

# Keynes' reading of the natural world: a real solution

draft

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Economists need to ask, why J.M. Keynes devoted the concluding chapter of his master theory of economic growth, to discussing the natural limits of money? That appears to not have been asked before and unclear why. As strange as the topic might have seemed in context, it held a very profitable insight we need today. He was speaking as a systems ecologist.

What Keynes discussed in [Chapter 16 of The General Theory](#) (1) was that following his own growth theory, growing investment would become increasingly unprofitable at natural limits. That gives a way to measure the approach of natural limits, comparing accumulative investment and returns. Quantities like that can be measured using whole system measurement methods like I developed in [Systems Energy Assessment \(SEA\)](#) (2), demonstrated for how to measure the true scale of business energy needs and liabilities.

Keynes pointed out that when growth becomes unprofitable a new kind of economic model would be needed. Investors would need to become spenders of last resort, spending from their accumulated savings as stewards of their decisions for how the economy developed, to restore its profitability and relieve financial obligations due to their overinvestment. That would restore balance between markets and the environment, and interrupt an otherwise terminal economic decline.

So, it's comes to a measurement problem. For more on the model Keynes sketched and my interpretation [see my 2010 blog post](#) (3). Speaking as a systems scientist, Keynes said:

*If I am right in supposing it to be comparatively easy to make capital-goods so abundant that the marginal efficiency of capital is zero, this may be the most sensible way of gradually getting rid of many of the objectionable features of capitalism. Ch 16, iv, p 4*



From a neoclassical view the financial costs of natural limits are “externalities” emerging as liabilities of growth. Not all, but many emerging financial liabilities, such as increasing disasters, climate change mitigation, redevelopment to build sustainable businesses and cities, and the societal conflicts due to [global resource demand exceeding supply](#) (4), could all be monetized. Life cycle balance sheets would show profits from development for cheap energy sources (now quickly running out and destabilizing the climate) balanced by the redevelopment costs of the world economy. That would let you define a “real discount rate” for various economic models and plans.

The actual key to Keynes’ solution, though, is not political power, but “people sharing information”, found by gaining insight into how nature works, and daring to act.

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1. J.M. Keynes (1936) "Sundry Observations On The Nature Of Capital", Chapter 16: The General Theory, of employment, interest and money.  
<http://www.synapse9.com/ref/KeynesGenTheoryTC+16-18.pdf>
2. P.F. Henshaw (2011) Systems Energy Assessment (SEA) <http://www.synapse9.com/SEA>
3. P.F. Henshaw (2010) "Keynes' "widow's cruse", *Reading Nature's Signals*.  
<http://synapse9.com/blog/2010/04/01/keynes-widows-cruse-compulsive-capitalism-v-natural-growth/>
4. P.F. Henshaw (2011) "A decisive moment for Investing in Sustainability", Spring 2011 *New European Economy*. <http://www.synapse9.com/pub/ASustInvestMoment-PH.pdf>