Taking Account...

Study offers global household production data

The economic literature generally agrees that as gross domestic product (GDP) per capita increases, the goods sector shrinks while the services sector expands. Most of the literature on this structural transformation is about reallocation among market sectors. However, recent work has explored the reallocation between the market sectors and the household sector.

Adding to the literature, a recent study by Benjamin Bridgman of the Bureau of Economic Analysis, Georg Duernecker of the University of Mannheim, and Berthold Herrendorf of Arizona State University, offers a new global data set on the behavior of hours, value added, and labor productivity of household production. This new data set is intended to be used as an input into quantitative work that involves the household sector.

For their research, the authors relied on 126 time use surveys from 36 countries, covering 1961–2012. The countries covered more than 40 percent of the world population and more than three quarters of world's GDP in 2000. While most of the countries are members of the Organisation for Economic Co-operation and Development, data was also collected for low-income countries, such as Algeria, Bangladesh, Colombia, India, and South Africa.

The study finds that in most countries, the household sector is responsible for a sizable part of economic activity. On average, the sector accounts for 46 percent of total hours worked (market plus household hours). Moreover, the variation in the shares of household hours in total hours is large, ranging from around a quarter to about two-thirds.

Regarding the household sector in comparison with market sectors, the study finds that as GDP per capita increases, the employment share of the household sector initially declines somewhat and then hardly changes, while the employment shares of market goods decrease and the employment share of market services increase. These facts imply that the employment share of total services increases with GDP per capita. (Total services refers to market-produced services plus household-produced services.)

The findings have two implications. First, the main stylized fact of structural transformation continues to hold for broad sectors: as GDP per capita grows, the goods sector shrinks while the services sector expands. Second, countries experience marketization of services in that labor is reallocated from the household sector to the market services sector.

The fact that the employment share of the household sector does not change as much as GDP per capita changes must mean that the opposing effects of structural transformation and marketization of household sector employment largely offset each other.

The study also calculates the value added of household production for 33 countries, which yields similar patterns of structural transformation and marketization in terms of value-added shares.

Given estimates of the hours worked and the value added of household production, it is straightforward to estimate the labor productivity of household production as the ratio of the two.

The authors find that while the labor productivity of household production is positively correlated with the labor productivity of market production, it is typically less than half of that in the market segment.

Moreover, for countries with similar labor productivities in the market, the difference in household labor productivities can be sizable. Lastly, in the United States, the labor productivity of household production has all but stagnated since 1960. In contrast, in most other countries the labor productivity of household production experienced sustained increases, and it often caught up with, or even overtook, productivity in the United States.

(This summary was prepared by the SURVEY OF CURRENT BUSINESS *staff in conjunction with the study's authors. The study is available on the BEA Web site.)*