

How Contagious is the "Baumol's Cost Disease"? Intermediates Use in the United States.

Abstract

This paper shows that the "Baumol's cost disease" has contaminated the intermediates use of United States economy body. The increasing use of the relatively expensive services-intermediates reinforces the increasing final demand for services. This paper establishes that the aggregate trend is driven also by the continuous substitution of goods-intermediates with services-intermediates at the industry-level.

A regression analysis supports that the complementarity between goods and services-intermediates is an important factor behind the pure substitution effect. This result is intuitive. For example, consider food production that uses both goods-intermediates inputs, like agricultural products, as well as services ones, like advertising. There is only a limited scope for substitutability between these inputs. To a great degree advertising is necessary for the production of any unit of food products and getting more agricultural products, electronic components, utensils etc. cannot create and implement an advertising idea. As a result, if agricultural products become cheaper over time they lower food input costs and raise production level. This creates a positive effect on the demand of the relatively expensive advertising services.

Regarding the aggregate impact of the changing composition in intermediates expenditures of the average United States industry, this paper reaches two conclusions. First, it shifts total requirement coefficients over time to imply lower aggregate production costs, but also higher (lower) exposure of the services (goods)-sector to any external demand shocks in the economy. Second, the intermediates reallocation that is driven by the industry size composition is large enough to offset the benefits from the changing composition within intermediates and bring about losses in labour productivity growth at the aggregate level. Thus, intermediates reallocation increases production costs over time; the "cost disease" is particularly severe for services.

Keywords: Baumol's cost disease, intermediates, elasticity of substitution