| Indonesia                             | 0.239               | -0.191  | 0.265                     | -0.212  | 0.260                          | -0.208  | 0.365        | -0.292  |
| Kyrgyzstan                            | 0.239               | -0.191  | 0.265                     | -0.212  | 0.260                          | -0.208  | 0.364        | -0.291  |
| Philippines                           | 0.238               | -0.191  | 0.264                     | -0.211  | 0.259                          | -0.208  | 0.362        | -0.290  |
| Cape Verde                            | 0.238               | -0.191  | 0.263                     | -0.211  | 0.259                          | -0.208  | 0.361        | -0.290  |
| Bolivia                               | 0.237               | -0.190  | 0.263                     | -0.211  | 0.258                          | -0.207  | 0.360        | -0.289  |
| Namibia                               | 0.232               | -0.189  | 0.257                     | -0.209  | 0.252                          | -0.205  | 0.349        | -0.284  |
| Sri Lanka                             | 0.230               | -0.188  | 0.254                     | -0.208  | 0.250                          | -0.204  | 0.344        | -0.281  |
| Botswana                              | 0.228               | -0.187  | 0.253                     | -0.207  | 0.248                          | -0.204  | 0.341        | -0.280  |
| Gabon                                 | 0.226               | -0.186  | 0.250                     | -0.206  | 0.246                          | -0.203  | 0.336        | -0.277  |
| Azerbaijan                            | 0.225               | -0.186  | 0.249                     | -0.206  | 0.245                          | -0.203  | 0.335        | -0.277  |
| Syria                                 | 0.224               | -0.186  | 0.248                     | -0.206  | 0.243                          | -0.202  | 0.331        | -0.275  |
| Equatorial Guinea                     | 0.217               | -0.183  | 0.241                     | -0.203  | 0.237                          | -0.200  | 0.319        | -0.269  |
| Paraguay                              | 0.215               | -0.183  | 0.238                     | -0.202  | 0.234                          | -0.199  | 0.315        | -0.267  |
| Fiji                                  | 0.213               | -0.182  | 0.235                     | -0.201  | 0.231                          | -0.198  | 0.310        | -0.265  |
| Swaziland                             | 0.210               | -0.180  | 0.232                     | -0.200  | 0.228                          | -0.196  | 0.304        | -0.262  |
| Moldova                               | 0.208               | -0.180  | 0.230                     | -0.199  | 0.227                          | -0.196  | 0.301        | -0.260  |
| Egypt                                 | 0.207               | -0.179  | 0.229                     | -0.198  | 0.225                          | -0.195  | 0.298        | -0.259  |
| Ecuador                               | 0.202               | -0.178  | 0.224                     | -0.197  | 0.220                          | -0.194  | 0.291        | -0.255  |
| Jordan                                | 0.202               | -0.178  | 0.223                     | -0.197  | 0.220                          | -0.193  | 0.290        | -0.255  |
| Georgia                               | 0.201               | -0.177  | 0.222                     | -0.196  | 0.219                          | -0.193  | 0.288        | -0.254  |
| Thailand                              | 0.200               | -0.177  | 0.221                     | -0.196  | 0.217                          | -0.192  | 0.285        | -0.253  |
| Colombia                              | 0.199               | -0.177  | 0.220                     | -0.195  | 0.216                          | -0.192  | 0.284        | -0.252  |
| Albania                               | 0.197               | -0.176  | 0.218                     | -0.194  | 0.214                          | -0.191  | 0.280        | -0.250  |
| Tunisia                               | 0.196               | -0.175  | 0.216                     | -0.194  | 0.213                          | -0.191  | 0.278        | -0.249  |
| Peru                                  | 0.193               | -0.174  | 0.213                     | -0.193  | 0.210                          | -0.190  | 0.273        | -0.247  |
| Armenia                               | 0.191               | -0.174  | 0.211                     | -0.192  | 0.207                          | -0.189  | 0.269        | -0.245  |
| <b>Middle-income countries</b>        |                     |         |                           |         |                                |         |              |         |
| Venezuela                             | 0.185               | -0.172  | 0.205                     | -0.190  | 0.202                          | -0.187  | 0.260        | -0.241  |
| Malaysia                              | 0.185               | -0.172  | 0.205                     | -0.190  | 0.201                          | -0.187  | 0.260        | -0.241  |
| Ukraine                               | 0.184               | -0.171  | 0.203                     | -0.189  | 0.200                          | -0.186  | 0.257        | -0.240  |
| Brazil                                | 0.182               | -0.170  | 0.201                     | -0.188  | 0.198                          | -0.185  | 0.254        | -0.238  |
| Montenegro                            | 0.181               | -0.170  | 0.200                     | -0.188  | 0.197                          | -0.185  | 0.252        | -0.237  |

—continued

**Cross-price elasticities with respect to change in food price, 144 countries in 2005—Continued**

| Country                                  | Clothing & footwear |         | Gross rent, fuel, & power |         | House furnishings & operations |         | Medical care |         |
|--|---------------------|---------|---------------------------|---------|--------------------------------|---------|--------------|---------|
|  | Slutsky             | Cournot | Slutsky                   | Cournot | Slutsky                        | Cournot | Slutsky      | Cournot |
| <b>Middle-income countries—continued</b> |                     |         |                           |         |                                |         |              |         |
| South Africa                             | 0.177               | -0.169  | 0.196                     | -0.186  | 0.193                          | -0.183  | 0.246        | -0.234  |
| Macedonia                                | 0.172               | -0.167  | 0.190                     | -0.184  | 0.187                          | -0.181  | 0.238        | -0.230  |
| Turkey                                   | 0.171               | -0.166  | 0.189                     | -0.184  | 0.186                          | -0.181  | 0.236        | -0.230  |
| Bosnia and Herzegovina                   | 0.166               | -0.165  | 0.184                     | -0.182  | 0.181                          | -0.179  | 0.229        | -0.226  |
| Serbia                                   | 0.165               | -0.164  | 0.182                     | -0.181  | 0.180                          | -0.179  | 0.227        | -0.225  |
| Belarus                                  | 0.165               | -0.164  | 0.182                     | -0.181  | 0.179                          | -0.179  | 0.226        | -0.225  |
| Romania                                  | 0.164               | -0.164  | 0.181                     | -0.181  | 0.178                          | -0.178  | 0.224        | -0.224  |
| Saudi Arabia                             | 0.163               | -0.164  | 0.180                     | -0.181  | 0.178                          | -0.178  | 0.224        | -0.224  |
| Uruguay                                  | 0.162               | -0.163  | 0.179                     | -0.180  | 0.176                          | -0.177  | 0.222        | -0.223  |
| Mauritius                                | 0.162               | -0.163  | 0.179                     | -0.180  | 0.176                          | -0.177  | 0.222        | -0.223  |
| Chile                                    | 0.162               | -0.163  | 0.179                     | -0.180  | 0.176                          | -0.177  | 0.221        | -0.223  |
| Kazakhstan                               | 0.159               | -0.162  | 0.176                     | -0.179  | 0.173                          | -0.176  | 0.217        | -0.221  |
| Russia                                   | 0.156               | -0.161  | 0.173                     | -0.178  | 0.170                          | -0.175  | 0.213        | -0.219  |
| Argentina                                | 0.155               | -0.161  | 0.171                     | -0.177  | 0.169                          | -0.175  | 0.211        | -0.218  |
| Bulgaria                                 | 0.154               | -0.160  | 0.170                     | -0.177  | 0.167                          | -0.174  | 0.208        | -0.217  |
| Oman                                     | 0.151               | -0.159  | 0.167                     | -0.176  | 0.164                          | -0.173  | 0.205        | -0.216  |
| Iran                                     | 0.146               | -0.157  | 0.161                     | -0.174  | 0.159                          | -0.171  | 0.197        | -0.212  |
| Latvia                                   | 0.141               | -0.155  | 0.155                     | -0.171  | 0.153                          | -0.169  | 0.189        | -0.208  |
| Mexico                                   | 0.139               | -0.155  | 0.154                     | -0.171  | 0.152                          | -0.168  | 0.187        | -0.208  |
| Lebanon                                  | 0.137               | -0.154  | 0.151                     | -0.170  | 0.149                          | -0.167  | 0.183        | -0.206  |
| Poland                                   | 0.129               | -0.151  | 0.142                     | -0.167  | 0.140                          | -0.164  | 0.171        | -0.201  |
| Croatia                                  | 0.128               | -0.151  | 0.142                     | -0.166  | 0.140                          | -0.164  | 0.171        | -0.200  |
| Macao, China                             | 0.128               | -0.151  | 0.141                     | -0.166  | 0.139                          | -0.164  | 0.170        | -0.200  |
| Lithuania                                | 0.128               | -0.151  | 0.141                     | -0.166  | 0.139                          | -0.164  | 0.170        | -0.200  |
| Estonia                                  | 0.125               | -0.150  | 0.138                     | -0.165  | 0.136                          | -0.163  | 0.165        | -0.198  |
| Brunei Darussalam                        | 0.121               | -0.148  | 0.134                     | -0.164  | 0.132                          | -0.161  | 0.160        | -0.196  |
| Slovak Republic                          | 0.120               | -0.148  | 0.133                     | -0.163  | 0.131                          | -0.161  | 0.159        | -0.195  |
| Hungary                                  | 0.120               | -0.148  | 0.132                     | -0.163  | 0.131                          | -0.161  | 0.158        | -0.195  |
| South Korea                              | 0.115               | -0.146  | 0.126                     | -0.161  | 0.124                          | -0.158  | 0.151        | -0.192  |
| Bahrain                                  | 0.114               | -0.146  | 0.126                     | -0.161  | 0.124                          | -0.158  | 0.150        | -0.192  |
| Czech Republic                           | 0.107               | -0.143  | 0.118                     | -0.158  | 0.116                          | -0.155  | 0.140        | -0.187  |
| Slovenia                                 | 0.103               | -0.142  | 0.114                     | -0.156  | 0.112                          | -0.154  | 0.135        | -0.185  |
| Israel                                   | 0.102               | -0.141  | 0.113                     | -0.156  | 0.111                          | -0.153  | 0.133        | -0.184  |
| <b>High-income countries</b>             |                     |         |                           |         |                                |         |              |         |
| Portugal                                 | 0.099               | -0.140  | 0.109                     | -0.154  | 0.107                          | -0.152  | 0.128        | -0.182  |
| Qatar                                    | 0.098               | -0.140  | 0.107                     | -0.154  | 0.106                          | -0.152  | 0.127        | -0.181  |
| Singapore                                | 0.097               | -0.139  | 0.106                     | -0.153  | 0.105                          | -0.151  | 0.125        | -0.181  |
| Malta                                    | 0.093               | -0.138  | 0.103                     | -0.152  | 0.101                          | -0.150  | 0.121        | -0.179  |
| Kuwait                                   | 0.092               | -0.138  | 0.102                     | -0.152  | 0.100                          | -0.150  | 0.120        | -0.178  |
| New Zealand                              | 0.086               | -0.135  | 0.095                     | -0.149  | 0.093                          | -0.147  | 0.111        | -0.175  |

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**Cross-price elasticities with respect to change in food price, 144 countries in 2005—Continued**

| Country                                | Clothing & footwear |         | Gross rent, fuel, & power |         | House furnishings & operations |         | Medical care |         |
|--|---------------------|---------|---------------------------|---------|--------------------------------|---------|--------------|---------|
|  | Slutsky             | Cournot | Slutsky                   | Cournot | Slutsky                        | Cournot | Slutsky      | Cournot |
| <b>High-income countries—continued</b> |                     |         |                           |         |                                |         |              |         |
| Finland                                | 0.085               | -0.135  | 0.093                     | -0.149  | 0.092                          | -0.146  | 0.109        | -0.174  |
| Taiwan, China                          | 0.084               | -0.135  | 0.092                     | -0.148  | 0.091                          | -0.146  | 0.108        | -0.173  |
| Spain                                  | 0.082               | -0.134  | 0.090                     | -0.147  | 0.089                          | -0.145  | 0.105        | -0.172  |
| Italy                                  | 0.080               | -0.133  | 0.089                     | -0.147  | 0.087                          | -0.145  | 0.103        | -0.171  |
| Ireland                                | 0.079               | -0.133  | 0.087                     | -0.146  | 0.086                          | -0.144  | 0.101        | -0.171  |
| Denmark                                | 0.079               | -0.133  | 0.087                     | -0.146  | 0.085                          | -0.144  | 0.101        | -0.170  |
| Sweden                                 | 0.077               | -0.132  | 0.085                     | -0.146  | 0.084                          | -0.144  | 0.099        | -0.170  |
| Hong Kong, China                       | 0.077               | -0.132  | 0.084                     | -0.145  | 0.083                          | -0.143  | 0.098        | -0.169  |
| Australia                              | 0.075               | -0.131  | 0.083                     | -0.145  | 0.081                          | -0.143  | 0.096        | -0.168  |
| Cyprus                                 | 0.075               | -0.131  | 0.082                     | -0.145  | 0.081                          | -0.143  | 0.096        | -0.168  |
| Belgium                                | 0.074               | -0.131  | 0.082                     | -0.144  | 0.081                          | -0.142  | 0.095        | -0.168  |
| Japan                                  | 0.074               | -0.131  | 0.082                     | -0.144  | 0.080                          | -0.142  | 0.095        | -0.168  |
| France                                 | 0.072               | -0.130  | 0.080                     | -0.144  | 0.079                          | -0.142  | 0.093        | -0.167  |
| Germany                                | 0.070               | -0.129  | 0.077                     | -0.143  | 0.076                          | -0.141  | 0.089        | -0.165  |
| Canada                                 | 0.070               | -0.129  | 0.077                     | -0.143  | 0.076                          | -0.141  | 0.089        | -0.165  |
| Iceland                                | 0.069               | -0.129  | 0.076                     | -0.142  | 0.075                          | -0.140  | 0.088        | -0.165  |
| Netherlands                            | 0.069               | -0.129  | 0.076                     | -0.142  | 0.075                          | -0.140  | 0.088        | -0.165  |
| Norway                                 | 0.069               | -0.129  | 0.075                     | -0.142  | 0.074                          | -0.140  | 0.087        | -0.165  |
| United Kingdom                         | 0.066               | -0.128  | 0.072                     | -0.141  | 0.071                          | -0.139  | 0.084        | -0.163  |
| Switzerland                            | 0.065               | -0.128  | 0.071                     | -0.141  | 0.071                          | -0.139  | 0.083        | -0.163  |
| Austria                                | 0.062               | -0.127  | 0.069                     | -0.140  | 0.068                          | -0.138  | 0.079        | -0.161  |
| Luxembourg                             | 0.048               | -0.121  | 0.053                     | -0.134  | 0.052                          | -0.132  | 0.061        | -0.153  |
| United States                          | 0.040               | -0.119  | 0.044                     | -0.131  | 0.044                          | -0.129  | 0.051        | -0.149  |
| Low-income average                     | 0.278               | -0.206  | 0.309                     | -0.228  | 0.303                          | -0.224  | 0.564        | -1.164  |
| Middle-income average                  | 0.148               | -0.158  | 0.163                     | -0.174  | 0.161                          | -0.172  | 0.201        | -0.214  |
| High-income average                    | 0.076               | -0.132  | 0.084                     | -0.145  | 0.083                          | -0.143  | 0.098        | -0.169  |

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**Cross-price elasticities with respect to change in food price, 144 countries in 2005—Continued**

| Country                     | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|-----------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                             | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries</b> |                            |         |            |         |           |         |         |         |
| Congo, Democratic Republic  | 0.642                      | -0.382  | 1.801      | -1.073  | 0.437     | -0.260  | 1.004   | -0.598  |
| Burundi                     | 0.540                      | -0.337  | 0.773      | -0.483  | 0.388     | -0.242  | 0.679   | -0.424  |
| Liberia                     | 0.523                      | -0.330  | 1.021      | -0.644  | 0.379     | -0.239  | 4.549   | -2.866  |
| Zimbabwe                    | 0.500                      | -0.320  | 0.801      | -0.512  | 0.365     | -0.234  | 1.834   | -1.173  |
| Ethiopia                    | 0.482                      | -0.312  | 2.053      | -1.330  | 0.355     | -0.230  | 1.316   | -0.852  |
| Niger                       | 0.481                      | -0.312  | 0.563      | -0.365  | 0.354     | -0.230  | 1.288   | -0.835  |
| Guinea-Bissau               | 0.480                      | -0.311  | 0.627      | -0.407  | 0.354     | -0.229  | 1.266   | -0.821  |
| Mozambique                  | 0.462                      | -0.304  | 0.794      | 3.941   | 0.343     | -0.226  | 1.014   | -0.667  |
| Malawi                      | 0.450                      | -0.299  | 0.476      | 9.721   | 0.335     | -0.223  | 0.896   | -0.595  |
| Rwanda                      | 0.445                      | -0.297  | 1.095      | 24.752  | 0.333     | -0.222  | 0.862   | -0.574  |
| Angola                      | 0.432                      | -0.291  | 4.538      | -3.059  | 0.324     | -0.219  | 0.776   | -0.523  |
| Chad                        | 0.430                      | -0.291  | 3.844      | -2.595  | 0.323     | -0.218  | 0.765   | -0.516  |
| Gambia, The                 | 0.428                      | -0.290  | 3.234      | -2.188  | 0.322     | -0.218  | 0.751   | -0.508  |
| Central African Republic    | 0.427                      | -0.289  | 2.995      | -2.029  | 0.321     | -0.217  | 0.744   | -0.504  |
| Mali                        | 0.427                      | -0.289  | 2.962      | -2.007  | 0.321     | -0.217  | 0.743   | -0.503  |
| Tanzania                    | 0.424                      | -0.288  | 2.574      | -1.748  | 0.319     | -0.217  | 0.730   | -0.495  |
| Sierra Leone                | 0.418                      | -0.285  | 1.972      | -1.347  | 0.315     | -0.215  | 0.699   | -0.477  |
| Guinea                      | 0.417                      | -0.285  | 1.896      | -1.296  | 0.314     | -0.215  | 0.694   | -0.474  |
| Burkina Faso                | 0.413                      | -0.283  | 1.667      | -1.144  | 0.312     | -0.214  | 0.676   | -0.464  |
| Uganda                      | 0.404                      | -0.279  | 1.330      | -0.921  | 0.306     | -0.212  | 0.639   | -0.442  |
| Madagascar                  | 0.403                      | -0.279  | 1.316      | -0.911  | 0.306     | -0.212  | 0.637   | -0.441  |
| Zambia                      | 0.403                      | -0.279  | 1.297      | -0.899  | 0.305     | -0.212  | 0.634   | -0.440  |
| Congo, Republic             | 0.399                      | -0.278  | 1.214      | -0.844  | 0.303     | -0.211  | 0.622   | -0.433  |
| Togo                        | 0.397                      | -0.277  | 1.162      | -0.810  | 0.302     | -0.210  | 0.614   | -0.428  |
| Nepal                       | 0.389                      | -0.273  | 1.014      | -0.713  | 0.296     | -0.208  | 0.586   | -0.412  |
| Ghana                       | 0.385                      | -0.272  | 0.952      | -0.672  | 0.293     | -0.207  | 0.572   | -0.404  |
| Benin                       | 0.378                      | -0.269  | 0.874      | -0.621  | 0.289     | -0.206  | 0.553   | -0.393  |
| Mauritania                  | 0.377                      | -0.269  | 0.863      | -0.615  | 0.289     | -0.205  | 0.550   | -0.392  |
| Bangladesh                  | 0.374                      | -0.267  | 0.829      | -0.593  | 0.286     | -0.205  | 0.541   | -0.386  |
| Côte d'Ivoire               | 0.373                      | -0.267  | 0.820      | -0.586  | 0.286     | -0.204  | 0.538   | -0.385  |
| Laos                        | 0.373                      | -0.267  | 0.817      | -0.585  | 0.285     | -0.204  | 0.537   | -0.384  |
| Kenya                       | 0.364                      | -0.263  | 0.739      | -0.535  | 0.279     | -0.202  | 0.512   | -0.371  |
| Djibouti                    | 0.363                      | -0.263  | 0.734      | -0.532  | 0.279     | -0.202  | 0.511   | -0.370  |
| Nigeria                     | 0.361                      | -0.262  | 0.720      | -0.522  | 0.277     | -0.201  | 0.506   | -0.367  |
| Senegal                     | 0.361                      | -0.262  | 0.716      | -0.520  | 0.277     | -0.201  | 0.505   | -0.366  |
| Cambodia                    | 0.354                      | -0.259  | 0.670      | -0.490  | 0.272     | -0.199  | 0.487   | -0.357  |
| Cameroon                    | 0.348                      | -0.257  | 0.636      | -0.469  | 0.268     | -0.198  | 0.474   | -0.349  |
| São Tomé and Príncipe       | 0.346                      | -0.256  | 0.625      | -0.463  | 0.267     | -0.197  | 0.469   | -0.347  |
| India                       | 0.342                      | -0.254  | 0.606      | -0.451  | 0.264     | -0.196  | 0.461   | -0.342  |
| Yemen                       | 0.341                      | -0.254  | 0.599      | -0.446  | 0.263     | -0.196  | 0.458   | -0.341  |
| Vietnam                     | 0.341                      | -0.254  | 0.598      | -0.446  | 0.263     | -0.196  | 0.457   | -0.340  |
| Mongolia                    | 0.339                      | -0.253  | 0.592      | -0.441  | 0.262     | -0.196  | 0.454   | -0.339  |

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**Cross-price elasticities with respect to change in food price, 144 countries in 2005—Continued**

| Country                               | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|---------------------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                                       | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| Iraq                                  | 0.335                      | -0.251  | 0.572      | -0.430  | 0.259     | -0.195  | 0.445   | -0.334  |
| Bhutan                                | 0.331                      | -0.250  | 0.557      | -0.420  | 0.257     | -0.194  | 0.437   | -0.330  |
| China                                 | 0.328                      | -0.249  | 0.543      | -0.411  | 0.254     | -0.193  | 0.430   | -0.326  |
| Sudan                                 | 0.320                      | -0.245  | 0.511      | -0.392  | 0.248     | -0.191  | 0.414   | -0.317  |
| Lesotho                               | 0.315                      | -0.243  | 0.495      | -0.382  | 0.245     | -0.189  | 0.405   | -0.313  |
| Tajikistan                            | 0.314                      | -0.243  | 0.493      | -0.381  | 0.245     | -0.189  | 0.404   | -0.312  |
| Maldives                              | 0.303                      | -0.239  | 0.459      | -0.361  | 0.237     | -0.186  | 0.384   | -0.302  |
| Morocco                               | 0.302                      | -0.238  | 0.454      | -0.358  | 0.235     | -0.186  | 0.381   | -0.300  |
| Pakistan                              | 0.299                      | -0.237  | 0.445      | -0.353  | 0.233     | -0.185  | 0.375   | -0.298  |
| Indonesia                             | 0.293                      | -0.235  | 0.431      | -0.345  | 0.229     | -0.184  | 0.366   | -0.293  |
| Kyrgyzstan                            | 0.293                      | -0.235  | 0.430      | -0.344  | 0.229     | -0.183  | 0.366   | -0.293  |
| Philippines                           | 0.292                      | -0.234  | 0.426      | -0.342  | 0.228     | -0.183  | 0.364   | -0.292  |
| Cape Verde                            | 0.291                      | -0.234  | 0.425      | -0.342  | 0.228     | -0.183  | 0.363   | -0.291  |
| Bolivia                               | 0.291                      | -0.234  | 0.423      | -0.340  | 0.227     | -0.183  | 0.362   | -0.291  |
| Namibia                               | 0.284                      | -0.231  | 0.406      | -0.330  | 0.222     | -0.181  | 0.350   | -0.285  |
| Sri Lanka                             | 0.281                      | -0.230  | 0.399      | -0.326  | 0.220     | -0.180  | 0.345   | -0.282  |
| Botswana                              | 0.279                      | -0.229  | 0.394      | -0.324  | 0.219     | -0.180  | 0.342   | -0.281  |
| Gabon                                 | 0.276                      | -0.228  | 0.387      | -0.320  | 0.217     | -0.179  | 0.338   | -0.279  |
| Azerbaijan                            | 0.275                      | -0.227  | 0.385      | -0.319  | 0.216     | -0.178  | 0.336   | -0.278  |
| Syria                                 | 0.273                      | -0.227  | 0.381      | -0.316  | 0.214     | -0.178  | 0.333   | -0.276  |
| Equatorial Guinea                     | 0.265                      | -0.223  | 0.363      | -0.306  | 0.208     | -0.176  | 0.320   | -0.270  |
| Paraguay                              | 0.262                      | -0.222  | 0.357      | -0.303  | 0.206     | -0.175  | 0.316   | -0.268  |
| Fiji                                  | 0.259                      | -0.221  | 0.350      | -0.299  | 0.204     | -0.174  | 0.311   | -0.266  |
| Swaziland                             | 0.255                      | -0.219  | 0.342      | -0.295  | 0.201     | -0.173  | 0.305   | -0.263  |
| Moldova                               | 0.253                      | -0.219  | 0.339      | -0.293  | 0.199     | -0.172  | 0.302   | -0.261  |
| Egypt                                 | 0.251                      | -0.218  | 0.334      | -0.290  | 0.198     | -0.172  | 0.299   | -0.260  |
| Ecuador                               | 0.245                      | -0.216  | 0.324      | -0.285  | 0.194     | -0.170  | 0.292   | -0.256  |
| Jordan                                | 0.245                      | -0.215  | 0.323      | -0.284  | 0.193     | -0.170  | 0.291   | -0.256  |
| Georgia                               | 0.243                      | -0.215  | 0.321      | -0.283  | 0.192     | -0.170  | 0.289   | -0.255  |
| Thailand                              | 0.242                      | -0.214  | 0.318      | -0.281  | 0.191     | -0.169  | 0.286   | -0.254  |
| Colombia                              | 0.241                      | -0.214  | 0.315      | -0.280  | 0.190     | -0.169  | 0.285   | -0.253  |
| Albania                               | 0.238                      | -0.213  | 0.311      | -0.278  | 0.188     | -0.168  | 0.281   | -0.251  |
| Tunisia                               | 0.236                      | -0.212  | 0.308      | -0.276  | 0.187     | -0.168  | 0.279   | -0.250  |
| Peru                                  | 0.233                      | -0.211  | 0.302      | -0.273  | 0.185     | -0.167  | 0.274   | -0.248  |
| Armenia                               | 0.230                      | -0.210  | 0.297      | -0.271  | 0.182     | -0.166  | 0.270   | -0.246  |
| <b>Middle-income countries</b>        |                            |         |            |         |           |         |         |         |
| Venezuela                             | 0.223                      | -0.207  | 0.285      | -0.264  | 0.177     | -0.164  | 0.261   | -0.242  |
| Malaysia                              | 0.223                      | -0.207  | 0.285      | -0.264  | 0.177     | -0.164  | 0.260   | -0.241  |
| Ukraine                               | 0.221                      | -0.206  | 0.282      | -0.263  | 0.176     | -0.164  | 0.258   | -0.240  |
| Brazil                                | 0.219                      | -0.205  | 0.278      | -0.261  | 0.174     | -0.163  | 0.255   | -0.239  |
| Montenegro                            | 0.218                      | -0.205  | 0.276      | -0.259  | 0.173     | -0.162  | 0.253   | -0.238  |

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**Cross-price elasticities with respect to change in food price, 144 countries in 2005—Continued**

| Country                                  | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|--|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Middle-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| South Africa                             | 0.213                      | -0.203  | 0.268      | -0.256  | 0.169     | -0.161  | 0.247   | -0.235  |
| Macedonia                                | 0.206                      | -0.200  | 0.258      | -0.250  | 0.164     | -0.159  | 0.238   | -0.231  |
| Turkey                                   | 0.205                      | -0.200  | 0.256      | -0.249  | 0.163     | -0.159  | 0.237   | -0.230  |
| Bosnia and Herzegovina                   | 0.200                      | -0.198  | 0.248      | -0.245  | 0.159     | -0.157  | 0.229   | -0.227  |
| Serbia                                   | 0.198                      | -0.197  | 0.245      | -0.244  | 0.158     | -0.157  | 0.227   | -0.226  |
| Belarus                                  | 0.198                      | -0.197  | 0.245      | -0.244  | 0.158     | -0.157  | 0.227   | -0.226  |
| Romania                                  | 0.196                      | -0.196  | 0.242      | -0.242  | 0.156     | -0.156  | 0.225   | -0.225  |
| Saudi Arabia                             | 0.196                      | -0.196  | 0.241      | -0.242  | 0.156     | -0.156  | 0.224   | -0.225  |
| Uruguay                                  | 0.194                      | -0.195  | 0.239      | -0.241  | 0.155     | -0.156  | 0.222   | -0.224  |
| Mauritius                                | 0.194                      | -0.195  | 0.239      | -0.241  | 0.155     | -0.156  | 0.222   | -0.224  |
| Chile                                    | 0.194                      | -0.195  | 0.238      | -0.240  | 0.154     | -0.156  | 0.222   | -0.223  |
| Kazakhstan                               | 0.191                      | -0.194  | 0.234      | -0.238  | 0.152     | -0.155  | 0.218   | -0.222  |
| Russia                                   | 0.187                      | -0.193  | 0.229      | -0.236  | 0.149     | -0.154  | 0.213   | -0.220  |
| Argentina                                | 0.185                      | -0.192  | 0.226      | -0.234  | 0.148     | -0.153  | 0.211   | -0.219  |
| Bulgaria                                 | 0.184                      | -0.191  | 0.224      | -0.233  | 0.146     | -0.153  | 0.209   | -0.218  |
| Oman                                     | 0.181                      | -0.190  | 0.219      | -0.231  | 0.144     | -0.152  | 0.205   | -0.216  |
| Iran                                     | 0.175                      | -0.188  | 0.211      | -0.227  | 0.139     | -0.150  | 0.198   | -0.213  |
| Latvia                                   | 0.168                      | -0.185  | 0.201      | -0.222  | 0.134     | -0.148  | 0.189   | -0.209  |
| Mexico                                   | 0.166                      | -0.185  | 0.199      | -0.221  | 0.133     | -0.148  | 0.187   | -0.208  |
| Lebanon                                  | 0.163                      | -0.183  | 0.195      | -0.219  | 0.130     | -0.147  | 0.183   | -0.206  |
| Poland                                   | 0.153                      | -0.180  | 0.182      | -0.213  | 0.123     | -0.144  | 0.172   | -0.201  |
| Croatia                                  | 0.153                      | -0.179  | 0.181      | -0.212  | 0.122     | -0.144  | 0.171   | -0.201  |
| Macao, China                             | 0.152                      | -0.179  | 0.180      | -0.212  | 0.122     | -0.144  | 0.170   | -0.201  |
| Lithuania                                | 0.152                      | -0.179  | 0.180      | -0.212  | 0.122     | -0.144  | 0.170   | -0.200  |
| Estonia                                  | 0.148                      | -0.178  | 0.175      | -0.210  | 0.119     | -0.142  | 0.166   | -0.198  |
| Brunei Darussalam                        | 0.144                      | -0.176  | 0.169      | -0.207  | 0.116     | -0.141  | 0.161   | -0.196  |
| Slovak Republic                          | 0.143                      | -0.176  | 0.168      | -0.206  | 0.115     | -0.141  | 0.159   | -0.196  |
| Hungary                                  | 0.142                      | -0.175  | 0.167      | -0.206  | 0.114     | -0.141  | 0.159   | -0.195  |
| South Korea                              | 0.136                      | -0.173  | 0.159      | -0.202  | 0.109     | -0.139  | 0.151   | -0.192  |
| Bahrain                                  | 0.136                      | -0.173  | 0.159      | -0.202  | 0.109     | -0.139  | 0.151   | -0.192  |
| Czech Republic                           | 0.126                      | -0.169  | 0.147      | -0.197  | 0.102     | -0.136  | 0.140   | -0.187  |
| Slovenia                                 | 0.122                      | -0.168  | 0.142      | -0.194  | 0.098     | -0.135  | 0.135   | -0.185  |
| Israel                                   | 0.121                      | -0.167  | 0.140      | -0.193  | 0.097     | -0.134  | 0.133   | -0.184  |
| <b>High-income countries</b>             |                            |         |            |         |           |         |         |         |
| Portugal                                 | 0.117                      | -0.165  | 0.135      | -0.191  | 0.094     | -0.133  | 0.129   | -0.182  |
| Qatar                                    | 0.115                      | -0.165  | 0.133      | -0.190  | 0.093     | -0.133  | 0.127   | -0.182  |
| Singapore                                | 0.114                      | -0.164  | 0.131      | -0.189  | 0.092     | -0.132  | 0.126   | -0.181  |
| Malta                                    | 0.110                      | -0.163  | 0.127      | -0.187  | 0.089     | -0.131  | 0.121   | -0.179  |
| Kuwait                                   | 0.109                      | -0.162  | 0.125      | -0.187  | 0.088     | -0.131  | 0.120   | -0.179  |
| New Zealand                              | 0.101                      | -0.159  | 0.116      | -0.182  | 0.082     | -0.128  | 0.111   | -0.175  |

—continued

**Cross-price elasticities with respect to change in food price, 144 countries in 2005—Continued**

| Country                                | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|--|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>High-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| Finland                                | 0.099                      | -0.159  | 0.114      | -0.181  | 0.080     | -0.128  | 0.109   | -0.174  |
| Taiwan, China                          | 0.099                      | -0.158  | 0.113      | -0.181  | 0.079     | -0.128  | 0.108   | -0.174  |
| Spain                                  | 0.096                      | -0.157  | 0.109      | -0.180  | 0.077     | -0.127  | 0.105   | -0.172  |
| Italy                                  | 0.095                      | -0.157  | 0.108      | -0.179  | 0.076     | -0.126  | 0.104   | -0.172  |
| Ireland                                | 0.093                      | -0.156  | 0.106      | -0.178  | 0.075     | -0.126  | 0.102   | -0.171  |
| Denmark                                | 0.092                      | -0.156  | 0.105      | -0.178  | 0.075     | -0.126  | 0.101   | -0.171  |
| Sweden                                 | 0.091                      | -0.155  | 0.103      | -0.177  | 0.073     | -0.125  | 0.099   | -0.170  |
| Hong Kong, China                       | 0.090                      | -0.155  | 0.102      | -0.176  | 0.073     | -0.125  | 0.098   | -0.169  |
| Australia                              | 0.088                      | -0.154  | 0.100      | -0.175  | 0.071     | -0.125  | 0.096   | -0.169  |
| Cyprus                                 | 0.088                      | -0.154  | 0.100      | -0.175  | 0.071     | -0.124  | 0.096   | -0.168  |
| Belgium                                | 0.087                      | -0.154  | 0.099      | -0.175  | 0.070     | -0.124  | 0.095   | -0.168  |
| Japan                                  | 0.087                      | -0.154  | 0.099      | -0.175  | 0.070     | -0.124  | 0.095   | -0.168  |
| France                                 | 0.085                      | -0.153  | 0.097      | -0.174  | 0.069     | -0.124  | 0.093   | -0.167  |
| Germany                                | 0.082                      | -0.152  | 0.093      | -0.172  | 0.066     | -0.123  | 0.089   | -0.166  |
| Canada                                 | 0.082                      | -0.152  | 0.093      | -0.172  | 0.066     | -0.123  | 0.089   | -0.166  |
| Iceland                                | 0.081                      | -0.152  | 0.092      | -0.172  | 0.065     | -0.122  | 0.088   | -0.165  |
| Netherlands                            | 0.081                      | -0.151  | 0.091      | -0.171  | 0.065     | -0.122  | 0.088   | -0.165  |
| Norway                                 | 0.080                      | -0.151  | 0.091      | -0.171  | 0.065     | -0.122  | 0.088   | -0.165  |
| United Kingdom                         | 0.077                      | -0.150  | 0.087      | -0.169  | 0.062     | -0.121  | 0.084   | -0.163  |
| Switzerland                            | 0.076                      | -0.150  | 0.086      | -0.169  | 0.061     | -0.121  | 0.083   | -0.163  |
| Austria                                | 0.073                      | -0.149  | 0.082      | -0.168  | 0.059     | -0.120  | 0.080   | -0.162  |
| Luxembourg                             | 0.056                      | -0.142  | 0.063      | -0.159  | 0.045     | -0.115  | 0.061   | -0.154  |
| United States                          | 0.047                      | -0.139  | 0.053      | -0.155  | 0.038     | -0.112  | 0.051   | -0.150  |
| Low-income average                     | 0.351                      | -0.258  | 0.900      | -0.121  | 0.268     | -0.198  | 0.591   | -0.422  |
| Middle-income average                  | 0.177                      | -0.189  | 0.216      | -0.230  | 0.141     | -0.151  | 0.202   | -0.215  |
| High-income average                    | 0.089                      | -0.155  | 0.102      | -0.176  | 0.072     | -0.125  | 0.098   | -0.169  |

Note: In shaded cells, elasticity is derived using actual budget shares as opposed to the predicted budget share from the Florida model.

Source: USDA, Economic Research Service calculations based on World Bank, 2005 International Comparison Program data.

**Cross-price elasticities with respect to change in clothing and footwear price, 144 countries in 2005**

| Country                     | Food, beverage,<br>& tobacco |         | Gross rent, fuel, &<br>power |         | House furnishings<br>& operations |         | Medical care |         |
|-----------------------------|------------------------------|---------|------------------------------|---------|-----------------------------------|---------|--------------|---------|
|                             | Slutsky                      | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot | Slutsky      | Cournot |
| <b>Low-income countries</b> |                              |         |                              |         |                                   |         |              |         |
| Congo, Democratic Republic  | 0.038                        | -0.015  | 0.048                        | -0.019  | 0.047                             | -0.019  | 0.069        | -0.028  |
| Burundi                     | 0.036                        | -0.015  | 0.047                        | -0.019  | 0.046                             | -0.019  | 0.068        | -5.304  |
| Liberia                     | 0.036                        | -0.015  | 0.047                        | -0.019  | 0.045                             | -0.019  | 0.370        | -0.151  |
| Zimbabwe                    | 0.036                        | -0.014  | 0.046                        | -0.019  | 0.045                             | -0.018  | 0.183        | -0.075  |
| Ethiopia                    | 0.035                        | -0.014  | 0.046                        | -0.019  | 0.045                             | -0.018  | 0.139        | -0.057  |
| Niger                       | 0.035                        | -0.014  | 0.046                        | -0.019  | 0.045                             | -0.018  | 0.137        | -0.056  |
| Guinea-Bissau               | 0.035                        | -0.014  | 0.046                        | -0.019  | 0.045                             | -0.018  | 0.135        | -0.055  |
| Mozambique                  | 0.035                        | -0.014  | 0.046                        | -0.019  | 0.045                             | -0.018  | 0.113        | -0.046  |
| Malawi                      | 0.035                        | -0.014  | 0.046                        | -0.019  | 0.045                             | -0.018  | 0.102        | -0.042  |
| Rwanda                      | 0.034                        | -0.014  | 0.045                        | -0.019  | 0.045                             | -0.018  | 0.099        | -0.040  |
| Angola                      | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.092        | -0.037  |
| Chad                        | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.091        | -0.037  |
| Gambia, The                 | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.089        | -0.037  |
| Central African Republic    | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.089        | -0.036  |
| Mali                        | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.089        | -0.036  |
| Tanzania                    | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.088        | -0.036  |
| Sierra Leone                | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.085        | -0.035  |
| Guinea                      | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.084        | -0.035  |
| Burkina Faso                | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.083        | -0.034  |
| Uganda                      | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.080        | -0.033  |
| Madagascar                  | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.080        | -0.033  |
| Zambia                      | 0.034                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.079        | -0.032  |
| Congo, Republic             | 0.033                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.078        | -0.032  |
| Togo                        | 0.033                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.078        | -0.032  |
| Nepal                       | 0.033                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.075        | -0.031  |
| Ghana                       | 0.033                        | -0.014  | 0.045                        | -0.018  | 0.044                             | -0.018  | 0.074        | -0.030  |
| Benin                       | 0.033                        | -0.013  | 0.044                        | -0.018  | 0.044                             | -0.018  | 0.073        | -0.030  |
| Mauritania                  | 0.033                        | -0.013  | 0.044                        | -0.018  | 0.044                             | -0.018  | 0.073        | -0.030  |
| Bangladesh                  | 0.033                        | -0.013  | 0.044                        | -0.018  | 0.044                             | -0.018  | 0.072        | -0.029  |
| Côte d'Ivoire               | 0.033                        | -0.013  | 0.044                        | -0.018  | 0.044                             | -0.018  | 0.072        | -0.029  |
| Laos                        | 0.033                        | -0.013  | 0.044                        | -0.018  | 0.044                             | -0.018  | 0.072        | -0.029  |
| Kenya                       | 0.033                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.070        | -0.028  |
| Djibouti                    | 0.033                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.069        | -0.028  |
| Nigeria                     | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.069        | -0.028  |
| Senegal                     | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.069        | -0.028  |
| Cambodia                    | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.068        | -0.028  |
| Cameroon                    | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.067        | -0.027  |
| São Tomé and Príncipe       | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.066        | -0.027  |
| India                       | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.066        | -0.027  |
| Yemen                       | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.065        | -0.027  |
| Vietnam                     | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.065        | -0.027  |
| Mongolia                    | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.065        | -0.027  |

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**Cross-price elasticities with respect to change in clothing and footwear price, 144 countries  
in 2005—Continued**

| Country                               | Food, beverage,<br>& tobacco |         | Gross rent, fuel, &<br>power |         | House furnishings<br>& operations |         | Medical care |         |
|---------------------------------------|------------------------------|---------|------------------------------|---------|-----------------------------------|---------|--------------|---------|
|                                       | Slutsky                      | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot | Slutsky      | Cournot |
| <b>Low-income countries—continued</b> |                              |         |                              |         |                                   |         |              |         |
| Iraq                                  | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.065        | -0.026  |
| Bhutan                                | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.064        | -0.026  |
| China                                 | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.064        | -0.026  |
| Sudan                                 | 0.031                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.062        | -0.026  |
| Lesotho                               | 0.031                        | -0.013  | 0.043                        | -0.018  | 0.043                             | -0.017  | 0.062        | -0.025  |
| Tajikistan                            | 0.031                        | -0.013  | 0.043                        | -0.018  | 0.043                             | -0.017  | 0.062        | -0.025  |
| Maldives                              | 0.031                        | -0.013  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.060        | -0.025  |
| Morocco                               | 0.031                        | -0.013  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.060        | -0.025  |
| Pakistan                              | 0.031                        | -0.013  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.060        | -0.025  |
| Indonesia                             | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.059        | -0.024  |
| Kyrgyzstan                            | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.059        | -0.024  |
| Philippines                           | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.059        | -0.024  |
| Cape Verde                            | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.059        | -0.024  |
| Bolivia                               | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.059        | -0.024  |
| Namibia                               | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.058        | -0.024  |
| Sri Lanka                             | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.058        | -0.024  |
| Botswana                              | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.058        | -0.024  |
| Gabon                                 | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.057        | -0.024  |
| Azerbaijan                            | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.057        | -0.024  |
| Syria                                 | 0.030                        | -0.012  | 0.043                        | -0.018  | 0.042                             | -0.017  | 0.057        | -0.023  |
| Equatorial Guinea                     | 0.029                        | -0.012  | 0.043                        | -0.017  | 0.042                             | -0.017  | 0.056        | -0.023  |
| Paraguay                              | 0.029                        | -0.012  | 0.043                        | -0.017  | 0.042                             | -0.017  | 0.056        | -0.023  |
| Fiji                                  | 0.029                        | -0.012  | 0.043                        | -0.017  | 0.042                             | -0.017  | 0.056        | -0.023  |
| Swaziland                             | 0.029                        | -0.012  | 0.042                        | -0.017  | 0.042                             | -0.017  | 0.056        | -0.023  |
| Moldova                               | 0.029                        | -0.012  | 0.042                        | -0.017  | 0.042                             | -0.017  | 0.055        | -0.023  |
| Egypt                                 | 0.029                        | -0.012  | 0.042                        | -0.017  | 0.042                             | -0.017  | 0.055        | -0.023  |
| Ecuador                               | 0.029                        | -0.012  | 0.042                        | -0.017  | 0.042                             | -0.017  | 0.055        | -0.023  |
| Jordan                                | 0.029                        | -0.012  | 0.042                        | -0.017  | 0.042                             | -0.017  | 0.055        | -0.023  |
| Georgia                               | 0.029                        | -0.012  | 0.042                        | -0.017  | 0.042                             | -0.017  | 0.055        | -0.022  |
| Thailand                              | 0.029                        | -0.012  | 0.042                        | -0.017  | 0.042                             | -0.017  | 0.055        | -0.022  |
| Colombia                              | 0.029                        | -0.012  | 0.042                        | -0.017  | 0.042                             | -0.017  | 0.054        | -0.022  |
| Albania                               | 0.028                        | -0.012  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.054        | -0.022  |
| Tunisia                               | 0.028                        | -0.012  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.054        | -0.022  |
| Peru                                  | 0.028                        | -0.012  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.054        | -0.022  |
| Armenia                               | 0.028                        | -0.012  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.054        | -0.022  |
| <b>Middle-income countries</b>        |                              |         |                              |         |                                   |         |              |         |
| Venezuela                             | 0.028                        | -0.011  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.053        | -0.022  |
| Malaysia                              | 0.028                        | -0.011  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.053        | -0.022  |
| Ukraine                               | 0.028                        | -0.011  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.053        | -0.022  |
| Brazil                                | 0.028                        | -0.011  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.053        | -0.022  |
| Montenegro                            | 0.028                        | -0.011  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.053        | -0.022  |

