



ERS *Report Summary*

Economic Research Service

March 2008

U.S. Department of Agriculture



*This is a summary
of an ERS report.*

Find the full report at
[www.ers.usda.gov/
publications/err56](http://www.ers.usda.gov/publications/err56)

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

Convergence in Global Food Demand and Delivery

Anita Regmi, Hiroyuki Takeshima, and Laurian Unnevehr

Globalization and income growth are resulting in increasing similarities worldwide in diets and food delivery mechanisms. Using consumer food expenditure data and food vendors' sales data, this report demonstrates that food-purchasing patterns and food delivery mechanisms of high-income countries are being increasingly copied by both upper middle-income countries (Mexico and Poland, for example) and lower middle-income countries (Brazil and China, for example).

What Is the Issue?

With increasing convergence in food systems, both the benefits and problems associated with modern food delivery are becoming more universal. For example, income growth and globalization of the food industry have improved access to and availability of an array of nutritious food products worldwide, promoting global trade in these products. The ongoing changes in food supply chains have contributed to modernization of food marketing in many developing countries, spurring agribusiness development and the establishment of modern food standards and regulations.

However, greater access to highly processed and calorie-rich foods has also led to an increased incidence of obesity worldwide. And globalization, which facilitates the standardization of food delivery, also heightens the risk of cross-border food contamination. Given such potential concerns, there is a need to better understand the dynamics of the global food industry, the pace and direction of change in food consumption patterns, and the evolution of the food retailing and foodservice (restaurant) sectors across countries.

What Did the Study Find?

Middle-income countries are beginning to resemble high-income countries in their food purchasing patterns at both retail and foodservice outlets. Middle-income countries appear to be following trends associated with high-income countries, with upper middle-income countries fast approaching the per capita expenditure and sales levels of high-income countries and lower middle-income countries also gaining.

Analyses of food expenditures across 47 countries indicate significant convergence in consumption patterns for total food, cereals, meats, seafood, dairy, sugar and confectionery, caffeinated beverages, and soft drinks. That convergence reflects consumption growth in middle-income countries due to rapid modernization of their food delivery systems, as well as to global income growth.

The convergence trends were faster in the early 1990s but slowed somewhat during the late 1990s and early 2000s, perhaps a result of slower income growth during the latter period.

www.ers.usda.gov

Convergence in total food expenditures, though, remains significant, particularly for meat, dairy, sugar, and caffeinated beverages.

Significant convergence in food expenditures for high-value products and packaged food implies a modernized food delivery system that makes these products available to consumers. Convergence across high- and middle-income countries is evident in several measures of food system modernization, including consumer expenditures on packaged foods, supermarket sales, and foodservice (particularly fast-food) sales.

The analysis also found evidence of convergence in the attributes of new food products introduced in both high- and middle-income countries. The share of labels with attribute claims of “natural,” “convenient,” or “high quality” tends to increase with the affluence of a given market. Convenience, for example, accounted for 27 percent of all label claims in Japan (a high-income country), 12 percent of total claims in Mexico (an upper middle-income country), and 6 percent of claims in Egypt (a lower-middle-income country). Such differences are to be expected given the higher opportunity cost of time in high-income economies.

Labels claiming healthful nutrients, such as added vitamins and minerals, showed a reverse trend, accounting for 51 percent of all claims in Indonesia (lower middle-income), 33 percent in Hungary (upper middle-income), and 27 percent in Japan. Even though preferences in developing countries are evolving toward those of consumers in high-income countries, many consumers in developing countries still prioritize obtaining adequate nutrition. Consumers in high-income countries, who may take adequate nutrition as a given, focus more on avoiding unwanted nutrients (as represented, for example, in the sale of low-fat foods) or attaining other attributes like organic sourcing.

Findings of convergence in food expenditures are important because they imply that demand for higher valued food products will continue to be strong in developing countries. As market opportunities for agricultural producers, distributors, and retailers grow in these countries, regulations and standards for food safety and quality will become increasingly important.

How Was the Study Conducted?

Annual data on 47 countries were collected from Euromonitor International for food expenditures and for total food sales from retail and foodservice outlets, covering 1990-2004. Data on product label claims were obtained from Product Scan, covering 2001-05. Using regression analysis, the expenditure and sales data were examined to evaluate whether convergence trends exist in food expenditure patterns and in food sales by retail outlet type across different countries. While past studies have examined convergence in food consumption patterns among high-income countries in Europe and North America, this study expands the analysis to cover middle-income countries and methods of food delivery.

Consumer demand for various food attributes was also analyzed using label claims on new products introduced in high- and middle-income markets. Convergence trends in expenditures were analyzed for total food, packaged food, and 11 food subgroups. Convergence trends in food delivery examined food sales from retail outlets such as supermarkets, hypermarkets, discounters, and convenience stores, while trends in foodservice outlets included fast-food sales and total foodservice sales.