Preferences and Per-capita Income: Skill Premiums and the Composition of Consumption in General Equilibrium

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Abstract

International trade theory, emprics, and policy analysis largely focus on the production side of general equilibrium. The demand side, in most analyses, uses simplistic and counter-empirical assumptions such as homothetic preferences or worse, quasi-linear preferences. Here I challenge us to look at several stylized facts and recent empirical findings, and ask whether or not they are related, and what sort of general-equilibrium structure can jointly explain them. (1) countries exhibit large and similar changes in the composition of final demand as per-capita income increases, (2) there are long periods of rising skill premiums in countries across the spectrum of per-capita incomes, (3) the skill intensity of production has increased in many sectors in spite of or in addition to the rising skill premium, and (4) there is a large and significant correlation between the skill intensity of a good or services and its income elasticity of demand. That is, goods and services that experience increased expenditure shares are skilled-labor intensive in production*.

The existence of skill-biased technical change, popular among labor economists, can explain (2) and (3) together but cannot explain (1) when preferences are homothetic and does not recognize the new evidence demonstrating (4) in Caron, Fally, and Markusen (QJE, 2014). The latter's estimated non-homothetic demand structure implies that rising per-capita income, whatever the cause (including SBTC), shifts the composition of consumption toward skill-intensive goods and services which in turn implies a rising skill premium. But CFM violates (3) if the underlying production structure in Heckscher-Ohlin.

I argue that it is not straight-forward to construct a simple model that can simultaneously capture all of the four stylized facts. To do so, the underlying technological improvement that raises per-capita income must not only be skill biased but sector biased toward skill-intensive sectors. When these features are combined with CFM non-homothetic preferences in which skill-intensive sectors have high income elasticities of demand, all four stylized facts emerge together as model predictions. Whether or not these model properties jointly characterize recent decades of development awaits empirical research.

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*This is shown in:
Caron, Justin, Thibault Fally and James R. Markusen (2014), "International Trade Puzzles: a Solution Linking Production and Preferences", *Quarterly Journal of Economics*, forthcoming August.