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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





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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.

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- 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.¹ 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

¹Theil 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).² 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.³

²Note 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.

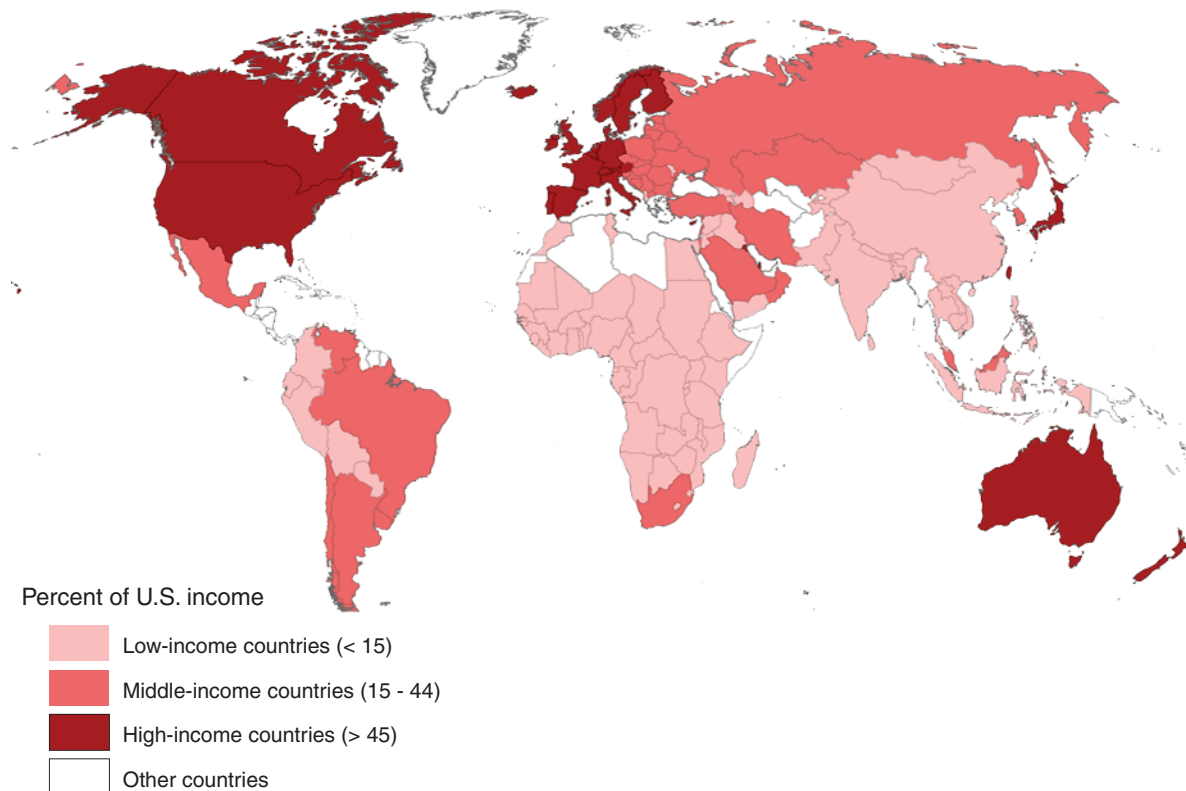
³For more detail on budget shares for all consumption categories, see MSMR (2011), table 2, p. 5.

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
Low-income countries				
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
Low-income countries—continued				
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
Middle-income countries				
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
Middle-income countries—continued				
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
High-income countries				
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
High-income countries—continued				
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.⁴ 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.⁵ 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, ε_{ic} is a random error term, and α and β_i are parameters to be estimated. Since the budget shares summed across all n goods equal 1, the α s and β 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, θ_i ,

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

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

⁵Note 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 θ_i change.⁶

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., α and β_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,

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

⁶The 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.

⁷Theil 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 $\log \bar{p}_i = \frac{1}{N} \sum_{c=1}^N \log p_{ic}$, α_i , β_i and ϕ (the income flexibility, defined as the inverse of the marginal utility of income put into elasticity form)⁸ are parameters to be estimated, and ε_1 is a random error term. As before, the α s and β 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^{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 θ_{ic} defined ϕ 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 α s and the β 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 ϕ as well as the α s and β 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} .