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**Cross-price elasticities with respect to change in clothing and footwear price, 144 countries  
in 2005—Continued**

| Country                                  | Food, beverage,<br>& tobacco |         | Gross rent, fuel, &<br>power |         | House furnishings<br>& operations |         | Medical care |         |
|--|------------------------------|---------|------------------------------|---------|-----------------------------------|---------|--------------|---------|
|  | Slutsky                      | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot | Slutsky      | Cournot |
| <b>Middle-income countries—continued</b> |                              |         |                              |         |                                   |         |              |         |
| South Africa                             | 0.027                        | -0.011  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.052        | -0.022  |
| Macedonia                                | 0.027                        | -0.011  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.052        | -0.021  |
| Turkey                                   | 0.027                        | -0.011  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.052        | -0.021  |
| Bosnia and Herzegovina                   | 0.027                        | -0.011  | 0.042                        | -0.017  | 0.041                             | -0.017  | 0.052        | -0.021  |
| Serbia                                   | 0.027                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.052        | -0.021  |
| Belarus                                  | 0.027                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.052        | -0.021  |
| Romania                                  | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.051        | -0.021  |
| Saudi Arabia                             | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.051        | -0.021  |
| Uruguay                                  | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.051        | -0.021  |
| Mauritius                                | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.051        | -0.021  |
| Chile                                    | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.051        | -0.021  |
| Kazakhstan                               | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.051        | -0.021  |
| Russia                                   | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.051        | -0.021  |
| Argentina                                | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.051        | -0.021  |
| Bulgaria                                 | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.051        | -0.021  |
| Oman                                     | 0.026                        | -0.011  | 0.041                        | -0.017  | 0.041                             | -0.017  | 0.050        | -0.021  |
| Iran                                     | 0.025                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.050        | -0.021  |
| Latvia                                   | 0.025                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.050        | -0.021  |
| Mexico                                   | 0.025                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.050        | -0.020  |
| Lebanon                                  | 0.025                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.050        | -0.020  |
| Poland                                   | 0.024                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.049        | -0.020  |
| Croatia                                  | 0.024                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.049        | -0.020  |
| Macao, China                             | 0.024                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.049        | -0.020  |
| Lithuania                                | 0.024                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.049        | -0.020  |
| Estonia                                  | 0.024                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.049        | -0.020  |
| Brunei Darussalam                        | 0.023                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.016  | 0.049        | -0.020  |
| Slovak Republic                          | 0.023                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.016  | 0.048        | -0.020  |
| Hungary                                  | 0.023                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.016  | 0.048        | -0.020  |
| South Korea                              | 0.023                        | -0.009  | 0.040                        | -0.017  | 0.040                             | -0.016  | 0.048        | -0.020  |
| Bahrain                                  | 0.023                        | -0.009  | 0.040                        | -0.017  | 0.040                             | -0.016  | 0.048        | -0.020  |
| Czech Republic                           | 0.022                        | -0.009  | 0.040                        | -0.017  | 0.040                             | -0.016  | 0.048        | -0.020  |
| Slovenia                                 | 0.022                        | -0.009  | 0.040                        | -0.017  | 0.040                             | -0.016  | 0.048        | -0.020  |
| Israel                                   | 0.022                        | -0.009  | 0.040                        | -0.017  | 0.040                             | -0.016  | 0.047        | -0.020  |
| <b>High-income countries</b>             |                              |         |                              |         |                                   |         |              |         |
| Portugal                                 | 0.021                        | -0.009  | 0.040                        | -0.017  | 0.039                             | -0.016  | 0.047        | -0.020  |
| Qatar                                    | 0.021                        | -0.009  | 0.040                        | -0.017  | 0.039                             | -0.016  | 0.047        | -0.020  |
| Singapore                                | 0.021                        | -0.009  | 0.040                        | -0.017  | 0.039                             | -0.016  | 0.047        | -0.019  |
| Malta                                    | 0.021                        | -0.009  | 0.040                        | -0.017  | 0.039                             | -0.016  | 0.047        | -0.019  |
| Kuwait                                   | 0.021                        | -0.009  | 0.040                        | -0.017  | 0.039                             | -0.016  | 0.047        | -0.019  |
| New Zealand                              | 0.020                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.047        | -0.019  |

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**Cross-price elasticities with respect to change in clothing and footwear price, 144 countries  
in 2005—Continued**

| Country                                | Food, beverage,<br>& tobacco |         | Gross rent, fuel, &<br>power |         | House furnishings<br>& operations |         | Medical care |         |
|--|------------------------------|---------|------------------------------|---------|-----------------------------------|---------|--------------|---------|
|  | Slutsky                      | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot | Slutsky      | Cournot |
| <b>High-income countries—continued</b> |                              |         |                              |         |                                   |         |              |         |
| Finland                                | 0.020                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Taiwan, China                          | 0.020                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Spain                                  | 0.019                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Italy                                  | 0.019                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Ireland                                | 0.019                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Denmark                                | 0.019                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Sweden                                 | 0.019                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Hong Kong, China                       | 0.019                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Australia                              | 0.018                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Cyprus                                 | 0.018                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Belgium                                | 0.018                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Japan                                  | 0.018                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| France                                 | 0.018                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Germany                                | 0.018                        | -0.007  | 0.039                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Canada                                 | 0.018                        | -0.007  | 0.039                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Iceland                                | 0.018                        | -0.007  | 0.039                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Netherlands                            | 0.018                        | -0.007  | 0.039                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Norway                                 | 0.018                        | -0.007  | 0.039                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| United Kingdom                         | 0.017                        | -0.007  | 0.039                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Switzerland                            | 0.017                        | -0.007  | 0.039                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |
| Austria                                | 0.017                        | -0.007  | 0.039                        | -0.016  | 0.039                             | -0.016  | 0.045        | -0.019  |
| Luxembourg                             | 0.014                        | -0.006  | 0.039                        | -0.016  | 0.038                             | -0.016  | 0.045        | -0.019  |
| United States                          | 0.013                        | -0.005  | 0.039                        | -0.016  | 0.038                             | -0.016  | 0.044        | -0.018  |
| Low-income average                     | 0.032                        | -0.013  | 0.044                        | -0.018  | 0.043                             | -0.018  | 0.076        | -0.100  |
| Middle-income average                  | 0.025                        | -0.010  | 0.041                        | -0.017  | 0.040                             | -0.017  | 0.050        | -0.021  |
| High-income average                    | 0.018                        | -0.008  | 0.040                        | -0.016  | 0.039                             | -0.016  | 0.046        | -0.019  |

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**Cross-price elasticities with respect to change in clothing and footwear price, 144 countries  
in 2005—Continued**

| Country                     | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|-----------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                             | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries</b> |                            |         |            |         |           |         |         |         |
| Congo, Democratic Republic  | 0.061                      | -0.025  | 0.171      | -0.069  | 0.041     | -0.017  | 0.095   | -0.039  |
| Burundi                     | 0.056                      | -0.023  | 0.081      | -0.033  | 0.040     | -0.016  | 0.071   | -0.029  |
| Liberia                     | 0.056                      | -0.023  | 0.108      | -0.044  | 0.040     | -0.016  | 0.483   | -0.197  |
| Zimbabwe                    | 0.055                      | -0.022  | 0.088      | -0.036  | 0.040     | -0.016  | 0.201   | -0.082  |
| Ethiopia                    | 0.054                      | -0.022  | 0.230      | -0.094  | 0.040     | -0.016  | 0.147   | -0.060  |
| Niger                       | 0.054                      | -0.022  | 0.063      | -0.026  | 0.040     | -0.016  | 0.145   | -0.059  |
| Guinea-Bissau               | 0.054                      | -0.022  | 0.071      | -0.029  | 0.040     | -0.016  | 0.142   | -0.058  |
| Mozambique                  | 0.053                      | -0.022  | 0.092      | 0.400   | 0.040     | -0.016  | 0.117   | -0.048  |
| Malawi                      | 0.053                      | -0.022  | 0.056      | 0.975   | 0.039     | -0.016  | 0.105   | -0.043  |
| Rwanda                      | 0.053                      | -0.021  | 0.129      | 2.493   | 0.039     | -0.016  | 0.102   | -0.042  |
| Angola                      | 0.052                      | -0.021  | 0.548      | -0.224  | 0.039     | -0.016  | 0.094   | -0.038  |
| Chad                        | 0.052                      | -0.021  | 0.466      | -0.190  | 0.039     | -0.016  | 0.093   | -0.038  |
| Gambia, The                 | 0.052                      | -0.021  | 0.393      | -0.161  | 0.039     | -0.016  | 0.091   | -0.037  |
| Central African Republic    | 0.052                      | -0.021  | 0.365      | -0.149  | 0.039     | -0.016  | 0.091   | -0.037  |
| Mali                        | 0.052                      | -0.021  | 0.361      | -0.147  | 0.039     | -0.016  | 0.091   | -0.037  |
| Tanzania                    | 0.052                      | -0.021  | 0.315      | -0.129  | 0.039     | -0.016  | 0.089   | -0.036  |
| Sierra Leone                | 0.052                      | -0.021  | 0.244      | -0.100  | 0.039     | -0.016  | 0.086   | -0.035  |
| Guinea                      | 0.052                      | -0.021  | 0.235      | -0.096  | 0.039     | -0.016  | 0.086   | -0.035  |
| Burkina Faso                | 0.052                      | -0.021  | 0.208      | -0.085  | 0.039     | -0.016  | 0.084   | -0.034  |
| Uganda                      | 0.051                      | -0.021  | 0.169      | -0.069  | 0.039     | -0.016  | 0.081   | -0.033  |
| Madagascar                  | 0.051                      | -0.021  | 0.167      | -0.068  | 0.039     | -0.016  | 0.081   | -0.033  |
| Zambia                      | 0.051                      | -0.021  | 0.165      | -0.067  | 0.039     | -0.016  | 0.081   | -0.033  |
| Congo, Republic             | 0.051                      | -0.021  | 0.155      | -0.063  | 0.039     | -0.016  | 0.080   | -0.033  |
| Togo                        | 0.051                      | -0.021  | 0.149      | -0.061  | 0.039     | -0.016  | 0.079   | -0.032  |
| Nepal                       | 0.051                      | -0.021  | 0.132      | -0.054  | 0.039     | -0.016  | 0.076   | -0.031  |
| Ghana                       | 0.051                      | -0.021  | 0.125      | -0.051  | 0.039     | -0.016  | 0.075   | -0.031  |
| Benin                       | 0.050                      | -0.021  | 0.116      | -0.048  | 0.038     | -0.016  | 0.074   | -0.030  |
| Mauritania                  | 0.050                      | -0.021  | 0.115      | -0.047  | 0.038     | -0.016  | 0.073   | -0.030  |
| Bangladesh                  | 0.050                      | -0.021  | 0.111      | -0.046  | 0.038     | -0.016  | 0.073   | -0.030  |
| Côte d'Ivoire               | 0.050                      | -0.021  | 0.110      | -0.045  | 0.038     | -0.016  | 0.072   | -0.030  |
| Laos                        | 0.050                      | -0.021  | 0.110      | -0.045  | 0.038     | -0.016  | 0.072   | -0.030  |
| Kenya                       | 0.050                      | -0.020  | 0.101      | -0.041  | 0.038     | -0.016  | 0.070   | -0.029  |
| Djibouti                    | 0.050                      | -0.020  | 0.101      | -0.041  | 0.038     | -0.016  | 0.070   | -0.029  |
| Nigeria                     | 0.050                      | -0.020  | 0.099      | -0.041  | 0.038     | -0.016  | 0.070   | -0.029  |
| Senegal                     | 0.050                      | -0.020  | 0.099      | -0.040  | 0.038     | -0.016  | 0.070   | -0.028  |
| Cambodia                    | 0.050                      | -0.020  | 0.094      | -0.038  | 0.038     | -0.016  | 0.068   | -0.028  |
| Cameroon                    | 0.049                      | -0.020  | 0.090      | -0.037  | 0.038     | -0.016  | 0.067   | -0.028  |
| São Tomé and Príncipe       | 0.049                      | -0.020  | 0.089      | -0.037  | 0.038     | -0.016  | 0.067   | -0.027  |
| India                       | 0.049                      | -0.020  | 0.087      | -0.036  | 0.038     | -0.016  | 0.066   | -0.027  |
| Yemen                       | 0.049                      | -0.020  | 0.086      | -0.035  | 0.038     | -0.016  | 0.066   | -0.027  |
| Vietnam                     | 0.049                      | -0.020  | 0.086      | -0.035  | 0.038     | -0.016  | 0.066   | -0.027  |
| Mongolia                    | 0.049                      | -0.020  | 0.086      | -0.035  | 0.038     | -0.016  | 0.066   | -0.027  |

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**Cross-price elasticities with respect to change in clothing and footwear price, 144 countries  
in 2005—Continued**

| Country                               | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|---------------------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                                       | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| Iraq                                  | 0.049                      | -0.020  | 0.084      | -0.034  | 0.038     | -0.016  | 0.065   | -0.027  |
| Bhutan                                | 0.049                      | -0.020  | 0.082      | -0.034  | 0.038     | -0.016  | 0.064   | -0.026  |
| China                                 | 0.049                      | -0.020  | 0.081      | -0.033  | 0.038     | -0.015  | 0.064   | -0.026  |
| Sudan                                 | 0.048                      | -0.020  | 0.078      | -0.032  | 0.038     | -0.015  | 0.063   | -0.026  |
| Lesotho                               | 0.048                      | -0.020  | 0.076      | -0.031  | 0.038     | -0.015  | 0.062   | -0.025  |
| Tajikistan                            | 0.048                      | -0.020  | 0.076      | -0.031  | 0.038     | -0.015  | 0.062   | -0.025  |
| Maldives                              | 0.048                      | -0.020  | 0.073      | -0.030  | 0.037     | -0.015  | 0.061   | -0.025  |
| Morocco                               | 0.048                      | -0.020  | 0.072      | -0.030  | 0.037     | -0.015  | 0.061   | -0.025  |
| Pakistan                              | 0.048                      | -0.020  | 0.071      | -0.029  | 0.037     | -0.015  | 0.060   | -0.025  |
| Indonesia                             | 0.048                      | -0.020  | 0.070      | -0.029  | 0.037     | -0.015  | 0.060   | -0.024  |
| Kyrgyzstan                            | 0.048                      | -0.020  | 0.070      | -0.029  | 0.037     | -0.015  | 0.060   | -0.024  |
| Philippines                           | 0.048                      | -0.020  | 0.070      | -0.029  | 0.037     | -0.015  | 0.059   | -0.024  |
| Cape Verde                            | 0.048                      | -0.020  | 0.070      | -0.029  | 0.037     | -0.015  | 0.059   | -0.024  |
| Bolivia                               | 0.048                      | -0.020  | 0.069      | -0.028  | 0.037     | -0.015  | 0.059   | -0.024  |
| Namibia                               | 0.047                      | -0.019  | 0.068      | -0.028  | 0.037     | -0.015  | 0.059   | -0.024  |
| Sri Lanka                             | 0.047                      | -0.019  | 0.067      | -0.028  | 0.037     | -0.015  | 0.058   | -0.024  |
| Botswana                              | 0.047                      | -0.019  | 0.067      | -0.027  | 0.037     | -0.015  | 0.058   | -0.024  |
| Gabon                                 | 0.047                      | -0.019  | 0.066      | -0.027  | 0.037     | -0.015  | 0.058   | -0.024  |
| Azerbaijan                            | 0.047                      | -0.019  | 0.066      | -0.027  | 0.037     | -0.015  | 0.058   | -0.024  |
| Syria                                 | 0.047                      | -0.019  | 0.066      | -0.027  | 0.037     | -0.015  | 0.057   | -0.024  |
| Equatorial Guinea                     | 0.047                      | -0.019  | 0.064      | -0.026  | 0.037     | -0.015  | 0.057   | -0.023  |
| Paraguay                              | 0.047                      | -0.019  | 0.064      | -0.026  | 0.037     | -0.015  | 0.056   | -0.023  |
| Fiji                                  | 0.047                      | -0.019  | 0.063      | -0.026  | 0.037     | -0.015  | 0.056   | -0.023  |
| Swaziland                             | 0.047                      | -0.019  | 0.063      | -0.026  | 0.037     | -0.015  | 0.056   | -0.023  |
| Moldova                               | 0.047                      | -0.019  | 0.062      | -0.026  | 0.037     | -0.015  | 0.056   | -0.023  |
| Egypt                                 | 0.046                      | -0.019  | 0.062      | -0.025  | 0.037     | -0.015  | 0.055   | -0.023  |
| Ecuador                               | 0.046                      | -0.019  | 0.061      | -0.025  | 0.037     | -0.015  | 0.055   | -0.023  |
| Jordan                                | 0.046                      | -0.019  | 0.061      | -0.025  | 0.037     | -0.015  | 0.055   | -0.023  |
| Georgia                               | 0.046                      | -0.019  | 0.061      | -0.025  | 0.037     | -0.015  | 0.055   | -0.023  |
| Thailand                              | 0.046                      | -0.019  | 0.061      | -0.025  | 0.037     | -0.015  | 0.055   | -0.023  |
| Colombia                              | 0.046                      | -0.019  | 0.061      | -0.025  | 0.037     | -0.015  | 0.055   | -0.022  |
| Albania                               | 0.046                      | -0.019  | 0.060      | -0.025  | 0.036     | -0.015  | 0.054   | -0.022  |
| Tunisia                               | 0.046                      | -0.019  | 0.060      | -0.025  | 0.036     | -0.015  | 0.054   | -0.022  |
| Peru                                  | 0.046                      | -0.019  | 0.060      | -0.025  | 0.036     | -0.015  | 0.054   | -0.022  |
| Armenia                               | 0.046                      | -0.019  | 0.059      | -0.024  | 0.036     | -0.015  | 0.054   | -0.022  |
| <b>Middle-income countries</b>        |                            |         |            |         |           |         |         |         |
| Venezuela                             | 0.046                      | -0.019  | 0.058      | -0.024  | 0.036     | -0.015  | 0.053   | -0.022  |
| Malaysia                              | 0.046                      | -0.019  | 0.058      | -0.024  | 0.036     | -0.015  | 0.053   | -0.022  |
| Ukraine                               | 0.046                      | -0.019  | 0.058      | -0.024  | 0.036     | -0.015  | 0.053   | -0.022  |
| Brazil                                | 0.046                      | -0.019  | 0.058      | -0.024  | 0.036     | -0.015  | 0.053   | -0.022  |
| Montenegro                            | 0.046                      | -0.019  | 0.058      | -0.024  | 0.036     | -0.015  | 0.053   | -0.022  |

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**Cross-price elasticities with respect to change in clothing and footwear price, 144 countries  
in 2005—Continued**

| Country                                  | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|--|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Middle-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| South Africa                             | 0.045                      | -0.019  | 0.057      | -0.024  | 0.036     | -0.015  | 0.053   | -0.022  |
| Macedonia                                | 0.045                      | -0.019  | 0.057      | -0.023  | 0.036     | -0.015  | 0.052   | -0.021  |
| Turkey                                   | 0.045                      | -0.019  | 0.056      | -0.023  | 0.036     | -0.015  | 0.052   | -0.021  |
| Bosnia and Herzegovina                   | 0.045                      | -0.019  | 0.056      | -0.023  | 0.036     | -0.015  | 0.052   | -0.021  |
| Serbia                                   | 0.045                      | -0.019  | 0.056      | -0.023  | 0.036     | -0.015  | 0.052   | -0.021  |
| Belarus                                  | 0.045                      | -0.019  | 0.056      | -0.023  | 0.036     | -0.015  | 0.052   | -0.021  |
| Romania                                  | 0.045                      | -0.019  | 0.056      | -0.023  | 0.036     | -0.015  | 0.052   | -0.021  |
| Saudi Arabia                             | 0.045                      | -0.019  | 0.055      | -0.023  | 0.036     | -0.015  | 0.052   | -0.021  |
| Uruguay                                  | 0.045                      | -0.019  | 0.055      | -0.023  | 0.036     | -0.015  | 0.051   | -0.021  |
| Mauritius                                | 0.045                      | -0.019  | 0.055      | -0.023  | 0.036     | -0.015  | 0.051   | -0.021  |
| Chile                                    | 0.045                      | -0.018  | 0.055      | -0.023  | 0.036     | -0.015  | 0.051   | -0.021  |
| Kazakhstan                               | 0.045                      | -0.018  | 0.055      | -0.023  | 0.036     | -0.015  | 0.051   | -0.021  |
| Russia                                   | 0.045                      | -0.018  | 0.055      | -0.023  | 0.036     | -0.015  | 0.051   | -0.021  |
| Argentina                                | 0.045                      | -0.018  | 0.055      | -0.022  | 0.036     | -0.015  | 0.051   | -0.021  |
| Bulgaria                                 | 0.045                      | -0.018  | 0.054      | -0.022  | 0.036     | -0.015  | 0.051   | -0.021  |
| Oman                                     | 0.045                      | -0.018  | 0.054      | -0.022  | 0.036     | -0.015  | 0.051   | -0.021  |
| Iran                                     | 0.044                      | -0.018  | 0.054      | -0.022  | 0.035     | -0.015  | 0.050   | -0.021  |
| Latvia                                   | 0.044                      | -0.018  | 0.053      | -0.022  | 0.035     | -0.015  | 0.050   | -0.021  |
| Mexico                                   | 0.044                      | -0.018  | 0.053      | -0.022  | 0.035     | -0.015  | 0.050   | -0.021  |
| Lebanon                                  | 0.044                      | -0.018  | 0.053      | -0.022  | 0.035     | -0.015  | 0.050   | -0.020  |
| Poland                                   | 0.044                      | -0.018  | 0.052      | -0.021  | 0.035     | -0.015  | 0.049   | -0.020  |
| Croatia                                  | 0.044                      | -0.018  | 0.052      | -0.021  | 0.035     | -0.014  | 0.049   | -0.020  |
| Macao, China                             | 0.044                      | -0.018  | 0.052      | -0.021  | 0.035     | -0.014  | 0.049   | -0.020  |
| Lithuania                                | 0.044                      | -0.018  | 0.052      | -0.021  | 0.035     | -0.014  | 0.049   | -0.020  |
| Estonia                                  | 0.044                      | -0.018  | 0.052      | -0.021  | 0.035     | -0.014  | 0.049   | -0.020  |
| Brunei Darussalam                        | 0.044                      | -0.018  | 0.051      | -0.021  | 0.035     | -0.014  | 0.049   | -0.020  |
| Slovak Republic                          | 0.044                      | -0.018  | 0.051      | -0.021  | 0.035     | -0.014  | 0.049   | -0.020  |
| Hungary                                  | 0.044                      | -0.018  | 0.051      | -0.021  | 0.035     | -0.014  | 0.049   | -0.020  |
| South Korea                              | 0.043                      | -0.018  | 0.051      | -0.021  | 0.035     | -0.014  | 0.048   | -0.020  |
| Bahrain                                  | 0.043                      | -0.018  | 0.051      | -0.021  | 0.035     | -0.014  | 0.048   | -0.020  |
| Czech Republic                           | 0.043                      | -0.018  | 0.050      | -0.021  | 0.035     | -0.014  | 0.048   | -0.020  |
| Slovenia                                 | 0.043                      | -0.018  | 0.050      | -0.021  | 0.035     | -0.014  | 0.048   | -0.020  |
| Israel                                   | 0.043                      | -0.018  | 0.050      | -0.021  | 0.035     | -0.014  | 0.048   | -0.020  |
| <b>High-income countries</b>             |                            |         |            |         |           |         |         |         |
| Portugal                                 | 0.043                      | -0.018  | 0.050      | -0.020  | 0.035     | -0.014  | 0.047   | -0.020  |
| Qatar                                    | 0.043                      | -0.018  | 0.049      | -0.020  | 0.034     | -0.014  | 0.047   | -0.020  |
| Singapore                                | 0.043                      | -0.018  | 0.049      | -0.020  | 0.034     | -0.014  | 0.047   | -0.020  |
| Malta                                    | 0.043                      | -0.018  | 0.049      | -0.020  | 0.034     | -0.014  | 0.047   | -0.019  |
| Kuwait                                   | 0.043                      | -0.018  | 0.049      | -0.020  | 0.034     | -0.014  | 0.047   | -0.019  |
| New Zealand                              | 0.043                      | -0.018  | 0.049      | -0.020  | 0.034     | -0.014  | 0.047   | -0.019  |

—continued

**Cross-price elasticities with respect to change in clothing and footwear price, 144 countries  
in 2005—Continued**

| Country                                | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|--|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>High-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| Finland                                | 0.042                      | -0.018  | 0.049      | -0.020  | 0.034     | -0.014  | 0.047   | -0.019  |
| Taiwan, China                          | 0.042                      | -0.018  | 0.049      | -0.020  | 0.034     | -0.014  | 0.047   | -0.019  |
| Spain                                  | 0.042                      | -0.018  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Italy                                  | 0.042                      | -0.018  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Ireland                                | 0.042                      | -0.018  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Denmark                                | 0.042                      | -0.018  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Sweden                                 | 0.042                      | -0.018  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Hong Kong, China                       | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Australia                              | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Cyprus                                 | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Belgium                                | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Japan                                  | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| France                                 | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Germany                                | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Canada                                 | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Iceland                                | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Netherlands                            | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Norway                                 | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| United Kingdom                         | 0.042                      | -0.017  | 0.047      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Switzerland                            | 0.042                      | -0.017  | 0.047      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |
| Austria                                | 0.042                      | -0.017  | 0.047      | -0.020  | 0.034     | -0.014  | 0.045   | -0.019  |
| Luxembourg                             | 0.041                      | -0.017  | 0.046      | -0.019  | 0.033     | -0.014  | 0.045   | -0.019  |
| United States                          | 0.041                      | -0.017  | 0.046      | -0.019  | 0.033     | -0.014  | 0.044   | -0.018  |
| Low-income average                     | 0.050                      | -0.020  | 0.120      | 0.003   | 0.038     | -0.016  | 0.079   | -0.032  |
| Middle-income average                  | 0.044                      | -0.018  | 0.054      | -0.022  | 0.036     | -0.015  | 0.051   | -0.021  |
| High-income average                    | 0.042                      | -0.017  | 0.048      | -0.020  | 0.034     | -0.014  | 0.046   | -0.019  |

Note: In shaded cells, elasticity is derived using actual budget shares as opposed to the predicted budget share from the Florida model.

Source: USDA, Economic Research Service calculations based on World Bank, 2005 International Comparison Program data.

**Cross-price elasticities with respect to change in gross rent/fuel/power price, 144 countries in 2005**

| Country                     | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | House furnishings<br>& operations |         | Medical care |         |
|-----------------------------|------------------------------|---------|---------------------|---------|-----------------------------------|---------|--------------|---------|
|                             | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                           | Cournot | Slutsky      | Cournot |
| <b>Low-income countries</b> |                              |         |                     |         |                                   |         |              |         |
| Congo, Democratic Republic  | 0.085                        | -0.021  | 0.096               | -0.024  | 0.105                             | -0.027  | 0.156        | -0.039  |
| Burundi                     | 0.088                        | -0.023  | 0.101               | -0.026  | 0.111                             | -0.029  | 0.164        | -11.464 |
| Liberia                     | 0.088                        | -0.023  | 0.102               | -0.026  | 0.112                             | -0.029  | 0.908        | -0.235  |
| Zimbabwe                    | 0.089                        | -0.023  | 0.103               | -0.027  | 0.113                             | -0.029  | 0.458        | -0.119  |
| Ethiopia                    | 0.089                        | -0.023  | 0.104               | -0.027  | 0.114                             | -0.030  | 0.353        | -0.092  |
| Niger                       | 0.089                        | -0.023  | 0.105               | -0.027  | 0.114                             | -0.030  | 0.347        | -0.091  |
| Guinea-Bissau               | 0.089                        | -0.023  | 0.105               | -0.027  | 0.114                             | -0.030  | 0.343        | -0.090  |
| Mozambique                  | 0.090                        | -0.024  | 0.106               | -0.028  | 0.115                             | -0.030  | 0.291        | -0.076  |
| Malawi                      | 0.090                        | -0.024  | 0.106               | -0.028  | 0.116                             | -0.031  | 0.267        | -0.070  |
| Rwanda                      | 0.090                        | -0.024  | 0.107               | -0.028  | 0.117                             | -0.031  | 0.260        | -0.068  |
| Angola                      | 0.090                        | -0.024  | 0.108               | -0.028  | 0.117                             | -0.031  | 0.243        | -0.064  |
| Chad                        | 0.091                        | -0.024  | 0.108               | -0.028  | 0.118                             | -0.031  | 0.240        | -0.064  |
| Gambia, The                 | 0.091                        | -0.024  | 0.108               | -0.029  | 0.118                             | -0.031  | 0.238        | -0.063  |
| Central African Republic    | 0.091                        | -0.024  | 0.108               | -0.029  | 0.118                             | -0.031  | 0.236        | -0.063  |
| Mali                        | 0.091                        | -0.024  | 0.108               | -0.029  | 0.118                             | -0.031  | 0.236        | -0.063  |
| Tanzania                    | 0.091                        | -0.024  | 0.108               | -0.029  | 0.118                             | -0.031  | 0.234        | -0.062  |
| Sierra Leone                | 0.091                        | -0.024  | 0.109               | -0.029  | 0.118                             | -0.031  | 0.228        | -0.060  |
| Guinea                      | 0.091                        | -0.024  | 0.109               | -0.029  | 0.118                             | -0.031  | 0.227        | -0.060  |
| Burkina Faso                | 0.091                        | -0.024  | 0.109               | -0.029  | 0.119                             | -0.032  | 0.223        | -0.059  |
| Uganda                      | 0.091                        | -0.024  | 0.109               | -0.029  | 0.119                             | -0.032  | 0.217        | -0.058  |
| Madagascar                  | 0.091                        | -0.024  | 0.109               | -0.029  | 0.119                             | -0.032  | 0.216        | -0.058  |
| Zambia                      | 0.091                        | -0.024  | 0.110               | -0.029  | 0.119                             | -0.032  | 0.216        | -0.058  |
| Congo, Republic             | 0.091                        | -0.024  | 0.110               | -0.029  | 0.120                             | -0.032  | 0.214        | -0.057  |
| Togo                        | 0.091                        | -0.024  | 0.110               | -0.029  | 0.120                             | -0.032  | 0.212        | -0.057  |
| Nepal                       | 0.091                        | -0.024  | 0.110               | -0.029  | 0.120                             | -0.032  | 0.208        | -0.055  |
| Ghana                       | 0.091                        | -0.024  | 0.111               | -0.030  | 0.121                             | -0.032  | 0.205        | -0.055  |
| Benin                       | 0.092                        | -0.025  | 0.111               | -0.030  | 0.121                             | -0.032  | 0.202        | -0.054  |
| Mauritania                  | 0.092                        | -0.025  | 0.111               | -0.030  | 0.121                             | -0.032  | 0.202        | -0.054  |
| Bangladesh                  | 0.092                        | -0.025  | 0.111               | -0.030  | 0.122                             | -0.033  | 0.200        | -0.054  |
| Côte d'Ivoire               | 0.092                        | -0.025  | 0.112               | -0.030  | 0.122                             | -0.033  | 0.200        | -0.054  |
| Laos                        | 0.092                        | -0.025  | 0.112               | -0.030  | 0.122                             | -0.033  | 0.200        | -0.054  |
| Kenya                       | 0.092                        | -0.025  | 0.112               | -0.030  | 0.122                             | -0.033  | 0.196        | -0.053  |
| Djibouti                    | 0.092                        | -0.025  | 0.112               | -0.030  | 0.122                             | -0.033  | 0.196        | -0.053  |
| Nigeria                     | 0.092                        | -0.025  | 0.112               | -0.030  | 0.122                             | -0.033  | 0.195        | -0.052  |
| Senegal                     | 0.092                        | -0.025  | 0.112               | -0.030  | 0.123                             | -0.033  | 0.195        | -0.052  |
| Cambodia                    | 0.092                        | -0.025  | 0.113               | -0.030  | 0.123                             | -0.033  | 0.193        | -0.052  |
| Cameroon                    | 0.092                        | -0.025  | 0.113               | -0.031  | 0.123                             | -0.033  | 0.191        | -0.051  |
| São Tomé and Príncipe       | 0.092                        | -0.025  | 0.113               | -0.031  | 0.124                             | -0.033  | 0.190        | -0.051  |
| India                       | 0.092                        | -0.025  | 0.114               | -0.031  | 0.124                             | -0.033  | 0.189        | -0.051  |
| Yemen                       | 0.092                        | -0.025  | 0.114               | -0.031  | 0.124                             | -0.033  | 0.189        | -0.051  |
| Vietnam                     | 0.092                        | -0.025  | 0.114               | -0.031  | 0.124                             | -0.033  | 0.189        | -0.051  |
| Mongolia                    | 0.092                        | -0.025  | 0.114               | -0.031  | 0.124                             | -0.034  | 0.188        | -0.051  |

—continued



**Cross-price elasticities with respect to change in gross rent/fuel/power price, 144 countries  
in 2005—Continued**

| Country                               | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | House furnishings<br>& operations |         | Medical care |         |
|---------------------------------------|------------------------------|---------|---------------------|---------|-----------------------------------|---------|--------------|---------|
|                                       | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                           | Cournot | Slutsky      | Cournot |
| <b>Low-income countries—continued</b> |                              |         |                     |         |                                   |         |              |         |
| Iraq                                  | 0.092                        | -0.025  | 0.114               | -0.031  | 0.124                             | -0.034  | 0.187        | -0.051  |
| Bhutan                                | 0.092                        | -0.025  | 0.114               | -0.031  | 0.125                             | -0.034  | 0.186        | -0.050  |
| China                                 | 0.092                        | -0.025  | 0.115               | -0.031  | 0.125                             | -0.034  | 0.185        | -0.050  |
| Sudan                                 | 0.092                        | -0.025  | 0.115               | -0.031  | 0.126                             | -0.034  | 0.183        | -0.050  |
| Lesotho                               | 0.092                        | -0.025  | 0.116               | -0.031  | 0.126                             | -0.034  | 0.182        | -0.050  |
| Tajikistan                            | 0.092                        | -0.025  | 0.116               | -0.031  | 0.126                             | -0.034  | 0.182        | -0.050  |
| Maldives                              | 0.092                        | -0.025  | 0.117               | -0.032  | 0.127                             | -0.035  | 0.180        | -0.049  |
| Morocco                               | 0.092                        | -0.025  | 0.117               | -0.032  | 0.127                             | -0.035  | 0.180        | -0.049  |
| Pakistan                              | 0.092                        | -0.025  | 0.117               | -0.032  | 0.127                             | -0.035  | 0.180        | -0.049  |
| Indonesia                             | 0.092                        | -0.025  | 0.117               | -0.032  | 0.128                             | -0.035  | 0.179        | -0.049  |
| Kyrgyzstan                            | 0.092                        | -0.025  | 0.117               | -0.032  | 0.128                             | -0.035  | 0.179        | -0.049  |
| Philippines                           | 0.092                        | -0.025  | 0.117               | -0.032  | 0.128                             | -0.035  | 0.179        | -0.049  |
| Cape Verde                            | 0.092                        | -0.025  | 0.117               | -0.032  | 0.128                             | -0.035  | 0.178        | -0.049  |
| Bolivia                               | 0.092                        | -0.025  | 0.117               | -0.032  | 0.128                             | -0.035  | 0.178        | -0.049  |
| Namibia                               | 0.092                        | -0.025  | 0.118               | -0.032  | 0.128                             | -0.035  | 0.177        | -0.048  |
| Sri Lanka                             | 0.092                        | -0.025  | 0.118               | -0.032  | 0.129                             | -0.035  | 0.177        | -0.048  |
| Botswana                              | 0.092                        | -0.025  | 0.118               | -0.032  | 0.129                             | -0.035  | 0.177        | -0.048  |
| Gabon                                 | 0.092                        | -0.025  | 0.119               | -0.032  | 0.129                             | -0.035  | 0.176        | -0.048  |
| Azerbaijan                            | 0.092                        | -0.025  | 0.119               | -0.032  | 0.129                             | -0.035  | 0.176        | -0.048  |
| Syria                                 | 0.092                        | -0.025  | 0.119               | -0.033  | 0.129                             | -0.035  | 0.176        | -0.048  |
| Equatorial Guinea                     | 0.091                        | -0.025  | 0.119               | -0.033  | 0.130                             | -0.036  | 0.175        | -0.048  |
| Paraguay                              | 0.091                        | -0.025  | 0.120               | -0.033  | 0.130                             | -0.036  | 0.175        | -0.048  |
| Fiji                                  | 0.091                        | -0.025  | 0.120               | -0.033  | 0.130                             | -0.036  | 0.175        | -0.048  |
| Swaziland                             | 0.091                        | -0.025  | 0.120               | -0.033  | 0.131                             | -0.036  | 0.174        | -0.048  |
| Moldova                               | 0.091                        | -0.025  | 0.120               | -0.033  | 0.131                             | -0.036  | 0.174        | -0.048  |
| Egypt                                 | 0.091                        | -0.025  | 0.121               | -0.033  | 0.131                             | -0.036  | 0.174        | -0.048  |
| Ecuador                               | 0.091                        | -0.025  | 0.121               | -0.033  | 0.132                             | -0.036  | 0.174        | -0.048  |
| Jordan                                | 0.091                        | -0.025  | 0.121               | -0.033  | 0.132                             | -0.036  | 0.173        | -0.048  |
| Georgia                               | 0.091                        | -0.025  | 0.121               | -0.033  | 0.132                             | -0.036  | 0.173        | -0.048  |
| Thailand                              | 0.091                        | -0.025  | 0.121               | -0.033  | 0.132                             | -0.036  | 0.173        | -0.048  |
| Colombia                              | 0.091                        | -0.025  | 0.121               | -0.033  | 0.132                             | -0.036  | 0.173        | -0.048  |
| Albania                               | 0.091                        | -0.025  | 0.121               | -0.034  | 0.132                             | -0.036  | 0.173        | -0.048  |
| Tunisia                               | 0.090                        | -0.025  | 0.122               | -0.034  | 0.132                             | -0.037  | 0.173        | -0.048  |
| Peru                                  | 0.090                        | -0.025  | 0.122               | -0.034  | 0.133                             | -0.037  | 0.173        | -0.048  |
| Armenia                               | 0.090                        | -0.025  | 0.122               | -0.034  | 0.133                             | -0.037  | 0.172        | -0.048  |
| <b>Middle-income countries</b>        |                              |         |                     |         |                                   |         |              |         |
| Venezuela                             | 0.090                        | -0.025  | 0.123               | -0.034  | 0.133                             | -0.037  | 0.172        | -0.048  |
| Malaysia                              | 0.090                        | -0.025  | 0.123               | -0.034  | 0.133                             | -0.037  | 0.172        | -0.048  |
| Ukraine                               | 0.090                        | -0.025  | 0.123               | -0.034  | 0.134                             | -0.037  | 0.172        | -0.048  |
| Brazil                                | 0.090                        | -0.025  | 0.123               | -0.034  | 0.134                             | -0.037  | 0.172        | -0.048  |
| Montenegro                            | 0.090                        | -0.025  | 0.123               | -0.034  | 0.134                             | -0.037  | 0.172        | -0.048  |

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**Cross-price elasticities with respect to change in gross rent/fuel/power price, 144 countries  
in 2005—Continued**

| Country                                  | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | House furnishings<br>& operations |         | Medical care |         |
|--|------------------------------|---------|---------------------|---------|-----------------------------------|---------|--------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                           | Cournot | Slutsky      | Cournot |
| <b>Middle-income countries—continued</b> |                              |         |                     |         |                                   |         |              |         |
| South Africa                             | 0.089                        | -0.025  | 0.123               | -0.034  | 0.134                             | -0.037  | 0.172        | -0.048  |
| Macedonia                                | 0.089                        | -0.025  | 0.124               | -0.034  | 0.135                             | -0.037  | 0.171        | -0.048  |
| Turkey                                   | 0.089                        | -0.025  | 0.124               | -0.034  | 0.135                             | -0.037  | 0.171        | -0.048  |
| Bosnia and Herzegovina                   | 0.088                        | -0.025  | 0.125               | -0.035  | 0.135                             | -0.038  | 0.171        | -0.048  |
| Serbia                                   | 0.088                        | -0.025  | 0.125               | -0.035  | 0.136                             | -0.038  | 0.171        | -0.048  |
| Belarus                                  | 0.088                        | -0.025  | 0.125               | -0.035  | 0.136                             | -0.038  | 0.171        | -0.048  |
| Romania                                  | 0.088                        | -0.025  | 0.125               | -0.035  | 0.136                             | -0.038  | 0.171        | -0.048  |
| Saudi Arabia                             | 0.088                        | -0.024  | 0.125               | -0.035  | 0.136                             | -0.038  | 0.171        | -0.048  |
| Uruguay                                  | 0.088                        | -0.024  | 0.125               | -0.035  | 0.136                             | -0.038  | 0.171        | -0.048  |
| Mauritius                                | 0.088                        | -0.024  | 0.125               | -0.035  | 0.136                             | -0.038  | 0.171        | -0.048  |
| Chile                                    | 0.088                        | -0.024  | 0.125               | -0.035  | 0.136                             | -0.038  | 0.171        | -0.048  |
| Kazakhstan                               | 0.088                        | -0.024  | 0.125               | -0.035  | 0.136                             | -0.038  | 0.171        | -0.048  |
| Russia                                   | 0.087                        | -0.024  | 0.126               | -0.035  | 0.136                             | -0.038  | 0.171        | -0.048  |
| Argentina                                | 0.087                        | -0.024  | 0.126               | -0.035  | 0.137                             | -0.038  | 0.171        | -0.048  |
| Bulgaria                                 | 0.087                        | -0.024  | 0.126               | -0.035  | 0.137                             | -0.038  | 0.171        | -0.048  |
| Oman                                     | 0.087                        | -0.024  | 0.126               | -0.035  | 0.137                             | -0.038  | 0.171        | -0.048  |
| Iran                                     | 0.086                        | -0.024  | 0.127               | -0.035  | 0.138                             | -0.038  | 0.171        | -0.048  |
| Latvia                                   | 0.085                        | -0.024  | 0.127               | -0.036  | 0.138                             | -0.039  | 0.170        | -0.048  |
| Mexico                                   | 0.085                        | -0.024  | 0.127               | -0.036  | 0.138                             | -0.039  | 0.170        | -0.048  |
| Lebanon                                  | 0.085                        | -0.024  | 0.127               | -0.036  | 0.139                             | -0.039  | 0.170        | -0.048  |
| Poland                                   | 0.083                        | -0.023  | 0.128               | -0.036  | 0.139                             | -0.039  | 0.170        | -0.048  |
| Croatia                                  | 0.083                        | -0.023  | 0.128               | -0.036  | 0.139                             | -0.039  | 0.170        | -0.048  |
| Macao, China                             | 0.083                        | -0.023  | 0.128               | -0.036  | 0.139                             | -0.039  | 0.170        | -0.048  |
| Lithuania                                | 0.083                        | -0.023  | 0.128               | -0.036  | 0.139                             | -0.039  | 0.170        | -0.048  |
| Estonia                                  | 0.083                        | -0.023  | 0.129               | -0.036  | 0.140                             | -0.039  | 0.170        | -0.048  |
| Brunei Darussalam                        | 0.082                        | -0.023  | 0.129               | -0.036  | 0.140                             | -0.039  | 0.170        | -0.048  |
| Slovak Republic                          | 0.082                        | -0.023  | 0.129               | -0.036  | 0.140                             | -0.039  | 0.170        | -0.048  |
| Hungary                                  | 0.082                        | -0.023  | 0.129               | -0.036  | 0.140                             | -0.039  | 0.170        | -0.048  |
| South Korea                              | 0.081                        | -0.023  | 0.130               | -0.036  | 0.141                             | -0.040  | 0.170        | -0.048  |
| Bahrain                                  | 0.081                        | -0.023  | 0.130               | -0.036  | 0.141                             | -0.040  | 0.170        | -0.048  |
| Czech Republic                           | 0.079                        | -0.022  | 0.130               | -0.037  | 0.142                             | -0.040  | 0.170        | -0.048  |
| Slovenia                                 | 0.078                        | -0.022  | 0.131               | -0.037  | 0.142                             | -0.040  | 0.171        | -0.048  |
| Israel                                   | 0.078                        | -0.022  | 0.131               | -0.037  | 0.142                             | -0.040  | 0.171        | -0.048  |
| <b>High-income countries</b>             |                              |         |                     |         |                                   |         |              |         |
| Portugal                                 | 0.077                        | -0.022  | 0.131               | -0.037  | 0.143                             | -0.040  | 0.171        | -0.048  |
| Qatar                                    | 0.076                        | -0.022  | 0.131               | -0.037  | 0.143                             | -0.040  | 0.171        | -0.048  |
| Singapore                                | 0.076                        | -0.022  | 0.131               | -0.037  | 0.143                             | -0.040  | 0.171        | -0.048  |
| Malta                                    | 0.075                        | -0.021  | 0.132               | -0.037  | 0.143                             | -0.040  | 0.171        | -0.048  |
| Kuwait                                   | 0.075                        | -0.021  | 0.132               | -0.037  | 0.143                             | -0.041  | 0.171        | -0.048  |
| New Zealand                              | 0.073                        | -0.021  | 0.133               | -0.038  | 0.144                             | -0.041  | 0.171        | -0.048  |

