

New Evidence for Gordon's Durable Goods Prices: Ratios of Structures to Equipment

OSAMU ARUGA

Ministry of Education, Culture, Sports,
Science and Technology

August 25, 2007

Accurate equipment prices are essential for assessing real economic growth. The U.S. National Income and Product Account price index for equipment, nevertheless, is, it is sometimes argued, biased. This paper examines the validity of this index using a neoclassical growth model with heterogeneous capital. The model includes long-lived structures and short-lived equipment. The model's prediction of the magnitude of the ratio of the stock of structures to equipment relative to the ratio of investment in structures to equipment is consistent with BEA data, the original data of NIPA. Using Gordon's equipment price index (as extended by Cummins and Violante) preserves this comparison. However, only with Gordon's data can the model also be consistent with time series evidence for both ratios.