

On Interest, Investment and Economic Growth

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In “The Interest Rate Affair,” Sugata Marjit (EPW, 4 April 2015) points out the deficiency of one particular mainstream macroeconomic viewpoint. Marjit’s counterpoint, which we are in broad agreement with, is that a lower rate of interest does “not spur investments” because “[t]he rate of investment depends on other factors” (p 14). However, there are logical issues with his neoclassical economic methodology. Another claim of his, which we disagree with, is also critically examined, albeit very briefly, in this short response: “[w]hat an interest rate cut does is directly increase the profits of the corporate sector” (p 14).

Our response begins at a more basic level and asks the following question: what determines economic growth? Subsequently, we discuss the determinants of investment wherein Marjit’s simple model capturing the “incentive to invest” is critically assessed. This comment ends with some observations on the connection between interest rate and corporate profits.

Economic Growth

Marjit’s understanding of the determinants of economic growth is clearly visible in the following excerpt: “the rate of investment and productivity that transform investment into output are the *only* two factors that affect the GDP (gross domestic product) growth rate” (p 15; emphasis added). This implies that an increase in the rate of investment raises the growth rate as long as productivity is constant (or rising). Or, that the growth rate rises when productivity is rising even if the rate of investment is constant (or rising). For productivity to rise, there has to have been past or present investment which upgrades existing working conditions and/or production techniques. So, increasing productivity can

be treated as an outcome of the investment process. (Also, given investment, it is likely that productivity cannot rise beyond a certain point without raising investment.) In short, Marjit’s argument is that a positive rate of investment is *sufficient* for economic growth.

Is a positive rate of investment sufficient for economic growth? An increase in the rate of investment necessarily increases the rate of growth of aggregate supply (of goods and services). But, are there mechanisms in the economy which generate a corresponding and equivalent growth in aggregate demand? If not, an increase in the rate of growth of aggregate supply will not lead to an increase in the rate of growth of the economy but to an increase in the rate of growth of unsold goods. This point has already been made by economists working in the tradition of Kalecki and Keynes (cf Serrano 1995).

However, Marjit does not totally ignore demand constraints from his discussion. Employing a phrase similar to what Adam Smith uses for referring to demand—“extent of the market,” he writes: “[p]rivate long-term investment is guided by future prospects such as the size of the market and infrastructure” (p 15). Indeed, long-term investment takes into account long-term demand. Similarly, short-term investment takes into account short-term demand, and if this demand is not forthcoming, it generates a glut in commodities and more importantly, of labour (Keynes 1936). Therefore, a positive rate of investment, although necessary, is *not sufficient* for economic growth.

Determinants of Investment

Investment refers to the additions made to total capital stock (both physical and human capital). As noted above, for Marjit, private long-term investment is

determined by “the size of the market and infrastructure” (p 15). According to Marjit, the following simple equation determines whether private investment will be undertaken.

$$A \times MPK = [(1+r)/(1+z)] \times f(T)$$

A captures the general state of infrastructure, technology, productivity and expected state of future demand; MPK is the marginal product of capital—the addition to total product when one additional unit of capital is employed; r is the nominal interest rate; z is the inflation rate; and $f(T)$ is “some real measure of cost of transaction” (p 15). $[(1+r)/(1+z)]$ is therefore the real interest rate *plus* unity which Marjit forgets to explicitly include. If $f(T)=1$, transaction costs are zero and if $f(T)>1$, transaction costs are positive. The left hand side (LHS) of the equation represents the “real return from one additional unit of capital” or “the gain from investment” (p 15). And the right hand side (RHS) represents the “cost or loss” from investment.

According to Marjit’s equation, investment will be undertaken by an entrepreneur if and only if the LHS is greater than the RHS. In other words, an entrepreneur will undertake investment if and only if the gains from investment outweigh the costs. However, he notes that the variables making up the RHS of the equation are “beyond her [the entrepreneur’s] control, it is determined nationally or globally” (p 15). But, how is A or MPK within her control? Both A and MPK depend on the existing technology, which in turn depends on the existing state of physical and social infrastructure. As Marjit himself writes, “the marginal productivity of capital itself depends on future demand and the state of infrastructure (A)” (p 15). Also, the unit of measurement of A is left unclear.