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**Cross-price elasticities with respect to change in gross rent/fuel/power price, 144 countries  
in 2005—Continued**

| Country                                | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | House furnishings<br>& operations |         | Medical care |         |
|--|------------------------------|---------|---------------------|---------|-----------------------------------|---------|--------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                           | Cournot | Slutsky      | Cournot |
| <b>High-income countries—continued</b> |                              |         |                     |         |                                   |         |              |         |
| Finland                                | 0.072                        | -0.020  | 0.133               | -0.038  | 0.144                             | -0.041  | 0.171        | -0.048  |
| Taiwan, China                          | 0.072                        | -0.020  | 0.133               | -0.038  | 0.144                             | -0.041  | 0.171        | -0.048  |
| Spain                                  | 0.071                        | -0.020  | 0.133               | -0.038  | 0.144                             | -0.041  | 0.171        | -0.048  |
| Italy                                  | 0.071                        | -0.020  | 0.133               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| Ireland                                | 0.070                        | -0.020  | 0.133               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| Denmark                                | 0.070                        | -0.020  | 0.133               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| Sweden                                 | 0.070                        | -0.020  | 0.133               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| Hong Kong, China                       | 0.069                        | -0.020  | 0.133               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| Australia                              | 0.069                        | -0.019  | 0.134               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| Cyprus                                 | 0.068                        | -0.019  | 0.134               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| Belgium                                | 0.068                        | -0.019  | 0.134               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| Japan                                  | 0.068                        | -0.019  | 0.134               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| France                                 | 0.068                        | -0.019  | 0.134               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |
| Germany                                | 0.066                        | -0.019  | 0.134               | -0.038  | 0.146                             | -0.041  | 0.171        | -0.049  |
| Canada                                 | 0.066                        | -0.019  | 0.134               | -0.038  | 0.146                             | -0.041  | 0.171        | -0.049  |
| Iceland                                | 0.066                        | -0.019  | 0.134               | -0.038  | 0.146                             | -0.041  | 0.171        | -0.049  |
| Netherlands                            | 0.066                        | -0.019  | 0.134               | -0.038  | 0.146                             | -0.041  | 0.171        | -0.049  |
| Norway                                 | 0.066                        | -0.019  | 0.134               | -0.038  | 0.146                             | -0.041  | 0.171        | -0.049  |
| United Kingdom                         | 0.064                        | -0.018  | 0.135               | -0.038  | 0.146                             | -0.042  | 0.171        | -0.049  |
| Switzerland                            | 0.064                        | -0.018  | 0.135               | -0.038  | 0.146                             | -0.042  | 0.171        | -0.049  |
| Austria                                | 0.063                        | -0.018  | 0.135               | -0.038  | 0.146                             | -0.042  | 0.172        | -0.049  |
| Luxembourg                             | 0.055                        | -0.016  | 0.136               | -0.039  | 0.148                             | -0.042  | 0.172        | -0.049  |
| United States                          | 0.049                        | -0.014  | 0.137               | -0.039  | 0.149                             | -0.043  | 0.172        | -0.049  |
| Low-income average                     | 0.091                        | -0.025  | 0.113               | -0.031  | 0.124                             | -0.033  | 0.214        | -0.206  |
| Middle-income average                  | 0.086                        | -0.024  | 0.126               | -0.035  | 0.137                             | -0.038  | 0.171        | -0.048  |
| High-income average                    | 0.068                        | -0.019  | 0.133               | -0.038  | 0.145                             | -0.041  | 0.171        | -0.049  |

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**Cross-price elasticities with respect to change in gross rent/fuel/power price, 144 countries  
in 2005—Continued**

| Country                     | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|-----------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                             | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries</b> |                            |         |            |         |           |         |         |         |
| Congo, Democratic Republic  | 0.137                      | -0.035  | 0.385      | -0.097  | 0.093     | -0.024  | 0.214   | -0.054  |
| Burundi                     | 0.136                      | -0.035  | 0.195      | -0.050  | 0.098     | -0.025  | 0.171   | -0.044  |
| Liberia                     | 0.136                      | -0.035  | 0.266      | -0.069  | 0.099     | -0.026  | 1.186   | -0.307  |
| Zimbabwe                    | 0.137                      | -0.036  | 0.219      | -0.057  | 0.100     | -0.026  | 0.501   | -0.130  |
| Ethiopia                    | 0.137                      | -0.036  | 0.583      | -0.152  | 0.101     | -0.026  | 0.374   | -0.098  |
| Niger                       | 0.137                      | -0.036  | 0.160      | -0.042  | 0.101     | -0.026  | 0.367   | -0.096  |
| Guinea-Bissau               | 0.137                      | -0.036  | 0.179      | -0.047  | 0.101     | -0.026  | 0.361   | -0.094  |
| Mozambique                  | 0.137                      | -0.036  | 0.236      | 0.949   | 0.102     | -0.027  | 0.302   | -0.079  |
| Malawi                      | 0.138                      | -0.036  | 0.146      | 2.295   | 0.103     | -0.027  | 0.274   | -0.072  |
| Rwanda                      | 0.138                      | -0.036  | 0.339      | 5.892   | 0.103     | -0.027  | 0.267   | -0.070  |
| Angola                      | 0.138                      | -0.037  | 1.450      | -0.384  | 0.104     | -0.027  | 0.248   | -0.066  |
| Chad                        | 0.138                      | -0.037  | 1.235      | -0.327  | 0.104     | -0.027  | 0.246   | -0.065  |
| Gambia, The                 | 0.138                      | -0.037  | 1.045      | -0.277  | 0.104     | -0.028  | 0.243   | -0.064  |
| Central African Republic    | 0.138                      | -0.037  | 0.971      | -0.257  | 0.104     | -0.028  | 0.241   | -0.064  |
| Mali                        | 0.138                      | -0.037  | 0.961      | -0.254  | 0.104     | -0.028  | 0.241   | -0.064  |
| Tanzania                    | 0.138                      | -0.037  | 0.840      | -0.223  | 0.104     | -0.028  | 0.238   | -0.063  |
| Sierra Leone                | 0.139                      | -0.037  | 0.654      | -0.174  | 0.105     | -0.028  | 0.232   | -0.062  |
| Guinea                      | 0.139                      | -0.037  | 0.631      | -0.168  | 0.105     | -0.028  | 0.231   | -0.061  |
| Burkina Faso                | 0.139                      | -0.037  | 0.561      | -0.149  | 0.105     | -0.028  | 0.227   | -0.060  |
| Uganda                      | 0.139                      | -0.037  | 0.458      | -0.122  | 0.105     | -0.028  | 0.220   | -0.059  |
| Madagascar                  | 0.139                      | -0.037  | 0.454      | -0.121  | 0.105     | -0.028  | 0.220   | -0.058  |
| Zambia                      | 0.139                      | -0.037  | 0.448      | -0.119  | 0.105     | -0.028  | 0.219   | -0.058  |
| Congo, Republic             | 0.139                      | -0.037  | 0.423      | -0.113  | 0.106     | -0.028  | 0.217   | -0.058  |
| Togo                        | 0.139                      | -0.037  | 0.408      | -0.109  | 0.106     | -0.028  | 0.215   | -0.057  |
| Nepal                       | 0.140                      | -0.037  | 0.364      | -0.097  | 0.106     | -0.028  | 0.210   | -0.056  |
| Ghana                       | 0.140                      | -0.037  | 0.346      | -0.092  | 0.107     | -0.029  | 0.208   | -0.056  |
| Benin                       | 0.140                      | -0.037  | 0.323      | -0.087  | 0.107     | -0.029  | 0.205   | -0.055  |
| Mauritania                  | 0.140                      | -0.037  | 0.320      | -0.086  | 0.107     | -0.029  | 0.204   | -0.055  |
| Bangladesh                  | 0.140                      | -0.038  | 0.311      | -0.083  | 0.107     | -0.029  | 0.203   | -0.054  |
| Côte d'Ivoire               | 0.140                      | -0.038  | 0.308      | -0.083  | 0.107     | -0.029  | 0.202   | -0.054  |
| Laos                        | 0.140                      | -0.038  | 0.307      | -0.082  | 0.107     | -0.029  | 0.202   | -0.054  |
| Kenya                       | 0.141                      | -0.038  | 0.286      | -0.077  | 0.108     | -0.029  | 0.198   | -0.053  |
| Djibouti                    | 0.141                      | -0.038  | 0.284      | -0.076  | 0.108     | -0.029  | 0.198   | -0.053  |
| Nigeria                     | 0.141                      | -0.038  | 0.280      | -0.075  | 0.108     | -0.029  | 0.197   | -0.053  |
| Senegal                     | 0.141                      | -0.038  | 0.279      | -0.075  | 0.108     | -0.029  | 0.197   | -0.053  |
| Cambodia                    | 0.141                      | -0.038  | 0.267      | -0.072  | 0.109     | -0.029  | 0.194   | -0.052  |
| Cameroon                    | 0.141                      | -0.038  | 0.258      | -0.070  | 0.109     | -0.029  | 0.192   | -0.052  |
| São Tomé and Príncipe       | 0.141                      | -0.038  | 0.256      | -0.069  | 0.109     | -0.029  | 0.192   | -0.052  |
| India                       | 0.142                      | -0.038  | 0.251      | -0.068  | 0.109     | -0.030  | 0.191   | -0.051  |
| Yemen                       | 0.142                      | -0.038  | 0.249      | -0.067  | 0.109     | -0.030  | 0.190   | -0.051  |
| Vietnam                     | 0.142                      | -0.038  | 0.249      | -0.067  | 0.109     | -0.030  | 0.190   | -0.051  |
| Mongolia                    | 0.142                      | -0.038  | 0.247      | -0.067  | 0.109     | -0.030  | 0.190   | -0.051  |

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**Cross-price elasticities with respect to change in gross rent/fuel/power price, 144 countries  
in 2005—Continued**

| Country                               | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|---------------------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                                       | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| Iraq                                  | 0.142                      | -0.038  | 0.242      | -0.066  | 0.110     | -0.030  | 0.188   | -0.051  |
| Bhutan                                | 0.142                      | -0.038  | 0.239      | -0.065  | 0.110     | -0.030  | 0.187   | -0.051  |
| China                                 | 0.142                      | -0.038  | 0.235      | -0.064  | 0.110     | -0.030  | 0.187   | -0.050  |
| Sudan                                 | 0.143                      | -0.039  | 0.228      | -0.062  | 0.111     | -0.030  | 0.185   | -0.050  |
| Lesotho                               | 0.143                      | -0.039  | 0.224      | -0.061  | 0.111     | -0.030  | 0.184   | -0.050  |
| Tajikistan                            | 0.143                      | -0.039  | 0.224      | -0.061  | 0.111     | -0.030  | 0.184   | -0.050  |
| Maldives                              | 0.143                      | -0.039  | 0.217      | -0.059  | 0.112     | -0.030  | 0.181   | -0.049  |
| Morocco                               | 0.143                      | -0.039  | 0.216      | -0.059  | 0.112     | -0.030  | 0.181   | -0.049  |
| Pakistan                              | 0.144                      | -0.039  | 0.214      | -0.058  | 0.112     | -0.031  | 0.181   | -0.049  |
| Indonesia                             | 0.144                      | -0.039  | 0.211      | -0.058  | 0.112     | -0.031  | 0.180   | -0.049  |
| Kyrgyzstan                            | 0.144                      | -0.039  | 0.211      | -0.058  | 0.112     | -0.031  | 0.180   | -0.049  |
| Philippines                           | 0.144                      | -0.039  | 0.210      | -0.057  | 0.113     | -0.031  | 0.179   | -0.049  |
| Cape Verde                            | 0.144                      | -0.039  | 0.210      | -0.057  | 0.113     | -0.031  | 0.179   | -0.049  |
| Bolivia                               | 0.144                      | -0.039  | 0.210      | -0.057  | 0.113     | -0.031  | 0.179   | -0.049  |
| Namibia                               | 0.144                      | -0.039  | 0.207      | -0.056  | 0.113     | -0.031  | 0.178   | -0.049  |
| Sri Lanka                             | 0.145                      | -0.040  | 0.205      | -0.056  | 0.113     | -0.031  | 0.178   | -0.049  |
| Botswana                              | 0.145                      | -0.040  | 0.205      | -0.056  | 0.113     | -0.031  | 0.178   | -0.049  |
| Gabon                                 | 0.145                      | -0.040  | 0.203      | -0.056  | 0.114     | -0.031  | 0.177   | -0.049  |
| Azerbaijan                            | 0.145                      | -0.040  | 0.203      | -0.056  | 0.114     | -0.031  | 0.177   | -0.048  |
| Syria                                 | 0.145                      | -0.040  | 0.202      | -0.055  | 0.114     | -0.031  | 0.177   | -0.048  |
| Equatorial Guinea                     | 0.145                      | -0.040  | 0.199      | -0.055  | 0.114     | -0.031  | 0.176   | -0.048  |
| Paraguay                              | 0.146                      | -0.040  | 0.198      | -0.055  | 0.115     | -0.031  | 0.176   | -0.048  |
| Fiji                                  | 0.146                      | -0.040  | 0.197      | -0.054  | 0.115     | -0.032  | 0.175   | -0.048  |
| Swaziland                             | 0.146                      | -0.040  | 0.196      | -0.054  | 0.115     | -0.032  | 0.175   | -0.048  |
| Moldova                               | 0.146                      | -0.040  | 0.196      | -0.054  | 0.115     | -0.032  | 0.175   | -0.048  |
| Egypt                                 | 0.146                      | -0.040  | 0.195      | -0.054  | 0.115     | -0.032  | 0.175   | -0.048  |
| Ecuador                               | 0.147                      | -0.040  | 0.194      | -0.053  | 0.116     | -0.032  | 0.174   | -0.048  |
| Jordan                                | 0.147                      | -0.040  | 0.194      | -0.053  | 0.116     | -0.032  | 0.174   | -0.048  |
| Georgia                               | 0.147                      | -0.040  | 0.193      | -0.053  | 0.116     | -0.032  | 0.174   | -0.048  |
| Thailand                              | 0.147                      | -0.040  | 0.193      | -0.053  | 0.116     | -0.032  | 0.174   | -0.048  |
| Colombia                              | 0.147                      | -0.040  | 0.193      | -0.053  | 0.116     | -0.032  | 0.174   | -0.048  |
| Albania                               | 0.147                      | -0.041  | 0.192      | -0.053  | 0.116     | -0.032  | 0.174   | -0.048  |
| Tunisia                               | 0.147                      | -0.041  | 0.192      | -0.053  | 0.116     | -0.032  | 0.173   | -0.048  |
| Peru                                  | 0.147                      | -0.041  | 0.191      | -0.053  | 0.117     | -0.032  | 0.173   | -0.048  |
| Armenia                               | 0.147                      | -0.041  | 0.190      | -0.053  | 0.117     | -0.032  | 0.173   | -0.048  |
| <b>Middle-income countries</b>        |                            |         |            |         |           |         |         |         |
| Venezuela                             | 0.148                      | -0.041  | 0.189      | -0.052  | 0.117     | -0.032  | 0.173   | -0.048  |
| Malaysia                              | 0.148                      | -0.041  | 0.189      | -0.052  | 0.117     | -0.032  | 0.173   | -0.048  |
| Ukraine                               | 0.148                      | -0.041  | 0.189      | -0.052  | 0.117     | -0.033  | 0.173   | -0.048  |
| Brazil                                | 0.148                      | -0.041  | 0.188      | -0.052  | 0.118     | -0.033  | 0.172   | -0.048  |
| Montenegro                            | 0.148                      | -0.041  | 0.188      | -0.052  | 0.118     | -0.033  | 0.172   | -0.048  |

—continued

**Cross-price elasticities with respect to change in gross rent/fuel/power price, 144 countries  
in 2005—Continued**

| Country                                  | Transport & communications |         | Gross rent, fuel, & power |         | House furnishings & operations |         | Medical care |         |
|--|----------------------------|---------|---------------------------|---------|--------------------------------|---------|--------------|---------|
|  | Slutsky                    | Cournot | Slutsky                   | Cournot | Slutsky                        | Cournot | Slutsky      | Cournot |
| <b>Middle-income countries—continued</b> |                            |         |                           |         |                                |         |              |         |
| South Africa                             | 0.149                      | -0.041  | 0.187                     | -0.052  | 0.118                          | -0.033  | 0.172        | -0.048  |
| Macedonia                                | 0.149                      | -0.041  | 0.186                     | -0.052  | 0.118                          | -0.033  | 0.172        | -0.048  |
| Turkey                                   | 0.149                      | -0.041  | 0.186                     | -0.052  | 0.118                          | -0.033  | 0.172        | -0.048  |
| Bosnia and Herzegovina                   | 0.149                      | -0.042  | 0.185                     | -0.051  | 0.119                          | -0.033  | 0.172        | -0.048  |
| Serbia                                   | 0.149                      | -0.042  | 0.185                     | -0.051  | 0.119                          | -0.033  | 0.172        | -0.048  |
| Belarus                                  | 0.149                      | -0.042  | 0.185                     | -0.051  | 0.119                          | -0.033  | 0.172        | -0.048  |
| Romania                                  | 0.150                      | -0.042  | 0.185                     | -0.051  | 0.119                          | -0.033  | 0.171        | -0.048  |
| Saudi Arabia                             | 0.150                      | -0.042  | 0.185                     | -0.051  | 0.119                          | -0.033  | 0.171        | -0.048  |
| Uruguay                                  | 0.150                      | -0.042  | 0.184                     | -0.051  | 0.119                          | -0.033  | 0.171        | -0.048  |
| Mauritius                                | 0.150                      | -0.042  | 0.184                     | -0.051  | 0.119                          | -0.033  | 0.171        | -0.048  |
| Chile                                    | 0.150                      | -0.042  | 0.184                     | -0.051  | 0.119                          | -0.033  | 0.171        | -0.048  |
| Kazakhstan                               | 0.150                      | -0.042  | 0.184                     | -0.051  | 0.119                          | -0.033  | 0.171        | -0.048  |
| Russia                                   | 0.150                      | -0.042  | 0.184                     | -0.051  | 0.120                          | -0.033  | 0.171        | -0.048  |
| Argentina                                | 0.150                      | -0.042  | 0.183                     | -0.051  | 0.120                          | -0.033  | 0.171        | -0.048  |
| Bulgaria                                 | 0.150                      | -0.042  | 0.183                     | -0.051  | 0.120                          | -0.033  | 0.171        | -0.048  |
| Oman                                     | 0.151                      | -0.042  | 0.183                     | -0.051  | 0.120                          | -0.034  | 0.171        | -0.048  |
| Iran                                     | 0.151                      | -0.042  | 0.182                     | -0.051  | 0.121                          | -0.034  | 0.171        | -0.048  |
| Latvia                                   | 0.151                      | -0.042  | 0.182                     | -0.051  | 0.121                          | -0.034  | 0.171        | -0.048  |
| Mexico                                   | 0.152                      | -0.042  | 0.182                     | -0.051  | 0.121                          | -0.034  | 0.171        | -0.048  |
| Lebanon                                  | 0.152                      | -0.043  | 0.181                     | -0.051  | 0.121                          | -0.034  | 0.171        | -0.048  |
| Poland                                   | 0.152                      | -0.043  | 0.181                     | -0.051  | 0.122                          | -0.034  | 0.171        | -0.048  |
| Croatia                                  | 0.152                      | -0.043  | 0.181                     | -0.051  | 0.122                          | -0.034  | 0.171        | -0.048  |
| Macao, China                             | 0.152                      | -0.043  | 0.181                     | -0.051  | 0.122                          | -0.034  | 0.171        | -0.048  |
| Lithuania                                | 0.152                      | -0.043  | 0.181                     | -0.051  | 0.122                          | -0.034  | 0.171        | -0.048  |
| Estonia                                  | 0.153                      | -0.043  | 0.180                     | -0.051  | 0.122                          | -0.034  | 0.171        | -0.048  |
| Brunei Darussalam                        | 0.153                      | -0.043  | 0.180                     | -0.051  | 0.123                          | -0.035  | 0.171        | -0.048  |
| Slovak Republic                          | 0.153                      | -0.043  | 0.180                     | -0.051  | 0.123                          | -0.035  | 0.171        | -0.048  |
| Hungary                                  | 0.153                      | -0.043  | 0.180                     | -0.051  | 0.123                          | -0.035  | 0.171        | -0.048  |
| South Korea                              | 0.154                      | -0.043  | 0.180                     | -0.051  | 0.123                          | -0.035  | 0.171        | -0.048  |
| Bahrain                                  | 0.154                      | -0.043  | 0.180                     | -0.051  | 0.123                          | -0.035  | 0.171        | -0.048  |
| Czech Republic                           | 0.154                      | -0.044  | 0.179                     | -0.051  | 0.124                          | -0.035  | 0.171        | -0.048  |
| Slovenia                                 | 0.155                      | -0.044  | 0.179                     | -0.051  | 0.124                          | -0.035  | 0.171        | -0.048  |
| Israel                                   | 0.155                      | -0.044  | 0.179                     | -0.051  | 0.124                          | -0.035  | 0.171        | -0.048  |
| <b>High-income countries</b>             |                            |         |                           |         |                                |         |              |         |
| Portugal                                 | 0.155                      | -0.044  | 0.179                     | -0.051  | 0.125                          | -0.035  | 0.171        | -0.048  |
| Qatar                                    | 0.155                      | -0.044  | 0.179                     | -0.051  | 0.125                          | -0.035  | 0.171        | -0.048  |
| Singapore                                | 0.155                      | -0.044  | 0.179                     | -0.051  | 0.125                          | -0.035  | 0.171        | -0.048  |
| Malta                                    | 0.155                      | -0.044  | 0.179                     | -0.051  | 0.125                          | -0.035  | 0.171        | -0.048  |
| Kuwait                                   | 0.155                      | -0.044  | 0.179                     | -0.051  | 0.125                          | -0.035  | 0.171        | -0.048  |
| New Zealand                              | 0.156                      | -0.044  | 0.178                     | -0.051  | 0.126                          | -0.036  | 0.171        | -0.048  |

—continued

**Cross-price elasticities with respect to change in gross rent/fuel/power price, 144 countries in 2005—Continued**

| Country                                | Transport & communications |         | Gross rent, fuel, & power |         | House furnishings & operations |         | Medical care |         |
|--|----------------------------|---------|---------------------------|---------|--------------------------------|---------|--------------|---------|
|  | Slutsky                    | Cournot | Slutsky                   | Cournot | Slutsky                        | Cournot | Slutsky      | Cournot |
| <b>High-income countries—continued</b> |                            |         |                           |         |                                |         |              |         |
| Finland                                | 0.156                      | -0.044  | 0.178                     | -0.051  | 0.126                          | -0.036  | 0.171        | -0.048  |
| Taiwan, China                          | 0.156                      | -0.044  | 0.178                     | -0.051  | 0.126                          | -0.036  | 0.171        | -0.049  |
| Spain                                  | 0.156                      | -0.044  | 0.178                     | -0.051  | 0.126                          | -0.036  | 0.171        | -0.049  |
| Italy                                  | 0.157                      | -0.044  | 0.178                     | -0.051  | 0.126                          | -0.036  | 0.171        | -0.049  |
| Ireland                                | 0.157                      | -0.044  | 0.178                     | -0.051  | 0.126                          | -0.036  | 0.171        | -0.049  |
| Denmark                                | 0.157                      | -0.044  | 0.178                     | -0.051  | 0.126                          | -0.036  | 0.171        | -0.049  |
| Sweden                                 | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.126                          | -0.036  | 0.171        | -0.049  |
| Hong Kong, China                       | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.126                          | -0.036  | 0.171        | -0.049  |
| Australia                              | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.171        | -0.049  |
| Cyprus                                 | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.171        | -0.049  |
| Belgium                                | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.171        | -0.049  |
| Japan                                  | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.171        | -0.049  |
| France                                 | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.171        | -0.049  |
| Germany                                | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.172        | -0.049  |
| Canada                                 | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.172        | -0.049  |
| Iceland                                | 0.158                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.172        | -0.049  |
| Netherlands                            | 0.158                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.172        | -0.049  |
| Norway                                 | 0.158                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.172        | -0.049  |
| United Kingdom                         | 0.158                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.172        | -0.049  |
| Switzerland                            | 0.158                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.172        | -0.049  |
| Austria                                | 0.158                      | -0.045  | 0.178                     | -0.051  | 0.128                          | -0.036  | 0.172        | -0.049  |
| Luxembourg                             | 0.159                      | -0.046  | 0.178                     | -0.051  | 0.129                          | -0.037  | 0.172        | -0.049  |
| United States                          | 0.160                      | -0.046  | 0.178                     | -0.051  | 0.129                          | -0.037  | 0.173        | -0.049  |
| Low-income average                     | 0.142                      | -0.038  | 0.333                     | 0.032   | 0.109                          | -0.029  | 0.221        | -0.059  |
| Middle-income average                  | 0.151                      | -0.042  | 0.183                     | -0.051  | 0.120                          | -0.034  | 0.171        | -0.048  |
| High-income average                    | 0.157                      | -0.045  | 0.178                     | -0.051  | 0.127                          | -0.036  | 0.171        | -0.049  |

Note: In shaded cells, elasticity is derived using actual budget shares as opposed to the predicted budget share from the Florida model.

Source: USDA, Economic Research Service calculations based on World Bank, 2005 International Comparison Program data.

**Cross-price elasticities with respect to change in house furnishings and operations price, 144 countries in 2005**

| Country                     | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | Medical care |         |
|-----------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|--------------|---------|
|                             | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky      | Cournot |
| <b>Low-income countries</b> |                              |         |                     |         |                              |         |              |         |
| Congo, Democratic Republic  | 0.030                        | -0.009  | 0.034               | -0.010  | 0.038                        | -0.011  | 0.055        | -0.016  |
| Burundi                     | 0.031                        | -0.009  | 0.035               | -0.010  | 0.040                        | -0.011  | 0.057        | -4.106  |
| Liberia                     | 0.031                        | -0.009  | 0.036               | -0.010  | 0.040                        | -0.011  | 0.317        | -0.091  |
| Zimbabwe                    | 0.031                        | -0.009  | 0.036               | -0.010  | 0.040                        | -0.012  | 0.159        | -0.046  |
| Ethiopia                    | 0.031                        | -0.009  | 0.036               | -0.010  | 0.040                        | -0.012  | 0.123        | -0.035  |
| Niger                       | 0.031                        | -0.009  | 0.036               | -0.010  | 0.040                        | -0.012  | 0.120        | -0.035  |
| Guinea-Bissau               | 0.031                        | -0.009  | 0.036               | -0.010  | 0.040                        | -0.012  | 0.119        | -0.034  |
| Mozambique                  | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.101        | -0.029  |
| Malawi                      | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.092        | -0.027  |
| Rwanda                      | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.090        | -0.026  |
| Angola                      | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.083        | -0.024  |
| Chad                        | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.083        | -0.024  |
| Gambia, The                 | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.082        | -0.024  |
| Central African Republic    | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.081        | -0.024  |
| Mali                        | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.081        | -0.024  |
| Tanzania                    | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.080        | -0.023  |
| Sierra Leone                | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.078        | -0.023  |
| Guinea                      | 0.031                        | -0.009  | 0.037               | -0.011  | 0.041                        | -0.012  | 0.078        | -0.023  |
| Burkina Faso                | 0.031                        | -0.009  | 0.037               | -0.011  | 0.042                        | -0.012  | 0.077        | -0.022  |
| Uganda                      | 0.031                        | -0.009  | 0.037               | -0.011  | 0.042                        | -0.012  | 0.074        | -0.022  |
| Madagascar                  | 0.031                        | -0.009  | 0.037               | -0.011  | 0.042                        | -0.012  | 0.074        | -0.022  |
| Zambia                      | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.074        | -0.022  |
| Congo, Republic             | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.073        | -0.021  |
| Togo                        | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.073        | -0.021  |
| Nepal                       | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.071        | -0.021  |
| Ghana                       | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.070        | -0.020  |
| Benin                       | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.069        | -0.020  |
| Mauritania                  | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.069        | -0.020  |
| Bangladesh                  | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.068        | -0.020  |
| Côte d'Ivoire               | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.068        | -0.020  |
| Laos                        | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.068        | -0.020  |
| Kenya                       | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.067        | -0.020  |
| Djibouti                    | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.067        | -0.020  |
| Nigeria                     | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.066        | -0.019  |
| Senegal                     | 0.031                        | -0.009  | 0.038               | -0.011  | 0.042                        | -0.012  | 0.066        | -0.019  |
| Cambodia                    | 0.031                        | -0.009  | 0.038               | -0.011  | 0.043                        | -0.012  | 0.065        | -0.019  |
| Cameroon                    | 0.031                        | -0.009  | 0.038               | -0.011  | 0.043                        | -0.013  | 0.065        | -0.019  |
| São Tomé and Príncipe       | 0.031                        | -0.009  | 0.038               | -0.011  | 0.043                        | -0.013  | 0.064        | -0.019  |
| India                       | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.064        | -0.019  |
| Yemen                       | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.064        | -0.019  |
| Vietnam                     | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.064        | -0.019  |
| Mongolia                    | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.064        | -0.019  |

—continued



**Cross-price elasticities with respect to change in house furnishings and operations price, 144 countries in 2005—Continued**

| Country                               | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | Medical care |         |
|---------------------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|--------------|---------|
|                                       | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky      | Cournot |
| <b>Low-income countries—continued</b> |                              |         |                     |         |                              |         |              |         |
| Iraq                                  | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.063        | -0.019  |
| Bhutan                                | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.063        | -0.019  |
| China                                 | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.063        | -0.018  |
| Sudan                                 | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.062        | -0.018  |
| Lesotho                               | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.062        | -0.018  |
| Tajikistan                            | 0.031                        | -0.009  | 0.039               | -0.011  | 0.043                        | -0.013  | 0.062        | -0.018  |
| Maldives                              | 0.031                        | -0.009  | 0.039               | -0.012  | 0.044                        | -0.013  | 0.061        | -0.018  |
| Morocco                               | 0.031                        | -0.009  | 0.039               | -0.012  | 0.044                        | -0.013  | 0.061        | -0.018  |
| Pakistan                              | 0.031                        | -0.009  | 0.039               | -0.012  | 0.044                        | -0.013  | 0.060        | -0.018  |
| Indonesia                             | 0.031                        | -0.009  | 0.039               | -0.012  | 0.044                        | -0.013  | 0.060        | -0.018  |
| Kyrgyzstan                            | 0.031                        | -0.009  | 0.039               | -0.012  | 0.044                        | -0.013  | 0.060        | -0.018  |
| Philippines                           | 0.031                        | -0.009  | 0.039               | -0.012  | 0.044                        | -0.013  | 0.060        | -0.018  |
| Cape Verde                            | 0.031                        | -0.009  | 0.039               | -0.012  | 0.044                        | -0.013  | 0.060        | -0.018  |
| Bolivia                               | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.060        | -0.018  |
| Namibia                               | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.060        | -0.018  |
| Sri Lanka                             | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.059        | -0.018  |
| Botswana                              | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.059        | -0.018  |
| Gabon                                 | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.059        | -0.018  |
| Azerbaijan                            | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.059        | -0.017  |
| Syria                                 | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.059        | -0.017  |
| Equatorial Guinea                     | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.059        | -0.017  |
| Paraguay                              | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.059        | -0.017  |
| Fiji                                  | 0.031                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.058        | -0.017  |
| Swaziland                             | 0.030                        | -0.009  | 0.040               | -0.012  | 0.044                        | -0.013  | 0.058        | -0.017  |
| Moldova                               | 0.030                        | -0.009  | 0.040               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Egypt                                 | 0.030                        | -0.009  | 0.040               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Ecuador                               | 0.030                        | -0.009  | 0.040               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Jordan                                | 0.030                        | -0.009  | 0.040               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Georgia                               | 0.030                        | -0.009  | 0.040               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Thailand                              | 0.030                        | -0.009  | 0.040               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Colombia                              | 0.030                        | -0.009  | 0.040               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Albania                               | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Tunisia                               | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Peru                                  | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.058        | -0.017  |
| Armenia                               | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.057        | -0.017  |
| <b>Middle-income countries</b>        |                              |         |                     |         |                              |         |              |         |
| Venezuela                             | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.057        | -0.017  |
| Malaysia                              | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.057        | -0.017  |
| Ukraine                               | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.057        | -0.017  |
| Brazil                                | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.057        | -0.017  |
| Montenegro                            | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.057        | -0.017  |

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**Cross-price elasticities with respect to change in house furnishings and operations price, 144 countries in 2005—Continued**

| Country                                  | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | Medical care |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|--------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky      | Cournot |
| <b>Middle-income countries—continued</b> |                              |         |                     |         |                              |         |              |         |
| South Africa                             | 0.030                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.013  | 0.057        | -0.017  |
| Macedonia                                | 0.029                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.014  | 0.057        | -0.017  |
| Turkey                                   | 0.029                        | -0.009  | 0.041               | -0.012  | 0.045                        | -0.014  | 0.057        | -0.017  |
| Bosnia and Herzegovina                   | 0.029                        | -0.009  | 0.041               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Serbia                                   | 0.029                        | -0.009  | 0.041               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Belarus                                  | 0.029                        | -0.009  | 0.041               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Romania                                  | 0.029                        | -0.009  | 0.041               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Saudi Arabia                             | 0.029                        | -0.009  | 0.041               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Uruguay                                  | 0.029                        | -0.009  | 0.041               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Mauritius                                | 0.029                        | -0.009  | 0.041               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Chile                                    | 0.029                        | -0.009  | 0.041               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Kazakhstan                               | 0.029                        | -0.009  | 0.041               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Russia                                   | 0.029                        | -0.009  | 0.042               | -0.012  | 0.046                        | -0.014  | 0.057        | -0.017  |
| Argentina                                | 0.029                        | -0.009  | 0.042               | -0.012  | 0.046                        | -0.014  | 0.056        | -0.017  |
| Bulgaria                                 | 0.029                        | -0.009  | 0.042               | -0.012  | 0.046                        | -0.014  | 0.056        | -0.017  |
| Oman                                     | 0.029                        | -0.009  | 0.042               | -0.012  | 0.046                        | -0.014  | 0.056        | -0.017  |
| Iran                                     | 0.028                        | -0.008  | 0.042               | -0.012  | 0.046                        | -0.014  | 0.056        | -0.017  |
| Latvia                                   | 0.028                        | -0.008  | 0.042               | -0.013  | 0.046                        | -0.014  | 0.056        | -0.017  |
| Mexico                                   | 0.028                        | -0.008  | 0.042               | -0.013  | 0.046                        | -0.014  | 0.056        | -0.017  |
| Lebanon                                  | 0.028                        | -0.008  | 0.042               | -0.013  | 0.046                        | -0.014  | 0.056        | -0.017  |
| Poland                                   | 0.027                        | -0.008  | 0.042               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Croatia                                  | 0.027                        | -0.008  | 0.042               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Macao, China                             | 0.027                        | -0.008  | 0.042               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Lithuania                                | 0.027                        | -0.008  | 0.042               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Estonia                                  | 0.027                        | -0.008  | 0.042               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Brunei Darussalam                        | 0.027                        | -0.008  | 0.042               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Slovak Republic                          | 0.027                        | -0.008  | 0.042               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Hungary                                  | 0.027                        | -0.008  | 0.042               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| South Korea                              | 0.026                        | -0.008  | 0.043               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Bahrain                                  | 0.026                        | -0.008  | 0.043               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Czech Republic                           | 0.026                        | -0.008  | 0.043               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Slovenia                                 | 0.026                        | -0.008  | 0.043               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Israel                                   | 0.025                        | -0.008  | 0.043               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| <b>High-income countries</b>             |                              |         |                     |         |                              |         |              |         |
| Portugal                                 | 0.025                        | -0.008  | 0.043               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Qatar                                    | 0.025                        | -0.008  | 0.043               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Singapore                                | 0.025                        | -0.007  | 0.043               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Malta                                    | 0.025                        | -0.007  | 0.043               | -0.013  | 0.047                        | -0.014  | 0.056        | -0.017  |
| Kuwait                                   | 0.024                        | -0.007  | 0.043               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| New Zealand                              | 0.024                        | -0.007  | 0.043               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |

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**Cross-price elasticities with respect to change in house furnishings and operations price, 144 countries in 2005—Continued**

| Country                                | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | Medical care |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|--------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky      | Cournot |
| <b>High-income countries—continued</b> |                              |         |                     |         |                              |         |              |         |
| Finland                                | 0.024                        | -0.007  | 0.043               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Taiwan, China                          | 0.024                        | -0.007  | 0.043               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Spain                                  | 0.023                        | -0.007  | 0.043               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Italy                                  | 0.023                        | -0.007  | 0.043               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Ireland                                | 0.023                        | -0.007  | 0.043               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Denmark                                | 0.023                        | -0.007  | 0.043               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Sweden                                 | 0.023                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Hong Kong, China                       | 0.023                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Australia                              | 0.022                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Cyprus                                 | 0.022                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Belgium                                | 0.022                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Japan                                  | 0.022                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| France                                 | 0.022                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |
| Germany                                | 0.022                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.015  | 0.056        | -0.017  |
| Canada                                 | 0.022                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.015  | 0.056        | -0.017  |
| Iceland                                | 0.022                        | -0.006  | 0.044               | -0.013  | 0.048                        | -0.015  | 0.056        | -0.017  |
| Netherlands                            | 0.021                        | -0.006  | 0.044               | -0.013  | 0.048                        | -0.015  | 0.056        | -0.017  |
| Norway                                 | 0.021                        | -0.006  | 0.044               | -0.013  | 0.048                        | -0.015  | 0.056        | -0.017  |
| United Kingdom                         | 0.021                        | -0.006  | 0.044               | -0.013  | 0.048                        | -0.015  | 0.056        | -0.017  |
| Switzerland                            | 0.021                        | -0.006  | 0.044               | -0.013  | 0.048                        | -0.015  | 0.056        | -0.017  |
| Austria                                | 0.020                        | -0.006  | 0.044               | -0.013  | 0.048                        | -0.015  | 0.056        | -0.017  |
| Luxembourg                             | 0.018                        | -0.005  | 0.044               | -0.013  | 0.049                        | -0.015  | 0.056        | -0.017  |
| United States                          | 0.016                        | -0.005  | 0.044               | -0.013  | 0.049                        | -0.015  | 0.056        | -0.017  |
| Low-income average                     | 0.031                        | -0.009  | 0.038               | -0.011  | 0.043                        | -0.013  | 0.073        | -0.074  |
| Middle-income average                  | 0.028                        | -0.008  | 0.042               | -0.012  | 0.046                        | -0.014  | 0.056        | -0.017  |
| High-income average                    | 0.022                        | -0.007  | 0.044               | -0.013  | 0.048                        | -0.014  | 0.056        | -0.017  |

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**Cross-price elasticities with respect to change in house furnishings and operations price, 144 countries in 2005—Continued**

| Country                     | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|-----------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                             | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries</b> |                            |         |            |         |           |         |         |         |
| Congo, Democratic Republic  | 0.049                      | -0.014  | 0.137      | -0.039  | 0.033     | -0.009  | 0.076   | -0.022  |
| Burundi                     | 0.048                      | -0.014  | 0.068      | -0.020  | 0.034     | -0.010  | 0.060   | -0.017  |
| Liberia                     | 0.048                      | -0.014  | 0.093      | -0.027  | 0.034     | -0.010  | 0.414   | -0.119  |
| Zimbabwe                    | 0.048                      | -0.014  | 0.076      | -0.022  | 0.035     | -0.010  | 0.174   | -0.050  |
| Ethiopia                    | 0.048                      | -0.014  | 0.202      | -0.058  | 0.035     | -0.010  | 0.130   | -0.037  |
| Niger                       | 0.048                      | -0.014  | 0.056      | -0.016  | 0.035     | -0.010  | 0.127   | -0.037  |
| Guinea-Bissau               | 0.048                      | -0.014  | 0.062      | -0.018  | 0.035     | -0.010  | 0.125   | -0.036  |
| Mozambique                  | 0.048                      | -0.014  | 0.082      | 0.333   | 0.035     | -0.010  | 0.104   | -0.030  |
| Malawi                      | 0.048                      | -0.014  | 0.050      | 0.808   | 0.035     | -0.010  | 0.095   | -0.027  |
| Rwanda                      | 0.048                      | -0.014  | 0.117      | 2.072   | 0.035     | -0.010  | 0.092   | -0.027  |
| Angola                      | 0.048                      | -0.014  | 0.499      | -0.145  | 0.036     | -0.010  | 0.085   | -0.025  |
| Chad                        | 0.048                      | -0.014  | 0.425      | -0.123  | 0.036     | -0.010  | 0.084   | -0.025  |
| Gambia, The                 | 0.048                      | -0.014  | 0.359      | -0.104  | 0.036     | -0.010  | 0.083   | -0.024  |
| Central African Republic    | 0.048                      | -0.014  | 0.334      | -0.097  | 0.036     | -0.010  | 0.083   | -0.024  |
| Mali                        | 0.048                      | -0.014  | 0.330      | -0.096  | 0.036     | -0.010  | 0.083   | -0.024  |
| Tanzania                    | 0.048                      | -0.014  | 0.289      | -0.084  | 0.036     | -0.010  | 0.082   | -0.024  |
| Sierra Leone                | 0.048                      | -0.014  | 0.225      | -0.065  | 0.036     | -0.010  | 0.080   | -0.023  |
| Guinea                      | 0.048                      | -0.014  | 0.217      | -0.063  | 0.036     | -0.010  | 0.079   | -0.023  |
| Burkina Faso                | 0.048                      | -0.014  | 0.192      | -0.056  | 0.036     | -0.010  | 0.078   | -0.023  |
| Uganda                      | 0.048                      | -0.014  | 0.157      | -0.046  | 0.036     | -0.011  | 0.075   | -0.022  |
| Madagascar                  | 0.048                      | -0.014  | 0.155      | -0.045  | 0.036     | -0.011  | 0.075   | -0.022  |
| Zambia                      | 0.048                      | -0.014  | 0.153      | -0.045  | 0.036     | -0.011  | 0.075   | -0.022  |
| Congo, Republic             | 0.048                      | -0.014  | 0.145      | -0.042  | 0.036     | -0.011  | 0.074   | -0.022  |
| Togo                        | 0.048                      | -0.014  | 0.139      | -0.041  | 0.036     | -0.011  | 0.074   | -0.021  |
| Nepal                       | 0.048                      | -0.014  | 0.124      | -0.036  | 0.036     | -0.011  | 0.072   | -0.021  |
| Ghana                       | 0.048                      | -0.014  | 0.118      | -0.035  | 0.036     | -0.011  | 0.071   | -0.021  |
| Benin                       | 0.048                      | -0.014  | 0.110      | -0.032  | 0.036     | -0.011  | 0.070   | -0.020  |
| Mauritania                  | 0.048                      | -0.014  | 0.109      | -0.032  | 0.037     | -0.011  | 0.070   | -0.020  |
| Bangladesh                  | 0.048                      | -0.014  | 0.106      | -0.031  | 0.037     | -0.011  | 0.069   | -0.020  |
| Côte d'Ivoire               | 0.048                      | -0.014  | 0.105      | -0.031  | 0.037     | -0.011  | 0.069   | -0.020  |
| Laos                        | 0.048                      | -0.014  | 0.105      | -0.031  | 0.037     | -0.011  | 0.069   | -0.020  |
| Kenya                       | 0.048                      | -0.014  | 0.097      | -0.028  | 0.037     | -0.011  | 0.067   | -0.020  |
| Djibouti                    | 0.048                      | -0.014  | 0.097      | -0.028  | 0.037     | -0.011  | 0.067   | -0.020  |
| Nigeria                     | 0.048                      | -0.014  | 0.095      | -0.028  | 0.037     | -0.011  | 0.067   | -0.020  |
| Senegal                     | 0.048                      | -0.014  | 0.095      | -0.028  | 0.037     | -0.011  | 0.067   | -0.020  |
| Cambodia                    | 0.048                      | -0.014  | 0.091      | -0.027  | 0.037     | -0.011  | 0.066   | -0.019  |
| Cameroon                    | 0.048                      | -0.014  | 0.088      | -0.026  | 0.037     | -0.011  | 0.065   | -0.019  |
| São Tomé and Príncipe       | 0.048                      | -0.014  | 0.087      | -0.025  | 0.037     | -0.011  | 0.065   | -0.019  |
| India                       | 0.048                      | -0.014  | 0.085      | -0.025  | 0.037     | -0.011  | 0.065   | -0.019  |
| Yemen                       | 0.048                      | -0.014  | 0.084      | -0.025  | 0.037     | -0.011  | 0.064   | -0.019  |
| Vietnam                     | 0.048                      | -0.014  | 0.084      | -0.025  | 0.037     | -0.011  | 0.064   | -0.019  |
| Mongolia                    | 0.048                      | -0.014  | 0.084      | -0.025  | 0.037     | -0.011  | 0.064   | -0.019  |

