

Capital is Back: Wealth-Income Ratios in Rich Countries 1870-2010*

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Abstract

This paper uses national balance sheets recently compiled for the main developed economies (U.S., Japan, Germany, France, U.K., Italy, Canada and Australia) in order to estimate wealth accumulation equations over the 1970-2010 period. For some countries, we are able to extend our analysis to 1870-2010 (U.S., Germany, France, U.K.). We obtain two main results. **(1)** First, we find that saving and investment flows account for the bulk of long run capital accumulation, in line with the one-sector Harrod-Domar-Solow model and the steady-state formula $\beta = s/g$. That is, we do not need to assume any major divergence between asset and goods prices in order to explain the very long run evolution of wealth-income and capital-output ratios. In the short and medium run, however, relative price effects (capital gains or losses) vastly dominate volume effects (saving flows). One needs to look at very long time horizons - or at large geographical units, e.g. Europe instead of individual countries - for price effects to vanish. **(2)** Next, and most importantly, we find in every country a gradual rise of wealth-income ratios, from about 200%-300% in 1970 to 400%-600% in 2010. In effect, today's ratios appear to be returning towards the high values observed in Europe in 1810-1910 (600%-700%). This can be accounted for by a combination of factors, including a long run asset price recovery effect (itself largely driven by changes in capital policies since World War 2, from anti- to pro-private wealth holders) and the slowdown of productivity and population growth. I.e. for a given saving rate $s=10\%$, then the long run wealth-income ratio $\beta = s/g$ is about 300% if $g=3\%$ and about 600% if $g=1.5\%$. Finally, by comparing the long run evolution of capital-output ratios and capital shares, we discuss the changing nature of wealth and technology, and the pros and cons of the Cobb-Douglas approximation.

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