Introduction

Food markets throughout the world are being reshaped by income-driven changes in consumer demand coupled with expansion of food product and retail models from high- income countries. Consumers in developing countries have used their growing incomes to upgrade diets, increasing their demand for meats, dairy products, and other higher value food products (Regmi and Gehlhar, 2005). Increasing affluence has also coincided with higher sales for labor-saving food products and for products perceived to be safer, more healthful, or produced in accord with environmental considerations, animal welfare, and equitable labor practices. The global expansion of multinational retail and foodservice chains has shaped tastes and diets and begun to standardize the manner in which food is produced, delivered, and consumed around the world (Unnevehr, 2004), in keeping with the "deep integration" phenomenon (Birdsall and Lawrence, 1999). As the food marketing and retail sector evolves in middle-income countries, consumers buy fewer raw commodities and more value-added and/or processed products (Reardon and Timmer, 2007).

Changes in food preferences and food delivery mechanisms are often mutually reinforcing, as when modern retailing increases access to processed foods or to perishable meats, fruits, and vegetables. Quality attributes then become more similar as a larger share of food demand is met through uniformly processed foods or through regulated food chains. Convergence in food systems means that both the benefits and problems associated with changes in local diets will rapidly become global issues. Increased consumption of processed foods, which tend to have high levels of fats and added sugars, has been posited as contributing to the global obesity epidemic (Popkin, 2007). The potential hazards when food supply chains cross multiple national boundaries has recently been exemplified by FDA restrictions on seafood imports from China (Martin, 2007). Thus, food policy issues may also grow more similar across countries. Interventions in particular countries to set safety standards or to impart nutritional information can have global consequences for health.

Just how widespread is convergence in global food markets? Does it extend to most food product categories and methods of food delivery, and to countries that are only recently urbanized?

Past studies have examined trends in food expenditures and food markets on a regional basis. Convergence between the North American and European food systems has been documented by Blandford (1984), Hermann and Röder (1995), Cotterill (1997), and Regmi and Unnevehr (2006). The regional transformation of food marketing systems in developing countries, and the potential impact on local producers, has been the focus of studies by Reardon and colleagues (e.g., Reardon and Timmer, 2007). However, no study has explicitly addressed whether convergence is evident across food systems at different levels of development.

This report examines whether convergence trends exist across high-income, upper middle-income, and lower middle-income countries, and whether they are evident in food expenditure patterns, food delivery mechanisms, and

food attributes. In doing so, the study addresses whether convergence in food demand is occurring in economies with very different food cultures and historical food preferences. To test for similarities in food delivery systems and their evolution, we statistically examine whether converging trends are evident in food retailing and foodservice sectors across high-income and middle-income countries. We use product label claims to examine whether consumer demand for different product attributes is similar among high- and middle-income countries.