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**Cross-price elasticities with respect to change in house furnishings and operations price, 144 countries in 2005—Continued**

| Country                               | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|---------------------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                                       | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| Iraq                                  | 0.048                      | -0.014  | 0.082      | -0.024  | 0.037     | -0.011  | 0.064   | -0.019  |
| Bhutan                                | 0.048                      | -0.014  | 0.081      | -0.024  | 0.037     | -0.011  | 0.063   | -0.019  |
| China                                 | 0.048                      | -0.014  | 0.080      | -0.023  | 0.037     | -0.011  | 0.063   | -0.019  |
| Sudan                                 | 0.048                      | -0.014  | 0.077      | -0.023  | 0.037     | -0.011  | 0.062   | -0.018  |
| Lesotho                               | 0.048                      | -0.014  | 0.076      | -0.022  | 0.037     | -0.011  | 0.062   | -0.018  |
| Tajikistan                            | 0.048                      | -0.014  | 0.076      | -0.022  | 0.038     | -0.011  | 0.062   | -0.018  |
| Maldives                              | 0.048                      | -0.014  | 0.073      | -0.022  | 0.038     | -0.011  | 0.061   | -0.018  |
| Morocco                               | 0.048                      | -0.014  | 0.073      | -0.021  | 0.038     | -0.011  | 0.061   | -0.018  |
| Pakistan                              | 0.048                      | -0.014  | 0.072      | -0.021  | 0.038     | -0.011  | 0.061   | -0.018  |
| Indonesia                             | 0.048                      | -0.014  | 0.071      | -0.021  | 0.038     | -0.011  | 0.060   | -0.018  |
| Kyrgyzstan                            | 0.048                      | -0.014  | 0.071      | -0.021  | 0.038     | -0.011  | 0.060   | -0.018  |
| Philippines                           | 0.048                      | -0.014  | 0.071      | -0.021  | 0.038     | -0.011  | 0.060   | -0.018  |
| Cape Verde                            | 0.048                      | -0.014  | 0.071      | -0.021  | 0.038     | -0.011  | 0.060   | -0.018  |
| Bolivia                               | 0.048                      | -0.014  | 0.071      | -0.021  | 0.038     | -0.011  | 0.060   | -0.018  |
| Namibia                               | 0.049                      | -0.014  | 0.069      | -0.021  | 0.038     | -0.011  | 0.060   | -0.018  |
| Sri Lanka                             | 0.049                      | -0.014  | 0.069      | -0.020  | 0.038     | -0.011  | 0.060   | -0.018  |
| Botswana                              | 0.049                      | -0.014  | 0.069      | -0.020  | 0.038     | -0.011  | 0.060   | -0.018  |
| Gabon                                 | 0.049                      | -0.014  | 0.068      | -0.020  | 0.038     | -0.011  | 0.059   | -0.018  |
| Azerbaijan                            | 0.049                      | -0.014  | 0.068      | -0.020  | 0.038     | -0.011  | 0.059   | -0.018  |
| Syria                                 | 0.049                      | -0.014  | 0.068      | -0.020  | 0.038     | -0.011  | 0.059   | -0.018  |
| Equatorial Guinea                     | 0.049                      | -0.014  | 0.067      | -0.020  | 0.038     | -0.011  | 0.059   | -0.017  |
| Paraguay                              | 0.049                      | -0.014  | 0.066      | -0.020  | 0.038     | -0.011  | 0.059   | -0.017  |
| Fiji                                  | 0.049                      | -0.014  | 0.066      | -0.020  | 0.038     | -0.011  | 0.059   | -0.017  |
| Swaziland                             | 0.049                      | -0.014  | 0.066      | -0.019  | 0.038     | -0.011  | 0.058   | -0.017  |
| Moldova                               | 0.049                      | -0.014  | 0.065      | -0.019  | 0.039     | -0.011  | 0.058   | -0.017  |
| Egypt                                 | 0.049                      | -0.014  | 0.065      | -0.019  | 0.039     | -0.011  | 0.058   | -0.017  |
| Ecuador                               | 0.049                      | -0.015  | 0.065      | -0.019  | 0.039     | -0.011  | 0.058   | -0.017  |
| Jordan                                | 0.049                      | -0.015  | 0.065      | -0.019  | 0.039     | -0.011  | 0.058   | -0.017  |
| Georgia                               | 0.049                      | -0.015  | 0.064      | -0.019  | 0.039     | -0.011  | 0.058   | -0.017  |
| Thailand                              | 0.049                      | -0.015  | 0.064      | -0.019  | 0.039     | -0.011  | 0.058   | -0.017  |
| Colombia                              | 0.049                      | -0.015  | 0.064      | -0.019  | 0.039     | -0.012  | 0.058   | -0.017  |
| Albania                               | 0.049                      | -0.015  | 0.064      | -0.019  | 0.039     | -0.012  | 0.058   | -0.017  |
| Tunisia                               | 0.049                      | -0.015  | 0.064      | -0.019  | 0.039     | -0.012  | 0.058   | -0.017  |
| Peru                                  | 0.049                      | -0.015  | 0.064      | -0.019  | 0.039     | -0.012  | 0.058   | -0.017  |
| Armenia                               | 0.049                      | -0.015  | 0.063      | -0.019  | 0.039     | -0.012  | 0.058   | -0.017  |
| <b>Middle-income countries</b>        |                            |         |            |         |           |         |         |         |
| Venezuela                             | 0.049                      | -0.015  | 0.063      | -0.019  | 0.039     | -0.012  | 0.057   | -0.017  |
| Malaysia                              | 0.049                      | -0.015  | 0.063      | -0.019  | 0.039     | -0.012  | 0.057   | -0.017  |
| Ukraine                               | 0.049                      | -0.015  | 0.063      | -0.019  | 0.039     | -0.012  | 0.057   | -0.017  |
| Brazil                                | 0.049                      | -0.015  | 0.063      | -0.019  | 0.039     | -0.012  | 0.057   | -0.017  |
| Montenegro                            | 0.049                      | -0.015  | 0.062      | -0.019  | 0.039     | -0.012  | 0.057   | -0.017  |

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**Cross-price elasticities with respect to change in house furnishings and operations price, 144 countries in 2005—Continued**

| Country                                  | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|--|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Middle-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| South Africa                             | 0.049                      | -0.015  | 0.062      | -0.019  | 0.039     | -0.012  | 0.057   | -0.017  |
| Macedonia                                | 0.049                      | -0.015  | 0.062      | -0.018  | 0.039     | -0.012  | 0.057   | -0.017  |
| Turkey                                   | 0.049                      | -0.015  | 0.062      | -0.018  | 0.039     | -0.012  | 0.057   | -0.017  |
| Bosnia and Herzegovina                   | 0.050                      | -0.015  | 0.061      | -0.018  | 0.039     | -0.012  | 0.057   | -0.017  |
| Serbia                                   | 0.050                      | -0.015  | 0.061      | -0.018  | 0.039     | -0.012  | 0.057   | -0.017  |
| Belarus                                  | 0.050                      | -0.015  | 0.061      | -0.018  | 0.039     | -0.012  | 0.057   | -0.017  |
| Romania                                  | 0.050                      | -0.015  | 0.061      | -0.018  | 0.039     | -0.012  | 0.057   | -0.017  |
| Saudi Arabia                             | 0.050                      | -0.015  | 0.061      | -0.018  | 0.039     | -0.012  | 0.057   | -0.017  |
| Uruguay                                  | 0.050                      | -0.015  | 0.061      | -0.018  | 0.039     | -0.012  | 0.057   | -0.017  |
| Mauritius                                | 0.050                      | -0.015  | 0.061      | -0.018  | 0.039     | -0.012  | 0.057   | -0.017  |
| Chile                                    | 0.050                      | -0.015  | 0.061      | -0.018  | 0.040     | -0.012  | 0.057   | -0.017  |
| Kazakhstan                               | 0.050                      | -0.015  | 0.061      | -0.018  | 0.040     | -0.012  | 0.057   | -0.017  |
| Russia                                   | 0.050                      | -0.015  | 0.061      | -0.018  | 0.040     | -0.012  | 0.057   | -0.017  |
| Argentina                                | 0.050                      | -0.015  | 0.061      | -0.018  | 0.040     | -0.012  | 0.057   | -0.017  |
| Bulgaria                                 | 0.050                      | -0.015  | 0.061      | -0.018  | 0.040     | -0.012  | 0.057   | -0.017  |
| Oman                                     | 0.050                      | -0.015  | 0.060      | -0.018  | 0.040     | -0.012  | 0.057   | -0.017  |
| Iran                                     | 0.050                      | -0.015  | 0.060      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Latvia                                   | 0.050                      | -0.015  | 0.060      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Mexico                                   | 0.050                      | -0.015  | 0.060      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Lebanon                                  | 0.050                      | -0.015  | 0.060      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Poland                                   | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Croatia                                  | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Macao, China                             | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Lithuania                                | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Estonia                                  | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Brunei Darussalam                        | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Slovak Republic                          | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Hungary                                  | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| South Korea                              | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Bahrain                                  | 0.050                      | -0.015  | 0.059      | -0.018  | 0.040     | -0.012  | 0.056   | -0.017  |
| Czech Republic                           | 0.051                      | -0.015  | 0.059      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Slovenia                                 | 0.051                      | -0.015  | 0.059      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Israel                                   | 0.051                      | -0.015  | 0.059      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| <b>High-income countries</b>             |                            |         |            |         |           |         |         |         |
| Portugal                                 | 0.051                      | -0.015  | 0.059      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Qatar                                    | 0.051                      | -0.015  | 0.059      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Singapore                                | 0.051                      | -0.015  | 0.059      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Malta                                    | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Kuwait                                   | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| New Zealand                              | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |

—continued

**Cross-price elasticities with respect to change in house furnishings and operations price, 144 countries in 2005—Continued**

| Country                                | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|--|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>High-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| Finland                                | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Taiwan, China                          | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Spain                                  | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Italy                                  | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Ireland                                | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Denmark                                | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Sweden                                 | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Hong Kong, China                       | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Australia                              | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Cyprus                                 | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Belgium                                | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Japan                                  | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| France                                 | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |
| Germany                                | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.013  | 0.056   | -0.017  |
| Canada                                 | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.013  | 0.056   | -0.017  |
| Iceland                                | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.013  | 0.056   | -0.017  |
| Netherlands                            | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.013  | 0.056   | -0.017  |
| Norway                                 | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.013  | 0.056   | -0.017  |
| United Kingdom                         | 0.051                      | -0.016  | 0.058      | -0.018  | 0.041     | -0.013  | 0.056   | -0.017  |
| Switzerland                            | 0.051                      | -0.016  | 0.058      | -0.018  | 0.041     | -0.013  | 0.056   | -0.017  |
| Austria                                | 0.051                      | -0.016  | 0.058      | -0.018  | 0.042     | -0.013  | 0.056   | -0.017  |
| Luxembourg                             | 0.052                      | -0.016  | 0.058      | -0.018  | 0.042     | -0.013  | 0.056   | -0.017  |
| United States                          | 0.052                      | -0.016  | 0.058      | -0.018  | 0.042     | -0.013  | 0.056   | -0.017  |
| Low-income average                     | 0.048                      | -0.014  | 0.114      | 0.009   | 0.037     | -0.011  | 0.075   | -0.022  |
| Middle-income average                  | 0.050                      | -0.015  | 0.061      | -0.018  | 0.040     | -0.012  | 0.057   | -0.017  |
| High-income average                    | 0.051                      | -0.015  | 0.058      | -0.018  | 0.041     | -0.012  | 0.056   | -0.017  |

Note: In shaded cells, elasticity is derived using actual budget shares as opposed to the predicted budget share from the Florida model.

Source: USDA, Economic Research Service calculations based on World Bank, 2005 International Comparison Program data.

**Cross-price elasticities with respect to change in medical care price, 144 countries in 2005**

| Country                     | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|-----------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                             | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries</b> |                              |         |                     |         |                              |         |                                   |         |
| Congo, Democratic Republic  | 0.035                        | 0.005   | 0.040               | 0.005   | 0.045                        | 0.006   | 0.043                             | 0.006   |
| Burundi                     | 0.013                        | 0.012   | 0.015               | 0.014   | 0.016                        | 0.016   | 0.016                             | 0.016   |
| Liberia                     | 0.014                        | 0.012   | 0.016               | 0.014   | 0.018                        | 0.015   | 0.018                             | 0.015   |
| Zimbabwe                    | 0.016                        | 0.011   | 0.019               | 0.013   | 0.021                        | 0.014   | 0.021                             | 0.014   |
| Ethiopia                    | 0.018                        | 0.010   | 0.021               | 0.012   | 0.023                        | 0.014   | 0.023                             | 0.013   |
| Niger                       | 0.018                        | 0.010   | 0.021               | 0.012   | 0.023                        | 0.013   | 0.023                             | 0.013   |
| Guinea-Bissau               | 0.018                        | 0.010   | 0.021               | 0.012   | 0.024                        | 0.013   | 0.023                             | 0.013   |
| Mozambique                  | 0.020                        | 0.010   | 0.023               | 0.011   | 0.026                        | 0.013   | 0.025                             | 0.012   |
| Malawi                      | 0.021                        | 0.009   | 0.025               | 0.011   | 0.027                        | 0.012   | 0.027                             | 0.012   |
| Rwanda                      | 0.021                        | 0.009   | 0.025               | 0.011   | 0.028                        | 0.012   | 0.027                             | 0.012   |
| Angola                      | 0.022                        | 0.008   | 0.027               | 0.010   | 0.030                        | 0.011   | 0.029                             | 0.011   |
| Chad                        | 0.023                        | 0.008   | 0.027               | 0.010   | 0.030                        | 0.011   | 0.029                             | 0.011   |
| Gambia, The                 | 0.023                        | 0.008   | 0.027               | 0.010   | 0.030                        | 0.011   | 0.030                             | 0.011   |
| Central African Republic    | 0.023                        | 0.008   | 0.027               | 0.010   | 0.030                        | 0.011   | 0.030                             | 0.011   |
| Mali                        | 0.023                        | 0.008   | 0.027               | 0.010   | 0.030                        | 0.011   | 0.030                             | 0.011   |
| Tanzania                    | 0.023                        | 0.008   | 0.028               | 0.010   | 0.031                        | 0.011   | 0.030                             | 0.011   |
| Sierra Leone                | 0.024                        | 0.008   | 0.028               | 0.009   | 0.032                        | 0.010   | 0.031                             | 0.010   |
| Guinea                      | 0.024                        | 0.008   | 0.029               | 0.009   | 0.032                        | 0.010   | 0.031                             | 0.010   |
| Burkina Faso                | 0.024                        | 0.008   | 0.029               | 0.009   | 0.032                        | 0.010   | 0.032                             | 0.010   |
| Uganda                      | 0.025                        | 0.007   | 0.030               | 0.009   | 0.034                        | 0.010   | 0.033                             | 0.010   |
| Madagascar                  | 0.025                        | 0.007   | 0.030               | 0.009   | 0.034                        | 0.010   | 0.033                             | 0.009   |
| Zambia                      | 0.025                        | 0.007   | 0.030               | 0.009   | 0.034                        | 0.010   | 0.033                             | 0.009   |
| Congo, Republic             | 0.026                        | 0.007   | 0.031               | 0.009   | 0.034                        | 0.009   | 0.034                             | 0.009   |
| Togo                        | 0.026                        | 0.007   | 0.031               | 0.008   | 0.034                        | 0.009   | 0.034                             | 0.009   |
| Nepal                       | 0.026                        | 0.007   | 0.032               | 0.008   | 0.036                        | 0.009   | 0.035                             | 0.009   |
| Ghana                       | 0.027                        | 0.006   | 0.033               | 0.008   | 0.036                        | 0.009   | 0.036                             | 0.009   |
| Benin                       | 0.027                        | 0.006   | 0.033               | 0.008   | 0.037                        | 0.008   | 0.036                             | 0.008   |
| Mauritania                  | 0.028                        | 0.006   | 0.034               | 0.007   | 0.037                        | 0.008   | 0.037                             | 0.008   |
| Bangladesh                  | 0.028                        | 0.006   | 0.034               | 0.007   | 0.038                        | 0.008   | 0.037                             | 0.008   |
| Côte d'Ivoire               | 0.028                        | 0.006   | 0.034               | 0.007   | 0.038                        | 0.008   | 0.037                             | 0.008   |
| Laos                        | 0.028                        | 0.006   | 0.034               | 0.007   | 0.038                        | 0.008   | 0.037                             | 0.008   |
| Kenya                       | 0.029                        | 0.006   | 0.035               | 0.007   | 0.039                        | 0.008   | 0.038                             | 0.007   |
| Djibouti                    | 0.029                        | 0.006   | 0.035               | 0.007   | 0.039                        | 0.008   | 0.039                             | 0.007   |
| Nigeria                     | 0.029                        | 0.005   | 0.036               | 0.007   | 0.040                        | 0.007   | 0.039                             | 0.007   |
| Senegal                     | 0.029                        | 0.005   | 0.036               | 0.007   | 0.040                        | 0.007   | 0.039                             | 0.007   |
| Cambodia                    | 0.030                        | 0.005   | 0.037               | 0.006   | 0.041                        | 0.007   | 0.040                             | 0.007   |
| Cameroon                    | 0.030                        | 0.005   | 0.037               | 0.006   | 0.042                        | 0.007   | 0.041                             | 0.007   |
| São Tomé and Príncipe       | 0.031                        | 0.005   | 0.038               | 0.006   | 0.042                        | 0.007   | 0.041                             | 0.007   |
| India                       | 0.031                        | 0.005   | 0.038               | 0.006   | 0.042                        | 0.006   | 0.042                             | 0.006   |
| Yemen                       | 0.031                        | 0.005   | 0.038               | 0.006   | 0.043                        | 0.006   | 0.042                             | 0.006   |
| Vietnam                     | 0.031                        | 0.005   | 0.038               | 0.006   | 0.043                        | 0.006   | 0.042                             | 0.006   |
| Mongolia                    | 0.031                        | 0.005   | 0.039               | 0.006   | 0.043                        | 0.006   | 0.042                             | 0.006   |

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**Cross-price elasticities with respect to change in medical care price, 144 countries in 2005—Continued**

| Country                               | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|---------------------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                                       | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Iraq                                  | 0.032                        | 0.004   | 0.039               | 0.005   | 0.043                        | 0.006   | 0.043                             | 0.006   |
| Bhutan                                | 0.032                        | 0.004   | 0.040               | 0.005   | 0.044                        | 0.006   | 0.043                             | 0.006   |
| China                                 | 0.032                        | 0.004   | 0.040               | 0.005   | 0.044                        | 0.006   | 0.044                             | 0.006   |
| Sudan                                 | 0.033                        | 0.004   | 0.041               | 0.005   | 0.046                        | 0.005   | 0.045                             | 0.005   |
| Lesotho                               | 0.033                        | 0.004   | 0.042               | 0.004   | 0.046                        | 0.005   | 0.046                             | 0.005   |
| Tajikistan                            | 0.033                        | 0.004   | 0.042               | 0.004   | 0.047                        | 0.005   | 0.046                             | 0.005   |
| Maldives                              | 0.034                        | 0.003   | 0.043               | 0.004   | 0.048                        | 0.004   | 0.047                             | 0.004   |
| Morocco                               | 0.034                        | 0.003   | 0.044               | 0.004   | 0.048                        | 0.004   | 0.048                             | 0.004   |
| Pakistan                              | 0.035                        | 0.003   | 0.044               | 0.004   | 0.049                        | 0.004   | 0.048                             | 0.004   |
| Indonesia                             | 0.035                        | 0.003   | 0.045               | 0.003   | 0.050                        | 0.004   | 0.049                             | 0.004   |
| Kyrgyzstan                            | 0.035                        | 0.003   | 0.045               | 0.003   | 0.050                        | 0.004   | 0.049                             | 0.004   |
| Philippines                           | 0.035                        | 0.003   | 0.045               | 0.003   | 0.050                        | 0.004   | 0.049                             | 0.004   |
| Cape Verde                            | 0.035                        | 0.003   | 0.045               | 0.003   | 0.050                        | 0.004   | 0.049                             | 0.004   |
| Bolivia                               | 0.035                        | 0.003   | 0.045               | 0.003   | 0.050                        | 0.004   | 0.049                             | 0.004   |
| Namibia                               | 0.036                        | 0.002   | 0.046               | 0.003   | 0.051                        | 0.003   | 0.050                             | 0.003   |
| Sri Lanka                             | 0.036                        | 0.002   | 0.047               | 0.003   | 0.052                        | 0.003   | 0.051                             | 0.003   |
| Botswana                              | 0.036                        | 0.002   | 0.047               | 0.003   | 0.052                        | 0.003   | 0.051                             | 0.003   |
| Gabon                                 | 0.037                        | 0.002   | 0.047               | 0.002   | 0.052                        | 0.003   | 0.052                             | 0.003   |
| Azerbaijan                            | 0.037                        | 0.002   | 0.047               | 0.002   | 0.053                        | 0.003   | 0.052                             | 0.003   |
| Syria                                 | 0.037                        | 0.002   | 0.048               | 0.002   | 0.053                        | 0.003   | 0.052                             | 0.003   |
| Equatorial Guinea                     | 0.037                        | 0.001   | 0.049               | 0.002   | 0.054                        | 0.002   | 0.053                             | 0.002   |
| Paraguay                              | 0.038                        | 0.001   | 0.049               | 0.002   | 0.055                        | 0.002   | 0.054                             | 0.002   |
| Fiji                                  | 0.038                        | 0.001   | 0.050               | 0.002   | 0.055                        | 0.002   | 0.054                             | 0.002   |
| Swaziland                             | 0.038                        | 0.001   | 0.050               | 0.001   | 0.056                        | 0.001   | 0.055                             | 0.001   |
| Moldova                               | 0.038                        | 0.001   | 0.051               | 0.001   | 0.056                        | 0.001   | 0.055                             | 0.001   |
| Egypt                                 | 0.038                        | 0.001   | 0.051               | 0.001   | 0.056                        | 0.001   | 0.055                             | 0.001   |
| Ecuador                               | 0.039                        | 0.001   | 0.052               | 0.001   | 0.057                        | 0.001   | 0.056                             | 0.001   |
| Jordan                                | 0.039                        | 0.001   | 0.052               | 0.001   | 0.057                        | 0.001   | 0.056                             | 0.001   |
| Georgia                               | 0.039                        | 0.001   | 0.052               | 0.001   | 0.058                        | 0.001   | 0.057                             | 0.001   |
| Thailand                              | 0.039                        | 0.001   | 0.052               | 0.001   | 0.058                        | 0.001   | 0.057                             | 0.001   |
| Colombia                              | 0.039                        | 0.000   | 0.052               | 0.001   | 0.058                        | 0.001   | 0.057                             | 0.001   |
| Albania                               | 0.039                        | 0.000   | 0.053               | 0.000   | 0.058                        | 0.001   | 0.057                             | 0.001   |
| Tunisia                               | 0.039                        | 0.000   | 0.053               | 0.000   | 0.059                        | 0.000   | 0.058                             | 0.000   |
| Peru                                  | 0.040                        | 0.000   | 0.053               | 0.000   | 0.059                        | 0.000   | 0.058                             | 0.000   |
| Armenia                               | 0.040                        | 0.000   | 0.054               | 0.000   | 0.060                        | 0.000   | 0.059                             | 0.000   |
| <b>Middle-income countries</b>        |                              |         |                     |         |                              |         |                                   |         |
| Venezuela                             | 0.040                        | 0.000   | 0.055               | 0.000   | 0.061                        | 0.000   | 0.060                             | 0.000   |
| Malaysia                              | 0.040                        | 0.000   | 0.055               | 0.000   | 0.061                        | 0.000   | 0.060                             | 0.000   |
| Ukraine                               | 0.040                        | 0.000   | 0.055               | 0.000   | 0.061                        | 0.000   | 0.060                             | 0.000   |
| Brazil                                | 0.040                        | 0.000   | 0.056               | -0.001  | 0.061                        | -0.001  | 0.060                             | -0.001  |
| Montenegro                            | 0.041                        | 0.000   | 0.056               | -0.001  | 0.062                        | -0.001  | 0.061                             | -0.001  |

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**Cross-price elasticities with respect to change in medical care price, 144 countries in 2005—Continued**

| Country                                  | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Middle-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| South Africa                             | 0.041                        | -0.001  | 0.056               | -0.001  | 0.062                        | -0.001  | 0.061                             | -0.001  |
| Macedonia                                | 0.041                        | -0.001  | 0.057               | -0.001  | 0.063                        | -0.001  | 0.062                             | -0.001  |
| Turkey                                   | 0.041                        | -0.001  | 0.058               | -0.001  | 0.064                        | -0.001  | 0.063                             | -0.001  |
| Bosnia and Herzegovina                   | 0.041                        | -0.001  | 0.058               | -0.002  | 0.065                        | -0.002  | 0.064                             | -0.002  |
| Serbia                                   | 0.042                        | -0.001  | 0.059               | -0.002  | 0.065                        | -0.002  | 0.064                             | -0.002  |
| Belarus                                  | 0.042                        | -0.001  | 0.059               | -0.002  | 0.065                        | -0.002  | 0.064                             | -0.002  |
| Romania                                  | 0.042                        | -0.001  | 0.059               | -0.002  | 0.065                        | -0.002  | 0.064                             | -0.002  |
| Saudi Arabia                             | 0.042                        | -0.001  | 0.059               | -0.002  | 0.065                        | -0.002  | 0.064                             | -0.002  |
| Uruguay                                  | 0.042                        | -0.001  | 0.059               | -0.002  | 0.065                        | -0.002  | 0.064                             | -0.002  |
| Mauritius                                | 0.042                        | -0.001  | 0.059               | -0.002  | 0.065                        | -0.002  | 0.064                             | -0.002  |
| Chile                                    | 0.042                        | -0.001  | 0.059               | -0.002  | 0.066                        | -0.002  | 0.065                             | -0.002  |
| Kazakhstan                               | 0.042                        | -0.001  | 0.060               | -0.002  | 0.066                        | -0.002  | 0.065                             | -0.002  |
| Russia                                   | 0.042                        | -0.002  | 0.060               | -0.002  | 0.067                        | -0.003  | 0.066                             | -0.002  |
| Argentina                                | 0.042                        | -0.002  | 0.061               | -0.002  | 0.067                        | -0.003  | 0.066                             | -0.003  |
| Bulgaria                                 | 0.042                        | -0.002  | 0.061               | -0.002  | 0.067                        | -0.003  | 0.066                             | -0.003  |
| Oman                                     | 0.042                        | -0.002  | 0.061               | -0.003  | 0.068                        | -0.003  | 0.067                             | -0.003  |
| Iran                                     | 0.042                        | -0.002  | 0.062               | -0.003  | 0.069                        | -0.003  | 0.068                             | -0.003  |
| Latvia                                   | 0.042                        | -0.002  | 0.063               | -0.003  | 0.070                        | -0.004  | 0.069                             | -0.004  |
| Mexico                                   | 0.042                        | -0.002  | 0.063               | -0.003  | 0.070                        | -0.004  | 0.069                             | -0.004  |
| Lebanon                                  | 0.043                        | -0.002  | 0.064               | -0.004  | 0.071                        | -0.004  | 0.070                             | -0.004  |
| Poland                                   | 0.043                        | -0.003  | 0.065               | -0.004  | 0.072                        | -0.005  | 0.071                             | -0.004  |
| Croatia                                  | 0.043                        | -0.003  | 0.066               | -0.004  | 0.072                        | -0.005  | 0.071                             | -0.005  |
| Macao, China                             | 0.043                        | -0.003  | 0.066               | -0.004  | 0.072                        | -0.005  | 0.071                             | -0.005  |
| Lithuania                                | 0.043                        | -0.003  | 0.066               | -0.004  | 0.072                        | -0.005  | 0.071                             | -0.005  |
| Estonia                                  | 0.043                        | -0.003  | 0.066               | -0.004  | 0.073                        | -0.005  | 0.072                             | -0.005  |
| Brunei Darussalam                        | 0.043                        | -0.003  | 0.067               | -0.005  | 0.074                        | -0.005  | 0.073                             | -0.005  |
| Slovak Republic                          | 0.042                        | -0.003  | 0.067               | -0.005  | 0.074                        | -0.005  | 0.073                             | -0.005  |
| Hungary                                  | 0.042                        | -0.003  | 0.067               | -0.005  | 0.074                        | -0.005  | 0.073                             | -0.005  |
| South Korea                              | 0.042                        | -0.003  | 0.068               | -0.005  | 0.075                        | -0.006  | 0.074                             | -0.006  |
| Bahrain                                  | 0.042                        | -0.003  | 0.068               | -0.005  | 0.075                        | -0.006  | 0.074                             | -0.006  |
| Czech Republic                           | 0.042                        | -0.003  | 0.070               | -0.006  | 0.077                        | -0.006  | 0.076                             | -0.006  |
| Slovenia                                 | 0.042                        | -0.004  | 0.070               | -0.006  | 0.077                        | -0.006  | 0.076                             | -0.006  |
| Israel                                   | 0.042                        | -0.004  | 0.070               | -0.006  | 0.078                        | -0.007  | 0.077                             | -0.006  |
| <b>High-income countries</b>             |                              |         |                     |         |                              |         |                                   |         |
| Portugal                                 | 0.042                        | -0.004  | 0.071               | -0.006  | 0.078                        | -0.007  | 0.077                             | -0.007  |
| Qatar                                    | 0.041                        | -0.004  | 0.071               | -0.006  | 0.079                        | -0.007  | 0.077                             | -0.007  |
| Singapore                                | 0.041                        | -0.004  | 0.071               | -0.006  | 0.079                        | -0.007  | 0.078                             | -0.007  |
| Malta                                    | 0.041                        | -0.004  | 0.072               | -0.007  | 0.079                        | -0.007  | 0.078                             | -0.007  |
| Kuwait                                   | 0.041                        | -0.004  | 0.072               | -0.007  | 0.080                        | -0.007  | 0.079                             | -0.007  |
| New Zealand                              | 0.040                        | -0.004  | 0.073               | -0.007  | 0.081                        | -0.008  | 0.080                             | -0.008  |

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**Cross-price elasticities with respect to change in medical care price, 144 countries in 2005—Continued**

| Country                                | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>High-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Finland                                | 0.040                        | -0.004  | 0.074               | -0.007  | 0.081                        | -0.008  | 0.080                             | -0.008  |
| Taiwan, China                          | 0.040                        | -0.004  | 0.074               | -0.007  | 0.081                        | -0.008  | 0.080                             | -0.008  |
| Spain                                  | 0.040                        | -0.004  | 0.074               | -0.007  | 0.082                        | -0.008  | 0.081                             | -0.008  |
| Italy                                  | 0.040                        | -0.004  | 0.074               | -0.007  | 0.082                        | -0.008  | 0.081                             | -0.008  |
| Ireland                                | 0.039                        | -0.004  | 0.075               | -0.008  | 0.082                        | -0.008  | 0.081                             | -0.008  |
| Denmark                                | 0.039                        | -0.004  | 0.075               | -0.008  | 0.082                        | -0.008  | 0.081                             | -0.008  |
| Sweden                                 | 0.039                        | -0.004  | 0.075               | -0.008  | 0.083                        | -0.008  | 0.082                             | -0.008  |
| Hong Kong, China                       | 0.039                        | -0.004  | 0.075               | -0.008  | 0.083                        | -0.008  | 0.082                             | -0.008  |
| Australia                              | 0.039                        | -0.004  | 0.076               | -0.008  | 0.083                        | -0.009  | 0.082                             | -0.008  |
| Cyprus                                 | 0.039                        | -0.004  | 0.076               | -0.008  | 0.083                        | -0.009  | 0.082                             | -0.009  |
| Belgium                                | 0.039                        | -0.004  | 0.076               | -0.008  | 0.083                        | -0.009  | 0.082                             | -0.009  |
| Japan                                  | 0.039                        | -0.004  | 0.076               | -0.008  | 0.083                        | -0.009  | 0.082                             | -0.009  |
| France                                 | 0.038                        | -0.004  | 0.076               | -0.008  | 0.084                        | -0.009  | 0.083                             | -0.009  |
| Germany                                | 0.038                        | -0.004  | 0.076               | -0.008  | 0.084                        | -0.009  | 0.083                             | -0.009  |
| Canada                                 | 0.038                        | -0.004  | 0.077               | -0.008  | 0.084                        | -0.009  | 0.083                             | -0.009  |
| Iceland                                | 0.038                        | -0.004  | 0.077               | -0.008  | 0.084                        | -0.009  | 0.083                             | -0.009  |
| Netherlands                            | 0.038                        | -0.004  | 0.077               | -0.008  | 0.084                        | -0.009  | 0.083                             | -0.009  |
| Norway                                 | 0.038                        | -0.004  | 0.077               | -0.008  | 0.084                        | -0.009  | 0.083                             | -0.009  |
| United Kingdom                         | 0.037                        | -0.004  | 0.077               | -0.008  | 0.085                        | -0.009  | 0.084                             | -0.009  |
| Switzerland                            | 0.037                        | -0.004  | 0.077               | -0.009  | 0.085                        | -0.009  | 0.084                             | -0.009  |
| Austria                                | 0.036                        | -0.004  | 0.078               | -0.009  | 0.086                        | -0.010  | 0.085                             | -0.009  |
| Luxembourg                             | 0.032                        | -0.004  | 0.081               | -0.010  | 0.089                        | -0.011  | 0.087                             | -0.010  |
| United States                          | 0.029                        | -0.004  | 0.082               | -0.010  | 0.090                        | -0.011  | 0.089                             | -0.011  |
| Low-income average                     | 0.030                        | 0.005   | 0.038               | 0.006   | 0.042                        | 0.007   | 0.041                             | 0.006   |
| Middle-income average                  | 0.042                        | -0.002  | 0.062               | -0.003  | 0.068                        | -0.003  | 0.067                             | -0.003  |
| High-income average                    | 0.039                        | -0.004  | 0.075               | -0.008  | 0.083                        | -0.009  | 0.082                             | -0.008  |

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**Cross-price elasticities with respect to change in medical care price, 144 countries in 2005—Continued**

| Country                     | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|-----------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                             | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries</b> |                            |         |            |         |           |         |         |         |
| Congo, Democratic Republic  | 0.057                      | 0.008   | 0.159      | 0.021   | 0.038     | 0.005   | 0.088   | 0.012   |
| Burundi                     | 0.020                      | 0.019   | 0.028      | 0.028   | 0.014     | 0.014   | 0.025   | 0.024   |
| Liberia                     | 0.022                      | 0.018   | 0.043      | 0.036   | 0.016     | 0.013   | 0.190   | 0.160   |
| Zimbabwe                    | 0.025                      | 0.017   | 0.040      | 0.027   | 0.018     | 0.012   | 0.091   | 0.062   |
| Ethiopia                    | 0.027                      | 0.016   | 0.116      | 0.068   | 0.020     | 0.012   | 0.074   | 0.043   |
| Niger                       | 0.027                      | 0.016   | 0.032      | 0.019   | 0.020     | 0.012   | 0.074   | 0.042   |
| Guinea-Bissau               | 0.028                      | 0.016   | 0.036      | 0.021   | 0.020     | 0.012   | 0.073   | 0.042   |
| Mozambique                  | 0.030                      | 0.015   | 0.052      | 0.115   | 0.022     | 0.011   | 0.066   | 0.032   |
| Malawi                      | 0.032                      | 0.014   | 0.034      | 0.254   | 0.024     | 0.010   | 0.063   | 0.028   |
| Rwanda                      | 0.032                      | 0.014   | 0.080      | 0.678   | 0.024     | 0.010   | 0.063   | 0.026   |
| Angola                      | 0.034                      | 0.013   | 0.359      | 0.135   | 0.026     | 0.010   | 0.061   | 0.023   |
| Chad                        | 0.035                      | 0.013   | 0.308      | 0.114   | 0.026     | 0.010   | 0.061   | 0.023   |
| Gambia, The                 | 0.035                      | 0.013   | 0.263      | 0.095   | 0.026     | 0.009   | 0.061   | 0.022   |
| Central African Republic    | 0.035                      | 0.013   | 0.246      | 0.088   | 0.026     | 0.009   | 0.061   | 0.022   |
| Mali                        | 0.035                      | 0.012   | 0.243      | 0.087   | 0.026     | 0.009   | 0.061   | 0.022   |
| Tanzania                    | 0.035                      | 0.012   | 0.215      | 0.075   | 0.027     | 0.009   | 0.061   | 0.021   |
| Sierra Leone                | 0.036                      | 0.012   | 0.171      | 0.056   | 0.027     | 0.009   | 0.061   | 0.020   |
| Guinea                      | 0.036                      | 0.012   | 0.166      | 0.054   | 0.028     | 0.009   | 0.061   | 0.020   |
| Burkina Faso                | 0.037                      | 0.012   | 0.150      | 0.047   | 0.028     | 0.009   | 0.061   | 0.019   |
| Uganda                      | 0.038                      | 0.011   | 0.126      | 0.036   | 0.029     | 0.008   | 0.061   | 0.018   |
| Madagascar                  | 0.038                      | 0.011   | 0.125      | 0.036   | 0.029     | 0.008   | 0.061   | 0.017   |
| Zambia                      | 0.039                      | 0.011   | 0.124      | 0.035   | 0.029     | 0.008   | 0.061   | 0.017   |
| Congo, Republic             | 0.039                      | 0.011   | 0.119      | 0.033   | 0.030     | 0.008   | 0.061   | 0.017   |
| Togo                        | 0.039                      | 0.011   | 0.115      | 0.031   | 0.030     | 0.008   | 0.061   | 0.016   |
| Nepal                       | 0.040                      | 0.010   | 0.106      | 0.026   | 0.031     | 0.008   | 0.061   | 0.015   |
| Ghana                       | 0.041                      | 0.010   | 0.102      | 0.024   | 0.031     | 0.008   | 0.061   | 0.015   |
| Benin                       | 0.042                      | 0.009   | 0.097      | 0.022   | 0.032     | 0.007   | 0.061   | 0.014   |
| Mauritania                  | 0.042                      | 0.009   | 0.097      | 0.022   | 0.032     | 0.007   | 0.062   | 0.014   |
| Bangladesh                  | 0.043                      | 0.009   | 0.095      | 0.020   | 0.033     | 0.007   | 0.062   | 0.013   |
| Côte d'Ivoire               | 0.043                      | 0.009   | 0.094      | 0.020   | 0.033     | 0.007   | 0.062   | 0.013   |
| Laos                        | 0.043                      | 0.009   | 0.094      | 0.020   | 0.033     | 0.007   | 0.062   | 0.013   |
| Kenya                       | 0.044                      | 0.009   | 0.090      | 0.017   | 0.034     | 0.007   | 0.062   | 0.012   |
| Djibouti                    | 0.044                      | 0.009   | 0.090      | 0.017   | 0.034     | 0.007   | 0.062   | 0.012   |
| Nigeria                     | 0.045                      | 0.008   | 0.089      | 0.017   | 0.034     | 0.006   | 0.062   | 0.012   |
| Senegal                     | 0.045                      | 0.008   | 0.089      | 0.017   | 0.034     | 0.006   | 0.063   | 0.012   |
| Cambodia                    | 0.046                      | 0.008   | 0.087      | 0.015   | 0.035     | 0.006   | 0.063   | 0.011   |
| Cameroon                    | 0.047                      | 0.008   | 0.085      | 0.014   | 0.036     | 0.006   | 0.063   | 0.010   |
| São Tomé and Príncipe       | 0.047                      | 0.007   | 0.085      | 0.013   | 0.036     | 0.006   | 0.064   | 0.010   |
| India                       | 0.047                      | 0.007   | 0.084      | 0.013   | 0.037     | 0.006   | 0.064   | 0.010   |
| Yemen                       | 0.048                      | 0.007   | 0.084      | 0.013   | 0.037     | 0.006   | 0.064   | 0.010   |
| Vietnam                     | 0.048                      | 0.007   | 0.084      | 0.013   | 0.037     | 0.005   | 0.064   | 0.010   |
| Mongolia                    | 0.048                      | 0.007   | 0.084      | 0.012   | 0.037     | 0.005   | 0.064   | 0.009   |

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**Cross-price elasticities with respect to change in medical care price, 144 countries in 2005—Continued**

| Country                               | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|---------------------------------------|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|                                       | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| Iraq                                  | 0.049                      | 0.007   | 0.083      | 0.012   | 0.038     | 0.005   | 0.065   | 0.009   |
| Bhutan                                | 0.049                      | 0.007   | 0.083      | 0.011   | 0.038     | 0.005   | 0.065   | 0.009   |
| China                                 | 0.050                      | 0.006   | 0.082      | 0.010   | 0.039     | 0.005   | 0.065   | 0.008   |
| Sudan                                 | 0.051                      | 0.006   | 0.082      | 0.009   | 0.040     | 0.004   | 0.066   | 0.008   |
| Lesotho                               | 0.052                      | 0.005   | 0.081      | 0.009   | 0.040     | 0.004   | 0.066   | 0.007   |
| Tajikistan                            | 0.052                      | 0.005   | 0.081      | 0.009   | 0.040     | 0.004   | 0.067   | 0.007   |
| Maldives                              | 0.053                      | 0.005   | 0.081      | 0.007   | 0.042     | 0.004   | 0.068   | 0.006   |
| Morocco                               | 0.054                      | 0.005   | 0.081      | 0.007   | 0.042     | 0.004   | 0.068   | 0.006   |
| Pakistan                              | 0.054                      | 0.004   | 0.081      | 0.007   | 0.042     | 0.003   | 0.068   | 0.006   |
| Indonesia                             | 0.055                      | 0.004   | 0.081      | 0.006   | 0.043     | 0.003   | 0.069   | 0.005   |
| Kyrgyzstan                            | 0.055                      | 0.004   | 0.081      | 0.006   | 0.043     | 0.003   | 0.069   | 0.005   |
| Philippines                           | 0.055                      | 0.004   | 0.081      | 0.006   | 0.043     | 0.003   | 0.069   | 0.005   |
| Cape Verde                            | 0.055                      | 0.004   | 0.081      | 0.006   | 0.043     | 0.003   | 0.069   | 0.005   |
| Bolivia                               | 0.055                      | 0.004   | 0.081      | 0.006   | 0.043     | 0.003   | 0.069   | 0.005   |
| Namibia                               | 0.057                      | 0.004   | 0.081      | 0.005   | 0.044     | 0.003   | 0.070   | 0.004   |
| Sri Lanka                             | 0.057                      | 0.003   | 0.081      | 0.005   | 0.045     | 0.003   | 0.070   | 0.004   |
| Botswana                              | 0.057                      | 0.003   | 0.081      | 0.004   | 0.045     | 0.002   | 0.070   | 0.004   |
| Gabon                                 | 0.058                      | 0.003   | 0.081      | 0.004   | 0.045     | 0.002   | 0.071   | 0.004   |
| Azerbaijan                            | 0.058                      | 0.003   | 0.081      | 0.004   | 0.045     | 0.002   | 0.071   | 0.004   |
| Syria                                 | 0.058                      | 0.003   | 0.081      | 0.004   | 0.046     | 0.002   | 0.071   | 0.003   |
| Equatorial Guinea                     | 0.060                      | 0.002   | 0.082      | 0.003   | 0.047     | 0.002   | 0.072   | 0.003   |
| Paraguay                              | 0.060                      | 0.002   | 0.082      | 0.003   | 0.047     | 0.002   | 0.072   | 0.003   |
| Fiji                                  | 0.061                      | 0.002   | 0.082      | 0.003   | 0.048     | 0.001   | 0.073   | 0.002   |
| Swaziland                             | 0.061                      | 0.002   | 0.082      | 0.002   | 0.048     | 0.001   | 0.073   | 0.002   |
| Moldova                               | 0.061                      | 0.002   | 0.082      | 0.002   | 0.048     | 0.001   | 0.074   | 0.002   |
| Egypt                                 | 0.062                      | 0.001   | 0.082      | 0.002   | 0.049     | 0.001   | 0.074   | 0.002   |
| Ecuador                               | 0.063                      | 0.001   | 0.083      | 0.001   | 0.049     | 0.001   | 0.074   | 0.001   |
| Jordan                                | 0.063                      | 0.001   | 0.083      | 0.001   | 0.050     | 0.001   | 0.075   | 0.001   |
| Georgia                               | 0.063                      | 0.001   | 0.083      | 0.001   | 0.050     | 0.001   | 0.075   | 0.001   |
| Thailand                              | 0.063                      | 0.001   | 0.083      | 0.001   | 0.050     | 0.001   | 0.075   | 0.001   |
| Colombia                              | 0.063                      | 0.001   | 0.083      | 0.001   | 0.050     | 0.001   | 0.075   | 0.001   |
| Albania                               | 0.064                      | 0.001   | 0.083      | 0.001   | 0.050     | 0.000   | 0.075   | 0.001   |
| Tunisia                               | 0.064                      | 0.000   | 0.083      | 0.001   | 0.051     | 0.000   | 0.076   | 0.001   |
| Peru                                  | 0.065                      | 0.000   | 0.084      | 0.000   | 0.051     | 0.000   | 0.076   | 0.000   |
| Armenia                               | 0.065                      | 0.000   | 0.084      | 0.000   | 0.052     | 0.000   | 0.076   | 0.000   |
| <b>Middle-income countries</b>        |                            |         |            |         |           |         |         |         |
| Venezuela                             |                            |         |            |         |           |         |         |         |
| Malaysia                              | 0.066                      | 0.000   | 0.085      | 0.000   | 0.052     | 0.000   | 0.077   | 0.000   |
| Ukraine                               | 0.066                      | 0.000   | 0.085      | -0.001  | 0.053     | 0.000   | 0.077   | 0.000   |
| Brazil                                | 0.067                      | -0.001  | 0.085      | -0.001  | 0.053     | 0.000   | 0.078   | -0.001  |
| Montenegro                            | 0.067                      | -0.001  | 0.085      | -0.001  | 0.053     | -0.001  | 0.078   | -0.001  |

