

## **Ecological constraints to Post-Keynesian endogenous money theory**

### LONG ABSTRACT

*Theme 6. Theory, methods and practice*

*6.1. Heterodox, post-Keynesian and ecological economics: connections and contradictions*

In Post-Keynesian theory, the money supply is endogenous, meaning that banks and the central bank could indefinitely accommodate the needs of a growing economy requiring endless levels of investment, with no ecological constraints to limit this process. Furthermore, it can be argued that endogenous money has made possible the transition from an “empty world” with rapid economic growth, overutilization of natural resources and increasing pollution to a “full world”, in which the economic system is getting close to the planetary boundaries (Goodland R. and Daly H., 1992).

Post-Keynesian theory and ecological economics seem irreconcilable, as they aim at reaching apparently incompatible objectives: economic growth and full employment versus degrowth or ecological constraints to economic growth and full-employment.

Besides, Post-Keynesian economics seems to be limited to analyzing “empty world” economic systems and might therefore become less relevant when the planetary boundaries are being reached.

In Post-Keynesian endogenous money theory, money creation is demand-driven and credit determined (Moore B. 1988). The money supply is constrained by the needs of the economy, then by bankers who decides whether to finance requests from enterprises and consumers, while the central bank is accommodative. However, there are traditionally no explicit ecological and environmental constraints to the process of endogenous money creation. In fact, Keynes mentions future limits to economic growth in the *Economic Possibilities for our Grandchildren* (1930), but he refers to consumers reaching a point where their absolute needs are met so that they can decide to devote their energy to non-economic purposes such as culture and leisure.

Since bank money creation is the means which brought our economic system close to planetary boundaries, one solution proposed by ecological economists consists in constraining the quantity of money in the economy to the level of optimal macroeconomic scale, by implementing 100% reserve requirements for banks. However, this solution might not have the expected results in an endogenous money framework.

This paper starts with Keynes’s refutation, in the *Treatise on Money* (1930), of the quantity theory of money and his claim that since money is not a commodity, we cannot analyze modern economies as if they were real exchange economies. It follows that Keynes does not think in terms of stocks of money in relation to quantities of goods, but in terms of the motives for which the flows of money are created and how they are then being used. Similarly, banks are not considered as creators of artificial money produced out of thin air, with no commodity backing, but the value of money depends on the motives for its creation and its uses.

It is then argued that ecological constraints can be integrated into the Post-Keynesian theory of endogenous money and banks. At the same time, ecological economics, and more specifically degrowth economists, might be interested in alternatives to the neoclassical commodity-based monetary and banking theories.

On one side, there can be a decoupling between the quantity of money created and the level of throughput and banks could influence the intensity of this kind of decoupling. On the other side, quantitative constraints on money creation per se, with no discrimination for the motives for money creation and its uses, might not have the expected ecological and environmental impacts, while imposing unnecessary high costs in terms of employment and well-being.

Finally, this paper claims that banks could play a crucial role both as ecological social accountants and ecological providers of credits. It also implies a lower reliance on financial markets to finance economic activities of production, investment and consumption.

In particular, banks would favour green investments and discriminate against unsustainable investments; for example, energy-conserving capital and investments in natural capital would be encouraged (Harris J., 2013). Banks can also finance green firms and green jobs more easily or provide firms with lower interest rates. On the durable consumption side, banks can also favour more sustainable consumer credits, for example directed toward energy efficient homes and cars.

### **Ecological constraints to Post-Keynesian endogenous money theory** SHORT ABSTRACT

In Post-Keynesian theory, the money supply is endogenous, meaning that banks could indefinitely accommodate the needs of a growing economy, with no ecological constraints. Because money endogeneity has brought our economic system closer to the planetary boundaries, ecological economists advocate 100% reserve requirements for banks. However, this solution might not have the expected results in an endogenous money framework, with unnecessary high costs in terms of employment and wellbeing.

This paper starts with Keynes's refutation of the quantity theory of money, as he proposes to think in terms of flows of money and the motives for its creation and its uses, while banks are not depicted as creators of artificial money. Then, it is argued that ecological constraints can be integrated into the Post-Keynesian theory of endogenous money and banks. In particular, banks could play a crucial role both as ecological social accountants and ecological providers of credits.