⁸Frisch (1932, p. 15) refers to the reciprocal of ϕ , that is $\phi^{-1} = \frac{d\mu}{dE} \frac{E}{\mu}$ where μ 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 (α , β , and ϕ) and real per capita income in all countries relative to that of the United States normalized to equal 1.⁹ 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.¹⁰

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

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

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

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

¹⁰The 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 ϕ estimate and α and β 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.¹¹

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

¹¹“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 1980¹² 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 ¹	Number of countries
Low-income average (44 countries)	7.0	48.6	44	7.9	53.3	35
Middle-income average (30 countries)	26.5	30.7	30	25.2	34.4	36
High-income average (25 countries)	65.1	20.5	25	67.5	16.5	28

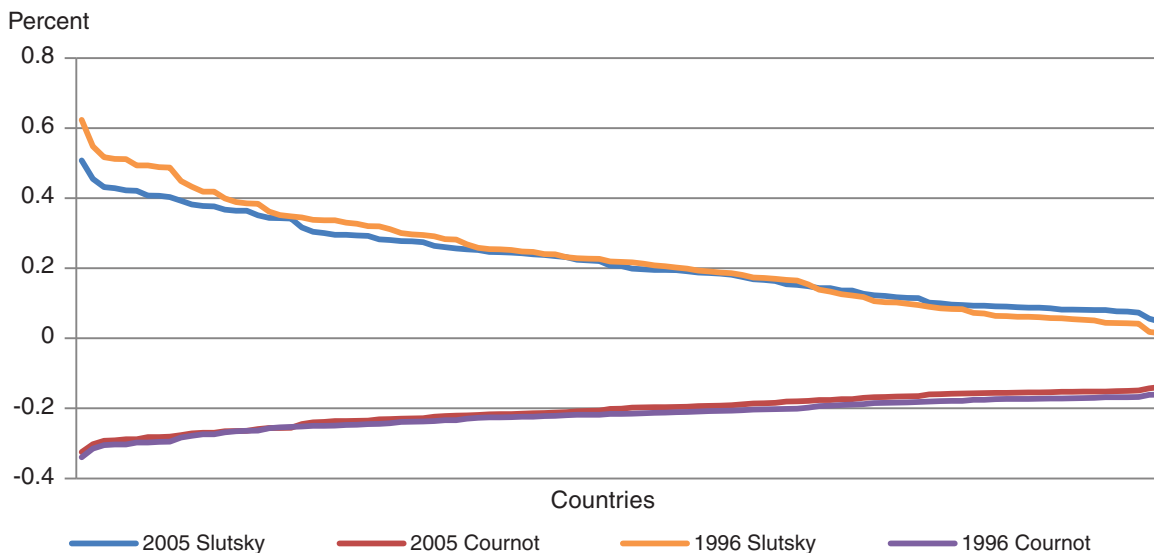
¹Includes food-away-from-home expenditures.

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

¹²Among 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

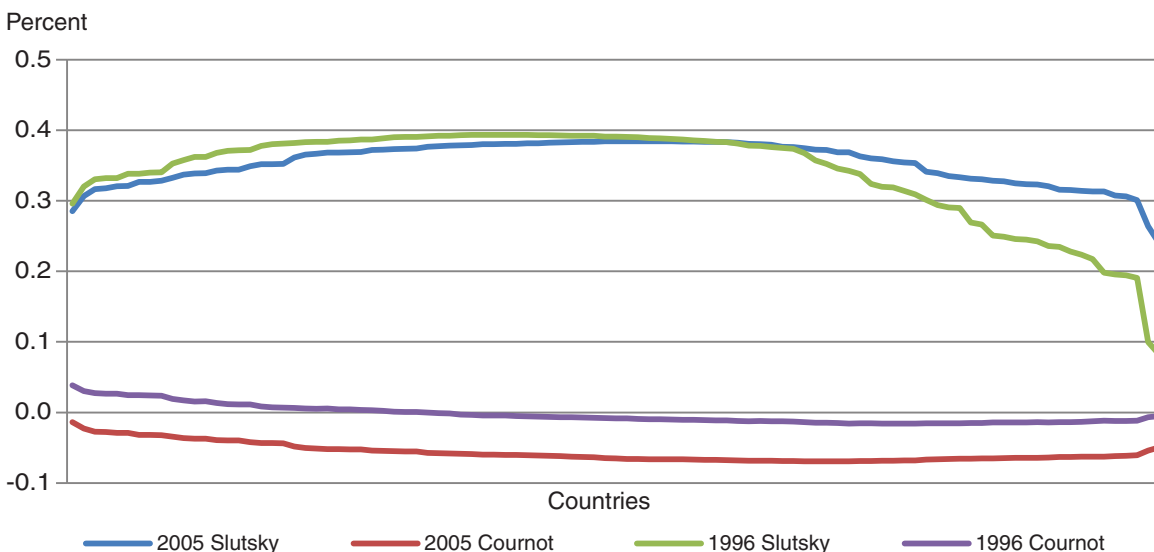
Figure 1
Nonfood cross-price elasticity with food price change