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**Cross-price elasticities with respect to change in medical care price, 144 countries in 2005—Continued**

| Country                                  | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|--|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Middle-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| South Africa                             | 0.068                      | -0.001  | 0.086      | -0.001  | 0.054     | -0.001  | 0.079   | -0.001  |
| Macedonia                                | 0.069                      | -0.001  | 0.086      | -0.002  | 0.055     | -0.001  | 0.080   | -0.002  |
| Turkey                                   | 0.069                      | -0.002  | 0.086      | -0.002  | 0.055     | -0.001  | 0.080   | -0.002  |
| Bosnia and Herzegovina                   | 0.070                      | -0.002  | 0.087      | -0.002  | 0.056     | -0.002  | 0.081   | -0.002  |
| Serbia                                   | 0.070                      | -0.002  | 0.087      | -0.002  | 0.056     | -0.002  | 0.081   | -0.002  |
| Belarus                                  | 0.070                      | -0.002  | 0.087      | -0.003  | 0.056     | -0.002  | 0.081   | -0.002  |
| Romania                                  | 0.071                      | -0.002  | 0.087      | -0.003  | 0.056     | -0.002  | 0.081   | -0.002  |
| Saudi Arabia                             | 0.071                      | -0.002  | 0.087      | -0.003  | 0.056     | -0.002  | 0.081   | -0.002  |
| Uruguay                                  | 0.071                      | -0.002  | 0.087      | -0.003  | 0.057     | -0.002  | 0.081   | -0.003  |
| Mauritius                                | 0.071                      | -0.002  | 0.087      | -0.003  | 0.057     | -0.002  | 0.081   | -0.003  |
| Chile                                    | 0.071                      | -0.002  | 0.088      | -0.003  | 0.057     | -0.002  | 0.081   | -0.003  |
| Kazakhstan                               | 0.072                      | -0.002  | 0.088      | -0.003  | 0.057     | -0.002  | 0.082   | -0.003  |
| Russia                                   | 0.072                      | -0.003  | 0.088      | -0.003  | 0.058     | -0.002  | 0.082   | -0.003  |
| Argentina                                | 0.072                      | -0.003  | 0.088      | -0.003  | 0.058     | -0.002  | 0.082   | -0.003  |
| Bulgaria                                 | 0.073                      | -0.003  | 0.089      | -0.004  | 0.058     | -0.002  | 0.083   | -0.003  |
| Oman                                     | 0.073                      | -0.003  | 0.089      | -0.004  | 0.058     | -0.003  | 0.083   | -0.004  |
| Iran                                     | 0.074                      | -0.004  | 0.090      | -0.004  | 0.059     | -0.003  | 0.084   | -0.004  |
| Latvia                                   | 0.075                      | -0.004  | 0.090      | -0.005  | 0.060     | -0.003  | 0.085   | -0.004  |
| Mexico                                   | 0.076                      | -0.004  | 0.091      | -0.005  | 0.060     | -0.003  | 0.085   | -0.005  |
| Lebanon                                  | 0.076                      | -0.004  | 0.091      | -0.005  | 0.061     | -0.003  | 0.086   | -0.005  |
| Poland                                   | 0.078                      | -0.005  | 0.092      | -0.006  | 0.062     | -0.004  | 0.087   | -0.006  |
| Croatia                                  | 0.078                      | -0.005  | 0.092      | -0.006  | 0.062     | -0.004  | 0.087   | -0.006  |
| Macao, China                             | 0.078                      | -0.005  | 0.092      | -0.006  | 0.062     | -0.004  | 0.087   | -0.006  |
| Lithuania                                | 0.078                      | -0.005  | 0.092      | -0.006  | 0.062     | -0.004  | 0.087   | -0.006  |
| Estonia                                  | 0.079                      | -0.005  | 0.093      | -0.006  | 0.063     | -0.004  | 0.088   | -0.006  |
| Brunei Darussalam                        | 0.079                      | -0.006  | 0.093      | -0.007  | 0.064     | -0.004  | 0.088   | -0.006  |
| Slovak Republic                          | 0.079                      | -0.006  | 0.093      | -0.007  | 0.064     | -0.005  | 0.089   | -0.006  |
| Hungary                                  | 0.080                      | -0.006  | 0.094      | -0.007  | 0.064     | -0.005  | 0.089   | -0.006  |
| South Korea                              | 0.081                      | -0.006  | 0.094      | -0.007  | 0.065     | -0.005  | 0.090   | -0.007  |
| Bahrain                                  | 0.081                      | -0.006  | 0.094      | -0.007  | 0.065     | -0.005  | 0.090   | -0.007  |
| Czech Republic                           | 0.082                      | -0.007  | 0.096      | -0.008  | 0.066     | -0.005  | 0.091   | -0.007  |
| Slovenia                                 | 0.083                      | -0.007  | 0.096      | -0.008  | 0.067     | -0.006  | 0.092   | -0.008  |
| Israel                                   | 0.083                      | -0.007  | 0.096      | -0.008  | 0.067     | -0.006  | 0.092   | -0.008  |
| <b>High-income countries</b>             |                            |         |            |         |           |         |         |         |
| Portugal                                 | 0.084                      | -0.007  | 0.097      | -0.008  | 0.067     | -0.006  | 0.093   | -0.008  |
| Qatar                                    | 0.084                      | -0.007  | 0.097      | -0.009  | 0.068     | -0.006  | 0.093   | -0.008  |
| Singapore                                | 0.084                      | -0.007  | 0.097      | -0.009  | 0.068     | -0.006  | 0.093   | -0.008  |
| Malta                                    | 0.085                      | -0.008  | 0.098      | -0.009  | 0.068     | -0.006  | 0.094   | -0.009  |
| Kuwait                                   | 0.085                      | -0.008  | 0.098      | -0.009  | 0.069     | -0.006  | 0.094   | -0.009  |
| New Zealand                              | 0.087                      | -0.008  | 0.099      | -0.010  | 0.070     | -0.007  | 0.095   | -0.009  |

—continued

**Cross-price elasticities with respect to change in medical care price, 144 countries in 2005—Continued**

| Country                                | Transport & communications |         | Recreation |         | Education |         | Other   |         |
|--|----------------------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>High-income countries—continued</b> |                            |         |            |         |           |         |         |         |
| Finland                                | 0.087                      | -0.008  | 0.099      | -0.010  | 0.070     | -0.007  | 0.095   | -0.009  |
| Taiwan, China                          | 0.087                      | -0.009  | 0.099      | -0.010  | 0.070     | -0.007  | 0.095   | -0.009  |
| Spain                                  | 0.087                      | -0.009  | 0.100      | -0.010  | 0.070     | -0.007  | 0.096   | -0.009  |
| Italy                                  | 0.088                      | -0.009  | 0.100      | -0.010  | 0.071     | -0.007  | 0.096   | -0.010  |
| Ireland                                | 0.088                      | -0.009  | 0.100      | -0.010  | 0.071     | -0.007  | 0.096   | -0.010  |
| Denmark                                | 0.088                      | -0.009  | 0.100      | -0.010  | 0.071     | -0.007  | 0.096   | -0.010  |
| Sweden                                 | 0.088                      | -0.009  | 0.100      | -0.010  | 0.071     | -0.007  | 0.096   | -0.010  |
| Hong Kong, China                       | 0.088                      | -0.009  | 0.100      | -0.010  | 0.071     | -0.007  | 0.097   | -0.010  |
| Australia                              | 0.089                      | -0.009  | 0.101      | -0.010  | 0.072     | -0.007  | 0.097   | -0.010  |
| Cyprus                                 | 0.089                      | -0.009  | 0.101      | -0.010  | 0.072     | -0.007  | 0.097   | -0.010  |
| Belgium                                | 0.089                      | -0.009  | 0.101      | -0.011  | 0.072     | -0.007  | 0.097   | -0.010  |
| Japan                                  | 0.089                      | -0.009  | 0.101      | -0.011  | 0.072     | -0.007  | 0.097   | -0.010  |
| France                                 | 0.089                      | -0.009  | 0.101      | -0.011  | 0.072     | -0.008  | 0.097   | -0.010  |
| Germany                                | 0.090                      | -0.010  | 0.102      | -0.011  | 0.072     | -0.008  | 0.098   | -0.010  |
| Canada                                 | 0.090                      | -0.010  | 0.102      | -0.011  | 0.072     | -0.008  | 0.098   | -0.010  |
| Iceland                                | 0.090                      | -0.010  | 0.102      | -0.011  | 0.073     | -0.008  | 0.098   | -0.011  |
| Netherlands                            | 0.090                      | -0.010  | 0.102      | -0.011  | 0.073     | -0.008  | 0.098   | -0.011  |
| Norway                                 | 0.090                      | -0.010  | 0.102      | -0.011  | 0.073     | -0.008  | 0.098   | -0.011  |
| United Kingdom                         | 0.091                      | -0.010  | 0.102      | -0.011  | 0.073     | -0.008  | 0.099   | -0.011  |
| Switzerland                            | 0.091                      | -0.010  | 0.102      | -0.011  | 0.073     | -0.008  | 0.099   | -0.011  |
| Austria                                | 0.091                      | -0.010  | 0.103      | -0.011  | 0.074     | -0.008  | 0.099   | -0.011  |
| Luxembourg                             | 0.094                      | -0.011  | 0.105      | -0.013  | 0.076     | -0.009  | 0.102   | -0.012  |
| United States                          | 0.096                      | -0.012  | 0.107      | -0.013  | 0.077     | -0.010  | 0.103   | -0.013  |
| Low-income average                     | 0.047                      | 0.007   | 0.102      | 0.035   | 0.036     | 0.006   | 0.068   | 0.014   |
| Middle-income average                  | 0.074                      | -0.003  | 0.090      | -0.004  | 0.059     | -0.003  | 0.084   | -0.004  |
| High-income average                    | 0.089                      | -0.009  | 0.101      | -0.010  | 0.071     | -0.007  | 0.097   | -0.010  |

Note: In shaded cells, elasticity is derived using actual budget shares as opposed to the predicted budget share from the Florida model.

Source: USDA, Economic Research Service calculations based on World Bank, 2005 International Comparison Program data.

**Cross-price elasticities with respect to change in transportation and communications price, 144 countries in 2005**

| Country                     | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|-----------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                             | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries</b> |                              |         |                     |         |                              |         |                                   |         |
| Congo, Democratic Republic  | 0.050                        | 0.001   | 0.056               | 0.001   | 0.063                        | 0.001   | 0.062                             | 0.001   |
| Burundi                     | 0.057                        | -0.003  | 0.066               | -0.003  | 0.074                        | -0.003  | 0.072                             | -0.003  |
| Liberia                     | 0.059                        | -0.003  | 0.068               | -0.004  | 0.076                        | -0.004  | 0.074                             | -0.004  |
| Zimbabwe                    | 0.061                        | -0.004  | 0.071               | -0.005  | 0.079                        | -0.005  | 0.077                             | -0.005  |
| Ethiopia                    | 0.062                        | -0.005  | 0.073               | -0.005  | 0.081                        | -0.006  | 0.079                             | -0.006  |
| Niger                       | 0.062                        | -0.005  | 0.073               | -0.005  | 0.081                        | -0.006  | 0.080                             | -0.006  |
| Guinea-Bissau               | 0.062                        | -0.005  | 0.073               | -0.005  | 0.081                        | -0.006  | 0.080                             | -0.006  |
| Mozambique                  | 0.064                        | -0.005  | 0.075               | -0.006  | 0.084                        | -0.007  | 0.082                             | -0.007  |
| Malawi                      | 0.065                        | -0.006  | 0.077               | -0.007  | 0.086                        | -0.008  | 0.084                             | -0.007  |
| Rwanda                      | 0.065                        | -0.006  | 0.077               | -0.007  | 0.086                        | -0.008  | 0.084                             | -0.008  |
| Angola                      | 0.066                        | -0.006  | 0.079               | -0.008  | 0.088                        | -0.008  | 0.086                             | -0.008  |
| Chad                        | 0.067                        | -0.006  | 0.079               | -0.008  | 0.088                        | -0.009  | 0.086                             | -0.008  |
| Gambia, The                 | 0.067                        | -0.007  | 0.080               | -0.008  | 0.089                        | -0.009  | 0.087                             | -0.009  |
| Central African Republic    | 0.067                        | -0.007  | 0.080               | -0.008  | 0.089                        | -0.009  | 0.087                             | -0.009  |
| Mali                        | 0.067                        | -0.007  | 0.080               | -0.008  | 0.089                        | -0.009  | 0.087                             | -0.009  |
| Tanzania                    | 0.067                        | -0.007  | 0.080               | -0.008  | 0.089                        | -0.009  | 0.087                             | -0.009  |
| Sierra Leone                | 0.068                        | -0.007  | 0.081               | -0.008  | 0.090                        | -0.009  | 0.088                             | -0.009  |
| Guinea                      | 0.068                        | -0.007  | 0.081               | -0.008  | 0.090                        | -0.009  | 0.088                             | -0.009  |
| Burkina Faso                | 0.068                        | -0.007  | 0.082               | -0.009  | 0.091                        | -0.009  | 0.089                             | -0.009  |
| Uganda                      | 0.069                        | -0.007  | 0.083               | -0.009  | 0.092                        | -0.010  | 0.090                             | -0.010  |
| Madagascar                  | 0.069                        | -0.007  | 0.083               | -0.009  | 0.092                        | -0.010  | 0.090                             | -0.010  |
| Zambia                      | 0.069                        | -0.008  | 0.083               | -0.009  | 0.092                        | -0.010  | 0.090                             | -0.010  |
| Congo, Republic             | 0.069                        | -0.008  | 0.083               | -0.009  | 0.093                        | -0.010  | 0.091                             | -0.010  |
| Togo                        | 0.069                        | -0.008  | 0.084               | -0.009  | 0.093                        | -0.010  | 0.091                             | -0.010  |
| Nepal                       | 0.070                        | -0.008  | 0.085               | -0.010  | 0.094                        | -0.011  | 0.092                             | -0.011  |
| Ghana                       | 0.070                        | -0.008  | 0.085               | -0.010  | 0.095                        | -0.011  | 0.093                             | -0.011  |
| Benin                       | 0.071                        | -0.008  | 0.086               | -0.010  | 0.096                        | -0.011  | 0.094                             | -0.011  |
| Mauritania                  | 0.071                        | -0.008  | 0.086               | -0.010  | 0.096                        | -0.011  | 0.094                             | -0.011  |
| Bangladesh                  | 0.071                        | -0.009  | 0.087               | -0.010  | 0.096                        | -0.012  | 0.095                             | -0.011  |
| Côte d'Ivoire               | 0.071                        | -0.009  | 0.087               | -0.010  | 0.097                        | -0.012  | 0.095                             | -0.011  |
| Laos                        | 0.071                        | -0.009  | 0.087               | -0.010  | 0.097                        | -0.012  | 0.095                             | -0.011  |
| Kenya                       | 0.072                        | -0.009  | 0.088               | -0.011  | 0.098                        | -0.012  | 0.096                             | -0.012  |
| Djibouti                    | 0.072                        | -0.009  | 0.088               | -0.011  | 0.098                        | -0.012  | 0.096                             | -0.012  |
| Nigeria                     | 0.072                        | -0.009  | 0.089               | -0.011  | 0.098                        | -0.012  | 0.097                             | -0.012  |
| Senegal                     | 0.072                        | -0.009  | 0.089               | -0.011  | 0.098                        | -0.012  | 0.097                             | -0.012  |
| Cambodia                    | 0.073                        | -0.009  | 0.090               | -0.011  | 0.100                        | -0.013  | 0.098                             | -0.013  |
| Cameroon                    | 0.073                        | -0.010  | 0.090               | -0.012  | 0.100                        | -0.013  | 0.099                             | -0.013  |
| São Tomé and Príncipe       | 0.074                        | -0.010  | 0.091               | -0.012  | 0.101                        | -0.013  | 0.099                             | -0.013  |
| India                       | 0.074                        | -0.010  | 0.091               | -0.012  | 0.101                        | -0.013  | 0.099                             | -0.013  |
| Yemen                       | 0.074                        | -0.010  | 0.091               | -0.012  | 0.101                        | -0.013  | 0.100                             | -0.013  |
| Vietnam                     | 0.074                        | -0.010  | 0.091               | -0.012  | 0.102                        | -0.013  | 0.100                             | -0.013  |
| Mongolia                    | 0.074                        | -0.010  | 0.092               | -0.012  | 0.102                        | -0.014  | 0.100                             | -0.013  |

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**Cross-price elasticities with respect to change in transportation and communications price, 144 countries in 2005—Continued**

| Country                               | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|---------------------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                                       | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Iraq                                  | 0.074                        | -0.010  | 0.092               | -0.012  | 0.102                        | -0.014  | 0.101                             | -0.014  |
| Bhutan                                | 0.075                        | -0.010  | 0.093               | -0.013  | 0.103                        | -0.014  | 0.101                             | -0.014  |
| China                                 | 0.075                        | -0.010  | 0.093               | -0.013  | 0.104                        | -0.014  | 0.102                             | -0.014  |
| Sudan                                 | 0.075                        | -0.011  | 0.095               | -0.013  | 0.105                        | -0.015  | 0.103                             | -0.014  |
| Lesotho                               | 0.076                        | -0.011  | 0.095               | -0.014  | 0.106                        | -0.015  | 0.104                             | -0.015  |
| Tajikistan                            | 0.076                        | -0.011  | 0.095               | -0.014  | 0.106                        | -0.015  | 0.104                             | -0.015  |
| Maldives                              | 0.076                        | -0.011  | 0.097               | -0.014  | 0.107                        | -0.016  | 0.106                             | -0.015  |
| Morocco                               | 0.077                        | -0.011  | 0.097               | -0.014  | 0.108                        | -0.016  | 0.106                             | -0.015  |
| Pakistan                              | 0.077                        | -0.011  | 0.098               | -0.014  | 0.108                        | -0.016  | 0.106                             | -0.016  |
| Indonesia                             | 0.077                        | -0.012  | 0.098               | -0.015  | 0.109                        | -0.016  | 0.107                             | -0.016  |
| Kyrgyzstan                            | 0.077                        | -0.012  | 0.098               | -0.015  | 0.109                        | -0.016  | 0.107                             | -0.016  |
| Philippines                           | 0.077                        | -0.012  | 0.099               | -0.015  | 0.109                        | -0.016  | 0.107                             | -0.016  |
| Cape Verde                            | 0.077                        | -0.012  | 0.099               | -0.015  | 0.109                        | -0.016  | 0.107                             | -0.016  |
| Bolivia                               | 0.077                        | -0.012  | 0.099               | -0.015  | 0.109                        | -0.016  | 0.108                             | -0.016  |
| Namibia                               | 0.078                        | -0.012  | 0.100               | -0.015  | 0.111                        | -0.017  | 0.109                             | -0.017  |
| Sri Lanka                             | 0.078                        | -0.012  | 0.100               | -0.015  | 0.111                        | -0.017  | 0.109                             | -0.017  |
| Botswana                              | 0.078                        | -0.012  | 0.101               | -0.015  | 0.111                        | -0.017  | 0.110                             | -0.017  |
| Gabon                                 | 0.078                        | -0.012  | 0.101               | -0.016  | 0.112                        | -0.017  | 0.110                             | -0.017  |
| Azerbaijan                            | 0.078                        | -0.012  | 0.101               | -0.016  | 0.112                        | -0.017  | 0.110                             | -0.017  |
| Syria                                 | 0.078                        | -0.012  | 0.101               | -0.016  | 0.112                        | -0.018  | 0.110                             | -0.017  |
| Equatorial Guinea                     | 0.079                        | -0.012  | 0.103               | -0.016  | 0.114                        | -0.018  | 0.112                             | -0.018  |
| Paraguay                              | 0.079                        | -0.013  | 0.103               | -0.016  | 0.114                        | -0.018  | 0.112                             | -0.018  |
| Fiji                                  | 0.079                        | -0.013  | 0.104               | -0.017  | 0.115                        | -0.018  | 0.113                             | -0.018  |
| Swaziland                             | 0.079                        | -0.013  | 0.104               | -0.017  | 0.115                        | -0.019  | 0.113                             | -0.018  |
| Moldova                               | 0.079                        | -0.013  | 0.105               | -0.017  | 0.116                        | -0.019  | 0.114                             | -0.018  |
| Egypt                                 | 0.079                        | -0.013  | 0.105               | -0.017  | 0.116                        | -0.019  | 0.114                             | -0.019  |
| Ecuador                               | 0.079                        | -0.013  | 0.106               | -0.017  | 0.117                        | -0.019  | 0.115                             | -0.019  |
| Jordan                                | 0.079                        | -0.013  | 0.106               | -0.017  | 0.117                        | -0.019  | 0.115                             | -0.019  |
| Georgia                               | 0.079                        | -0.013  | 0.106               | -0.017  | 0.117                        | -0.019  | 0.115                             | -0.019  |
| Thailand                              | 0.080                        | -0.013  | 0.106               | -0.018  | 0.118                        | -0.019  | 0.116                             | -0.019  |
| Colombia                              | 0.080                        | -0.013  | 0.106               | -0.018  | 0.118                        | -0.019  | 0.116                             | -0.019  |
| Albania                               | 0.080                        | -0.013  | 0.107               | -0.018  | 0.118                        | -0.020  | 0.116                             | -0.019  |
| Tunisia                               | 0.080                        | -0.013  | 0.107               | -0.018  | 0.118                        | -0.020  | 0.117                             | -0.019  |
| Peru                                  | 0.080                        | -0.013  | 0.108               | -0.018  | 0.119                        | -0.020  | 0.117                             | -0.020  |
| Armenia                               | 0.080                        | -0.013  | 0.108               | -0.018  | 0.119                        | -0.020  | 0.118                             | -0.020  |
| <b>Middle-income countries</b>        |                              |         |                     |         |                              |         |                                   |         |
| Venezuela                             | 0.080                        | -0.014  | 0.109               | -0.019  | 0.121                        | -0.021  | 0.119                             | -0.020  |
| Malaysia                              | 0.080                        | -0.014  | 0.109               | -0.019  | 0.121                        | -0.021  | 0.119                             | -0.020  |
| Ukraine                               | 0.080                        | -0.014  | 0.109               | -0.019  | 0.121                        | -0.021  | 0.119                             | -0.020  |
| Brazil                                | 0.080                        | -0.014  | 0.110               | -0.019  | 0.121                        | -0.021  | 0.119                             | -0.020  |
| Montenegro                            | 0.080                        | -0.014  | 0.110               | -0.019  | 0.122                        | -0.021  | 0.120                             | -0.021  |

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**Cross-price elasticities with respect to change in transportation and communications price, 144 countries in 2005—Continued**

| Country                                  | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Middle-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| South Africa                             | 0.080                        | -0.014  | 0.111               | -0.019  | 0.122                        | -0.021  | 0.120                             | -0.021  |
| Macedonia                                | 0.080                        | -0.014  | 0.112               | -0.020  | 0.124                        | -0.022  | 0.122                             | -0.021  |
| Turkey                                   | 0.080                        | -0.014  | 0.112               | -0.020  | 0.124                        | -0.022  | 0.122                             | -0.021  |
| Bosnia and Herzegovina                   | 0.080                        | -0.014  | 0.113               | -0.020  | 0.125                        | -0.022  | 0.123                             | -0.022  |
| Serbia                                   | 0.080                        | -0.014  | 0.113               | -0.020  | 0.125                        | -0.022  | 0.123                             | -0.022  |
| Belarus                                  | 0.080                        | -0.014  | 0.113               | -0.020  | 0.125                        | -0.022  | 0.123                             | -0.022  |
| Romania                                  | 0.080                        | -0.014  | 0.113               | -0.020  | 0.125                        | -0.022  | 0.123                             | -0.022  |
| Saudi Arabia                             | 0.080                        | -0.014  | 0.114               | -0.020  | 0.125                        | -0.022  | 0.123                             | -0.022  |
| Uruguay                                  | 0.080                        | -0.014  | 0.114               | -0.020  | 0.126                        | -0.022  | 0.124                             | -0.022  |
| Mauritius                                | 0.080                        | -0.014  | 0.114               | -0.020  | 0.126                        | -0.022  | 0.124                             | -0.022  |
| Chile                                    | 0.080                        | -0.014  | 0.114               | -0.020  | 0.126                        | -0.022  | 0.124                             | -0.022  |
| Kazakhstan                               | 0.080                        | -0.014  | 0.114               | -0.020  | 0.126                        | -0.023  | 0.124                             | -0.022  |
| Russia                                   | 0.080                        | -0.014  | 0.115               | -0.021  | 0.127                        | -0.023  | 0.125                             | -0.023  |
| Argentina                                | 0.080                        | -0.014  | 0.115               | -0.021  | 0.127                        | -0.023  | 0.125                             | -0.023  |
| Bulgaria                                 | 0.080                        | -0.014  | 0.115               | -0.021  | 0.127                        | -0.023  | 0.126                             | -0.023  |
| Oman                                     | 0.080                        | -0.015  | 0.116               | -0.021  | 0.128                        | -0.023  | 0.126                             | -0.023  |
| Iran                                     | 0.080                        | -0.015  | 0.117               | -0.021  | 0.129                        | -0.024  | 0.127                             | -0.023  |
| Latvia                                   | 0.079                        | -0.015  | 0.118               | -0.022  | 0.130                        | -0.024  | 0.128                             | -0.024  |
| Mexico                                   | 0.079                        | -0.015  | 0.118               | -0.022  | 0.131                        | -0.024  | 0.129                             | -0.024  |
| Lebanon                                  | 0.079                        | -0.015  | 0.119               | -0.022  | 0.131                        | -0.024  | 0.129                             | -0.024  |
| Poland                                   | 0.078                        | -0.015  | 0.120               | -0.023  | 0.133                        | -0.025  | 0.131                             | -0.025  |
| Croatia                                  | 0.078                        | -0.015  | 0.120               | -0.023  | 0.133                        | -0.025  | 0.131                             | -0.025  |
| Macao, China                             | 0.078                        | -0.015  | 0.121               | -0.023  | 0.133                        | -0.025  | 0.131                             | -0.025  |
| Lithuania                                | 0.078                        | -0.015  | 0.121               | -0.023  | 0.133                        | -0.025  | 0.131                             | -0.025  |
| Estonia                                  | 0.078                        | -0.015  | 0.121               | -0.023  | 0.134                        | -0.025  | 0.132                             | -0.025  |
| Brunei Darussalam                        | 0.077                        | -0.015  | 0.122               | -0.023  | 0.134                        | -0.026  | 0.132                             | -0.025  |
| Slovak Republic                          | 0.077                        | -0.015  | 0.122               | -0.023  | 0.135                        | -0.026  | 0.133                             | -0.025  |
| Hungary                                  | 0.077                        | -0.015  | 0.122               | -0.023  | 0.135                        | -0.026  | 0.133                             | -0.025  |
| South Korea                              | 0.077                        | -0.015  | 0.123               | -0.024  | 0.136                        | -0.026  | 0.134                             | -0.026  |
| Bahrain                                  | 0.077                        | -0.015  | 0.123               | -0.024  | 0.136                        | -0.026  | 0.134                             | -0.026  |
| Czech Republic                           | 0.075                        | -0.015  | 0.125               | -0.024  | 0.138                        | -0.027  | 0.136                             | -0.026  |
| Slovenia                                 | 0.075                        | -0.015  | 0.125               | -0.025  | 0.138                        | -0.027  | 0.136                             | -0.027  |
| Israel                                   | 0.075                        | -0.015  | 0.126               | -0.025  | 0.139                        | -0.027  | 0.137                             | -0.027  |
| <b>High-income countries</b>             |                              |         |                     |         |                              |         |                                   |         |
| Portugal                                 | 0.074                        | -0.015  | 0.126               | -0.025  | 0.139                        | -0.027  | 0.137                             | -0.027  |
| Qatar                                    | 0.074                        | -0.015  | 0.127               | -0.025  | 0.140                        | -0.028  | 0.138                             | -0.027  |
| Singapore                                | 0.073                        | -0.015  | 0.127               | -0.025  | 0.140                        | -0.028  | 0.138                             | -0.027  |
| Malta                                    | 0.073                        | -0.014  | 0.127               | -0.025  | 0.140                        | -0.028  | 0.138                             | -0.027  |
| Kuwait                                   | 0.072                        | -0.014  | 0.128               | -0.025  | 0.141                        | -0.028  | 0.139                             | -0.028  |
| New Zealand                              | 0.071                        | -0.014  | 0.129               | -0.026  | 0.142                        | -0.028  | 0.140                             | -0.028  |

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**Cross-price elasticities with respect to change in transportation and communications price, 144 countries in 2005—Continued**

| Country                                | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>High-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Finland                                | 0.070                        | -0.014  | 0.129               | -0.026  | 0.142                        | -0.029  | 0.140                             | -0.028  |
| Taiwan, China                          | 0.070                        | -0.014  | 0.129               | -0.026  | 0.142                        | -0.029  | 0.141                             | -0.028  |
| Spain                                  | 0.070                        | -0.014  | 0.130               | -0.026  | 0.143                        | -0.029  | 0.141                             | -0.028  |
| Italy                                  | 0.069                        | -0.014  | 0.130               | -0.026  | 0.143                        | -0.029  | 0.141                             | -0.028  |
| Ireland                                | 0.069                        | -0.014  | 0.130               | -0.026  | 0.144                        | -0.029  | 0.142                             | -0.029  |
| Denmark                                | 0.069                        | -0.014  | 0.130               | -0.026  | 0.144                        | -0.029  | 0.142                             | -0.029  |
| Sweden                                 | 0.068                        | -0.014  | 0.131               | -0.026  | 0.144                        | -0.029  | 0.142                             | -0.029  |
| Hong Kong, China                       | 0.068                        | -0.014  | 0.131               | -0.026  | 0.144                        | -0.029  | 0.142                             | -0.029  |
| Australia                              | 0.067                        | -0.014  | 0.131               | -0.027  | 0.144                        | -0.029  | 0.142                             | -0.029  |
| Cyprus                                 | 0.067                        | -0.014  | 0.131               | -0.027  | 0.144                        | -0.029  | 0.142                             | -0.029  |
| Belgium                                | 0.067                        | -0.014  | 0.131               | -0.027  | 0.145                        | -0.029  | 0.143                             | -0.029  |
| Japan                                  | 0.067                        | -0.014  | 0.131               | -0.027  | 0.145                        | -0.029  | 0.143                             | -0.029  |
| France                                 | 0.066                        | -0.014  | 0.132               | -0.027  | 0.145                        | -0.030  | 0.143                             | -0.029  |
| Germany                                | 0.065                        | -0.013  | 0.132               | -0.027  | 0.145                        | -0.030  | 0.144                             | -0.029  |
| Canada                                 | 0.065                        | -0.013  | 0.132               | -0.027  | 0.146                        | -0.030  | 0.144                             | -0.029  |
| Iceland                                | 0.065                        | -0.013  | 0.132               | -0.027  | 0.146                        | -0.030  | 0.144                             | -0.029  |
| Netherlands                            | 0.065                        | -0.013  | 0.132               | -0.027  | 0.146                        | -0.030  | 0.144                             | -0.029  |
| Norway                                 | 0.065                        | -0.013  | 0.132               | -0.027  | 0.146                        | -0.030  | 0.144                             | -0.029  |
| United Kingdom                         | 0.064                        | -0.013  | 0.133               | -0.027  | 0.146                        | -0.030  | 0.144                             | -0.030  |
| Switzerland                            | 0.063                        | -0.013  | 0.133               | -0.027  | 0.147                        | -0.030  | 0.145                             | -0.030  |
| Austria                                | 0.062                        | -0.013  | 0.134               | -0.028  | 0.147                        | -0.030  | 0.145                             | -0.030  |
| Luxembourg                             | 0.055                        | -0.011  | 0.136               | -0.029  | 0.150                        | -0.031  | 0.148                             | -0.031  |
| United States                          | 0.050                        | -0.010  | 0.138               | -0.029  | 0.152                        | -0.032  | 0.150                             | -0.032  |
| Low-income average                     | 0.072                        | -0.009  | 0.091               | -0.012  | 0.101                        | -0.013  | 0.099                             | -0.013  |
| Middle-income average                  | 0.079                        | -0.014  | 0.117               | -0.021  | 0.129                        | -0.024  | 0.127                             | -0.023  |
| High-income average                    | 0.067                        | -0.014  | 0.131               | -0.027  | 0.144                        | -0.029  | 0.142                             | -0.029  |

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**Cross-price elasticities with respect to change in transportation and communications price, 144 countries in 2005—Continued**

| Country                     | Medical care |         | Recreation |         | Education |         | Other   |         |
|-----------------------------|--------------|---------|------------|---------|-----------|---------|---------|---------|
|                             | Slutsky      | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries</b> |              |         |            |         |           |         |         |         |
| Congo, Democratic Republic  | 0.091        | 0.001   | 0.225      | 0.003   | 0.054     | 0.001   | 0.125   | 0.002   |
| Burundi                     | 0.107        | -6.200  | 0.128      | -0.006  | 0.064     | -0.003  | 0.112   | -0.005  |
| Liberia                     | 0.605        | -0.032  | 0.177      | -0.009  | 0.066     | -0.003  | 0.789   | -0.042  |
| Zimbabwe                    | 0.313        | -0.020  | 0.149      | -0.010  | 0.068     | -0.004  | 0.342   | -0.022  |
| Ethiopia                    | 0.246        | -0.018  | 0.406      | -0.030  | 0.070     | -0.005  | 0.260   | -0.019  |
| Niger                       | 0.242        | -0.018  | 0.112      | -0.008  | 0.070     | -0.005  | 0.256   | -0.019  |
| Guinea-Bissau               | 0.239        | -0.018  | 0.125      | -0.009  | 0.071     | -0.005  | 0.252   | -0.019  |
| Mozambique                  | 0.207        | -0.017  | 0.168      | 0.603   | 0.073     | -0.006  | 0.215   | -0.018  |
| Malawi                      | 0.192        | -0.017  | 0.105      | 1.440   | 0.074     | -0.007  | 0.198   | -0.017  |
| Rwanda                      | 0.188        | -0.017  | 0.245      | 3.716   | 0.075     | -0.007  | 0.193   | -0.017  |
| Angola                      | 0.178        | -0.017  | 1.065      | -0.103  | 0.076     | -0.007  | 0.182   | -0.017  |
| Chad                        | 0.177        | -0.017  | 0.908      | -0.088  | 0.076     | -0.007  | 0.181   | -0.018  |
| Gambia, The                 | 0.175        | -0.017  | 0.771      | -0.076  | 0.077     | -0.008  | 0.179   | -0.018  |
| Central African Republic    | 0.175        | -0.017  | 0.717      | -0.071  | 0.077     | -0.008  | 0.178   | -0.018  |
| Mali                        | 0.174        | -0.017  | 0.709      | -0.070  | 0.077     | -0.008  | 0.178   | -0.018  |
| Tanzania                    | 0.173        | -0.017  | 0.622      | -0.062  | 0.077     | -0.008  | 0.176   | -0.018  |
| Sierra Leone                | 0.170        | -0.017  | 0.488      | -0.050  | 0.078     | -0.008  | 0.173   | -0.018  |
| Guinea                      | 0.169        | -0.017  | 0.471      | -0.049  | 0.078     | -0.008  | 0.172   | -0.018  |
| Burkina Faso                | 0.167        | -0.018  | 0.420      | -0.044  | 0.079     | -0.008  | 0.170   | -0.018  |
| Uganda                      | 0.164        | -0.018  | 0.346      | -0.038  | 0.080     | -0.009  | 0.166   | -0.018  |
| Madagascar                  | 0.164        | -0.018  | 0.343      | -0.037  | 0.080     | -0.009  | 0.166   | -0.018  |
| Zambia                      | 0.163        | -0.018  | 0.339      | -0.037  | 0.080     | -0.009  | 0.166   | -0.018  |
| Congo, Republic             | 0.162        | -0.018  | 0.321      | -0.035  | 0.080     | -0.009  | 0.165   | -0.018  |
| Togo                        | 0.162        | -0.018  | 0.310      | -0.035  | 0.081     | -0.009  | 0.164   | -0.018  |
| Nepal                       | 0.159        | -0.018  | 0.279      | -0.032  | 0.082     | -0.009  | 0.161   | -0.018  |
| Ghana                       | 0.158        | -0.018  | 0.266      | -0.031  | 0.082     | -0.010  | 0.160   | -0.019  |
| Benin                       | 0.157        | -0.019  | 0.251      | -0.030  | 0.083     | -0.010  | 0.159   | -0.019  |
| Mauritania                  | 0.157        | -0.019  | 0.249      | -0.030  | 0.083     | -0.010  | 0.158   | -0.019  |
| Bangladesh                  | 0.156        | -0.019  | 0.242      | -0.029  | 0.083     | -0.010  | 0.158   | -0.019  |
| Côte d'Ivoire               | 0.156        | -0.019  | 0.240      | -0.029  | 0.084     | -0.010  | 0.157   | -0.019  |
| Laos                        | 0.156        | -0.019  | 0.239      | -0.029  | 0.084     | -0.010  | 0.157   | -0.019  |
| Kenya                       | 0.154        | -0.019  | 0.225      | -0.028  | 0.085     | -0.011  | 0.156   | -0.019  |
| Djibouti                    | 0.154        | -0.019  | 0.224      | -0.028  | 0.085     | -0.011  | 0.156   | -0.019  |
| Nigeria                     | 0.154        | -0.019  | 0.221      | -0.028  | 0.085     | -0.011  | 0.155   | -0.019  |
| Senegal                     | 0.154        | -0.019  | 0.220      | -0.028  | 0.085     | -0.011  | 0.155   | -0.019  |
| Cambodia                    | 0.153        | -0.020  | 0.212      | -0.027  | 0.086     | -0.011  | 0.154   | -0.020  |
| Cameroon                    | 0.152        | -0.020  | 0.206      | -0.027  | 0.087     | -0.011  | 0.153   | -0.020  |
| São Tomé and Príncipe       | 0.152        | -0.020  | 0.204      | -0.027  | 0.087     | -0.011  | 0.153   | -0.020  |
| India                       | 0.152        | -0.020  | 0.201      | -0.027  | 0.088     | -0.012  | 0.153   | -0.020  |
| Yemen                       | 0.152        | -0.020  | 0.200      | -0.027  | 0.088     | -0.012  | 0.153   | -0.020  |
| Vietnam                     | 0.152        | -0.020  | 0.200      | -0.027  | 0.088     | -0.012  | 0.153   | -0.020  |
| Mongolia                    | 0.151        | -0.020  | 0.199      | -0.027  | 0.088     | -0.012  | 0.153   | -0.020  |

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**Cross-price elasticities with respect to change in transportation and communications price, 144 countries in 2005—Continued**

| Country                               | Medical care |         | Recreation |         | Education |         | Other   |         |
|---------------------------------------|--------------|---------|------------|---------|-----------|---------|---------|---------|
|                                       | Slutsky      | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries—continued</b> |              |         |            |         |           |         |         |         |
| Iraq                                  | 0.151        | -0.020  | 0.196      | -0.026  | 0.089     | -0.012  | 0.152   | -0.021  |
| Bhutan                                | 0.151        | -0.021  | 0.193      | -0.026  | 0.089     | -0.012  | 0.152   | -0.021  |
| China                                 | 0.151        | -0.021  | 0.191      | -0.026  | 0.090     | -0.012  | 0.152   | -0.021  |
| Sudan                                 | 0.150        | -0.021  | 0.187      | -0.026  | 0.091     | -0.013  | 0.151   | -0.021  |
| Lesotho                               | 0.150        | -0.021  | 0.185      | -0.026  | 0.091     | -0.013  | 0.151   | -0.021  |
| Tajikistan                            | 0.150        | -0.021  | 0.185      | -0.026  | 0.091     | -0.013  | 0.151   | -0.021  |
| Maldives                              | 0.150        | -0.022  | 0.180      | -0.026  | 0.093     | -0.014  | 0.151   | -0.022  |
| Morocco                               | 0.150        | -0.022  | 0.180      | -0.026  | 0.093     | -0.014  | 0.151   | -0.022  |
| Pakistan                              | 0.150        | -0.022  | 0.179      | -0.026  | 0.094     | -0.014  | 0.151   | -0.022  |
| Indonesia                             | 0.150        | -0.022  | 0.177      | -0.026  | 0.094     | -0.014  | 0.151   | -0.022  |
| Kyrgyzstan                            | 0.150        | -0.022  | 0.177      | -0.026  | 0.094     | -0.014  | 0.151   | -0.022  |
| Philippines                           | 0.150        | -0.022  | 0.177      | -0.026  | 0.095     | -0.014  | 0.151   | -0.023  |
| Cape Verde                            | 0.150        | -0.022  | 0.177      | -0.026  | 0.095     | -0.014  | 0.151   | -0.023  |
| Bolivia                               | 0.150        | -0.023  | 0.177      | -0.027  | 0.095     | -0.014  | 0.151   | -0.023  |
| Namibia                               | 0.150        | -0.023  | 0.175      | -0.027  | 0.096     | -0.015  | 0.151   | -0.023  |
| Sri Lanka                             | 0.150        | -0.023  | 0.174      | -0.027  | 0.096     | -0.015  | 0.151   | -0.023  |
| Botswana                              | 0.150        | -0.023  | 0.174      | -0.027  | 0.096     | -0.015  | 0.151   | -0.023  |
| Gabon                                 | 0.150        | -0.023  | 0.173      | -0.027  | 0.097     | -0.015  | 0.151   | -0.023  |
| Azerbaijan                            | 0.150        | -0.023  | 0.173      | -0.027  | 0.097     | -0.015  | 0.151   | -0.023  |
| Syria                                 | 0.150        | -0.023  | 0.173      | -0.027  | 0.097     | -0.015  | 0.151   | -0.024  |
| Equatorial Guinea                     | 0.151        | -0.024  | 0.171      | -0.027  | 0.098     | -0.016  | 0.151   | -0.024  |
| Paraguay                              | 0.151        | -0.024  | 0.171      | -0.027  | 0.099     | -0.016  | 0.151   | -0.024  |
| Fiji                                  | 0.151        | -0.024  | 0.171      | -0.027  | 0.099     | -0.016  | 0.152   | -0.024  |
| Swaziland                             | 0.151        | -0.024  | 0.170      | -0.027  | 0.100     | -0.016  | 0.152   | -0.024  |
| Moldova                               | 0.151        | -0.024  | 0.170      | -0.028  | 0.100     | -0.016  | 0.152   | -0.025  |
| Egypt                                 | 0.151        | -0.025  | 0.170      | -0.028  | 0.100     | -0.016  | 0.152   | -0.025  |
| Ecuador                               | 0.152        | -0.025  | 0.169      | -0.028  | 0.101     | -0.017  | 0.152   | -0.025  |
| Jordan                                | 0.152        | -0.025  | 0.169      | -0.028  | 0.101     | -0.017  | 0.152   | -0.025  |
| Georgia                               | 0.152        | -0.025  | 0.169      | -0.028  | 0.101     | -0.017  | 0.152   | -0.025  |
| Thailand                              | 0.152        | -0.025  | 0.169      | -0.028  | 0.102     | -0.017  | 0.152   | -0.025  |
| Colombia                              | 0.152        | -0.025  | 0.169      | -0.028  | 0.102     | -0.017  | 0.153   | -0.025  |
| Albania                               | 0.152        | -0.025  | 0.169      | -0.028  | 0.102     | -0.017  | 0.153   | -0.025  |
| Tunisia                               | 0.152        | -0.025  | 0.169      | -0.028  | 0.102     | -0.017  | 0.153   | -0.025  |
| Peru                                  | 0.152        | -0.026  | 0.169      | -0.028  | 0.103     | -0.017  | 0.153   | -0.026  |
| Armenia                               | 0.153        | -0.026  | 0.168      | -0.028  | 0.103     | -0.017  | 0.153   | -0.026  |
| <b>Middle-income countries</b>        |              |         |            |         |           |         |         |         |
| Venezuela                             | 0.153        | -0.026  | 0.168      | -0.029  | 0.104     | -0.018  | 0.154   | -0.026  |
| Malaysia                              | 0.153        | -0.026  | 0.168      | -0.029  | 0.104     | -0.018  | 0.154   | -0.026  |
| Ukraine                               | 0.153        | -0.026  | 0.168      | -0.029  | 0.105     | -0.018  | 0.154   | -0.026  |
| Brazil                                | 0.153        | -0.026  | 0.168      | -0.029  | 0.105     | -0.018  | 0.154   | -0.026  |
| Montenegro                            | 0.154        | -0.026  | 0.168      | -0.029  | 0.105     | -0.018  | 0.154   | -0.026  |

