**Appendix**

**Table A1** Share of carbonated beverages in households’ nonalcoholic beverage consumption

|  |  |  |  |
| --- | --- | --- | --- |
| Survey\* | Households’ total monthly expenditure† on nonalcoholic beverages‡ (million Rs.) | Households’ total monthly expenditure† on carbonated beverages  (million Rs.) | Share of carbonated beverages in households’ total expenditure of nonalcoholic beverages  (%) |
|  |  |  |  |
| 2005-06 | 464.80 | 334.00 | 71.86 |
| 2007-08 | 650.80 | 459.00 | 70.53 |
| 2010-11 | 1135.00 | 843.00 | 74.27 |
| 2011-12 | 964.50 | 759.00 | 78.69 |
| 2013-14 | 1992.60 | 1430.00 | 71.77 |
| 2015-16 | 2739.90 | 1690.00 | 61.68 |
|  |  |  |  |

\*Pakistan Household Integrated Economic Survey, various waves. Pakistan Bureau of Statistics, Islamabad: Government of Pakistan.

†Total monthly expenditure is the aggregate average monthly expenditure of all households and calculated using wave specific complex survey weights.

‡Nonalcoholic beverages include carbonated beverages, squashes and syrups, fresh and packed fruit juices, and mineral water.

**Table A2** Expenditure elasticity estimates without controlling for household characteristics

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Expenditure Elasticity of Food (ηFood) | | | Within Food Category Expenditure Elasticity of Carbonated Beverages (η(Food)CB) | | | Total Expenditure Elasticity  (ECB)† | | |
|  | **2006-2008** | **2011-2012** | **2014-2016** | **2006-**  **2008** | **2011-**  **2012** | **2014-**  **2016** | **2006-2008** | **2011-2012** | **2014-2016** |
| Q1 | 0.90 | 0.92 | 0.89 | 3.08 | 2.54 | 2.55 | 2.76 | 2.34 | 2.26 |
|  | (0.89, 0.90)\* | (0.92, 0.93) | (0.88, 0.89) | (2.94, 3.21) | (2.44, 2.64) | (2.46, 2.63) |  |  |  |
| Q2 | 0.87 | 0.89 | 0.86 | 2.34 | 1.98 | 1.82 | 2.03 | 1.76 | 1.57 |
|  | (0.86, 0.87) | (0.88, 0.89) | (0.86, 0.87) | (2.27, 2.42) | (1.93, 2.04) | (1.77, 1.86) |  |  |  |
| Q3 | 0.84 | 0.87 | 0.85 | 1.92 | 1.74 | 1.56 | 1.62 | 1.51 | 1.32 |
|  | (0.84, 0.85) | (0.86, 0.87) | (0.84, 0.85) | (1.87, 1.97) | (1.70, 1.79) | (1.52, 1.59) |  |  |  |
| Q4 | 0.81 | 0.84 | 0.82 | 1.73 | 1.54 | 1.37 | 1.41 | 1.29 | 1.12 |
|  | (0.81, 0.82) | (0.83, 0.84) | (0.82, 0.82) | (1.69, 1.77) | (1.51, 1.57) | (1.35, 1.40) |  |  |  |
| Q5 | 0.68 | 0.72 | 0.74 | 1.42 | 1.34 | 1.20 | 0.96 | 0.97 | 0.89 |
|  | (0.67, 0.69) | (0.72, 0.73) | (0.73, 0.75) | (1.39, 1.44) | (1.32, 1.37) | (1.18, 1.22) |  |  |  |
| All | 0.83 | 0.86 | 0.83 | 1.82 | 1.66 | 1.52 | 1.52 | 1.42 | 1.26 |
|  | (0.83, 0.84) | (0.85, 0.86) | (0.83, 0.84) | (1.78, 1.87) | (1.62, 1.70) | (1.48, 1.55) | 2.76 | 2.34 | 2.26 |

\*95% confidence intervals, calculated using the delta method, are in parenthesis.

†ECB is the product of ηF and η(F)CB.