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, beverages, and tobacco	Clothing and footwear	Gross rent, fuel, & power	House furnishings and operations	Medical and health	Transport and communi- cations	Recre- ation	Educa- tion	Other
<i>Average cross-price elasticities, average own-price elasticities on diagonal</i>									
Low-income countries									
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
Middle-income countries									
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
High-income countries									
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, beverages, and tobacco	Clothing and footwear	Gross rent, fuel, & power	House furnishings and operations	Medical and health	Transport and communi- cations	Recre- ation	Educa- tion	Other
<i>Average cross-price elasticities, average own-price elasticities on diagonal</i>									
Low-income countries									
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
Middle-income countries									
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
High-income countries									
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.

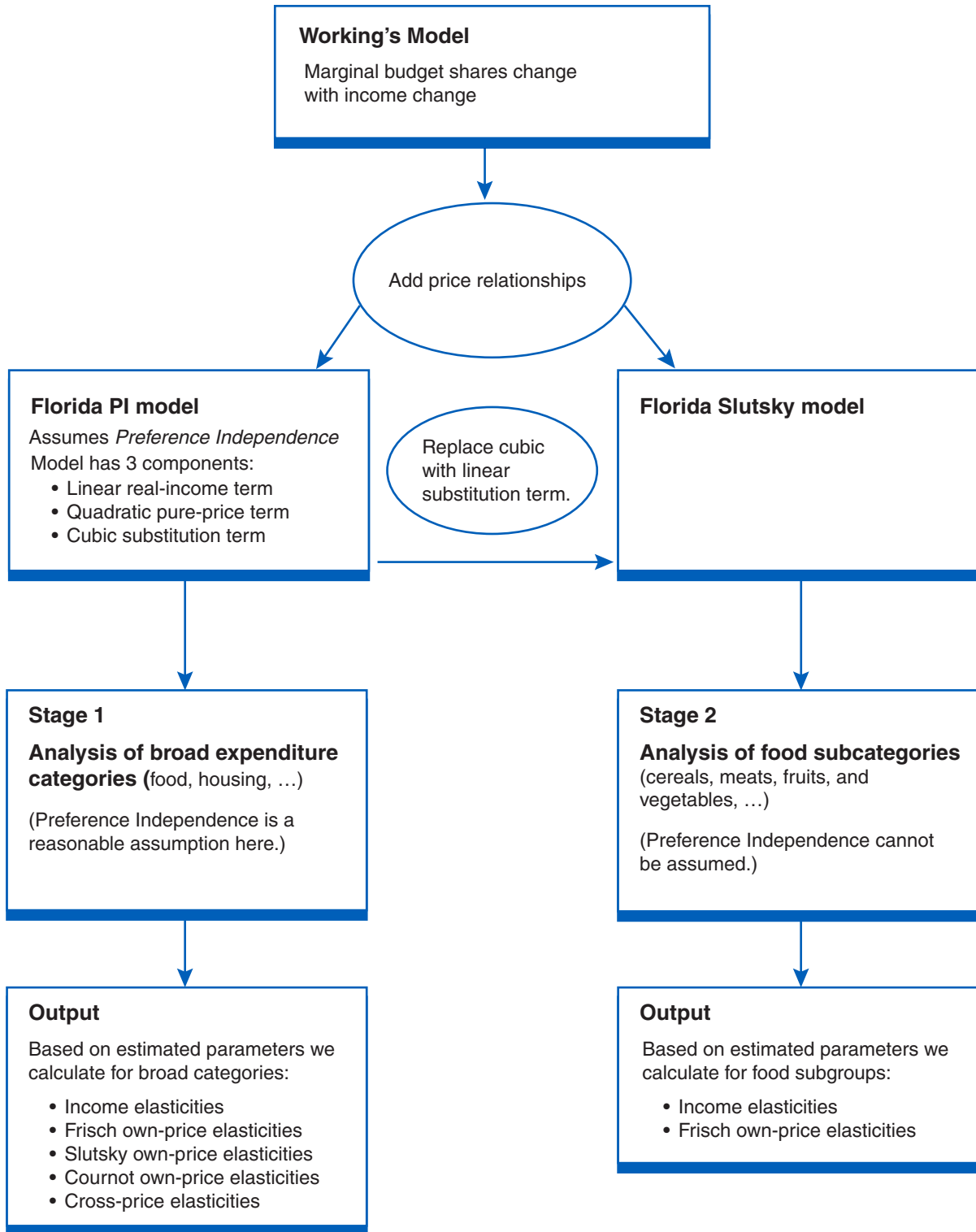
The estimates from this report represent consistent cross-country cross-price elasticity estimates for a large number of countries (144) and consumption categories (9). These cross-price elasticities together with the income and own-price elasticities presented by MSMR (2011) are useful inputs into global 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 of Independent States	Europe / Organisation for Economic Co-operation 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 & 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 of Independent States	Europe / Organisation for Economic Co-operation 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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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