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**Cross-price elasticities with respect to change in transportation and communications price, 144 countries in 2005—Continued**

| Country                                  | Medical care |         | Recreation |         | Education |         | Other   |         |
|--|--------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky      | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Middle-income countries—continued</b> |              |         |            |         |           |         |         |         |
| South Africa                             | 0.154        | -0.027  | 0.168      | -0.029  | 0.106     | -0.018  | 0.154   | -0.027  |
| Macedonia                                | 0.155        | -0.027  | 0.168      | -0.029  | 0.107     | -0.019  | 0.155   | -0.027  |
| Turkey                                   | 0.155        | -0.027  | 0.168      | -0.029  | 0.107     | -0.019  | 0.155   | -0.027  |
| Bosnia and Herzegovina                   | 0.155        | -0.027  | 0.168      | -0.030  | 0.108     | -0.019  | 0.156   | -0.028  |
| Serbia                                   | 0.155        | -0.028  | 0.168      | -0.030  | 0.108     | -0.019  | 0.156   | -0.028  |
| Belarus                                  | 0.155        | -0.028  | 0.168      | -0.030  | 0.108     | -0.019  | 0.156   | -0.028  |
| Romania                                  | 0.155        | -0.028  | 0.168      | -0.030  | 0.108     | -0.019  | 0.156   | -0.028  |
| Saudi Arabia                             | 0.156        | -0.028  | 0.168      | -0.030  | 0.108     | -0.019  | 0.156   | -0.028  |
| Uruguay                                  | 0.156        | -0.028  | 0.168      | -0.030  | 0.109     | -0.019  | 0.156   | -0.028  |
| Mauritius                                | 0.156        | -0.028  | 0.168      | -0.030  | 0.109     | -0.019  | 0.156   | -0.028  |
| Chile                                    | 0.156        | -0.028  | 0.168      | -0.030  | 0.109     | -0.019  | 0.156   | -0.028  |
| Kazakhstan                               | 0.156        | -0.028  | 0.168      | -0.030  | 0.109     | -0.020  | 0.156   | -0.028  |
| Russia                                   | 0.156        | -0.028  | 0.168      | -0.030  | 0.110     | -0.020  | 0.157   | -0.028  |
| Argentina                                | 0.156        | -0.028  | 0.168      | -0.030  | 0.110     | -0.020  | 0.157   | -0.028  |
| Bulgaria                                 | 0.157        | -0.028  | 0.168      | -0.030  | 0.110     | -0.020  | 0.157   | -0.028  |
| Oman                                     | 0.157        | -0.029  | 0.168      | -0.031  | 0.111     | -0.020  | 0.157   | -0.029  |
| Iran                                     | 0.158        | -0.029  | 0.168      | -0.031  | 0.111     | -0.020  | 0.158   | -0.029  |
| Latvia                                   | 0.158        | -0.029  | 0.169      | -0.031  | 0.112     | -0.021  | 0.159   | -0.029  |
| Mexico                                   | 0.158        | -0.029  | 0.169      | -0.031  | 0.113     | -0.021  | 0.159   | -0.029  |
| Lebanon                                  | 0.159        | -0.030  | 0.169      | -0.031  | 0.113     | -0.021  | 0.159   | -0.030  |
| Poland                                   | 0.160        | -0.030  | 0.170      | -0.032  | 0.115     | -0.022  | 0.160   | -0.030  |
| Croatia                                  | 0.160        | -0.030  | 0.170      | -0.032  | 0.115     | -0.022  | 0.160   | -0.030  |
| Macao, China                             | 0.160        | -0.030  | 0.170      | -0.032  | 0.115     | -0.022  | 0.160   | -0.030  |
| Lithuania                                | 0.160        | -0.030  | 0.170      | -0.032  | 0.115     | -0.022  | 0.160   | -0.030  |
| Estonia                                  | 0.160        | -0.030  | 0.170      | -0.032  | 0.115     | -0.022  | 0.161   | -0.031  |
| Brunei Darussalam                        | 0.161        | -0.031  | 0.170      | -0.032  | 0.116     | -0.022  | 0.161   | -0.031  |
| Slovak Republic                          | 0.161        | -0.031  | 0.170      | -0.033  | 0.116     | -0.022  | 0.161   | -0.031  |
| Hungary                                  | 0.161        | -0.031  | 0.170      | -0.033  | 0.116     | -0.022  | 0.161   | -0.031  |
| South Korea                              | 0.162        | -0.031  | 0.171      | -0.033  | 0.117     | -0.023  | 0.162   | -0.031  |
| Bahrain                                  | 0.162        | -0.031  | 0.171      | -0.033  | 0.117     | -0.023  | 0.162   | -0.031  |
| Czech Republic                           | 0.163        | -0.032  | 0.171      | -0.033  | 0.119     | -0.023  | 0.163   | -0.032  |
| Slovenia                                 | 0.164        | -0.032  | 0.172      | -0.034  | 0.119     | -0.023  | 0.164   | -0.032  |
| Israel                                   | 0.164        | -0.032  | 0.172      | -0.034  | 0.119     | -0.023  | 0.164   | -0.032  |
| <b>High-income countries</b>             |              |         |            |         |           |         |         |         |
| Portugal                                 | 0.164        | -0.032  | 0.172      | -0.034  | 0.120     | -0.024  | 0.165   | -0.032  |
| Qatar                                    | 0.164        | -0.032  | 0.172      | -0.034  | 0.120     | -0.024  | 0.165   | -0.032  |
| Singapore                                | 0.165        | -0.033  | 0.172      | -0.034  | 0.120     | -0.024  | 0.165   | -0.033  |
| Malta                                    | 0.165        | -0.033  | 0.173      | -0.034  | 0.121     | -0.024  | 0.165   | -0.033  |
| Kuwait                                   | 0.165        | -0.033  | 0.173      | -0.034  | 0.121     | -0.024  | 0.166   | -0.033  |
| New Zealand                              | 0.166        | -0.033  | 0.174      | -0.035  | 0.122     | -0.025  | 0.166   | -0.033  |

—continued

**Cross-price elasticities with respect to change in transportation and communications price, 144 countries in 2005—Continued**

| Country                                | Medical care |         | Recreation |         | Education |         | Other   |         |
|--|--------------|---------|------------|---------|-----------|---------|---------|---------|
|  | Slutsky      | Cournot | Slutsky    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>High-income countries—continued</b> |              |         |            |         |           |         |         |         |
| Finland                                | 0.166        | -0.033  | 0.174      | -0.035  | 0.123     | -0.025  | 0.167   | -0.033  |
| Taiwan, China                          | 0.167        | -0.033  | 0.174      | -0.035  | 0.123     | -0.025  | 0.167   | -0.034  |
| Spain                                  | 0.167        | -0.034  | 0.174      | -0.035  | 0.123     | -0.025  | 0.167   | -0.034  |
| Italy                                  | 0.167        | -0.034  | 0.174      | -0.035  | 0.123     | -0.025  | 0.167   | -0.034  |
| Ireland                                | 0.167        | -0.034  | 0.174      | -0.035  | 0.124     | -0.025  | 0.168   | -0.034  |
| Denmark                                | 0.167        | -0.034  | 0.175      | -0.035  | 0.124     | -0.025  | 0.168   | -0.034  |
| Sweden                                 | 0.168        | -0.034  | 0.175      | -0.035  | 0.124     | -0.025  | 0.168   | -0.034  |
| Hong Kong, China                       | 0.168        | -0.034  | 0.175      | -0.035  | 0.124     | -0.025  | 0.168   | -0.034  |
| Australia                              | 0.168        | -0.034  | 0.175      | -0.036  | 0.124     | -0.025  | 0.168   | -0.034  |
| Cyprus                                 | 0.168        | -0.034  | 0.175      | -0.036  | 0.124     | -0.025  | 0.168   | -0.034  |
| Belgium                                | 0.168        | -0.034  | 0.175      | -0.036  | 0.124     | -0.025  | 0.168   | -0.034  |
| Japan                                  | 0.168        | -0.034  | 0.175      | -0.036  | 0.124     | -0.025  | 0.168   | -0.034  |
| France                                 | 0.168        | -0.034  | 0.175      | -0.036  | 0.125     | -0.025  | 0.169   | -0.034  |
| Germany                                | 0.169        | -0.034  | 0.176      | -0.036  | 0.125     | -0.026  | 0.169   | -0.035  |
| Canada                                 | 0.169        | -0.034  | 0.176      | -0.036  | 0.125     | -0.026  | 0.169   | -0.035  |
| Iceland                                | 0.169        | -0.035  | 0.176      | -0.036  | 0.125     | -0.026  | 0.169   | -0.035  |
| Netherlands                            | 0.169        | -0.035  | 0.176      | -0.036  | 0.125     | -0.026  | 0.169   | -0.035  |
| Norway                                 | 0.169        | -0.035  | 0.176      | -0.036  | 0.125     | -0.026  | 0.169   | -0.035  |
| United Kingdom                         | 0.169        | -0.035  | 0.176      | -0.036  | 0.126     | -0.026  | 0.170   | -0.035  |
| Switzerland                            | 0.170        | -0.035  | 0.176      | -0.036  | 0.126     | -0.026  | 0.170   | -0.035  |
| Austria                                | 0.170        | -0.035  | 0.177      | -0.036  | 0.126     | -0.026  | 0.170   | -0.035  |
| Luxembourg                             | 0.172        | -0.036  | 0.178      | -0.037  | 0.129     | -0.027  | 0.173   | -0.036  |
| United States                          | 0.174        | -0.037  | 0.180      | -0.038  | 0.130     | -0.028  | 0.174   | -0.037  |
| Low-income average                     | 0.167        | -0.101  | 0.258      | 0.045   | 0.087     | -0.011  | 0.172   | -0.021  |
| Middle-income average                  | 0.158        | -0.029  | 0.169      | -0.031  | 0.111     | -0.020  | 0.158   | -0.029  |
| High-income average                    | 0.168        | -0.034  | 0.175      | -0.035  | 0.124     | -0.025  | 0.168   | -0.034  |

Note: In shaded cells, elasticity is derived using actual budget shares as opposed to the predicted budget share from the Florida model.

Source: USDA, Economic Research Service calculations based on World Bank, 2005 International Comparison Program data.

**Cross-price elasticities with respect to change in recreation price, 144 countries in 2005**

| Country                     | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|-----------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                             | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries</b> |                              |         |                     |         |                              |         |                                   |         |
| Congo, Democratic Republic  | 0.022                        | 0.014   | 0.025               | 0.016   | 0.028                        | 0.018   | 0.027                             | 0.018   |
| Burundi                     | 0.035                        | 0.009   | 0.040               | 0.011   | 0.045                        | 0.012   | 0.044                             | 0.012   |
| Liberia                     | 0.027                        | 0.012   | 0.031               | 0.014   | 0.034                        | 0.016   | 0.034                             | 0.015   |
| Zimbabwe                    | 0.031                        | 0.010   | 0.036               | 0.012   | 0.040                        | 0.014   | 0.040                             | 0.013   |
| Ethiopia                    | 0.019                        | 0.015   | 0.023               | 0.017   | 0.025                        | 0.019   | 0.025                             | 0.019   |
| Niger                       | 0.048                        | 0.004   | 0.057               | 0.005   | 0.063                        | 0.005   | 0.062                             | 0.005   |
| Guinea-Bissau               | 0.040                        | 0.007   | 0.047               | 0.008   | 0.052                        | 0.009   | 0.051                             | 0.009   |
| Mozambique                  | 0.013                        | 0.017   | 0.016               | 0.020   | 0.017                        | 0.022   | 0.017                             | 0.021   |
| Malawi                      | 0.015                        | 0.016   | 0.017               | 0.019   | 0.019                        | 0.021   | 0.019                             | 0.021   |
| Rwanda                      | 0.015                        | 0.016   | 0.018               | 0.019   | 0.020                        | 0.021   | 0.020                             | 0.020   |
| Angola                      | 0.017                        | 0.015   | 0.020               | 0.018   | 0.022                        | 0.020   | 0.022                             | 0.020   |
| Chad                        | 0.017                        | 0.015   | 0.020               | 0.018   | 0.023                        | 0.020   | 0.022                             | 0.020   |
| Gambia, The                 | 0.017                        | 0.015   | 0.021               | 0.018   | 0.023                        | 0.020   | 0.023                             | 0.019   |
| Central African Republic    | 0.018                        | 0.015   | 0.021               | 0.018   | 0.023                        | 0.020   | 0.023                             | 0.019   |
| Mali                        | 0.018                        | 0.015   | 0.021               | 0.018   | 0.023                        | 0.020   | 0.023                             | 0.019   |
| Tanzania                    | 0.018                        | 0.015   | 0.021               | 0.018   | 0.024                        | 0.020   | 0.023                             | 0.019   |
| Sierra Leone                | 0.019                        | 0.014   | 0.022               | 0.017   | 0.025                        | 0.019   | 0.024                             | 0.019   |
| Guinea                      | 0.019                        | 0.014   | 0.023               | 0.017   | 0.025                        | 0.019   | 0.025                             | 0.019   |
| Burkina Faso                | 0.019                        | 0.014   | 0.023               | 0.017   | 0.026                        | 0.019   | 0.025                             | 0.018   |
| Uganda                      | 0.020                        | 0.014   | 0.025               | 0.016   | 0.027                        | 0.018   | 0.027                             | 0.018   |
| Madagascar                  | 0.021                        | 0.014   | 0.025               | 0.016   | 0.027                        | 0.018   | 0.027                             | 0.018   |
| Zambia                      | 0.021                        | 0.014   | 0.025               | 0.016   | 0.028                        | 0.018   | 0.027                             | 0.018   |
| Congo, Republic             | 0.021                        | 0.013   | 0.025               | 0.016   | 0.028                        | 0.018   | 0.028                             | 0.018   |
| Togo                        | 0.021                        | 0.013   | 0.026               | 0.016   | 0.029                        | 0.018   | 0.028                             | 0.017   |
| Nepal                       | 0.022                        | 0.013   | 0.027               | 0.015   | 0.030                        | 0.017   | 0.029                             | 0.017   |
| Ghana                       | 0.023                        | 0.013   | 0.028               | 0.015   | 0.031                        | 0.017   | 0.030                             | 0.017   |
| Benin                       | 0.024                        | 0.012   | 0.029               | 0.015   | 0.032                        | 0.016   | 0.031                             | 0.016   |
| Mauritania                  | 0.024                        | 0.012   | 0.029               | 0.015   | 0.032                        | 0.016   | 0.032                             | 0.016   |
| Bangladesh                  | 0.024                        | 0.012   | 0.029               | 0.015   | 0.033                        | 0.016   | 0.032                             | 0.016   |
| Côte d'Ivoire               | 0.024                        | 0.012   | 0.030               | 0.015   | 0.033                        | 0.016   | 0.032                             | 0.016   |
| Laos                        | 0.024                        | 0.012   | 0.030               | 0.014   | 0.033                        | 0.016   | 0.032                             | 0.016   |
| Kenya                       | 0.026                        | 0.011   | 0.031               | 0.014   | 0.035                        | 0.015   | 0.034                             | 0.015   |
| Djibouti                    | 0.026                        | 0.011   | 0.031               | 0.014   | 0.035                        | 0.015   | 0.034                             | 0.015   |
| Nigeria                     | 0.026                        | 0.011   | 0.032               | 0.014   | 0.035                        | 0.015   | 0.034                             | 0.015   |
| Senegal                     | 0.026                        | 0.011   | 0.032               | 0.014   | 0.035                        | 0.015   | 0.035                             | 0.015   |
| Cambodia                    | 0.027                        | 0.011   | 0.033               | 0.013   | 0.037                        | 0.015   | 0.036                             | 0.015   |
| Cameroon                    | 0.028                        | 0.011   | 0.034               | 0.013   | 0.038                        | 0.014   | 0.037                             | 0.014   |
| São Tomé and Príncipe       | 0.028                        | 0.010   | 0.034               | 0.013   | 0.038                        | 0.014   | 0.037                             | 0.014   |
| India                       | 0.028                        | 0.010   | 0.035               | 0.013   | 0.039                        | 0.014   | 0.038                             | 0.014   |
| Yemen                       | 0.028                        | 0.010   | 0.035               | 0.013   | 0.039                        | 0.014   | 0.038                             | 0.014   |
| Vietnam                     | 0.028                        | 0.010   | 0.035               | 0.012   | 0.039                        | 0.014   | 0.038                             | 0.014   |
| Mongolia                    | 0.029                        | 0.010   | 0.035               | 0.012   | 0.039                        | 0.014   | 0.039                             | 0.014   |

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**Cross-price elasticities with respect to change in recreation price, 144 countries in 2005—Continued**

| Country                               | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|---------------------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                                       | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Iraq                                  | 0.029                        | 0.010   | 0.036               | 0.012   | 0.040                        | 0.013   | 0.039                             | 0.013   |
| Bhutan                                | 0.030                        | 0.010   | 0.037               | 0.012   | 0.041                        | 0.013   | 0.040                             | 0.013   |
| China                                 | 0.030                        | 0.009   | 0.037               | 0.012   | 0.041                        | 0.013   | 0.041                             | 0.013   |
| Sudan                                 | 0.031                        | 0.009   | 0.039               | 0.011   | 0.043                        | 0.012   | 0.042                             | 0.012   |
| Lesotho                               | 0.032                        | 0.009   | 0.040               | 0.011   | 0.044                        | 0.012   | 0.043                             | 0.012   |
| Tajikistan                            | 0.032                        | 0.009   | 0.040               | 0.011   | 0.044                        | 0.012   | 0.043                             | 0.012   |
| Maldives                              | 0.033                        | 0.008   | 0.042               | 0.010   | 0.046                        | 0.011   | 0.045                             | 0.011   |
| Morocco                               | 0.033                        | 0.008   | 0.042               | 0.010   | 0.047                        | 0.011   | 0.046                             | 0.011   |
| Pakistan                              | 0.033                        | 0.008   | 0.043               | 0.010   | 0.047                        | 0.011   | 0.046                             | 0.011   |
| Indonesia                             | 0.034                        | 0.007   | 0.043               | 0.009   | 0.048                        | 0.010   | 0.047                             | 0.010   |
| Kyrgyzstan                            | 0.034                        | 0.007   | 0.044               | 0.009   | 0.048                        | 0.010   | 0.047                             | 0.010   |
| Philippines                           | 0.034                        | 0.007   | 0.044               | 0.009   | 0.049                        | 0.010   | 0.048                             | 0.010   |
| Cape Verde                            | 0.034                        | 0.007   | 0.044               | 0.009   | 0.049                        | 0.010   | 0.048                             | 0.010   |
| Bolivia                               | 0.034                        | 0.007   | 0.044               | 0.009   | 0.049                        | 0.010   | 0.048                             | 0.010   |
| Namibia                               | 0.035                        | 0.007   | 0.045               | 0.009   | 0.050                        | 0.010   | 0.049                             | 0.010   |
| Sri Lanka                             | 0.036                        | 0.007   | 0.046               | 0.009   | 0.051                        | 0.010   | 0.050                             | 0.009   |
| Botswana                              | 0.036                        | 0.007   | 0.046               | 0.008   | 0.051                        | 0.009   | 0.050                             | 0.009   |
| Gabon                                 | 0.036                        | 0.006   | 0.047               | 0.008   | 0.052                        | 0.009   | 0.051                             | 0.009   |
| Azerbaijan                            | 0.036                        | 0.006   | 0.047               | 0.008   | 0.052                        | 0.009   | 0.051                             | 0.009   |
| Syria                                 | 0.036                        | 0.006   | 0.047               | 0.008   | 0.052                        | 0.009   | 0.051                             | 0.009   |
| Equatorial Guinea                     | 0.037                        | 0.006   | 0.049               | 0.008   | 0.054                        | 0.008   | 0.053                             | 0.008   |
| Paraguay                              | 0.038                        | 0.006   | 0.049               | 0.007   | 0.054                        | 0.008   | 0.054                             | 0.008   |
| Fiji                                  | 0.038                        | 0.005   | 0.050               | 0.007   | 0.055                        | 0.008   | 0.054                             | 0.008   |
| Swaziland                             | 0.038                        | 0.005   | 0.051               | 0.007   | 0.056                        | 0.008   | 0.055                             | 0.007   |
| Moldova                               | 0.039                        | 0.005   | 0.051               | 0.007   | 0.056                        | 0.007   | 0.055                             | 0.007   |
| Egypt                                 | 0.039                        | 0.005   | 0.051               | 0.007   | 0.057                        | 0.007   | 0.056                             | 0.007   |
| Ecuador                               | 0.039                        | 0.005   | 0.052               | 0.006   | 0.058                        | 0.007   | 0.057                             | 0.007   |
| Jordan                                | 0.039                        | 0.005   | 0.052               | 0.006   | 0.058                        | 0.007   | 0.057                             | 0.007   |
| Georgia                               | 0.039                        | 0.005   | 0.053               | 0.006   | 0.058                        | 0.007   | 0.057                             | 0.007   |
| Thailand                              | 0.040                        | 0.004   | 0.053               | 0.006   | 0.059                        | 0.007   | 0.058                             | 0.007   |
| Colombia                              | 0.040                        | 0.004   | 0.053               | 0.006   | 0.059                        | 0.007   | 0.058                             | 0.006   |
| Albania                               | 0.040                        | 0.004   | 0.054               | 0.006   | 0.059                        | 0.006   | 0.058                             | 0.006   |
| Tunisia                               | 0.040                        | 0.004   | 0.054               | 0.006   | 0.060                        | 0.006   | 0.059                             | 0.006   |
| Peru                                  | 0.040                        | 0.004   | 0.055               | 0.005   | 0.060                        | 0.006   | 0.059                             | 0.006   |
| Armenia                               | 0.041                        | 0.004   | 0.055               | 0.005   | 0.061                        | 0.006   | 0.060                             | 0.006   |
| <b>Middle-income countries</b>        |                              |         |                     |         |                              |         |                                   |         |
| Venezuela                             | 0.041                        | 0.003   | 0.056               | 0.005   | 0.062                        | 0.005   | 0.061                             | 0.005   |
| Malaysia                              | 0.041                        | 0.003   | 0.056               | 0.005   | 0.062                        | 0.005   | 0.061                             | 0.005   |
| Ukraine                               | 0.042                        | 0.003   | 0.057               | 0.005   | 0.063                        | 0.005   | 0.062                             | 0.005   |
| Brazil                                | 0.042                        | 0.003   | 0.057               | 0.004   | 0.063                        | 0.005   | 0.062                             | 0.005   |
| Montenegro                            | 0.042                        | 0.003   | 0.058               | 0.004   | 0.064                        | 0.005   | 0.063                             | 0.005   |

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**Cross-price elasticities with respect to change in recreation price, 144 countries in 2005—Continued**

| Country                                  | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Middle-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| South Africa                             | 0.042                        | 0.003   | 0.058               | 0.004   | 0.065                        | 0.004   | 0.064                             | 0.004   |
| Macedonia                                | 0.043                        | 0.003   | 0.060               | 0.004   | 0.066                        | 0.004   | 0.065                             | 0.004   |
| Turkey                                   | 0.043                        | 0.002   | 0.060               | 0.003   | 0.066                        | 0.004   | 0.065                             | 0.004   |
| Bosnia and Herzegovina                   | 0.043                        | 0.002   | 0.061               | 0.003   | 0.067                        | 0.003   | 0.066                             | 0.003   |
| Serbia                                   | 0.043                        | 0.002   | 0.061               | 0.003   | 0.068                        | 0.003   | 0.067                             | 0.003   |
| Belarus                                  | 0.043                        | 0.002   | 0.061               | 0.003   | 0.068                        | 0.003   | 0.067                             | 0.003   |
| Romania                                  | 0.043                        | 0.002   | 0.062               | 0.003   | 0.068                        | 0.003   | 0.067                             | 0.003   |
| Saudi Arabia                             | 0.044                        | 0.002   | 0.062               | 0.003   | 0.068                        | 0.003   | 0.067                             | 0.003   |
| Uruguay                                  | 0.044                        | 0.002   | 0.062               | 0.003   | 0.068                        | 0.003   | 0.067                             | 0.003   |
| Mauritius                                | 0.044                        | 0.002   | 0.062               | 0.003   | 0.068                        | 0.003   | 0.067                             | 0.003   |
| Chile                                    | 0.044                        | 0.002   | 0.062               | 0.003   | 0.069                        | 0.003   | 0.068                             | 0.003   |
| Kazakhstan                               | 0.044                        | 0.002   | 0.063               | 0.002   | 0.069                        | 0.003   | 0.068                             | 0.003   |
| Russia                                   | 0.044                        | 0.002   | 0.063               | 0.002   | 0.070                        | 0.002   | 0.069                             | 0.002   |
| Argentina                                | 0.044                        | 0.001   | 0.064               | 0.002   | 0.070                        | 0.002   | 0.069                             | 0.002   |
| Bulgaria                                 | 0.044                        | 0.001   | 0.064               | 0.002   | 0.071                        | 0.002   | 0.070                             | 0.002   |
| Oman                                     | 0.044                        | 0.001   | 0.065               | 0.002   | 0.071                        | 0.002   | 0.070                             | 0.002   |
| Iran                                     | 0.045                        | 0.001   | 0.066               | 0.001   | 0.073                        | 0.001   | 0.072                             | 0.001   |
| Latvia                                   | 0.045                        | 0.001   | 0.067               | 0.001   | 0.074                        | 0.001   | 0.073                             | 0.001   |
| Mexico                                   | 0.045                        | 0.000   | 0.067               | 0.001   | 0.074                        | 0.001   | 0.073                             | 0.001   |
| Lebanon                                  | 0.045                        | 0.000   | 0.068               | 0.000   | 0.075                        | 0.001   | 0.074                             | 0.001   |
| Poland                                   | 0.046                        | 0.000   | 0.070               | 0.000   | 0.077                        | 0.000   | 0.076                             | 0.000   |
| Croatia                                  | 0.046                        | 0.000   | 0.070               | 0.000   | 0.077                        | 0.000   | 0.076                             | 0.000   |
| Macao, China                             | 0.046                        | 0.000   | 0.070               | 0.000   | 0.077                        | 0.000   | 0.076                             | 0.000   |
| Lithuania                                | 0.046                        | 0.000   | 0.070               | 0.000   | 0.077                        | 0.000   | 0.076                             | 0.000   |
| Estonia                                  | 0.046                        | 0.000   | 0.071               | -0.001  | 0.078                        | -0.001  | 0.077                             | -0.001  |
| Brunei Darussalam                        | 0.046                        | -0.001  | 0.072               | -0.001  | 0.079                        | -0.001  | 0.078                             | -0.001  |
| Slovak Republic                          | 0.046                        | -0.001  | 0.072               | -0.001  | 0.079                        | -0.001  | 0.078                             | -0.001  |
| Hungary                                  | 0.046                        | -0.001  | 0.072               | -0.001  | 0.080                        | -0.001  | 0.078                             | -0.001  |
| South Korea                              | 0.046                        | -0.001  | 0.073               | -0.001  | 0.081                        | -0.002  | 0.080                             | -0.002  |
| Bahrain                                  | 0.046                        | -0.001  | 0.073               | -0.001  | 0.081                        | -0.002  | 0.080                             | -0.002  |
| Czech Republic                           | 0.045                        | -0.001  | 0.075               | -0.002  | 0.083                        | -0.002  | 0.082                             | -0.002  |
| Slovenia                                 | 0.045                        | -0.001  | 0.076               | -0.002  | 0.084                        | -0.003  | 0.083                             | -0.003  |
| Israel                                   | 0.045                        | -0.002  | 0.076               | -0.003  | 0.084                        | -0.003  | 0.083                             | -0.003  |
| <b>High-income countries</b>             |                              |         |                     |         |                              |         |                                   |         |
| Portugal                                 | 0.045                        | -0.002  | 0.077               | -0.003  | 0.085                        | -0.003  | 0.084                             | -0.003  |
| Qatar                                    | 0.045                        | -0.002  | 0.078               | -0.003  | 0.085                        | -0.003  | 0.084                             | -0.003  |
| Singapore                                | 0.045                        | -0.002  | 0.078               | -0.003  | 0.086                        | -0.003  | 0.084                             | -0.003  |
| Malta                                    | 0.045                        | -0.002  | 0.079               | -0.003  | 0.087                        | -0.004  | 0.085                             | -0.004  |
| Kuwait                                   | 0.045                        | -0.002  | 0.079               | -0.003  | 0.087                        | -0.004  | 0.086                             | -0.004  |
| New Zealand                              | 0.044                        | -0.002  | 0.080               | -0.004  | 0.088                        | -0.004  | 0.087                             | -0.004  |

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**Cross-price elasticities with respect to change in recreation price, 144 countries in 2005—Continued**

| Country                                | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>High-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Finland                                | 0.044                        | -0.002  | 0.081               | -0.004  | 0.089                        | -0.005  | 0.088                             | -0.004  |
| Taiwan, China                          | 0.044                        | -0.002  | 0.081               | -0.004  | 0.089                        | -0.005  | 0.088                             | -0.005  |
| Spain                                  | 0.044                        | -0.002  | 0.081               | -0.004  | 0.090                        | -0.005  | 0.088                             | -0.005  |
| Italy                                  | 0.043                        | -0.002  | 0.082               | -0.004  | 0.090                        | -0.005  | 0.089                             | -0.005  |
| Ireland                                | 0.043                        | -0.002  | 0.082               | -0.005  | 0.090                        | -0.005  | 0.089                             | -0.005  |
| Denmark                                | 0.043                        | -0.002  | 0.082               | -0.005  | 0.090                        | -0.005  | 0.089                             | -0.005  |
| Sweden                                 | 0.043                        | -0.002  | 0.082               | -0.005  | 0.091                        | -0.005  | 0.089                             | -0.005  |
| Hong Kong, China                       | 0.043                        | -0.002  | 0.083               | -0.005  | 0.091                        | -0.005  | 0.090                             | -0.005  |
| Australia                              | 0.043                        | -0.003  | 0.083               | -0.005  | 0.091                        | -0.005  | 0.090                             | -0.005  |
| Cyprus                                 | 0.043                        | -0.003  | 0.083               | -0.005  | 0.091                        | -0.005  | 0.090                             | -0.005  |
| Belgium                                | 0.042                        | -0.003  | 0.083               | -0.005  | 0.092                        | -0.006  | 0.090                             | -0.005  |
| Japan                                  | 0.042                        | -0.003  | 0.083               | -0.005  | 0.092                        | -0.006  | 0.090                             | -0.005  |
| France                                 | 0.042                        | -0.003  | 0.084               | -0.005  | 0.092                        | -0.006  | 0.091                             | -0.006  |
| Germany                                | 0.042                        | -0.003  | 0.084               | -0.005  | 0.093                        | -0.006  | 0.091                             | -0.006  |
| Canada                                 | 0.042                        | -0.003  | 0.084               | -0.005  | 0.093                        | -0.006  | 0.091                             | -0.006  |
| Iceland                                | 0.042                        | -0.003  | 0.084               | -0.005  | 0.093                        | -0.006  | 0.092                             | -0.006  |
| Netherlands                            | 0.041                        | -0.003  | 0.084               | -0.005  | 0.093                        | -0.006  | 0.092                             | -0.006  |
| Norway                                 | 0.041                        | -0.003  | 0.084               | -0.005  | 0.093                        | -0.006  | 0.092                             | -0.006  |
| United Kingdom                         | 0.041                        | -0.003  | 0.085               | -0.006  | 0.094                        | -0.006  | 0.093                             | -0.006  |
| Switzerland                            | 0.041                        | -0.003  | 0.085               | -0.006  | 0.094                        | -0.006  | 0.093                             | -0.006  |
| Austria                                | 0.040                        | -0.003  | 0.086               | -0.006  | 0.095                        | -0.007  | 0.093                             | -0.007  |
| Luxembourg                             | 0.036                        | -0.003  | 0.089               | -0.007  | 0.098                        | -0.008  | 0.097                             | -0.008  |
| United States                          | 0.033                        | -0.003  | 0.091               | -0.008  | 0.100                        | -0.009  | 0.099                             | -0.009  |
| Low-income average                     | 0.029                        | 0.010   | 0.037               | 0.012   | 0.041                        | 0.013   | 0.040                             | 0.013   |
| Middle-income average                  | 0.044                        | 0.001   | 0.065               | 0.001   | 0.072                        | 0.002   | 0.071                             | 0.002   |
| High-income average                    | 0.042                        | -0.002  | 0.083               | -0.005  | 0.091                        | -0.005  | 0.090                             | -0.005  |

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**Cross-price elasticities with respect to change in recreation price, 144 countries in 2005—Continued**

| Country                     | Medical care |         | Transport & communications |         | Education |         | Other   |         |
|-----------------------------|--------------|---------|----------------------------|---------|-----------|---------|---------|---------|
|                             | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries</b> |              |         |                            |         |           |         |         |         |
| Congo, Democratic Republic  | 0.041        | 0.026   | 0.036                      | 0.023   | 0.024     | 0.016   | 0.056   | 0.036   |
| Burundi                     | 0.065        | -2.598  | 0.054                      | 0.015   | 0.039     | 0.010   | 0.068   | 0.018   |
| Liberia                     | 0.273        | 0.126   | 0.041                      | 0.019   | 0.030     | 0.014   | 0.357   | 0.164   |
| Zimbabwe                    | 0.160        | 0.054   | 0.048                      | 0.016   | 0.035     | 0.012   | 0.176   | 0.059   |
| Ethiopia                    | 0.077        | 0.058   | 0.030                      | 0.022   | 0.022     | 0.016   | 0.081   | 0.061   |
| Niger                       | 0.189        | 0.016   | 0.074                      | 0.006   | 0.055     | 0.005   | 0.199   | 0.016   |
| Guinea-Bissau               | 0.153        | 0.027   | 0.061                      | 0.011   | 0.045     | 0.008   | 0.161   | 0.029   |
| Mozambique                  | 0.043        | 0.054   | 0.020                      | 0.026   | 0.015     | 0.019   | 0.044   | 0.056   |
| Malawi                      | 0.044        | 0.047   | 0.023                      | 0.025   | 0.017     | 0.018   | 0.045   | 0.049   |
| Rwanda                      | 0.044        | 0.046   | 0.023                      | 0.024   | 0.017     | 0.018   | 0.045   | 0.047   |
| Angola                      | 0.045        | 0.041   | 0.026                      | 0.023   | 0.019     | 0.017   | 0.046   | 0.041   |
| Chad                        | 0.045        | 0.040   | 0.026                      | 0.023   | 0.020     | 0.017   | 0.046   | 0.041   |
| Gambia, The                 | 0.046        | 0.039   | 0.027                      | 0.023   | 0.020     | 0.017   | 0.047   | 0.040   |
| Central African Republic    | 0.046        | 0.039   | 0.027                      | 0.023   | 0.020     | 0.017   | 0.047   | 0.040   |
| Mali                        | 0.046        | 0.039   | 0.027                      | 0.023   | 0.020     | 0.017   | 0.047   | 0.039   |
| Tanzania                    | 0.046        | 0.038   | 0.027                      | 0.022   | 0.021     | 0.017   | 0.047   | 0.039   |
| Sierra Leone                | 0.047        | 0.036   | 0.029                      | 0.022   | 0.022     | 0.017   | 0.048   | 0.037   |
| Guinea                      | 0.047        | 0.036   | 0.029                      | 0.022   | 0.022     | 0.016   | 0.048   | 0.036   |
| Burkina Faso                | 0.048        | 0.035   | 0.030                      | 0.021   | 0.022     | 0.016   | 0.048   | 0.035   |
| Uganda                      | 0.049        | 0.032   | 0.031                      | 0.021   | 0.024     | 0.016   | 0.050   | 0.033   |
| Madagascar                  | 0.049        | 0.032   | 0.031                      | 0.021   | 0.024     | 0.016   | 0.050   | 0.033   |
| Zambia                      | 0.049        | 0.032   | 0.032                      | 0.021   | 0.024     | 0.016   | 0.050   | 0.033   |
| Congo, Republic             | 0.049        | 0.031   | 0.032                      | 0.020   | 0.024     | 0.015   | 0.050   | 0.032   |
| Togo                        | 0.050        | 0.031   | 0.033                      | 0.020   | 0.025     | 0.015   | 0.050   | 0.031   |
| Nepal                       | 0.051        | 0.029   | 0.034                      | 0.020   | 0.026     | 0.015   | 0.051   | 0.029   |
| Ghana                       | 0.051        | 0.028   | 0.035                      | 0.019   | 0.027     | 0.015   | 0.052   | 0.029   |
| Benin                       | 0.052        | 0.027   | 0.036                      | 0.019   | 0.028     | 0.014   | 0.053   | 0.027   |
| Mauritania                  | 0.052        | 0.027   | 0.036                      | 0.019   | 0.028     | 0.014   | 0.053   | 0.027   |
| Bangladesh                  | 0.053        | 0.026   | 0.037                      | 0.018   | 0.028     | 0.014   | 0.054   | 0.026   |
| Côte d'Ivoire               | 0.053        | 0.026   | 0.037                      | 0.018   | 0.029     | 0.014   | 0.054   | 0.026   |
| Laos                        | 0.053        | 0.026   | 0.037                      | 0.018   | 0.029     | 0.014   | 0.054   | 0.026   |
| Kenya                       | 0.055        | 0.024   | 0.039                      | 0.017   | 0.030     | 0.013   | 0.055   | 0.025   |
| Djibouti                    | 0.055        | 0.024   | 0.039                      | 0.017   | 0.030     | 0.013   | 0.055   | 0.024   |
| Nigeria                     | 0.055        | 0.024   | 0.040                      | 0.017   | 0.030     | 0.013   | 0.055   | 0.024   |
| Senegal                     | 0.055        | 0.024   | 0.040                      | 0.017   | 0.031     | 0.013   | 0.056   | 0.024   |
| Cambodia                    | 0.056        | 0.023   | 0.041                      | 0.017   | 0.032     | 0.013   | 0.057   | 0.023   |
| Cameroon                    | 0.057        | 0.022   | 0.042                      | 0.016   | 0.033     | 0.012   | 0.058   | 0.022   |
| São Tomé and Príncipe       | 0.057        | 0.021   | 0.043                      | 0.016   | 0.033     | 0.012   | 0.058   | 0.022   |
| India                       | 0.058        | 0.021   | 0.043                      | 0.016   | 0.034     | 0.012   | 0.058   | 0.021   |
| Yemen                       | 0.058        | 0.021   | 0.044                      | 0.016   | 0.034     | 0.012   | 0.059   | 0.021   |
| Vietnam                     | 0.058        | 0.021   | 0.044                      | 0.016   | 0.034     | 0.012   | 0.059   | 0.021   |
| Mongolia                    | 0.058        | 0.020   | 0.044                      | 0.015   | 0.034     | 0.012   | 0.059   | 0.021   |

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**Cross-price elasticities with respect to change in recreation price, 144 countries in 2005—Continued**

| Country                               | Medical care |         | Transport & communications |         | Education |         | Other   |         |
|---------------------------------------|--------------|---------|----------------------------|---------|-----------|---------|---------|---------|
|                                       | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Low-income countries—continued</b> |              |         |                            |         |           |         |         |         |
| Iraq                                  | 0.059        | 0.020   | 0.045                      | 0.015   | 0.035     | 0.012   | 0.060   | 0.020   |
| Bhutan                                | 0.060        | 0.019   | 0.046                      | 0.015   | 0.035     | 0.011   | 0.060   | 0.020   |
| China                                 | 0.060        | 0.019   | 0.046                      | 0.014   | 0.036     | 0.011   | 0.061   | 0.019   |
| Sudan                                 | 0.062        | 0.018   | 0.048                      | 0.014   | 0.037     | 0.011   | 0.062   | 0.018   |
| Lesotho                               | 0.063        | 0.017   | 0.049                      | 0.013   | 0.038     | 0.010   | 0.063   | 0.017   |
| Tajikistan                            | 0.063        | 0.017   | 0.049                      | 0.013   | 0.038     | 0.010   | 0.063   | 0.017   |
| Maldives                              | 0.065        | 0.016   | 0.051                      | 0.012   | 0.040     | 0.010   | 0.065   | 0.016   |
| Morocco                               | 0.065        | 0.015   | 0.052                      | 0.012   | 0.040     | 0.010   | 0.065   | 0.016   |
| Pakistan                              | 0.065        | 0.015   | 0.052                      | 0.012   | 0.041     | 0.009   | 0.066   | 0.015   |
| Indonesia                             | 0.066        | 0.014   | 0.053                      | 0.012   | 0.042     | 0.009   | 0.067   | 0.014   |
| Kyrgyzstan                            | 0.066        | 0.014   | 0.053                      | 0.012   | 0.042     | 0.009   | 0.067   | 0.014   |
| Philippines                           | 0.067        | 0.014   | 0.054                      | 0.011   | 0.042     | 0.009   | 0.067   | 0.014   |
| Cape Verde                            | 0.067        | 0.014   | 0.054                      | 0.011   | 0.042     | 0.009   | 0.067   | 0.014   |
| Bolivia                               | 0.067        | 0.014   | 0.054                      | 0.011   | 0.042     | 0.009   | 0.067   | 0.014   |
| Namibia                               | 0.068        | 0.013   | 0.055                      | 0.011   | 0.043     | 0.008   | 0.068   | 0.013   |
| Sri Lanka                             | 0.069        | 0.013   | 0.056                      | 0.011   | 0.044     | 0.008   | 0.069   | 0.013   |
| Botswana                              | 0.069        | 0.013   | 0.056                      | 0.010   | 0.044     | 0.008   | 0.069   | 0.013   |
| Gabon                                 | 0.069        | 0.012   | 0.057                      | 0.010   | 0.045     | 0.008   | 0.070   | 0.012   |
| Azerbaijan                            | 0.070        | 0.012   | 0.057                      | 0.010   | 0.045     | 0.008   | 0.070   | 0.012   |
| Syria                                 | 0.070        | 0.012   | 0.058                      | 0.010   | 0.045     | 0.008   | 0.070   | 0.012   |
| Equatorial Guinea                     | 0.071        | 0.011   | 0.059                      | 0.009   | 0.047     | 0.007   | 0.072   | 0.011   |
| Paraguay                              | 0.072        | 0.011   | 0.060                      | 0.009   | 0.047     | 0.007   | 0.072   | 0.011   |
| Fiji                                  | 0.073        | 0.010   | 0.061                      | 0.009   | 0.048     | 0.007   | 0.073   | 0.010   |
| Swaziland                             | 0.073        | 0.010   | 0.061                      | 0.008   | 0.048     | 0.007   | 0.074   | 0.010   |
| Moldova                               | 0.074        | 0.010   | 0.062                      | 0.008   | 0.049     | 0.006   | 0.074   | 0.010   |
| Egypt                                 | 0.074        | 0.010   | 0.062                      | 0.008   | 0.049     | 0.006   | 0.074   | 0.010   |
| Ecuador                               | 0.075        | 0.009   | 0.063                      | 0.008   | 0.050     | 0.006   | 0.075   | 0.009   |
| Jordan                                | 0.075        | 0.009   | 0.064                      | 0.008   | 0.050     | 0.006   | 0.075   | 0.009   |
| Georgia                               | 0.075        | 0.009   | 0.064                      | 0.007   | 0.050     | 0.006   | 0.076   | 0.009   |
| Thailand                              | 0.076        | 0.009   | 0.064                      | 0.007   | 0.051     | 0.006   | 0.076   | 0.009   |
| Colombia                              | 0.076        | 0.008   | 0.064                      | 0.007   | 0.051     | 0.006   | 0.076   | 0.008   |
| Albania                               | 0.076        | 0.008   | 0.065                      | 0.007   | 0.051     | 0.005   | 0.077   | 0.008   |
| Tunisia                               | 0.077        | 0.008   | 0.065                      | 0.007   | 0.052     | 0.005   | 0.077   | 0.008   |
| Peru                                  | 0.077        | 0.008   | 0.066                      | 0.007   | 0.052     | 0.005   | 0.078   | 0.008   |
| Armenia                               | 0.078        | 0.007   | 0.067                      | 0.006   | 0.053     | 0.005   | 0.078   | 0.007   |
| <b>Middle-income countries</b>        |              |         |                            |         |           |         |         |         |
| Venezuela                             | 0.079        | 0.007   | 0.068                      | 0.006   | 0.054     | 0.005   | 0.079   | 0.007   |
| Malaysia                              | 0.079        | 0.007   | 0.068                      | 0.006   | 0.054     | 0.004   | 0.080   | 0.007   |
| Ukraine                               | 0.080        | 0.006   | 0.068                      | 0.006   | 0.054     | 0.004   | 0.080   | 0.006   |
| Brazil                                | 0.080        | 0.006   | 0.069                      | 0.005   | 0.055     | 0.004   | 0.080   | 0.006   |
| Montenegro                            | 0.080        | 0.006   | 0.069                      | 0.005   | 0.055     | 0.004   | 0.081   | 0.006   |

