

Do Durable Goods Matter?
-Effect on the Welfare Cost of Business Cycle-

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[Abstract]

Taking durable goods into account, what will happen in the welfare cost of business cycle? Based on Mankiw(1982), we derive the durable goods stock Euler equation using CRRA utility function and measure the welfare cost of business cycle including durable goods consumption. Different from Lucas(1987) and Obstfeld(1994), our utility measure is based on not durable goods consumption (flow) but durable goods stock. Our calculation shows that durable goods is not important in terms of the level of the welfare costs of business cycle, similar to the conclusion of Obstfeld(1994), Alvarez and Jermann(2004). But our reason is different; durability (accumulation) means that volatility is smaller in stock and durable goods stock actually has the larger growth rate. Therefore, quantitatively the calculated welfare cost of durable goods stock is not always larger than those of nondurable goods and service consumption. It depends on the degree of intertemporal substitution.

Key words; Business cycle, Depreciation rate, Durable goods, Risk free growth rate, Welfare

JEL classification; E20, E27, E32

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