STRUCTURAL CHANGE AND THE KALDOR FACTS IN A GROWTH MODEL WITH RELATIVE PRICE EFFECTS AND NON-GORMAN PREFERENCES

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U.S. data reveal three facts: (1) the share of goods in total expenditure declines at a constant rate over time, (2) the price of goods relative to services declines at a constant rate over time, and (3) poor households spend a larger fraction of their budget on goods than do rich households. I provide a macroeconomic model with non-Gorman preferences that rationalizes these facts, along with the aggregate Kaldor facts. The model is parsimonious and admits an analytical solution. Its functional form allows a decomposition of U.S. structural change into an income and substitution effect. Estimates from micro data show each of these effects to be of roughly equal importance.

KEYWORDS: Structural change, structural transformation, relative price effect, non-Gorman preferences, Kaldor facts.

1. INTRODUCTION

IT IS WELL DOCUMENTED THAT ECONOMIC GROWTH GOES HAND IN HAND with significant shifts in the sectoral structure of output, employment, and expenditures ([Kuznets \(1957\)](#)). These dynamics are hard to square with balanced growth at the aggregate level, as described by the Kaldor facts—that is, the growth rate of real per-capita output, the real interest rate, the capital-output ratio, and the labor income share are all constant over time ([Kaldor \(1961\)](#)).

Structural change in expenditures is commonly believed to be driven by two separate forces. First, the expenditure structure can shift because of relative price changes driven by asymmetric technologies across sectors.² Second, an income effect may decrease the expenditure shares of necessities (and increase

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²This mechanism goes back to [Baumol \(1967\)](#), who stressed productivity growth differentials as a source of relative price changes. Changes in relative prices affect expenditure shares whenever the elasticity of substitution across sectors is not equal to unity.