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**Cross-price elasticities with respect to change in recreation price, 144 countries in 2005—Continued**

| Country                                  | Medical care |         | Transport & communications |         | Education |         | Other   |         |
|--|--------------|---------|----------------------------|---------|-----------|---------|---------|---------|
|  | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>Middle-income countries—continued</b> |              |         |                            |         |           |         |         |         |
| South Africa                             | 0.081        | 0.006   | 0.070                      | 0.005   | 0.056     | 0.004   | 0.081   | 0.006   |
| Macedonia                                | 0.082        | 0.005   | 0.072                      | 0.004   | 0.057     | 0.003   | 0.083   | 0.005   |
| Turkey                                   | 0.083        | 0.005   | 0.072                      | 0.004   | 0.057     | 0.003   | 0.083   | 0.005   |
| Bosnia and Herzegovina                   | 0.084        | 0.004   | 0.073                      | 0.004   | 0.058     | 0.003   | 0.084   | 0.004   |
| Serbia                                   | 0.084        | 0.004   | 0.073                      | 0.004   | 0.058     | 0.003   | 0.084   | 0.004   |
| Belarus                                  | 0.084        | 0.004   | 0.074                      | 0.004   | 0.059     | 0.003   | 0.084   | 0.004   |
| Romania                                  | 0.084        | 0.004   | 0.074                      | 0.003   | 0.059     | 0.003   | 0.085   | 0.004   |
| Saudi Arabia                             | 0.085        | 0.004   | 0.074                      | 0.003   | 0.059     | 0.003   | 0.085   | 0.004   |
| Uruguay                                  | 0.085        | 0.004   | 0.074                      | 0.003   | 0.059     | 0.003   | 0.085   | 0.004   |
| Mauritius                                | 0.085        | 0.004   | 0.074                      | 0.003   | 0.059     | 0.003   | 0.085   | 0.004   |
| Chile                                    | 0.085        | 0.004   | 0.074                      | 0.003   | 0.059     | 0.003   | 0.085   | 0.004   |
| Kazakhstan                               | 0.086        | 0.003   | 0.075                      | 0.003   | 0.060     | 0.002   | 0.086   | 0.003   |
| Russia                                   | 0.086        | 0.003   | 0.076                      | 0.003   | 0.060     | 0.002   | 0.086   | 0.003   |
| Argentina                                | 0.087        | 0.003   | 0.076                      | 0.002   | 0.061     | 0.002   | 0.087   | 0.003   |
| Bulgaria                                 | 0.087        | 0.003   | 0.077                      | 0.002   | 0.061     | 0.002   | 0.087   | 0.003   |
| Oman                                     | 0.088        | 0.002   | 0.077                      | 0.002   | 0.062     | 0.002   | 0.088   | 0.002   |
| Iran                                     | 0.089        | 0.002   | 0.079                      | 0.002   | 0.063     | 0.001   | 0.089   | 0.002   |
| Latvia                                   | 0.090        | 0.001   | 0.080                      | 0.001   | 0.064     | 0.001   | 0.090   | 0.001   |
| Mexico                                   | 0.090        | 0.001   | 0.080                      | 0.001   | 0.064     | 0.001   | 0.091   | 0.001   |
| Lebanon                                  | 0.091        | 0.001   | 0.081                      | 0.001   | 0.065     | 0.000   | 0.091   | 0.001   |
| Poland                                   | 0.093        | 0.000   | 0.083                      | 0.000   | 0.067     | 0.000   | 0.093   | 0.000   |
| Croatia                                  | 0.093        | 0.000   | 0.083                      | 0.000   | 0.067     | 0.000   | 0.093   | 0.000   |
| Macao, China                             | 0.093        | 0.000   | 0.083                      | 0.000   | 0.067     | 0.000   | 0.093   | 0.000   |
| Lithuania                                | 0.093        | 0.000   | 0.083                      | 0.000   | 0.067     | 0.000   | 0.093   | 0.000   |
| Estonia                                  | 0.094        | -0.001  | 0.084                      | -0.001  | 0.068     | -0.001  | 0.094   | -0.001  |
| Brunei Darussalam                        | 0.095        | -0.001  | 0.085                      | -0.001  | 0.068     | -0.001  | 0.095   | -0.001  |
| Slovak Republic                          | 0.095        | -0.001  | 0.085                      | -0.001  | 0.069     | -0.001  | 0.095   | -0.001  |
| Hungary                                  | 0.095        | -0.001  | 0.086                      | -0.001  | 0.069     | -0.001  | 0.095   | -0.001  |
| South Korea                              | 0.096        | -0.002  | 0.087                      | -0.002  | 0.070     | -0.001  | 0.097   | -0.002  |
| Bahrain                                  | 0.097        | -0.002  | 0.087                      | -0.002  | 0.070     | -0.001  | 0.097   | -0.002  |
| Czech Republic                           | 0.098        | -0.003  | 0.089                      | -0.003  | 0.072     | -0.002  | 0.099   | -0.003  |
| Slovenia                                 | 0.099        | -0.003  | 0.090                      | -0.003  | 0.072     | -0.002  | 0.099   | -0.003  |
| Israel                                   | 0.100        | -0.003  | 0.090                      | -0.003  | 0.073     | -0.002  | 0.100   | -0.003  |
| <b>High-income countries</b>             |              |         |                            |         |           |         |         |         |
| Portugal                                 | 0.100        | -0.004  | 0.091                      | -0.003  | 0.073     | -0.003  | 0.101   | -0.004  |
| Qatar                                    | 0.101        | -0.004  | 0.091                      | -0.003  | 0.074     | -0.003  | 0.101   | -0.004  |
| Singapore                                | 0.101        | -0.004  | 0.092                      | -0.004  | 0.074     | -0.003  | 0.101   | -0.004  |
| Malta                                    | 0.102        | -0.004  | 0.093                      | -0.004  | 0.075     | -0.003  | 0.102   | -0.004  |
| Kuwait                                   | 0.102        | -0.004  | 0.093                      | -0.004  | 0.075     | -0.003  | 0.102   | -0.004  |
| New Zealand                              | 0.104        | -0.005  | 0.095                      | -0.005  | 0.076     | -0.004  | 0.104   | -0.005  |

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**Cross-price elasticities with respect to change in recreation price, 144 countries in 2005—Continued**

| Country                                | Medical care |         | Transport & communications |         | Education |         | Other   |         |
|--|--------------|---------|----------------------------|---------|-----------|---------|---------|---------|
|  | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky   | Cournot | Slutsky | Cournot |
| <b>High-income countries—continued</b> |              |         |                            |         |           |         |         |         |
| Finland                                | 0.104        | -0.005  | 0.095                      | -0.005  | 0.076     | -0.004  | 0.104   | -0.005  |
| Taiwan, China                          | 0.104        | -0.005  | 0.095                      | -0.005  | 0.077     | -0.004  | 0.104   | -0.005  |
| Spain                                  | 0.105        | -0.006  | 0.096                      | -0.005  | 0.077     | -0.004  | 0.105   | -0.006  |
| Italy                                  | 0.105        | -0.006  | 0.096                      | -0.005  | 0.077     | -0.004  | 0.105   | -0.006  |
| Ireland                                | 0.105        | -0.006  | 0.096                      | -0.005  | 0.078     | -0.004  | 0.105   | -0.006  |
| Denmark                                | 0.105        | -0.006  | 0.096                      | -0.005  | 0.078     | -0.004  | 0.105   | -0.006  |
| Sweden                                 | 0.106        | -0.006  | 0.097                      | -0.006  | 0.078     | -0.005  | 0.106   | -0.006  |
| Hong Kong, China                       | 0.106        | -0.006  | 0.097                      | -0.006  | 0.078     | -0.005  | 0.106   | -0.006  |
| Australia                              | 0.106        | -0.006  | 0.097                      | -0.006  | 0.079     | -0.005  | 0.106   | -0.006  |
| Cyprus                                 | 0.106        | -0.006  | 0.098                      | -0.006  | 0.079     | -0.005  | 0.106   | -0.006  |
| Belgium                                | 0.106        | -0.006  | 0.098                      | -0.006  | 0.079     | -0.005  | 0.107   | -0.006  |
| Japan                                  | 0.106        | -0.006  | 0.098                      | -0.006  | 0.079     | -0.005  | 0.107   | -0.006  |
| France                                 | 0.107        | -0.007  | 0.098                      | -0.006  | 0.079     | -0.005  | 0.107   | -0.007  |
| Germany                                | 0.108        | -0.007  | 0.099                      | -0.006  | 0.080     | -0.005  | 0.108   | -0.007  |
| Canada                                 | 0.108        | -0.007  | 0.099                      | -0.006  | 0.080     | -0.005  | 0.108   | -0.007  |
| Iceland                                | 0.108        | -0.007  | 0.099                      | -0.006  | 0.080     | -0.005  | 0.108   | -0.007  |
| Netherlands                            | 0.108        | -0.007  | 0.099                      | -0.006  | 0.080     | -0.005  | 0.108   | -0.007  |
| Norway                                 | 0.108        | -0.007  | 0.099                      | -0.006  | 0.080     | -0.005  | 0.108   | -0.007  |
| United Kingdom                         | 0.109        | -0.007  | 0.100                      | -0.007  | 0.081     | -0.005  | 0.109   | -0.007  |
| Switzerland                            | 0.109        | -0.007  | 0.100                      | -0.007  | 0.081     | -0.006  | 0.109   | -0.007  |
| Austria                                | 0.109        | -0.008  | 0.101                      | -0.007  | 0.081     | -0.006  | 0.109   | -0.008  |
| Luxembourg                             | 0.113        | -0.009  | 0.105                      | -0.009  | 0.085     | -0.007  | 0.113   | -0.009  |
| United States                          | 0.115        | -0.010  | 0.107                      | -0.009  | 0.086     | -0.008  | 0.115   | -0.010  |
| Low-income average                     | 0.067        | -0.010  | 0.046                      | 0.015   | 0.035     | 0.011   | 0.069   | 0.025   |
| Middle-income average                  | 0.088        | 0.002   | 0.078                      | 0.002   | 0.062     | 0.001   | 0.088   | 0.002   |
| High-income average                    | 0.106        | -0.006  | 0.097                      | -0.006  | 0.078     | -0.005  | 0.106   | -0.006  |

Note: In shaded cells, elasticity is derived using actual budget shares as opposed to the predicted budget share from the Florida model.

Source: USDA, Economic Research Service calculations based on World Bank, 2005 International Comparison Program data.

**Cross-price elasticities with respect to change in education price, 144 countries in 2005**

| Country                     | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|-----------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                             | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries</b> |                              |         |                     |         |                              |         |                                   |         |
| Congo, Democratic Republic  | 0.023                        | -0.010  | 0.026               | -0.012  | 0.029                        | -0.013  | 0.029                             | -0.013  |
| Burundi                     | 0.022                        | -0.010  | 0.025               | -0.011  | 0.028                        | -0.013  | 0.027                             | -0.013  |
| Liberia                     | 0.022                        | -0.010  | 0.025               | -0.011  | 0.028                        | -0.013  | 0.027                             | -0.012  |
| Zimbabwe                    | 0.021                        | -0.010  | 0.025               | -0.011  | 0.028                        | -0.013  | 0.027                             | -0.012  |
| Ethiopia                    | 0.021                        | -0.010  | 0.024               | -0.011  | 0.027                        | -0.012  | 0.027                             | -0.012  |
| Niger                       | 0.021                        | -0.010  | 0.024               | -0.011  | 0.027                        | -0.012  | 0.027                             | -0.012  |
| Guinea-Bissau               | 0.021                        | -0.010  | 0.024               | -0.011  | 0.027                        | -0.012  | 0.027                             | -0.012  |
| Mozambique                  | 0.020                        | -0.009  | 0.024               | -0.011  | 0.027                        | -0.012  | 0.026                             | -0.012  |
| Malawi                      | 0.020                        | -0.009  | 0.024               | -0.011  | 0.027                        | -0.012  | 0.026                             | -0.012  |
| Rwanda                      | 0.020                        | -0.009  | 0.024               | -0.011  | 0.027                        | -0.012  | 0.026                             | -0.012  |
| Angola                      | 0.020                        | -0.009  | 0.024               | -0.011  | 0.026                        | -0.012  | 0.026                             | -0.012  |
| Chad                        | 0.020                        | -0.009  | 0.024               | -0.011  | 0.026                        | -0.012  | 0.026                             | -0.012  |
| Gambia, The                 | 0.020                        | -0.009  | 0.024               | -0.011  | 0.026                        | -0.012  | 0.026                             | -0.012  |
| Central African Republic    | 0.020                        | -0.009  | 0.024               | -0.011  | 0.026                        | -0.012  | 0.026                             | -0.012  |
| Mali                        | 0.020                        | -0.009  | 0.024               | -0.011  | 0.026                        | -0.012  | 0.026                             | -0.012  |
| Tanzania                    | 0.020                        | -0.009  | 0.024               | -0.011  | 0.026                        | -0.012  | 0.026                             | -0.012  |
| Sierra Leone                | 0.020                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.026                             | -0.012  |
| Guinea                      | 0.020                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.026                             | -0.012  |
| Burkina Faso                | 0.020                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.026                             | -0.012  |
| Uganda                      | 0.019                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.025                             | -0.012  |
| Madagascar                  | 0.019                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.025                             | -0.012  |
| Zambia                      | 0.019                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.025                             | -0.012  |
| Congo, Republic             | 0.019                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.025                             | -0.012  |
| Togo                        | 0.019                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.025                             | -0.012  |
| Nepal                       | 0.019                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.025                             | -0.012  |
| Ghana                       | 0.019                        | -0.009  | 0.023               | -0.011  | 0.026                        | -0.012  | 0.025                             | -0.012  |
| Benin                       | 0.019                        | -0.009  | 0.023               | -0.011  | 0.025                        | -0.012  | 0.025                             | -0.012  |
| Mauritania                  | 0.019                        | -0.009  | 0.023               | -0.011  | 0.025                        | -0.012  | 0.025                             | -0.012  |
| Bangladesh                  | 0.019                        | -0.009  | 0.023               | -0.011  | 0.025                        | -0.012  | 0.025                             | -0.012  |
| Côte d'Ivoire               | 0.019                        | -0.009  | 0.023               | -0.011  | 0.025                        | -0.012  | 0.025                             | -0.012  |
| Laos                        | 0.019                        | -0.009  | 0.023               | -0.011  | 0.025                        | -0.012  | 0.025                             | -0.012  |
| Kenya                       | 0.019                        | -0.009  | 0.023               | -0.011  | 0.025                        | -0.012  | 0.025                             | -0.011  |
| Djibouti                    | 0.019                        | -0.009  | 0.023               | -0.011  | 0.025                        | -0.012  | 0.025                             | -0.011  |
| Nigeria                     | 0.018                        | -0.009  | 0.023               | -0.011  | 0.025                        | -0.012  | 0.025                             | -0.011  |
| Senegal                     | 0.018                        | -0.009  | 0.023               | -0.011  | 0.025                        | -0.012  | 0.025                             | -0.011  |
| Cambodia                    | 0.018                        | -0.009  | 0.023               | -0.010  | 0.025                        | -0.012  | 0.025                             | -0.011  |
| Cameroon                    | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.012  | 0.024                             | -0.011  |
| São Tomé and Príncipe       | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.012  | 0.024                             | -0.011  |
| India                       | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.012  | 0.024                             | -0.011  |
| Yemen                       | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.012  | 0.024                             | -0.011  |
| Vietnam                     | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.012  | 0.024                             | -0.011  |
| Mongolia                    | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.012  | 0.024                             | -0.011  |

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**Cross-price elasticities with respect to change in education price, 144 countries in 2005—Continued**

| Country                               | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|---------------------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                                       | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Iraq                                  | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.012  | 0.024                             | -0.011  |
| Bhutan                                | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.011  | 0.024                             | -0.011  |
| China                                 | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.011  | 0.024                             | -0.011  |
| Sudan                                 | 0.018                        | -0.008  | 0.022               | -0.010  | 0.024                        | -0.011  | 0.024                             | -0.011  |
| Lesotho                               | 0.017                        | -0.008  | 0.022               | -0.010  | 0.024                        | -0.011  | 0.024                             | -0.011  |
| Tajikistan                            | 0.017                        | -0.008  | 0.022               | -0.010  | 0.024                        | -0.011  | 0.024                             | -0.011  |
| Maldives                              | 0.017                        | -0.008  | 0.022               | -0.010  | 0.024                        | -0.011  | 0.024                             | -0.011  |
| Morocco                               | 0.017                        | -0.008  | 0.022               | -0.010  | 0.024                        | -0.011  | 0.024                             | -0.011  |
| Pakistan                              | 0.017                        | -0.008  | 0.022               | -0.010  | 0.024                        | -0.011  | 0.024                             | -0.011  |
| Indonesia                             | 0.017                        | -0.008  | 0.022               | -0.010  | 0.024                        | -0.011  | 0.023                             | -0.011  |
| Kyrgyzstan                            | 0.017                        | -0.008  | 0.022               | -0.010  | 0.024                        | -0.011  | 0.023                             | -0.011  |
| Philippines                           | 0.017                        | -0.008  | 0.022               | -0.010  | 0.024                        | -0.011  | 0.023                             | -0.011  |
| Cape Verde                            | 0.017                        | -0.008  | 0.021               | -0.010  | 0.024                        | -0.011  | 0.023                             | -0.011  |
| Bolivia                               | 0.017                        | -0.008  | 0.021               | -0.010  | 0.024                        | -0.011  | 0.023                             | -0.011  |
| Namibia                               | 0.017                        | -0.008  | 0.021               | -0.010  | 0.024                        | -0.011  | 0.023                             | -0.011  |
| Sri Lanka                             | 0.017                        | -0.008  | 0.021               | -0.010  | 0.024                        | -0.011  | 0.023                             | -0.011  |
| Botswana                              | 0.016                        | -0.008  | 0.021               | -0.010  | 0.024                        | -0.011  | 0.023                             | -0.011  |
| Gabon                                 | 0.016                        | -0.008  | 0.021               | -0.010  | 0.024                        | -0.011  | 0.023                             | -0.011  |
| Azerbaijan                            | 0.016                        | -0.008  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Syria                                 | 0.016                        | -0.008  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Equatorial Guinea                     | 0.016                        | -0.008  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Paraguay                              | 0.016                        | -0.008  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Fiji                                  | 0.016                        | -0.008  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Swaziland                             | 0.016                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Moldova                               | 0.016                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Egypt                                 | 0.016                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Ecuador                               | 0.016                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Jordan                                | 0.016                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Georgia                               | 0.016                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.023                             | -0.011  |
| Thailand                              | 0.015                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.022                             | -0.011  |
| Colombia                              | 0.015                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.022                             | -0.011  |
| Albania                               | 0.015                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.022                             | -0.011  |
| Tunisia                               | 0.015                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.022                             | -0.011  |
| Peru                                  | 0.015                        | -0.007  | 0.021               | -0.010  | 0.023                        | -0.011  | 0.022                             | -0.011  |
| Armenia                               | 0.015                        | -0.007  | 0.020               | -0.010  | 0.023                        | -0.011  | 0.022                             | -0.011  |
| <b>Middle-income countries</b>        |                              |         |                     |         |                              |         |                                   |         |
| Venezuela                             | 0.015                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.011  |
| Malaysia                              | 0.015                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.011  |
| Ukraine                               | 0.015                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.011  |
| Brazil                                | 0.015                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.011  |
| Montenegro                            | 0.015                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.010  |

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**Cross-price elasticities with respect to change in education price, 144 countries in 2005—Continued**

| Country                                  | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Middle-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| South Africa                             | 0.015                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.010  |
| Macedonia                                | 0.014                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.010  |
| Turkey                                   | 0.014                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.010  |
| Bosnia and Herzegovina                   | 0.014                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.010  |
| Serbia                                   | 0.014                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.010  |
| Belarus                                  | 0.014                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.010  |
| Romania                                  | 0.014                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.011  | 0.022                             | -0.010  |
| Saudi Arabia                             | 0.014                        | -0.007  | 0.020               | -0.010  | 0.022                        | -0.010  | 0.022                             | -0.010  |
| Uruguay                                  | 0.014                        | -0.007  | 0.020               | -0.009  | 0.022                        | -0.010  | 0.022                             | -0.010  |
| Mauritius                                | 0.014                        | -0.007  | 0.020               | -0.009  | 0.022                        | -0.010  | 0.022                             | -0.010  |
| Chile                                    | 0.014                        | -0.007  | 0.020               | -0.009  | 0.022                        | -0.010  | 0.022                             | -0.010  |
| Kazakhstan                               | 0.014                        | -0.007  | 0.020               | -0.009  | 0.022                        | -0.010  | 0.021                             | -0.010  |
| Russia                                   | 0.014                        | -0.007  | 0.020               | -0.009  | 0.022                        | -0.010  | 0.021                             | -0.010  |
| Argentina                                | 0.014                        | -0.007  | 0.020               | -0.009  | 0.022                        | -0.010  | 0.021                             | -0.010  |
| Bulgaria                                 | 0.014                        | -0.007  | 0.020               | -0.009  | 0.022                        | -0.010  | 0.021                             | -0.010  |
| Oman                                     | 0.013                        | -0.006  | 0.020               | -0.009  | 0.022                        | -0.010  | 0.021                             | -0.010  |
| Iran                                     | 0.013                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Latvia                                   | 0.013                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Mexico                                   | 0.013                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Lebanon                                  | 0.013                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Poland                                   | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Croatia                                  | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Macao, China                             | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Lithuania                                | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Estonia                                  | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Brunei Darussalam                        | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Slovak Republic                          | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| Hungary                                  | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.021                             | -0.010  |
| South Korea                              | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.020                             | -0.010  |
| Bahrain                                  | 0.012                        | -0.006  | 0.019               | -0.009  | 0.021                        | -0.010  | 0.020                             | -0.010  |
| Czech Republic                           | 0.011                        | -0.005  | 0.019               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Slovenia                                 | 0.011                        | -0.005  | 0.019               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Israel                                   | 0.011                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| <b>High-income countries</b>             |                              |         |                     |         |                              |         |                                   |         |
| Portugal                                 | 0.011                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Qatar                                    | 0.011                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Singapore                                | 0.011                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Malta                                    | 0.010                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Kuwait                                   | 0.010                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| New Zealand                              | 0.010                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |

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**Cross-price elasticities with respect to change in education price, 144 countries in 2005—Continued**

| Country                                | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>High-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Finland                                | 0.010                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Taiwan, China                          | 0.010                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Spain                                  | 0.010                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Italy                                  | 0.010                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Ireland                                | 0.009                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.020                             | -0.010  |
| Denmark                                | 0.009                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.010  |
| Sweden                                 | 0.009                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.010  |
| Hong Kong, China                       | 0.009                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.010  |
| Australia                              | 0.009                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.010  |
| Cyprus                                 | 0.009                        | -0.004  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.010  |
| Belgium                                | 0.009                        | -0.004  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.010  |
| Japan                                  | 0.009                        | -0.004  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.010  |
| France                                 | 0.009                        | -0.004  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.010  |
| Germany                                | 0.009                        | -0.004  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.009  |
| Canada                                 | 0.009                        | -0.004  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.009  |
| Iceland                                | 0.009                        | -0.004  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.009  |
| Netherlands                            | 0.009                        | -0.004  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.009  |
| Norway                                 | 0.009                        | -0.004  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.009  |
| United Kingdom                         | 0.008                        | -0.004  | 0.018               | -0.009  | 0.019                        | -0.010  | 0.019                             | -0.009  |
| Switzerland                            | 0.008                        | -0.004  | 0.018               | -0.009  | 0.019                        | -0.010  | 0.019                             | -0.009  |
| Austria                                | 0.008                        | -0.004  | 0.018               | -0.009  | 0.019                        | -0.010  | 0.019                             | -0.009  |
| Luxembourg                             | 0.007                        | -0.003  | 0.017               | -0.009  | 0.019                        | -0.009  | 0.019                             | -0.009  |
| United States                          | 0.006                        | -0.003  | 0.017               | -0.009  | 0.019                        | -0.009  | 0.019                             | -0.009  |
| Low-income average                     | 0.018                        | -0.008  | 0.022               | -0.010  | 0.025                        | -0.012  | 0.024                             | -0.011  |
| Middle-income average                  | 0.013                        | -0.006  | 0.019               | -0.009  | 0.022                        | -0.010  | 0.021                             | -0.010  |
| High-income average                    | 0.009                        | -0.005  | 0.018               | -0.009  | 0.020                        | -0.010  | 0.019                             | -0.010  |

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**Cross-price elasticities with respect to change in education price, 144 countries in 2005—Continued**

| Country                     | Medical care |         | Transport & communications |         | Recreation |         | Other   |         |
|-----------------------------|--------------|---------|----------------------------|---------|------------|---------|---------|---------|
|                             | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky | Cournot |
| <b>Low-income countries</b> |              |         |                            |         |            |         |         |         |
| Congo, Democratic Republic  | 0.043        | -0.019  | 0.037                      | -0.017  | 0.105      | -0.047  | 0.058   | -0.026  |
| Burundi                     | 0.041        | -3.301  | 0.034                      | -0.015  | 0.048      | -0.022  | 0.043   | -0.019  |
| Liberia                     | 0.222        | -0.101  | 0.033                      | -0.015  | 0.065      | -0.030  | 0.290   | -0.132  |
| Zimbabwe                    | 0.109        | -0.050  | 0.033                      | -0.015  | 0.052      | -0.024  | 0.119   | -0.055  |
| Ethiopia                    | 0.083        | -0.038  | 0.032                      | -0.015  | 0.136      | -0.062  | 0.087   | -0.040  |
| Niger                       | 0.081        | -0.037  | 0.032                      | -0.015  | 0.037      | -0.017  | 0.086   | -0.039  |
| Guinea-Bissau               | 0.080        | -0.037  | 0.032                      | -0.015  | 0.042      | -0.019  | 0.084   | -0.039  |
| Mozambique                  | 0.066        | -0.030  | 0.031                      | -0.014  | 0.054      | 0.242   | 0.069   | -0.032  |
| Malawi                      | 0.060        | -0.028  | 0.031                      | -0.014  | 0.033      | 0.591   | 0.062   | -0.028  |
| Rwanda                      | 0.058        | -0.027  | 0.031                      | -0.014  | 0.076      | 1.511   | 0.060   | -0.027  |
| Angola                      | 0.053        | -0.025  | 0.030                      | -0.014  | 0.320      | -0.147  | 0.055   | -0.025  |
| Chad                        | 0.053        | -0.024  | 0.030                      | -0.014  | 0.271      | -0.125  | 0.054   | -0.025  |
| Gambia, The                 | 0.052        | -0.024  | 0.030                      | -0.014  | 0.229      | -0.106  | 0.053   | -0.025  |
| Central African Republic    | 0.052        | -0.024  | 0.030                      | -0.014  | 0.213      | -0.098  | 0.053   | -0.024  |
| Mali                        | 0.052        | -0.024  | 0.030                      | -0.014  | 0.210      | -0.097  | 0.053   | -0.024  |
| Tanzania                    | 0.051        | -0.023  | 0.030                      | -0.014  | 0.183      | -0.085  | 0.052   | -0.024  |
| Sierra Leone                | 0.049        | -0.023  | 0.030                      | -0.014  | 0.142      | -0.065  | 0.050   | -0.023  |
| Guinea                      | 0.049        | -0.023  | 0.030                      | -0.014  | 0.136      | -0.063  | 0.050   | -0.023  |
| Burkina Faso                | 0.048        | -0.022  | 0.030                      | -0.014  | 0.121      | -0.056  | 0.049   | -0.023  |
| Uganda                      | 0.046        | -0.021  | 0.030                      | -0.014  | 0.097      | -0.045  | 0.047   | -0.022  |
| Madagascar                  | 0.046        | -0.021  | 0.030                      | -0.014  | 0.097      | -0.045  | 0.047   | -0.022  |
| Zambia                      | 0.046        | -0.021  | 0.030                      | -0.014  | 0.095      | -0.044  | 0.047   | -0.022  |
| Congo, Republic             | 0.045        | -0.021  | 0.029                      | -0.014  | 0.090      | -0.041  | 0.046   | -0.021  |
| Togo                        | 0.045        | -0.021  | 0.029                      | -0.014  | 0.086      | -0.040  | 0.045   | -0.021  |
| Nepal                       | 0.043        | -0.020  | 0.029                      | -0.014  | 0.076      | -0.035  | 0.044   | -0.020  |
| Ghana                       | 0.043        | -0.020  | 0.029                      | -0.013  | 0.072      | -0.033  | 0.043   | -0.020  |
| Benin                       | 0.042        | -0.019  | 0.029                      | -0.013  | 0.067      | -0.031  | 0.042   | -0.020  |
| Mauritania                  | 0.042        | -0.019  | 0.029                      | -0.013  | 0.066      | -0.031  | 0.042   | -0.019  |
| Bangladesh                  | 0.041        | -0.019  | 0.029                      | -0.013  | 0.064      | -0.030  | 0.041   | -0.019  |
| Côte d'Ivoire               | 0.041        | -0.019  | 0.029                      | -0.013  | 0.063      | -0.029  | 0.041   | -0.019  |
| Laos                        | 0.041        | -0.019  | 0.029                      | -0.013  | 0.063      | -0.029  | 0.041   | -0.019  |
| Kenya                       | 0.040        | -0.018  | 0.028                      | -0.013  | 0.058      | -0.027  | 0.040   | -0.019  |
| Djibouti                    | 0.040        | -0.018  | 0.028                      | -0.013  | 0.057      | -0.027  | 0.040   | -0.019  |
| Nigeria                     | 0.039        | -0.018  | 0.028                      | -0.013  | 0.056      | -0.026  | 0.040   | -0.018  |
| Senegal                     | 0.039        | -0.018  | 0.028                      | -0.013  | 0.056      | -0.026  | 0.040   | -0.018  |
| Cambodia                    | 0.038        | -0.018  | 0.028                      | -0.013  | 0.053      | -0.025  | 0.039   | -0.018  |
| Cameroon                    | 0.038        | -0.018  | 0.028                      | -0.013  | 0.051      | -0.024  | 0.038   | -0.018  |
| São Tomé and Príncipe       | 0.038        | -0.017  | 0.028                      | -0.013  | 0.050      | -0.024  | 0.038   | -0.018  |
| India                       | 0.037        | -0.017  | 0.028                      | -0.013  | 0.049      | -0.023  | 0.037   | -0.017  |
| Yemen                       | 0.037        | -0.017  | 0.028                      | -0.013  | 0.049      | -0.023  | 0.037   | -0.017  |
| Vietnam                     | 0.037        | -0.017  | 0.028                      | -0.013  | 0.049      | -0.023  | 0.037   | -0.017  |
| Mongolia                    | 0.037        | -0.017  | 0.028                      | -0.013  | 0.048      | -0.023  | 0.037   | -0.017  |

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**Cross-price elasticities with respect to change in education price, 144 countries in 2005—Continued**

| Country                               | Medical care |         | Transport & communications |         | Recreation |         | Other   |         |
|---------------------------------------|--------------|---------|----------------------------|---------|------------|---------|---------|---------|
|                                       | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky | Cournot |
| <b>Low-income countries—continued</b> |              |         |                            |         |            |         |         |         |
| Iraq                                  | 0.036        | -0.017  | 0.028                      | -0.013  | 0.047      | -0.022  | 0.037   | -0.017  |
| Bhutan                                | 0.036        | -0.017  | 0.027                      | -0.013  | 0.046      | -0.022  | 0.036   | -0.017  |
| China                                 | 0.036        | -0.017  | 0.027                      | -0.013  | 0.045      | -0.021  | 0.036   | -0.017  |
| Sudan                                 | 0.035        | -0.016  | 0.027                      | -0.013  | 0.043      | -0.020  | 0.035   | -0.016  |
| Lesotho                               | 0.035        | -0.016  | 0.027                      | -0.013  | 0.042      | -0.020  | 0.035   | -0.016  |
| Tajikistan                            | 0.034        | -0.016  | 0.027                      | -0.013  | 0.042      | -0.020  | 0.035   | -0.016  |
| Maldives                              | 0.034        | -0.016  | 0.027                      | -0.013  | 0.040      | -0.019  | 0.034   | -0.016  |
| Morocco                               | 0.033        | -0.016  | 0.027                      | -0.013  | 0.040      | -0.019  | 0.034   | -0.016  |
| Pakistan                              | 0.033        | -0.016  | 0.027                      | -0.012  | 0.040      | -0.019  | 0.033   | -0.016  |
| Indonesia                             | 0.033        | -0.015  | 0.026                      | -0.012  | 0.039      | -0.018  | 0.033   | -0.016  |
| Kyrgyzstan                            | 0.033        | -0.015  | 0.026                      | -0.012  | 0.039      | -0.018  | 0.033   | -0.016  |
| Philippines                           | 0.033        | -0.015  | 0.026                      | -0.012  | 0.039      | -0.018  | 0.033   | -0.015  |
| Cape Verde                            | 0.033        | -0.015  | 0.026                      | -0.012  | 0.038      | -0.018  | 0.033   | -0.015  |
| Bolivia                               | 0.033        | -0.015  | 0.026                      | -0.012  | 0.038      | -0.018  | 0.033   | -0.015  |
| Namibia                               | 0.032        | -0.015  | 0.026                      | -0.012  | 0.037      | -0.018  | 0.032   | -0.015  |
| Sri Lanka                             | 0.032        | -0.015  | 0.026                      | -0.012  | 0.037      | -0.017  | 0.032   | -0.015  |
| Botswana                              | 0.032        | -0.015  | 0.026                      | -0.012  | 0.037      | -0.017  | 0.032   | -0.015  |
| Gabon                                 | 0.032        | -0.015  | 0.026                      | -0.012  | 0.036      | -0.017  | 0.032   | -0.015  |
| Azerbaijan                            | 0.032        | -0.015  | 0.026                      | -0.012  | 0.036      | -0.017  | 0.032   | -0.015  |
| Syria                                 | 0.031        | -0.015  | 0.026                      | -0.012  | 0.036      | -0.017  | 0.032   | -0.015  |
| Equatorial Guinea                     | 0.031        | -0.015  | 0.026                      | -0.012  | 0.035      | -0.017  | 0.031   | -0.015  |
| Paraguay                              | 0.031        | -0.015  | 0.026                      | -0.012  | 0.035      | -0.016  | 0.031   | -0.015  |
| Fiji                                  | 0.030        | -0.014  | 0.025                      | -0.012  | 0.034      | -0.016  | 0.031   | -0.014  |
| Swaziland                             | 0.030        | -0.014  | 0.025                      | -0.012  | 0.034      | -0.016  | 0.030   | -0.014  |
| Moldova                               | 0.030        | -0.014  | 0.025                      | -0.012  | 0.034      | -0.016  | 0.030   | -0.014  |
| Egypt                                 | 0.030        | -0.014  | 0.025                      | -0.012  | 0.034      | -0.016  | 0.030   | -0.014  |
| Ecuador                               | 0.030        | -0.014  | 0.025                      | -0.012  | 0.033      | -0.016  | 0.030   | -0.014  |
| Jordan                                | 0.030        | -0.014  | 0.025                      | -0.012  | 0.033      | -0.016  | 0.030   | -0.014  |
| Georgia                               | 0.030        | -0.014  | 0.025                      | -0.012  | 0.033      | -0.016  | 0.030   | -0.014  |
| Thailand                              | 0.030        | -0.014  | 0.025                      | -0.012  | 0.033      | -0.016  | 0.030   | -0.014  |
| Colombia                              | 0.029        | -0.014  | 0.025                      | -0.012  | 0.033      | -0.016  | 0.030   | -0.014  |
| Albania                               | 0.029        | -0.014  | 0.025                      | -0.012  | 0.033      | -0.015  | 0.029   | -0.014  |
| Tunisia                               | 0.029        | -0.014  | 0.025                      | -0.012  | 0.032      | -0.015  | 0.029   | -0.014  |
| Peru                                  | 0.029        | -0.014  | 0.025                      | -0.012  | 0.032      | -0.015  | 0.029   | -0.014  |
| Armenia                               | 0.029        | -0.014  | 0.025                      | -0.012  | 0.032      | -0.015  | 0.029   | -0.014  |
| <b>Middle-income countries</b>        |              |         |                            |         |            |         |         |         |
| Venezuela                             | 0.029        | -0.014  | 0.025                      | -0.012  | 0.031      | -0.015  | 0.029   | -0.014  |
| Malaysia                              | 0.029        | -0.014  | 0.025                      | -0.012  | 0.031      | -0.015  | 0.029   | -0.014  |
| Ukraine                               | 0.028        | -0.014  | 0.024                      | -0.012  | 0.031      | -0.015  | 0.029   | -0.014  |
| Brazil                                | 0.028        | -0.013  | 0.024                      | -0.012  | 0.031      | -0.015  | 0.028   | -0.014  |
| Montenegro                            | 0.028        | -0.013  | 0.024                      | -0.012  | 0.031      | -0.015  | 0.028   | -0.014  |

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**Cross-price elasticities with respect to change in education price, 144 countries in 2005—Continued**

| Country                                  | Medical care |         | Transport & communications |         | Recreation |         | Other   |         |
|--|--------------|---------|----------------------------|---------|------------|---------|---------|---------|
|  | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky | Cournot |
| <b>Middle-income countries—continued</b> |              |         |                            |         |            |         |         |         |
| South Africa                             | 0.028        | -0.013  | 0.024                      | -0.012  | 0.031      | -0.015  | 0.028   | -0.013  |
| Macedonia                                | 0.028        | -0.013  | 0.024                      | -0.012  | 0.030      | -0.014  | 0.028   | -0.013  |
| Turkey                                   | 0.028        | -0.013  | 0.024                      | -0.011  | 0.030      | -0.014  | 0.028   | -0.013  |
| Bosnia and Herzegovina                   | 0.027        | -0.013  | 0.024                      | -0.011  | 0.030      | -0.014  | 0.027   | -0.013  |
| Serbia                                   | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Belarus                                  | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Romania                                  | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Saudi Arabia                             | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Uruguay                                  | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Mauritius                                | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Chile                                    | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Kazakhstan                               | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Russia                                   | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Argentina                                | 0.027        | -0.013  | 0.024                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Bulgaria                                 | 0.027        | -0.013  | 0.023                      | -0.011  | 0.029      | -0.014  | 0.027   | -0.013  |
| Oman                                     | 0.026        | -0.013  | 0.023                      | -0.011  | 0.028      | -0.014  | 0.027   | -0.013  |
| Iran                                     | 0.026        | -0.013  | 0.023                      | -0.011  | 0.028      | -0.013  | 0.026   | -0.013  |
| Latvia                                   | 0.026        | -0.013  | 0.023                      | -0.011  | 0.028      | -0.013  | 0.026   | -0.013  |
| Mexico                                   | 0.026        | -0.012  | 0.023                      | -0.011  | 0.028      | -0.013  | 0.026   | -0.012  |
| Lebanon                                  | 0.026        | -0.012  | 0.023                      | -0.011  | 0.027      | -0.013  | 0.026   | -0.012  |
| Poland                                   | 0.025        | -0.012  | 0.023                      | -0.011  | 0.027      | -0.013  | 0.025   | -0.012  |
| Croatia                                  | 0.025        | -0.012  | 0.023                      | -0.011  | 0.027      | -0.013  | 0.025   | -0.012  |
| Macao, China                             | 0.025        | -0.012  | 0.023                      | -0.011  | 0.027      | -0.013  | 0.025   | -0.012  |
| Lithuania                                | 0.025        | -0.012  | 0.023                      | -0.011  | 0.027      | -0.013  | 0.025   | -0.012  |
| Estonia                                  | 0.025        | -0.012  | 0.023                      | -0.011  | 0.027      | -0.013  | 0.025   | -0.012  |
| Brunei Darussalam                        | 0.025        | -0.012  | 0.022                      | -0.011  | 0.026      | -0.013  | 0.025   | -0.012  |
| Slovak Republic                          | 0.025        | -0.012  | 0.022                      | -0.011  | 0.026      | -0.013  | 0.025   | -0.012  |
| Hungary                                  | 0.025        | -0.012  | 0.022                      | -0.011  | 0.026      | -0.013  | 0.025   | -0.012  |
| South Korea                              | 0.025        | -0.012  | 0.022                      | -0.011  | 0.026      | -0.013  | 0.025   | -0.012  |
| Bahrain                                  | 0.025        | -0.012  | 0.022                      | -0.011  | 0.026      | -0.013  | 0.025   | -0.012  |
| Czech Republic                           | 0.024        | -0.012  | 0.022                      | -0.011  | 0.026      | -0.012  | 0.024   | -0.012  |
| Slovenia                                 | 0.024        | -0.012  | 0.022                      | -0.011  | 0.025      | -0.012  | 0.024   | -0.012  |
| Israel                                   | 0.024        | -0.012  | 0.022                      | -0.011  | 0.025      | -0.012  | 0.024   | -0.012  |
| <b>High-income countries</b>             |              |         |                            |         |            |         |         |         |
| Portugal                                 | 0.024        | -0.012  | 0.022                      | -0.011  | 0.025      | -0.012  | 0.024   | -0.012  |
| Qatar                                    | 0.024        | -0.012  | 0.022                      | -0.011  | 0.025      | -0.012  | 0.024   | -0.012  |
| Singapore                                | 0.024        | -0.012  | 0.022                      | -0.011  | 0.025      | -0.012  | 0.024   | -0.012  |
| Malta                                    | 0.024        | -0.012  | 0.022                      | -0.011  | 0.025      | -0.012  | 0.024   | -0.012  |
| Kuwait                                   | 0.024        | -0.012  | 0.022                      | -0.011  | 0.025      | -0.012  | 0.024   | -0.012  |
| New Zealand                              | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |

—continued

**Cross-price elasticities with respect to change in education price, 144 countries in 2005—Continued**

| Country                                | Medical care |         | Transport & communications |         | Recreation |         | Other   |         |
|--|--------------|---------|----------------------------|---------|------------|---------|---------|---------|
|  | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky | Cournot |
| <b>High-income countries—continued</b> |              |         |                            |         |            |         |         |         |
| Finland                                | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Taiwan, China                          | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Spain                                  | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Italy                                  | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Ireland                                | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Denmark                                | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Sweden                                 | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Hong Kong, China                       | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Australia                              | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Cyprus                                 | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Belgium                                | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Japan                                  | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| France                                 | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Germany                                | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Canada                                 | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Iceland                                | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Netherlands                            | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| Norway                                 | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |
| United Kingdom                         | 0.023        | -0.011  | 0.021                      | -0.010  | 0.023      | -0.012  | 0.023   | -0.011  |
| Switzerland                            | 0.022        | -0.011  | 0.021                      | -0.010  | 0.023      | -0.012  | 0.023   | -0.011  |
| Austria                                | 0.022        | -0.011  | 0.021                      | -0.010  | 0.023      | -0.011  | 0.022   | -0.011  |
| Luxembourg                             | 0.022        | -0.011  | 0.020                      | -0.010  | 0.023      | -0.011  | 0.022   | -0.011  |
| United States                          | 0.022        | -0.011  | 0.020                      | -0.010  | 0.022      | -0.011  | 0.022   | -0.011  |
| Low-income average                     | 0.044        | -0.063  | 0.028                      | -0.013  | 0.069      | 0.000   | 0.045   | -0.021  |
| Middle-income average                  | 0.026        | -0.013  | 0.023                      | -0.011  | 0.028      | -0.014  | 0.026   | -0.013  |
| High-income average                    | 0.023        | -0.011  | 0.021                      | -0.010  | 0.024      | -0.012  | 0.023   | -0.011  |

Note: In shaded cells, elasticity is derived using actual budget shares as opposed to the predicted budget share from the Florida model.

Source: USDA, Economic Research Service calculations based on World Bank, 2005 International Comparison Program data.