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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
Middle-income countries—continued								
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
High-income countries								
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
High-income countries—continued								
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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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
Middle-income countries—continued								
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
High-income countries								
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

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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
High-income countries—continued								
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, & tobacco		Gross rent, fuel, & power		House furnishings & operations		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries								
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, & tobacco		Gross rent, fuel, & power		House furnishings & operations		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries—continued								
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
Middle-income countries								
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, & tobacco		Gross rent, fuel, & power		House furnishings & operations		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Middle-income countries—continued								
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
High-income countries								
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, & tobacco		Gross rent, fuel, & power		House furnishings & operations		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
High-income countries—continued								
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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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
Middle-income countries—continued								
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
High-income countries								
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

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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
High-income countries—continued								
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, & tobacco		Clothing & footwear		House furnishings & operations		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries								
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

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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, & tobacco		Clothing & footwear		House furnishings & operations		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries—continued								
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
Middle-income countries								
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, & tobacco		Clothing & footwear		House furnishings & operations		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Middle-income countries—continued								
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
High-income countries								
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, & tobacco		Clothing & footwear		House furnishings & operations		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
High-income countries—continued								
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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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
Middle-income countries—continued								
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
High-income countries								
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

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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		Gross rent, fuel, & power		House furnishings & operations		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
High-income countries—continued								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries								
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

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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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries—continued								
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
Middle-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Middle-income countries—continued								
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
High-income countries								
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

—continued

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

Country	Food, beverage, & tobacco		Clothing & footwear		Gross rent, fuel, & power		Medical care	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
High-income countries—continued								
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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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
Middle-income countries—continued								
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
High-income countries								
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

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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
High-income countries—continued								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries—continued								
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
Middle-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Middle-income countries—continued								
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
High-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
High-income countries—continued								
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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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
Middle-income countries—continued								
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
High-income countries								
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

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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
High-income countries—continued								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries—continued								
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
Middle-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Middle-income countries—continued								
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
High-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
High-income countries—continued								
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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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
Middle-income countries—continued								
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
High-income countries								
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
High-income countries—continued								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries—continued								
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
Middle-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Middle-income countries—continued								
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
High-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
High-income countries—continued								
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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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
Middle-income countries—continued								
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
High-income countries								
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
High-income countries—continued								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries—continued								
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
Middle-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Middle-income countries—continued								
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
High-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
High-income countries—continued								
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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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
Middle-income countries—continued								
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
High-income countries								
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

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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
High-income countries—continued								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Low-income countries—continued								
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
Middle-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
Middle-income countries—continued								
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
High-income countries								
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, & tobacco		Clothing & footwear		Gross rent, fuel, & power		House furnishings & operations	
	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot	Slutsky	Cournot
High-income countries—continued								
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
Low-income countries								
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
Low-income countries—continued								
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
Middle-income countries								
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

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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
Middle-income countries—continued								
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
High-income countries								
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

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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
High-income countries—continued								
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.