

How the consumption preferences of rich and poor households is fuelling inequality and job polarization.

In recent decades the employment structure of the US has been polarizing with low-skill, low-wage and high-skill, high-wage, jobs on the rise at the expense of middle-wage and middle-skill jobs. In new research [Marco Leonardi](#) looks at an understudied potential mechanism for this polarization – changes in demand for certain goods and services. Using data from forty years of the Consumer Expenditure Survey, he argues that increasing education levels mean that skill-intensive goods and services tend to be favored by consumers, as are low-skilled services as households substitute them for domestic work.



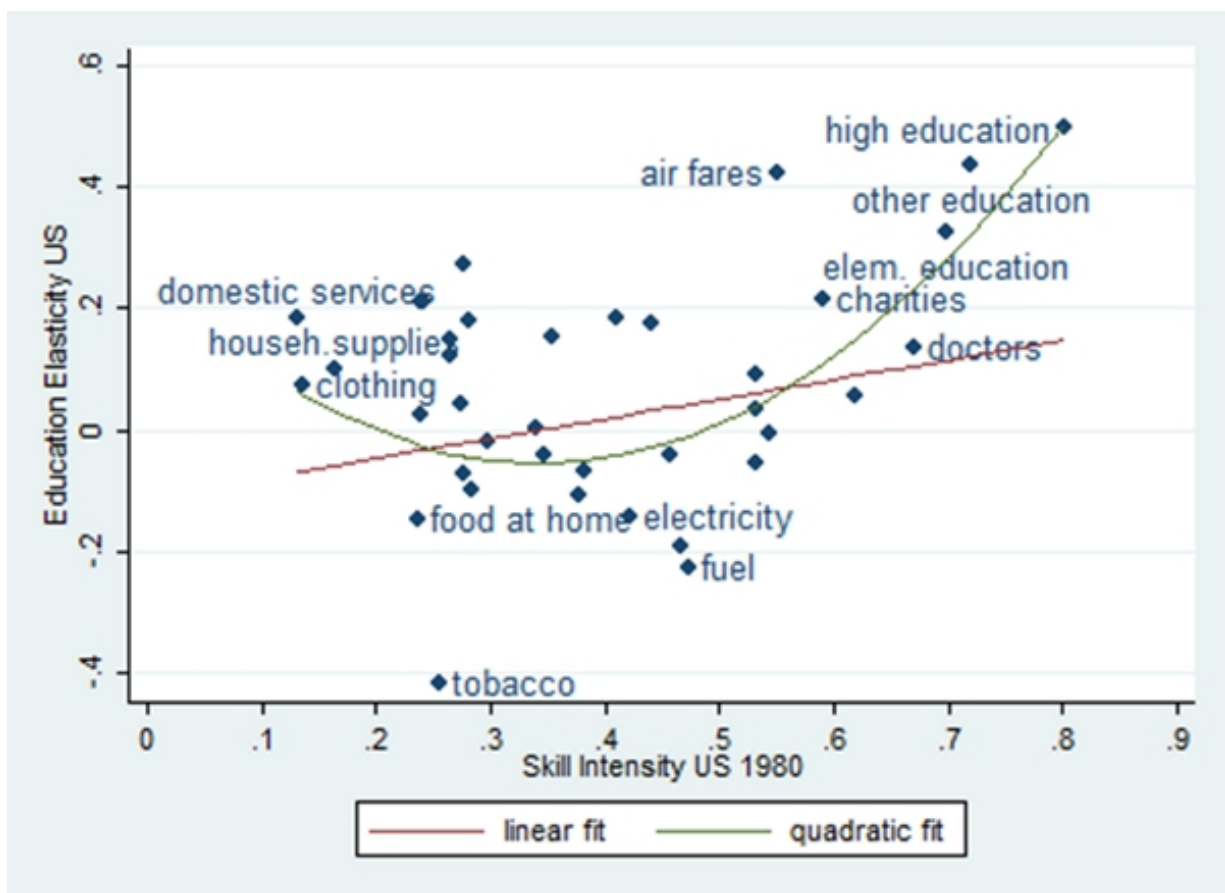
Recent commentary and research on wage inequality has highlighted the phenomenon of “polarization”. The structure of job opportunities in the United States and elsewhere has sharply polarized over the past two decades, with expanding job opportunities in high-skill, high-wage occupations and low-skill, low-wage occupations, coupled with contracting opportunities in middle-wage, middle-skill white-collar and blue-collar jobs. Wages also have polarized together with job opportunities. Many explanations for this phenomenon have pointed to the rise of overseas global competitors or increased investment in robotics which has removed middle-skill jobs (and reduced their relative wages), but not the lowest skill or the highest skill.