**Cross-price elasticities with respect to change in other price, 144 countries in 2005**

| Country                     | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|-----------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                             | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries</b> |                              |         |                     |         |                              |         |                                   |         |
| Congo, Democratic Republic  | 0.035                        | 0.013   | 0.040               | 0.015   | 0.045                        | 0.017   | 0.044                             | 0.016   |
| Burundi                     | 0.048                        | 0.008   | 0.055               | 0.009   | 0.062                        | 0.010   | 0.060                             | 0.010   |
| Liberia                     | 0.020                        | 0.018   | 0.024               | 0.021   | 0.026                        | 0.023   | 0.026                             | 0.023   |
| Zimbabwe                    | 0.023                        | 0.017   | 0.027               | 0.019   | 0.031                        | 0.022   | 0.030                             | 0.021   |
| Ethiopia                    | 0.026                        | 0.016   | 0.030               | 0.018   | 0.034                        | 0.020   | 0.033                             | 0.020   |
| Niger                       | 0.026                        | 0.016   | 0.030               | 0.018   | 0.034                        | 0.020   | 0.033                             | 0.020   |
| Guinea-Bissau               | 0.026                        | 0.016   | 0.031               | 0.018   | 0.034                        | 0.020   | 0.034                             | 0.020   |
| Mozambique                  | 0.029                        | 0.015   | 0.034               | 0.017   | 0.038                        | 0.019   | 0.037                             | 0.019   |
| Malawi                      | 0.030                        | 0.014   | 0.036               | 0.016   | 0.040                        | 0.018   | 0.039                             | 0.018   |
| Rwanda                      | 0.031                        | 0.014   | 0.037               | 0.016   | 0.041                        | 0.018   | 0.040                             | 0.017   |
| Angola                      | 0.033                        | 0.013   | 0.039               | 0.015   | 0.043                        | 0.017   | 0.043                             | 0.017   |
| Chad                        | 0.033                        | 0.013   | 0.039               | 0.015   | 0.044                        | 0.017   | 0.043                             | 0.016   |
| Gambia, The                 | 0.033                        | 0.012   | 0.040               | 0.015   | 0.044                        | 0.017   | 0.043                             | 0.016   |
| Central African Republic    | 0.034                        | 0.012   | 0.040               | 0.015   | 0.045                        | 0.016   | 0.044                             | 0.016   |
| Mali                        | 0.034                        | 0.012   | 0.040               | 0.015   | 0.045                        | 0.016   | 0.044                             | 0.016   |
| Tanzania                    | 0.034                        | 0.012   | 0.040               | 0.015   | 0.045                        | 0.016   | 0.044                             | 0.016   |
| Sierra Leone                | 0.035                        | 0.012   | 0.042               | 0.014   | 0.046                        | 0.016   | 0.045                             | 0.015   |
| Guinea                      | 0.035                        | 0.012   | 0.042               | 0.014   | 0.047                        | 0.016   | 0.046                             | 0.015   |
| Burkina Faso                | 0.036                        | 0.012   | 0.043               | 0.014   | 0.047                        | 0.015   | 0.046                             | 0.015   |
| Uganda                      | 0.037                        | 0.011   | 0.044               | 0.013   | 0.049                        | 0.015   | 0.048                             | 0.014   |
| Madagascar                  | 0.037                        | 0.011   | 0.044               | 0.013   | 0.049                        | 0.015   | 0.048                             | 0.014   |
| Zambia                      | 0.037                        | 0.011   | 0.044               | 0.013   | 0.049                        | 0.015   | 0.048                             | 0.014   |
| Congo, Republic             | 0.037                        | 0.011   | 0.045               | 0.013   | 0.050                        | 0.014   | 0.049                             | 0.014   |
| Togo                        | 0.038                        | 0.011   | 0.045               | 0.013   | 0.051                        | 0.014   | 0.050                             | 0.014   |
| Nepal                       | 0.039                        | 0.010   | 0.047               | 0.012   | 0.052                        | 0.014   | 0.051                             | 0.013   |
| Ghana                       | 0.039                        | 0.010   | 0.048               | 0.012   | 0.053                        | 0.013   | 0.052                             | 0.013   |
| Benin                       | 0.040                        | 0.009   | 0.049               | 0.012   | 0.054                        | 0.013   | 0.053                             | 0.013   |
| Mauritania                  | 0.041                        | 0.009   | 0.049               | 0.011   | 0.055                        | 0.013   | 0.054                             | 0.012   |
| Bangladesh                  | 0.041                        | 0.009   | 0.050               | 0.011   | 0.055                        | 0.012   | 0.054                             | 0.012   |
| Côte d'Ivoire               | 0.041                        | 0.009   | 0.050               | 0.011   | 0.056                        | 0.012   | 0.055                             | 0.012   |
| Laos                        | 0.041                        | 0.009   | 0.050               | 0.011   | 0.056                        | 0.012   | 0.055                             | 0.012   |
| Kenya                       | 0.042                        | 0.009   | 0.052               | 0.010   | 0.058                        | 0.012   | 0.057                             | 0.011   |
| Djibouti                    | 0.042                        | 0.009   | 0.052               | 0.010   | 0.058                        | 0.012   | 0.057                             | 0.011   |
| Nigeria                     | 0.043                        | 0.008   | 0.052               | 0.010   | 0.058                        | 0.011   | 0.057                             | 0.011   |
| Senegal                     | 0.043                        | 0.008   | 0.052               | 0.010   | 0.058                        | 0.011   | 0.057                             | 0.011   |
| Cambodia                    | 0.044                        | 0.008   | 0.054               | 0.010   | 0.060                        | 0.011   | 0.059                             | 0.011   |
| Cameroon                    | 0.045                        | 0.008   | 0.055               | 0.009   | 0.061                        | 0.010   | 0.060                             | 0.010   |
| São Tomé and Príncipe       | 0.045                        | 0.007   | 0.055               | 0.009   | 0.061                        | 0.010   | 0.060                             | 0.010   |
| India                       | 0.045                        | 0.007   | 0.056               | 0.009   | 0.062                        | 0.010   | 0.061                             | 0.010   |
| Yemen                       | 0.046                        | 0.007   | 0.056               | 0.009   | 0.063                        | 0.010   | 0.061                             | 0.010   |
| Vietnam                     | 0.046                        | 0.007   | 0.056               | 0.009   | 0.063                        | 0.010   | 0.062                             | 0.010   |
| Mongolia                    | 0.046                        | 0.007   | 0.057               | 0.009   | 0.063                        | 0.010   | 0.062                             | 0.009   |

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**Cross-price elasticities with respect to change in other price, 144 countries in 2005—Continued**

| Country                               | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|---------------------------------------|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|                                       | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Low-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Iraq                                  | 0.046                        | 0.007   | 0.058               | 0.008   | 0.064                        | 0.009   | 0.063                             | 0.009   |
| Bhutan                                | 0.047                        | 0.007   | 0.058               | 0.008   | 0.065                        | 0.009   | 0.064                             | 0.009   |
| China                                 | 0.047                        | 0.006   | 0.059               | 0.008   | 0.065                        | 0.009   | 0.064                             | 0.009   |
| Sudan                                 | 0.048                        | 0.006   | 0.061               | 0.007   | 0.067                        | 0.008   | 0.066                             | 0.008   |
| Lesotho                               | 0.049                        | 0.005   | 0.062               | 0.007   | 0.068                        | 0.008   | 0.067                             | 0.008   |
| Tajikistan                            | 0.049                        | 0.005   | 0.062               | 0.007   | 0.068                        | 0.008   | 0.067                             | 0.007   |
| Maldives                              | 0.051                        | 0.005   | 0.064               | 0.006   | 0.071                        | 0.007   | 0.070                             | 0.007   |
| Morocco                               | 0.051                        | 0.005   | 0.064               | 0.006   | 0.071                        | 0.007   | 0.070                             | 0.006   |
| Pakistan                              | 0.051                        | 0.004   | 0.065               | 0.006   | 0.072                        | 0.006   | 0.071                             | 0.006   |
| Indonesia                             | 0.052                        | 0.004   | 0.066               | 0.005   | 0.073                        | 0.006   | 0.072                             | 0.006   |
| Kyrgyzstan                            | 0.052                        | 0.004   | 0.066               | 0.005   | 0.073                        | 0.006   | 0.072                             | 0.006   |
| Philippines                           | 0.052                        | 0.004   | 0.066               | 0.005   | 0.074                        | 0.006   | 0.072                             | 0.006   |
| Cape Verde                            | 0.052                        | 0.004   | 0.067               | 0.005   | 0.074                        | 0.006   | 0.072                             | 0.006   |
| Bolivia                               | 0.052                        | 0.004   | 0.067               | 0.005   | 0.074                        | 0.006   | 0.073                             | 0.006   |
| Namibia                               | 0.053                        | 0.004   | 0.068               | 0.005   | 0.075                        | 0.005   | 0.074                             | 0.005   |
| Sri Lanka                             | 0.053                        | 0.003   | 0.069               | 0.004   | 0.076                        | 0.005   | 0.075                             | 0.005   |
| Botswana                              | 0.054                        | 0.003   | 0.069               | 0.004   | 0.077                        | 0.005   | 0.075                             | 0.005   |
| Gabon                                 | 0.054                        | 0.003   | 0.070               | 0.004   | 0.077                        | 0.004   | 0.076                             | 0.004   |
| Azerbaijan                            | 0.054                        | 0.003   | 0.070               | 0.004   | 0.078                        | 0.004   | 0.076                             | 0.004   |
| Syria                                 | 0.054                        | 0.003   | 0.070               | 0.004   | 0.078                        | 0.004   | 0.077                             | 0.004   |
| Equatorial Guinea                     | 0.055                        | 0.002   | 0.072               | 0.003   | 0.080                        | 0.003   | 0.079                             | 0.003   |
| Paraguay                              | 0.056                        | 0.002   | 0.073               | 0.003   | 0.081                        | 0.003   | 0.079                             | 0.003   |
| Fiji                                  | 0.056                        | 0.002   | 0.073               | 0.003   | 0.081                        | 0.003   | 0.080                             | 0.003   |
| Swaziland                             | 0.056                        | 0.002   | 0.074               | 0.002   | 0.082                        | 0.003   | 0.081                             | 0.002   |
| Moldova                               | 0.057                        | 0.002   | 0.075               | 0.002   | 0.083                        | 0.002   | 0.081                             | 0.002   |
| Egypt                                 | 0.057                        | 0.001   | 0.075               | 0.002   | 0.083                        | 0.002   | 0.082                             | 0.002   |
| Ecuador                               | 0.057                        | 0.001   | 0.076               | 0.002   | 0.084                        | 0.002   | 0.083                             | 0.002   |
| Jordan                                | 0.057                        | 0.001   | 0.076               | 0.001   | 0.085                        | 0.002   | 0.083                             | 0.002   |
| Georgia                               | 0.058                        | 0.001   | 0.077               | 0.001   | 0.085                        | 0.002   | 0.083                             | 0.002   |
| Thailand                              | 0.058                        | 0.001   | 0.077               | 0.001   | 0.085                        | 0.001   | 0.084                             | 0.001   |
| Colombia                              | 0.058                        | 0.001   | 0.077               | 0.001   | 0.086                        | 0.001   | 0.084                             | 0.001   |
| Albania                               | 0.058                        | 0.001   | 0.078               | 0.001   | 0.086                        | 0.001   | 0.085                             | 0.001   |
| Tunisia                               | 0.058                        | 0.001   | 0.078               | 0.001   | 0.087                        | 0.001   | 0.085                             | 0.001   |
| Peru                                  | 0.059                        | 0.000   | 0.079               | 0.001   | 0.087                        | 0.001   | 0.086                             | 0.001   |
| Armenia                               | 0.059                        | 0.000   | 0.080               | 0.000   | 0.088                        | 0.000   | 0.087                             | 0.000   |
| <b>Middle-income countries</b>        |                              |         |                     |         |                              |         |                                   |         |
| Venezuela                             | 0.059                        | 0.000   | 0.081               | 0.000   | 0.090                        | 0.000   | 0.088                             | 0.000   |
| Malaysia                              | 0.059                        | 0.000   | 0.081               | 0.000   | 0.090                        | 0.000   | 0.088                             | 0.000   |
| Ukraine                               | 0.060                        | 0.000   | 0.082               | 0.000   | 0.090                        | 0.000   | 0.089                             | 0.000   |
| Brazil                                | 0.060                        | 0.000   | 0.082               | -0.001  | 0.091                        | -0.001  | 0.089                             | -0.001  |
| Montenegro                            | 0.060                        | 0.000   | 0.082               | -0.001  | 0.091                        | -0.001  | 0.090                             | -0.001  |

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**Cross-price elasticities with respect to change in other price, 144 countries in 2005—Continued**

| Country                                  | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>Middle-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| South Africa                             | 0.060                        | -0.001  | 0.083               | -0.001  | 0.092                        | -0.001  | 0.091                             | -0.001  |
| Macedonia                                | 0.061                        | -0.001  | 0.085               | -0.002  | 0.094                        | -0.002  | 0.092                             | -0.002  |
| Turkey                                   | 0.061                        | -0.001  | 0.085               | -0.002  | 0.094                        | -0.002  | 0.093                             | -0.002  |
| Bosnia and Herzegovina                   | 0.061                        | -0.001  | 0.086               | -0.002  | 0.095                        | -0.002  | 0.094                             | -0.002  |
| Serbia                                   | 0.061                        | -0.002  | 0.087               | -0.002  | 0.096                        | -0.002  | 0.094                             | -0.002  |
| Belarus                                  | 0.061                        | -0.002  | 0.087               | -0.002  | 0.096                        | -0.002  | 0.094                             | -0.002  |
| Romania                                  | 0.061                        | -0.002  | 0.087               | -0.002  | 0.096                        | -0.003  | 0.095                             | -0.003  |
| Saudi Arabia                             | 0.062                        | -0.002  | 0.087               | -0.002  | 0.096                        | -0.003  | 0.095                             | -0.003  |
| Uruguay                                  | 0.062                        | -0.002  | 0.088               | -0.003  | 0.097                        | -0.003  | 0.095                             | -0.003  |
| Mauritius                                | 0.062                        | -0.002  | 0.088               | -0.003  | 0.097                        | -0.003  | 0.095                             | -0.003  |
| Chile                                    | 0.062                        | -0.002  | 0.088               | -0.003  | 0.097                        | -0.003  | 0.095                             | -0.003  |
| Kazakhstan                               | 0.062                        | -0.002  | 0.088               | -0.003  | 0.098                        | -0.003  | 0.096                             | -0.003  |
| Russia                                   | 0.062                        | -0.002  | 0.089               | -0.003  | 0.098                        | -0.003  | 0.097                             | -0.003  |
| Argentina                                | 0.062                        | -0.002  | 0.090               | -0.003  | 0.099                        | -0.004  | 0.097                             | -0.004  |
| Bulgaria                                 | 0.062                        | -0.002  | 0.090               | -0.003  | 0.099                        | -0.004  | 0.098                             | -0.004  |
| Oman                                     | 0.062                        | -0.003  | 0.091               | -0.004  | 0.100                        | -0.004  | 0.099                             | -0.004  |
| Iran                                     | 0.063                        | -0.003  | 0.092               | -0.004  | 0.102                        | -0.005  | 0.100                             | -0.005  |
| Latvia                                   | 0.063                        | -0.003  | 0.094               | -0.005  | 0.103                        | -0.005  | 0.102                             | -0.005  |
| Mexico                                   | 0.063                        | -0.003  | 0.094               | -0.005  | 0.104                        | -0.005  | 0.102                             | -0.005  |
| Lebanon                                  | 0.063                        | -0.003  | 0.095               | -0.005  | 0.104                        | -0.006  | 0.103                             | -0.006  |
| Poland                                   | 0.063                        | -0.004  | 0.097               | -0.006  | 0.107                        | -0.007  | 0.105                             | -0.006  |
| Croatia                                  | 0.063                        | -0.004  | 0.097               | -0.006  | 0.107                        | -0.007  | 0.105                             | -0.006  |
| Macao, China                             | 0.063                        | -0.004  | 0.097               | -0.006  | 0.107                        | -0.007  | 0.105                             | -0.007  |
| Lithuania                                | 0.063                        | -0.004  | 0.097               | -0.006  | 0.107                        | -0.007  | 0.105                             | -0.007  |
| Estonia                                  | 0.063                        | -0.004  | 0.098               | -0.006  | 0.108                        | -0.007  | 0.106                             | -0.007  |
| Brunei Darussalam                        | 0.063                        | -0.004  | 0.099               | -0.007  | 0.109                        | -0.007  | 0.107                             | -0.007  |
| Slovak Republic                          | 0.063                        | -0.004  | 0.099               | -0.007  | 0.109                        | -0.007  | 0.108                             | -0.007  |
| Hungary                                  | 0.063                        | -0.004  | 0.099               | -0.007  | 0.109                        | -0.008  | 0.108                             | -0.007  |
| South Korea                              | 0.063                        | -0.005  | 0.101               | -0.007  | 0.111                        | -0.008  | 0.110                             | -0.008  |
| Bahrain                                  | 0.063                        | -0.005  | 0.101               | -0.007  | 0.111                        | -0.008  | 0.110                             | -0.008  |
| Czech Republic                           | 0.062                        | -0.005  | 0.103               | -0.008  | 0.113                        | -0.009  | 0.112                             | -0.009  |
| Slovenia                                 | 0.062                        | -0.005  | 0.104               | -0.009  | 0.115                        | -0.009  | 0.113                             | -0.009  |
| Israel                                   | 0.062                        | -0.005  | 0.104               | -0.009  | 0.115                        | -0.010  | 0.113                             | -0.009  |
| <b>High-income countries</b>             |                              |         |                     |         |                              |         |                                   |         |
| Portugal                                 | 0.061                        | -0.005  | 0.105               | -0.009  | 0.116                        | -0.010  | 0.114                             | -0.010  |
| Qatar                                    | 0.061                        | -0.005  | 0.106               | -0.009  | 0.116                        | -0.010  | 0.115                             | -0.010  |
| Singapore                                | 0.061                        | -0.005  | 0.106               | -0.009  | 0.117                        | -0.010  | 0.115                             | -0.010  |
| Malta                                    | 0.061                        | -0.005  | 0.107               | -0.010  | 0.118                        | -0.011  | 0.116                             | -0.010  |
| Kuwait                                   | 0.061                        | -0.005  | 0.107               | -0.010  | 0.118                        | -0.011  | 0.116                             | -0.010  |
| New Zealand                              | 0.060                        | -0.006  | 0.109               | -0.010  | 0.120                        | -0.011  | 0.118                             | -0.011  |

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**Cross-price elasticities with respect to change in other price, 144 countries in 2005—Continued**

| Country                                | Food, beverage,<br>& tobacco |         | Clothing & footwear |         | Gross rent, fuel,<br>& power |         | House furnishings<br>& operations |         |
|--|------------------------------|---------|---------------------|---------|------------------------------|---------|-----------------------------------|---------|
|  | Slutsky                      | Cournot | Slutsky             | Cournot | Slutsky                      | Cournot | Slutsky                           | Cournot |
| <b>High-income countries—continued</b> |                              |         |                     |         |                              |         |                                   |         |
| Finland                                | 0.059                        | -0.006  | 0.109               | -0.010  | 0.120                        | -0.011  | 0.119                             | -0.011  |
| Taiwan, China                          | 0.059                        | -0.006  | 0.109               | -0.011  | 0.120                        | -0.012  | 0.119                             | -0.011  |
| Spain                                  | 0.059                        | -0.006  | 0.110               | -0.011  | 0.121                        | -0.012  | 0.119                             | -0.012  |
| Italy                                  | 0.059                        | -0.006  | 0.110               | -0.011  | 0.121                        | -0.012  | 0.120                             | -0.012  |
| Ireland                                | 0.058                        | -0.006  | 0.111               | -0.011  | 0.122                        | -0.012  | 0.120                             | -0.012  |
| Denmark                                | 0.058                        | -0.006  | 0.111               | -0.011  | 0.122                        | -0.012  | 0.120                             | -0.012  |
| Sweden                                 | 0.058                        | -0.006  | 0.111               | -0.011  | 0.122                        | -0.012  | 0.121                             | -0.012  |
| Hong Kong, China                       | 0.058                        | -0.006  | 0.111               | -0.011  | 0.123                        | -0.012  | 0.121                             | -0.012  |
| Australia                              | 0.057                        | -0.006  | 0.112               | -0.011  | 0.123                        | -0.013  | 0.121                             | -0.012  |
| Cyprus                                 | 0.057                        | -0.006  | 0.112               | -0.011  | 0.123                        | -0.013  | 0.122                             | -0.012  |
| Belgium                                | 0.057                        | -0.006  | 0.112               | -0.011  | 0.123                        | -0.013  | 0.122                             | -0.012  |
| Japan                                  | 0.057                        | -0.006  | 0.112               | -0.011  | 0.123                        | -0.013  | 0.122                             | -0.012  |
| France                                 | 0.057                        | -0.006  | 0.112               | -0.012  | 0.124                        | -0.013  | 0.122                             | -0.013  |
| Germany                                | 0.056                        | -0.006  | 0.113               | -0.012  | 0.125                        | -0.013  | 0.123                             | -0.013  |
| Canada                                 | 0.056                        | -0.006  | 0.113               | -0.012  | 0.125                        | -0.013  | 0.123                             | -0.013  |
| Iceland                                | 0.056                        | -0.006  | 0.113               | -0.012  | 0.125                        | -0.013  | 0.123                             | -0.013  |
| Netherlands                            | 0.056                        | -0.006  | 0.114               | -0.012  | 0.125                        | -0.013  | 0.123                             | -0.013  |
| Norway                                 | 0.056                        | -0.006  | 0.114               | -0.012  | 0.125                        | -0.013  | 0.123                             | -0.013  |
| United Kingdom                         | 0.055                        | -0.006  | 0.114               | -0.012  | 0.126                        | -0.014  | 0.124                             | -0.013  |
| Switzerland                            | 0.055                        | -0.006  | 0.115               | -0.012  | 0.126                        | -0.014  | 0.124                             | -0.013  |
| Austria                                | 0.054                        | -0.006  | 0.115               | -0.013  | 0.127                        | -0.014  | 0.125                             | -0.014  |
| Luxembourg                             | 0.048                        | -0.006  | 0.119               | -0.014  | 0.131                        | -0.016  | 0.130                             | -0.015  |
| United States                          | 0.044                        | -0.005  | 0.121               | -0.015  | 0.134                        | -0.016  | 0.132                             | -0.016  |
| Low-income average                     | 0.045                        | 0.007   | 0.056               | 0.009   | 0.062                        | 0.010   | 0.061                             | 0.010   |
| Middle-income average                  | 0.062                        | -0.003  | 0.091               | -0.004  | 0.101                        | -0.004  | 0.099                             | -0.004  |
| High-income average                    | 0.057                        | -0.006  | 0.112               | -0.011  | 0.123                        | -0.012  | 0.121                             | -0.012  |

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**Cross-price elasticities with respect to change in other price, 144 countries in 2005—Continued**

| Country                     | Medical care |         | Transport & communications |         | Recreation |         | Education |         |
|-----------------------------|--------------|---------|----------------------------|---------|------------|---------|-----------|---------|
|                             | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot |
| <b>Low-income countries</b> |              |         |                            |         |            |         |           |         |
| Congo, Democratic Republic  | 0.065        | 0.024   | 0.057                      | 0.021   | 0.160      | 0.059   | 0.039     | 0.014   |
| Burundi                     | 0.090        | -4.102  | 0.074                      | 0.013   | 0.106      | 0.018   | 0.053     | 0.009   |
| Liberia                     | 0.210        | 0.185   | 0.032                      | 0.028   | 0.062      | 0.054   | 0.023     | 0.020   |
| Zimbabwe                    | 0.121        | 0.086   | 0.036                      | 0.026   | 0.058      | 0.041   | 0.026     | 0.019   |
| Ethiopia                    | 0.102        | 0.062   | 0.040                      | 0.024   | 0.169      | 0.102   | 0.029     | 0.018   |
| Niger                       | 0.101        | 0.061   | 0.040                      | 0.024   | 0.047      | 0.028   | 0.029     | 0.018   |
| Guinea-Bissau               | 0.101        | 0.060   | 0.040                      | 0.024   | 0.053      | 0.031   | 0.030     | 0.018   |
| Mozambique                  | 0.093        | 0.047   | 0.044                      | 0.022   | 0.075      | 0.164   | 0.033     | 0.016   |
| Malawi                      | 0.090        | 0.041   | 0.046                      | 0.021   | 0.049      | 0.362   | 0.035     | 0.016   |
| Rwanda                      | 0.089        | 0.039   | 0.047                      | 0.021   | 0.116      | 0.967   | 0.035     | 0.015   |
| Angola                      | 0.088        | 0.034   | 0.050                      | 0.019   | 0.526      | 0.204   | 0.038     | 0.015   |
| Chad                        | 0.088        | 0.034   | 0.050                      | 0.019   | 0.451      | 0.172   | 0.038     | 0.014   |
| Gambia, The                 | 0.088        | 0.033   | 0.051                      | 0.019   | 0.385      | 0.144   | 0.038     | 0.014   |
| Central African Republic    | 0.088        | 0.032   | 0.051                      | 0.019   | 0.360      | 0.133   | 0.039     | 0.014   |
| Mali                        | 0.088        | 0.032   | 0.051                      | 0.019   | 0.356      | 0.132   | 0.039     | 0.014   |
| Tanzania                    | 0.087        | 0.032   | 0.052                      | 0.019   | 0.315      | 0.114   | 0.039     | 0.014   |
| Sierra Leone                | 0.087        | 0.030   | 0.053                      | 0.018   | 0.251      | 0.086   | 0.040     | 0.014   |
| Guinea                      | 0.087        | 0.029   | 0.053                      | 0.018   | 0.243      | 0.082   | 0.040     | 0.014   |
| Burkina Faso                | 0.087        | 0.028   | 0.054                      | 0.018   | 0.219      | 0.071   | 0.041     | 0.013   |
| Uganda                      | 0.088        | 0.026   | 0.056                      | 0.017   | 0.185      | 0.055   | 0.043     | 0.013   |
| Madagascar                  | 0.088        | 0.026   | 0.056                      | 0.017   | 0.184      | 0.055   | 0.043     | 0.013   |
| Zambia                      | 0.088        | 0.026   | 0.056                      | 0.017   | 0.182      | 0.054   | 0.043     | 0.013   |
| Congo, Republic             | 0.088        | 0.025   | 0.057                      | 0.016   | 0.174      | 0.050   | 0.043     | 0.012   |
| Togo                        | 0.088        | 0.025   | 0.058                      | 0.016   | 0.169      | 0.047   | 0.044     | 0.012   |
| Nepal                       | 0.088        | 0.023   | 0.059                      | 0.015   | 0.155      | 0.040   | 0.045     | 0.012   |
| Ghana                       | 0.089        | 0.022   | 0.060                      | 0.015   | 0.149      | 0.037   | 0.046     | 0.011   |
| Benin                       | 0.089        | 0.021   | 0.062                      | 0.014   | 0.143      | 0.033   | 0.047     | 0.011   |
| Mauritania                  | 0.089        | 0.021   | 0.062                      | 0.014   | 0.142      | 0.033   | 0.047     | 0.011   |
| Bangladesh                  | 0.090        | 0.020   | 0.063                      | 0.014   | 0.139      | 0.031   | 0.048     | 0.011   |
| Côte d'Ivoire               | 0.090        | 0.020   | 0.063                      | 0.014   | 0.138      | 0.031   | 0.048     | 0.011   |
| Laos                        | 0.090        | 0.020   | 0.063                      | 0.014   | 0.138      | 0.031   | 0.048     | 0.011   |
| Kenya                       | 0.091        | 0.018   | 0.065                      | 0.013   | 0.132      | 0.027   | 0.050     | 0.010   |
| Djibouti                    | 0.091        | 0.018   | 0.065                      | 0.013   | 0.132      | 0.026   | 0.050     | 0.010   |
| Nigeria                     | 0.091        | 0.018   | 0.066                      | 0.013   | 0.131      | 0.026   | 0.050     | 0.010   |
| Senegal                     | 0.091        | 0.018   | 0.066                      | 0.013   | 0.130      | 0.025   | 0.050     | 0.010   |
| Cambodia                    | 0.092        | 0.017   | 0.067                      | 0.012   | 0.127      | 0.023   | 0.052     | 0.009   |
| Cameroon                    | 0.093        | 0.016   | 0.069                      | 0.012   | 0.125      | 0.021   | 0.053     | 0.009   |
| São Tomé and Príncipe       | 0.093        | 0.015   | 0.069                      | 0.011   | 0.125      | 0.021   | 0.053     | 0.009   |
| India                       | 0.093        | 0.015   | 0.070                      | 0.011   | 0.124      | 0.020   | 0.054     | 0.009   |
| Yemen                       | 0.093        | 0.015   | 0.070                      | 0.011   | 0.123      | 0.019   | 0.054     | 0.008   |
| Vietnam                     | 0.094        | 0.015   | 0.070                      | 0.011   | 0.123      | 0.019   | 0.054     | 0.008   |
| Mongolia                    | 0.094        | 0.014   | 0.071                      | 0.011   | 0.123      | 0.019   | 0.055     | 0.008   |

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**Cross-price elasticities with respect to change in other price, 144 countries in 2005—Continued**

| Country                               | Medical care |         | Transport & communications |         | Recreation |         | Education |         |
|---------------------------------------|--------------|---------|----------------------------|---------|------------|---------|-----------|---------|
|                                       | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot |
| <b>Low-income countries—continued</b> |              |         |                            |         |            |         |           |         |
| Iraq                                  | 0.094        | 0.014   | 0.072                      | 0.010   | 0.122      | 0.018   | 0.055     | 0.008   |
| Bhutan                                | 0.095        | 0.013   | 0.072                      | 0.010   | 0.122      | 0.017   | 0.056     | 0.008   |
| China                                 | 0.095        | 0.013   | 0.073                      | 0.010   | 0.121      | 0.016   | 0.057     | 0.008   |
| Sudan                                 | 0.097        | 0.012   | 0.075                      | 0.009   | 0.120      | 0.014   | 0.058     | 0.007   |
| Lesotho                               | 0.097        | 0.011   | 0.076                      | 0.009   | 0.120      | 0.013   | 0.059     | 0.007   |
| Tajikistan                            | 0.097        | 0.011   | 0.076                      | 0.008   | 0.120      | 0.013   | 0.059     | 0.007   |
| Maldives                              | 0.099        | 0.009   | 0.079                      | 0.007   | 0.119      | 0.011   | 0.061     | 0.006   |
| Morocco                               | 0.099        | 0.009   | 0.079                      | 0.007   | 0.119      | 0.011   | 0.062     | 0.006   |
| Pakistan                              | 0.100        | 0.009   | 0.080                      | 0.007   | 0.119      | 0.010   | 0.062     | 0.005   |
| Indonesia                             | 0.101        | 0.008   | 0.081                      | 0.006   | 0.119      | 0.009   | 0.063     | 0.005   |
| Kyrgyzstan                            | 0.101        | 0.008   | 0.081                      | 0.006   | 0.119      | 0.009   | 0.063     | 0.005   |
| Philippines                           | 0.101        | 0.008   | 0.082                      | 0.006   | 0.119      | 0.009   | 0.064     | 0.005   |
| Cape Verde                            | 0.101        | 0.008   | 0.082                      | 0.006   | 0.119      | 0.009   | 0.064     | 0.005   |
| Bolivia                               | 0.101        | 0.008   | 0.082                      | 0.006   | 0.119      | 0.009   | 0.064     | 0.005   |
| Namibia                               | 0.102        | 0.007   | 0.083                      | 0.006   | 0.119      | 0.008   | 0.065     | 0.004   |
| Sri Lanka                             | 0.103        | 0.006   | 0.084                      | 0.005   | 0.119      | 0.007   | 0.066     | 0.004   |
| Botswana                              | 0.103        | 0.006   | 0.085                      | 0.005   | 0.120      | 0.007   | 0.066     | 0.004   |
| Gabon                                 | 0.104        | 0.006   | 0.085                      | 0.005   | 0.120      | 0.007   | 0.067     | 0.004   |
| Azerbaijan                            | 0.104        | 0.006   | 0.085                      | 0.005   | 0.120      | 0.007   | 0.067     | 0.004   |
| Syria                                 | 0.104        | 0.005   | 0.086                      | 0.005   | 0.120      | 0.006   | 0.067     | 0.004   |
| Equatorial Guinea                     | 0.106        | 0.005   | 0.088                      | 0.004   | 0.120      | 0.005   | 0.069     | 0.003   |
| Paraguay                              | 0.106        | 0.004   | 0.089                      | 0.003   | 0.121      | 0.005   | 0.070     | 0.003   |
| Fiji                                  | 0.107        | 0.004   | 0.089                      | 0.003   | 0.121      | 0.004   | 0.070     | 0.002   |
| Swaziland                             | 0.108        | 0.003   | 0.090                      | 0.003   | 0.121      | 0.004   | 0.071     | 0.002   |
| Moldova                               | 0.108        | 0.003   | 0.091                      | 0.003   | 0.121      | 0.003   | 0.072     | 0.002   |
| Egypt                                 | 0.109        | 0.003   | 0.091                      | 0.002   | 0.122      | 0.003   | 0.072     | 0.002   |
| Ecuador                               | 0.110        | 0.002   | 0.092                      | 0.002   | 0.122      | 0.002   | 0.073     | 0.001   |
| Jordan                                | 0.110        | 0.002   | 0.093                      | 0.002   | 0.122      | 0.002   | 0.073     | 0.001   |
| Georgia                               | 0.110        | 0.002   | 0.093                      | 0.002   | 0.122      | 0.002   | 0.073     | 0.001   |
| Thailand                              | 0.110        | 0.002   | 0.093                      | 0.002   | 0.123      | 0.002   | 0.074     | 0.001   |
| Colombia                              | 0.110        | 0.002   | 0.094                      | 0.001   | 0.123      | 0.002   | 0.074     | 0.001   |
| Albania                               | 0.111        | 0.001   | 0.094                      | 0.001   | 0.123      | 0.002   | 0.074     | 0.001   |
| Tunisia                               | 0.111        | 0.001   | 0.095                      | 0.001   | 0.123      | 0.001   | 0.075     | 0.001   |
| Peru                                  | 0.112        | 0.001   | 0.095                      | 0.001   | 0.124      | 0.001   | 0.076     | 0.001   |
| Armenia                               | 0.112        | 0.000   | 0.096                      | 0.000   | 0.124      | 0.001   | 0.076     | 0.000   |
| <b>Middle-income countries</b>        |              |         |                            |         |            |         |           |         |
| Venezuela                             | 0.114        | 0.000   | 0.098                      | 0.000   | 0.125      | 0.000   | 0.078     | 0.000   |
| Malaysia                              | 0.114        | 0.000   | 0.098                      | 0.000   | 0.125      | 0.000   | 0.078     | 0.000   |
| Ukraine                               | 0.114        | -0.001  | 0.098                      | 0.000   | 0.125      | -0.001  | 0.078     | 0.000   |
| Brazil                                | 0.115        | -0.001  | 0.099                      | -0.001  | 0.126      | -0.001  | 0.078     | -0.001  |
| Montenegro                            | 0.115        | -0.001  | 0.099                      | -0.001  | 0.126      | -0.001  | 0.079     | -0.001  |

—continued

**Cross-price elasticities with respect to change in other price, 144 countries in 2005—Continued**

| Country                                  | Medical care |         | Transport & communications |         | Recreation |         | Education |         |
|--|--------------|---------|----------------------------|---------|------------|---------|-----------|---------|
|  | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot |
| <b>Middle-income countries—continued</b> |              |         |                            |         |            |         |           |         |
| South Africa                             | 0.116        | -0.001  | 0.100                      | -0.001  | 0.126      | -0.002  | 0.080     | -0.001  |
| Macedonia                                | 0.117        | -0.002  | 0.102                      | -0.002  | 0.127      | -0.002  | 0.081     | -0.002  |
| Turkey                                   | 0.118        | -0.002  | 0.102                      | -0.002  | 0.128      | -0.002  | 0.081     | -0.002  |
| Bosnia and Herzegovina                   | 0.119        | -0.003  | 0.104                      | -0.003  | 0.128      | -0.003  | 0.082     | -0.002  |
| Serbia                                   | 0.119        | -0.003  | 0.104                      | -0.003  | 0.129      | -0.003  | 0.083     | -0.002  |
| Belarus                                  | 0.119        | -0.003  | 0.104                      | -0.003  | 0.129      | -0.003  | 0.083     | -0.002  |
| Romania                                  | 0.119        | -0.003  | 0.104                      | -0.003  | 0.129      | -0.004  | 0.083     | -0.002  |
| Saudi Arabia                             | 0.120        | -0.003  | 0.105                      | -0.003  | 0.129      | -0.004  | 0.083     | -0.002  |
| Uruguay                                  | 0.120        | -0.004  | 0.105                      | -0.003  | 0.129      | -0.004  | 0.084     | -0.002  |
| Mauritius                                | 0.120        | -0.004  | 0.105                      | -0.003  | 0.129      | -0.004  | 0.084     | -0.002  |
| Chile                                    | 0.120        | -0.004  | 0.105                      | -0.003  | 0.129      | -0.004  | 0.084     | -0.002  |
| Kazakhstan                               | 0.121        | -0.004  | 0.106                      | -0.003  | 0.130      | -0.004  | 0.084     | -0.003  |
| Russia                                   | 0.121        | -0.004  | 0.107                      | -0.004  | 0.130      | -0.005  | 0.085     | -0.003  |
| Argentina                                | 0.122        | -0.004  | 0.107                      | -0.004  | 0.131      | -0.005  | 0.085     | -0.003  |
| Bulgaria                                 | 0.122        | -0.005  | 0.108                      | -0.004  | 0.131      | -0.005  | 0.086     | -0.003  |
| Oman                                     | 0.123        | -0.005  | 0.108                      | -0.004  | 0.131      | -0.005  | 0.086     | -0.004  |
| Iran                                     | 0.124        | -0.006  | 0.110                      | -0.005  | 0.133      | -0.006  | 0.088     | -0.004  |
| Latvia                                   | 0.125        | -0.006  | 0.111                      | -0.006  | 0.134      | -0.007  | 0.089     | -0.005  |
| Mexico                                   | 0.126        | -0.007  | 0.112                      | -0.006  | 0.134      | -0.007  | 0.089     | -0.005  |
| Lebanon                                  | 0.126        | -0.007  | 0.113                      | -0.006  | 0.135      | -0.007  | 0.090     | -0.005  |
| Poland                                   | 0.129        | -0.008  | 0.115                      | -0.007  | 0.136      | -0.008  | 0.092     | -0.006  |
| Croatia                                  | 0.129        | -0.008  | 0.115                      | -0.007  | 0.136      | -0.008  | 0.092     | -0.006  |
| Macao, China                             | 0.129        | -0.008  | 0.115                      | -0.007  | 0.136      | -0.008  | 0.092     | -0.006  |
| Lithuania                                | 0.129        | -0.008  | 0.115                      | -0.007  | 0.137      | -0.008  | 0.092     | -0.006  |
| Estonia                                  | 0.130        | -0.008  | 0.116                      | -0.008  | 0.137      | -0.009  | 0.093     | -0.006  |
| Brunei Darussalam                        | 0.131        | -0.009  | 0.117                      | -0.008  | 0.138      | -0.009  | 0.094     | -0.006  |
| Slovak Republic                          | 0.131        | -0.009  | 0.118                      | -0.008  | 0.138      | -0.009  | 0.094     | -0.006  |
| Hungary                                  | 0.131        | -0.009  | 0.118                      | -0.008  | 0.138      | -0.010  | 0.094     | -0.007  |
| South Korea                              | 0.132        | -0.010  | 0.119                      | -0.009  | 0.140      | -0.010  | 0.096     | -0.007  |
| Bahrain                                  | 0.132        | -0.010  | 0.119                      | -0.009  | 0.140      | -0.010  | 0.096     | -0.007  |
| Czech Republic                           | 0.135        | -0.011  | 0.122                      | -0.010  | 0.141      | -0.011  | 0.098     | -0.008  |
| Slovenia                                 | 0.135        | -0.011  | 0.123                      | -0.010  | 0.142      | -0.012  | 0.099     | -0.008  |
| Israel                                   | 0.136        | -0.011  | 0.123                      | -0.010  | 0.143      | -0.012  | 0.099     | -0.008  |
| <b>High-income countries</b>             |              |         |                            |         |            |         |           |         |
| Portugal                                 | 0.137        | -0.012  | 0.124                      | -0.011  | 0.143      | -0.012  | 0.100     | -0.009  |
| Qatar                                    | 0.137        | -0.012  | 0.125                      | -0.011  | 0.144      | -0.012  | 0.100     | -0.009  |
| Singapore                                | 0.137        | -0.012  | 0.125                      | -0.011  | 0.144      | -0.013  | 0.100     | -0.009  |
| Malta                                    | 0.138        | -0.012  | 0.126                      | -0.011  | 0.145      | -0.013  | 0.101     | -0.009  |
| Kuwait                                   | 0.138        | -0.012  | 0.126                      | -0.011  | 0.145      | -0.013  | 0.102     | -0.009  |
| New Zealand                              | 0.140        | -0.013  | 0.128                      | -0.012  | 0.146      | -0.014  | 0.103     | -0.010  |

—continued

**Cross-price elasticities with respect to change in other price, 144 countries in 2005—Continued**

| Country                                | Medical care |         | Transport & communications |         | Recreation |         | Education |         |
|--|--------------|---------|----------------------------|---------|------------|---------|-----------|---------|
|  | Slutsky      | Cournot | Slutsky                    | Cournot | Slutsky    | Cournot | Slutsky   | Cournot |
| <b>High-income countries—continued</b> |              |         |                            |         |            |         |           |         |
| Finland                                | 0.141        | -0.013  | 0.129                      | -0.012  | 0.147      | -0.014  | 0.104     | -0.010  |
| Taiwan, China                          | 0.141        | -0.014  | 0.129                      | -0.012  | 0.147      | -0.014  | 0.104     | -0.010  |
| Spain                                  | 0.141        | -0.014  | 0.129                      | -0.013  | 0.148      | -0.014  | 0.104     | -0.010  |
| Italy                                  | 0.142        | -0.014  | 0.130                      | -0.013  | 0.148      | -0.015  | 0.105     | -0.010  |
| Ireland                                | 0.142        | -0.014  | 0.130                      | -0.013  | 0.148      | -0.015  | 0.105     | -0.010  |
| Denmark                                | 0.142        | -0.014  | 0.130                      | -0.013  | 0.148      | -0.015  | 0.105     | -0.010  |
| Sweden                                 | 0.143        | -0.014  | 0.131                      | -0.013  | 0.149      | -0.015  | 0.105     | -0.011  |
| Hong Kong, China                       | 0.143        | -0.014  | 0.131                      | -0.013  | 0.149      | -0.015  | 0.106     | -0.011  |
| Australia                              | 0.143        | -0.015  | 0.131                      | -0.013  | 0.149      | -0.015  | 0.106     | -0.011  |
| Cyprus                                 | 0.143        | -0.015  | 0.132                      | -0.013  | 0.149      | -0.015  | 0.106     | -0.011  |
| Belgium                                | 0.143        | -0.015  | 0.132                      | -0.013  | 0.149      | -0.015  | 0.106     | -0.011  |
| Japan                                  | 0.143        | -0.015  | 0.132                      | -0.014  | 0.149      | -0.015  | 0.106     | -0.011  |
| France                                 | 0.144        | -0.015  | 0.132                      | -0.014  | 0.150      | -0.016  | 0.107     | -0.011  |
| Germany                                | 0.145        | -0.015  | 0.133                      | -0.014  | 0.150      | -0.016  | 0.107     | -0.011  |
| Canada                                 | 0.145        | -0.015  | 0.133                      | -0.014  | 0.151      | -0.016  | 0.107     | -0.011  |
| Iceland                                | 0.145        | -0.015  | 0.133                      | -0.014  | 0.151      | -0.016  | 0.107     | -0.011  |
| Netherlands                            | 0.145        | -0.015  | 0.133                      | -0.014  | 0.151      | -0.016  | 0.108     | -0.011  |
| Norway                                 | 0.145        | -0.015  | 0.133                      | -0.014  | 0.151      | -0.016  | 0.108     | -0.011  |
| United Kingdom                         | 0.146        | -0.016  | 0.134                      | -0.015  | 0.152      | -0.016  | 0.108     | -0.012  |
| Switzerland                            | 0.146        | -0.016  | 0.134                      | -0.015  | 0.152      | -0.016  | 0.109     | -0.012  |
| Austria                                | 0.147        | -0.016  | 0.135                      | -0.015  | 0.152      | -0.017  | 0.109     | -0.012  |
| Luxembourg                             | 0.151        | -0.018  | 0.140                      | -0.017  | 0.156      | -0.019  | 0.113     | -0.013  |
| United States                          | 0.153        | -0.019  | 0.142                      | -0.017  | 0.158      | -0.019  | 0.115     | -0.014  |
| Low-income average                     | 0.098        | -0.033  | 0.070                      | 0.011   | 0.150      | 0.051   | 0.054     | 0.009   |
| Middle-income average                  | 0.124        | -0.005  | 0.109                      | -0.005  | 0.132      | -0.006  | 0.087     | -0.004  |
| High-income average                    | 0.143        | -0.014  | 0.131                      | -0.013  | 0.149      | -0.015  | 0.106     | -0.011  |

Note: In shaded cells, elasticity is derived using actual budget shares as opposed to the predicted budget share from the Florida model.

Source: USDA, Economic Research Service calculations based on 2005 International Comparison Program data.