

THE EMERGENCE OF DEBT AND SECULAR STAGNATION IN AN UNEQUAL SOCIETY: A STOCK-FLOW CONSISTENT AGENT-BASED APPROACH*

WORKING PAPER

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ABSTRACT

In 1943 Keynes suggested that once industrialised nations had been through the immediate phase of post war reconstruction and had endured a protracted phase of steady economic growth (made possible by - what we now call - Keynesian stabilization policies), they would enter a third phase, in which low unemployment rates would become increasingly difficult to achieve (Keynes, 1943). Behind this was his concern that once a certain level of prosperity was reached, attained levels of higher income would lead to higher saving rates, while at the same time the demand for capital goods may not be able to accommodate those saving rates. Therefore, desired saving would at some stage come to substantially exceed planned investment. A formalization of this problem can be found in Harrod (1939), who argued that any development that increases the average saving rate raises the warranted rate of growth (which is the rate of growth necessary to satisfy producer expectations *ex post*), meaning that income would have to grow at a higher pace in order to create sufficient demand to meet producer expectations. If economic growth does not follow in the necessary direction, producers

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will not be able to sell all of their output, leading to a downward revision of production plans and rising unemployment.

While Keynes did not go into detail on why investment demand would not accommodate those higher saving rates, such explanations have subsequently been proposed by Hansen (1939) and Steindl (1952). While Hansen argued that an eventual decline in population growth would lead to stagnating investment demand, Steindl predicted that the rise of oligopolies at advanced stages of capitalist development would lead to rising profit margins, which would have a depressing impact on capacity utilization rates and therefore depress investment.² Only recently Summers (2014, 2015) revived this debate, arguing that the economy would be in a state of ‘secular stagnation’ due to chronically low investment and high saving. He points to low population growth (similar to Hansen) and the low cost of capital goods as reasons for sluggish investment demand. According to Summers, the legacy of the financial crisis and its impact on credit supply are part of the reasons for high saving rates. Another part of the explanation is the observed rising income inequality which goes along with a higher average propensity to save. As a remedy to stagnation, Summers argues in favor of higher government deficits. Interestingly, this proposition is quite in line with Keynes original vision, as he predicted that once this phase was reached, it would be accompanied by prolonged government deficits (Guger and Walterskirchen, 1988; Keynes, 1943).

While Keynes did not stress the issue of income inequality, although he does reference income redistribution as a means to reduce the propensity to save occasionally in the General Theory, Summers references it explicitly. In this sense we can ask the following question: What happens when income concentration rises in such a way, that a small part of the population can afford – and is willing to – save ever larger parts of their income? In order to properly isolate this influence, we will use an agent based stock flow consistent model without technological change, where firms use capital and labor for production. Doing so, we are going to investigate whether higher income concentration indeed leads to a rise in the average propensity to save that is not matched by a rise in the propensity to invest, and whether the result is chronically higher unemployment if it is not matched by chronic government deficits. Furthermore we will investigate the extent to which rising household debt is able to provide a short term remedy.

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²See on this also Guger and Walterskirchen (1988) and Backhouse and Boianovsky (2018).