In new research, I shed some light on a different mechanism which may explain part of the increase of wage inequality and of polarization. If individuals with relatively higher education prefer to consume goods and services whose production is relatively skill intensive, then an increase in the relative supply of skilled labor can shift demand for final products and raise the relative demand for skills measured as the college premium. I refer to this mechanism as the “education elasticity of demand”: goods and services with a high education elasticity of demand tend to be consumed in higher proportions by college graduates. If these same goods and services require high skill intensity in production, then an increase in the supply of college graduates will turn into an increase in the relative wages of skilled workers. This mechanism, based on consumption elasticities and product demand, is a potential explanation of rising inequality –together with trade and technology.

The time-series evidence is consistent with this hypothesis. Consumer Expenditure Survey data show that the share of head of households with some college education went from 27.5 percent to 62 percent from 1972 through 2012 in the US. At the same time the share of total expenditure in the most skill-intensive services (defined as the sum of health services, education and personal insurance) rose from 14.4 percent in 1972 to 20.1 percent in 2012 while the combined share of expenditure on food and apparel (two low-skill-intensive products) declined from 26.1 percent in 1972 to 17.7 percent in 2012.

Results from using Consumer Expenditure Survey data at the micro level indicate that on average educated consumers tend to favor skill-intensive goods and services: education, health and professional services have very large education and income elasticities. Educated workers also demand more very low-skill-intensive services (such as personal services): they substitute domestic chores for market-provided household services when family income rises. Consumption has polarized, alongside with job and wage polarization. Figure 1 shows this phenomenon plotting the education elasticity of each consumption item in the Consumer Expenditure Survey against the skill intensity of the producing industry.

Figure 1 – The relation between education elasticities of consumer products and skill intensity of their producing sectors.



Additional evidence at the Metropolitan Statistical Area (MSA) level shows that the “education elasticity of demand” mechanism can explain part of the correlation between the share of college-educated workers in a city and the employment share of service industries. The J-shaped relationship between elasticities and skill intensities implies a positive product demand effect for both high-skill-intensive and very low-skill-intensive industry employment shares. Therefore an independent increase in the number of college graduates in one MSA should raise the employment share of high-skill-intensive non-tradable industries with high education elasticities both through a supply and a product demand effect.

The effect of demand can be detected at the MSA level only for non-tradable services which have a local demand, because manufactured goods can be imported and exported and depend from the worldwide demand. I analyze the change in college graduates in a MSA using changes in college graduates working in tradable industries at the national level: if the skill ratio in a specific tradable industry increases at national level, the MSA where that same industry employs a larger share of the tradable sector experiences a positive shock to skill intensity.

I find that a ten percent increase (in a decade) in the skill ratio in the tradable sector in a city is associated with a 0.45 percentage points (over an average employment share of 7 percent) higher increase in the employment share in skill-intensive non-tradable services.

These results are particularly important because they provide a mechanism –consumption preferences– consistent with recent work from Enrico Moretti who [shows](#) that an exogenous increase in the number of jobs in the tradable sector in a city results in an increase in local labor demand in the service sector.

A question arises naturally: How important is this mechanism, based on consumption elasticities and product demand, relative to the technology substitution or outsourcing mechanisms proposed by most of the literature?

The parametrization of a simple model suggests that this induced demand shift can explain around 6.5 percent of the increase in the college premium in the US between 1984 and 2002. Technology and trade remain the most important explanations but consumption preferences should be taken into the picture. Consumption preferences of educated workers are plausibly common across countries, in fact, similar results that give rise to the phenomenon of consumption polarization are provided for the UK.

This article is based on the paper "[The Effect of Product Demand on Inequality: Evidence from the U.S. and the U.K.](#)", in the *American Economic Journal, Applied Economics*, 2015.

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