

Neoclassical, post-Keynesian and neo-Marxian perspectives on degrowth

The question, how an economy can be organized without growth has received little attention from many strands of macroeconomics. While ecological economists have been working on this issue to great extent, several other strands have neglected the question almost entirely. In this paper I investigate the question, from the point of view of three prominent strands of macroeconomic theories: neoclassical, post-Keynesian and neo-Marxian approaches.

Neoclassical theories

In neoclassical theory there are two central groups of agents. Their behavior and the technological knowledge determine the macroeconomic variables. On the one hand, there are firms. They produce goods so that their profits are maximized. As they all face the same production function, they all behave in the same way. They need (to buy) labor and capital for production. On the other hand there are households. They get labor and capital income, dependent upon how much they work and how much money they save. They can choose (1) how much of their time they dedicate to work and (2) how much of their income they consume. The behavior of firms, households and the technological state of affairs determine all other variables: overall production, savings, investment, wage level and the interest rate.

Neoclassical growth theories build upon this framework. The level of production is determined by the amount of labor and capital applied. The amount of labor depends on the preferences of the households and the level of wages, which depends on the technological state of affairs. The amount of capital changes over time. Whether and how fast capital is accumulated depends on the price for money, which is determined on the money market. The demand (by the firms) depends on the productivity of capital, the supply (by the households) depends on the households' preferences. The more productive additional capital is and the more willing households are to save, the more capital is accumulated.

In a non-growing economy, the production factors (capital, labor, technology, and in some instances natural resources) all stay constant, or the growth of one factor is balanced by the reduction of another. As technological change is exogenous, little can be said for the conditions for decreasing productivity. Capital accumulation would be smaller, the smaller are the households' willingnesses to save money. This mechanism is highly doubted by many theorists though. The amount of labor applied depends on households decisions. Its size decreases if households' preferences change from consumption towards more leisure time.

The general view emerging from the neoclassical paradigm is, that we need a different technological development path, less capital accumulation (driven by less savings) and less labor (driven by a change in households preferences). Whether the driving mechanisms are the true causes for capital accumulation and working hours is questionable though, and technological change is not explained either.

Post-Keynesian Theories

In post-Keynesian theories, aggregate demand plays the central role and is the starting point of causal reasoning. Aggregate demand consists of consumption and investments. The amount of consumption depends primarily on the size and distribution of income. Investments depend on the costs of and expected revenues from additional production. The costs in turn depend primarily on the interest rate, the expected revenues depend on the expected level of consumption.

The size of aggregate demand determines the level of production, the level of employment, income and investments. We therefore have a circular economic causal relationship: Consumption and investments (the demand side) lead to a certain production level. This leads (on the supply side) to a certain level of employment and incentives to invest, which influences the demand side again.

Post-Keynesian growth theories put a strong emphasis on the (dual) role of investments. As in neoclassical theory, investments increase the capital stock and therefore increase the amount of production factors (capacity effect). But in post-Keynesian theories, there is a second effect (the demand effect). Investments lead to higher employment, higher income and hence higher demand. The conditions under which these two effects are of equal size, is of major concern in post-Keynesian growth theories.

An additionally interesting strand within post-Keynesian theories are monetary approaches, in particular stock-flow consistent models. They look at the monetary flows between different sectors and hence they can be used in order to examine what needs to happen to monetary flows in a non-growing economy. A central role is attributed to the deployment of capital incomes. If the savings rate (in these models only capital incomes are saved) is high, the consequent accumulation of monetary entitlements requires a growth of the real economy in order to generate sufficient profits.

From a post-Keynesian perspective, a stationary state is achieved, when aggregate demand is just sufficient in order to stimulate investments that counterbalance capital depreciation. Additionally, on the monetary level, the accumulation of monetary entitlements needs to be prevented. The driving force would be to stop the increase of consumption. This would directly lead to a decrease in aggregate demand and additionally to less incentives to invest. Simultaneously (similar as for the neoclassical theories) technological change needs to be stirred towards a different path, so that labor productivity does not increase in order to prevent unemployment.

Neo-Marxian theories

The neo-Marxian paradigm focuses on the movements of capital (money that is invested to make profit). There are two important classes in this analysis, capitalists and workers. Capitalists buy the production factors (capital, labor and inputs) to produce goods that can be sold to make profits. Capitalists save all their profits and reinvest them. Workers sell their working power to get wages and consume all of their income.

In neo-Marxian theories, systemic forces are at the center of the growth process. Firms compete and have to invest into more efficient production methods in order to increase profits and/or stay competitive. The profits that are not reinvested in this manner are invested into other new sectors in order to obtain profits there. In these new sectors, additional goods are produced. In case there is not sufficient demand, advertisements get an increasing role. The driving forces behind growth - capital accumulation, technological change (towards higher labor productivity) and increasing demand - are therefore inherent to the capitalist mode of production.

Hence, from a neo-Marxian point of view, in a degrowth society such mechanisms need to be prevented. Most importantly, the mechanisms leading to capital accumulation need to be addressed. On the firm-level, this would mean to counteract economies of scale, as only when larger production is cheaper than smaller production, capital accumulation at the firm level is necessary to be able to compete. On the macro-level, capital accumulation can be addressed by decreasing overall capital-income and the ability to earn profits from new investments. Additionally, the creation of additional demand – by advertisements and other mechanisms – are of concern.

Further research

In this paper I examined the views of three prominent macroeconomic theories on the conditions for a non-growing economy. While various insights can already be drawn from this, several areas for further research emerge: (1) The pluralist approach of this paper brought to light several mechanisms that lead to growth and that need to be addressed. The question remains though, in how far these mechanisms can be tackled at the same time and whether that makes sense from the

perspective of the different theories. (2) The investigation should be extended towards such theories within the theoretical schools used, that include environmental aspects. (3) The results need to be compared to the results from more established discourses on the issue at hand – most importantly ecological economics.