

# On business cycles of variety and quality <sup>☆</sup>

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## Abstract

This paper explores the role played by product variety and quality in a real business cycle model. Firms are heterogeneous in terms of their specific quality as well as productivity level. Firms which have costly technology enter in the period of high aggregated demand and produce high quality goods. Thus, the average quality level and the number of available varieties are procyclical as in the data. The model can replicate the observed inflationary bias in the conventional CPI due to a rise in the number of new product varieties and quality.

*Keywords:* entry and exit, firm heterogeneity, the Schumpeterian destruction, product quality, business cycles

*JEL classification:* D24, E23, E32, L11, L60

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## 1. Introduction

Measuring fluctuations in the number of product varieties and their quality level is important for a better assessment of true cost of living. It is well known, however, that conventional consumer price indices do not fully appreciate changes in the number of product varieties and quality. Many empirical studies have documented the existence

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