Moreover, how does one logically separate out transaction costs (T) from A , the general state of infrastructure? Is Marjit’s equation a microeconomic one or a macroeconomic one? He uses this equation to make firm-level as well as economy-level claims about investment. Such a usage, according to us, is unsatisfactory

because what is true for the firm need not be true for the entire economy and vice versa (the fallacy of composition). Furthermore, zero transaction costs are associated with a neoclassical perfectly competitive market structure; if they are positive, the market structure is an imperfectly competitive one. In the case of the latter, he needs to explain how incomes are distributed as wages and profits. Also, he needs to make explicit the mechanism which tends to bring the gain from investment into equality with the cost of investment.

The expected state (both levels and growth) of future demand is part of A . It is not clear how expected demand forms part of the gain from investment. Here, an implicit assumption is made, viz, that the expectations about the state of future demand are correct. This is an unreasonable assumption to make unless as a preliminary simplifying assumption which will later be discarded.

Marjit argues that there are economic forces which tend to bring the gain from investment into equality with the cost of investment. "More investment will reduce the return from investment, that is, MPK , and finally at some κ , the RHS will be equal to LHS" (p 15). The underlying framework is nothing but the orthodox marginal productivity theory of distribution: "[t]he standard textbook hypothesis is that MPK falls with rising κ " (p 15). How does more investment reduce the return from investment? The only way this is possible is by assuming the law of diminishing returns: more the investment, less the returns from investment. But, what does this really mean in the context of aggregate private investment? Moreover, it must be noted that the equilibrium does not happen "at some κ " but at a point where κ (howsoever it might be defined, measured and aggregated) if fully employed. Also, using the marginal product of capital at the aggregate level to comprehend economic growth is theoretically and empirically very problematic (for instance, see Joshi and Thomas 2013).

An increase in z keeping A , R and T constant, according to Marjit, is "good for investment because goods can be sold at a higher price" (p 15). There is

inadequate information in his equation to make such a claim. For instance, if wage incomes do not rise in line with inflation, consumption demand will fall and so will investment. As Keynes rightly pointed out, there is "an inadequate appreciation of the fact that capital is not a self-subsistent entity existing apart from consumption" (Keynes 1936: 106).

Rate of Interest and Corporate Profits

Marjit is quick to conclude that a reduction of the interest rate raises the profits of the corporate sector. Here, it appears that he is drawing a causal link between a rate and a level. "The corporate sector, apart from seeing a boost in consumer demand, sees its cost of credit come down and profits rise" (p 15). Furthermore, he argues that "[e]ven if there is no increase in demand for the corporate sector's products, a cut in the interest rate will itself increase its profits." The phrase "there is no increase in demand" can mean either that consumer demand is constant or that it is falling. Let us consider each of these situations separately. Independent of the interest rate cut, if the demand for the corporate sector's products fall, it is not clear how corporate profits will increase. However, if the demand for the corporate sector's products remains constant, then a cut in the interest rate will have a tendency to increase corporate profits. In general, we think that this is a contingent result and not an absolute one because after all, the actual profits depend on the volume of actual sales.

Yet another aspect to be empirically examined is the routes through which the corporate sector gets its funds. For instance, if a particular firm gets most of its funds via external commercial

borrowings, then the domestic interest rate may not significantly affect its cost of borrowing. As for the Indian informal sector, it is often seen that the informal interest rates have an asymmetric relation with the formal lending rates. That is, if the latter go up, the former go up proportionately more and if the latter go down, the former do not necessarily go down proportionately.

Actually, Marjit's equation is a derivative of the marginal productivity of distribution, where, in equilibrium, the marginal product of capital equals the rate of profit (or interest, as it is also called) and the marginal product of labour equals the wage rate. Despite the many logical and methodological problems characterising Marjit's analysis, his point that a cut in the interest rate does not necessarily lead to an increase in investment merits a thorough intellectual engagement (an empirical starting point could be Anand and Tulin 2014).

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