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The Problem of Effective Demand with Tugan-Baranovsky and Rosa Luxemburg (1967)

I

In the discussions about the market for the national product in terms of the Marxian schemes of reproduction, the positions taken by Tugan-Baranovsky and Rosa Luxemburg are at opposite poles. Tugan-Baranovsky denies altogether that the problem of markets may constitute an obstacle to the development of capitalism, which thus depends entirely on the increase in productive capacity. Rosa Luxemburg, on the contrary, considers expanded reproduction in a closed capitalist system impossible, attributing all its development to the possibility of selling its wares in the markets external to it, i.e. in the non-capitalist sector of the world economy.

It is most interesting that both authors commit important errors in their arguments and that nevertheless their theories give a correct picture of some essentials of capitalist economy. Tugan-Baranovsky rightly stresses the 'antagonistic character' of the capitalist regime, as a result of which the production of consumer goods is not its final aim and the demand for them is not the motive force of its development. Similarly, although Rosa Luxemburg's theory that the development of capitalism depends solely on the 'external markets' is not correct, these markets are still an important part in the dynamics of capitalism.

The two theories find something like a point of intersection in present-day—especially US—capitalism, where a decisive role is played by a market created by the government for armament production.

II

The theory of Tugan-Baranovsky is in fact very simple: the author maintains that with 'appropriate proportions' of use made of national product the problem of effective demand does not arise. This argument, illustrated numerically by means of Marxian schemes of reproduction, is in fact tantamount to the statement that, at any level of consumption of workers and capitalists, the national product may be sold provided investment is sufficiently large. These are the 'proportions' between consumption and investment, which must be established in order that the total production should be purchased. A distortion of this proportion leads to crises in the course of which the deviation from it is being corrected. Thus the fundamental idea of Tugan rests on an error that what *may* happen is actually happening, because he does not show at all why capitalists in the long run are to invest to the extent

which is necessary to contribute to full utilization of productive equipment.

Tugan stresses the point that his theory will be right even in the most adverse conditions of actual curtailment of worker consumption and stability of capitalist consumption. Obviously, on paper even this may be offset by a sufficiently high level of investment. The author, by the way, does not anticipate the criticism that capitalists may be unwilling to use the surplus value by investing so much. Instead he answers a critic of a different type, who would consider absurd investment the purpose of which is production of investment goods rather than that of consumer goods. After having 'fixed' his critic in this way, Tugan gives a perfectly sensible answer.

The capitalist system is not a 'harmonious' regime the purpose of which is the satisfaction of the needs of its citizens, but an 'antagonistic' regime which aims to secure profits for capitalists. As a result, there is nothing absurd in basing the development of the system on expansion of a production of 'coal and steel' which serves merely to develop the production of these commodities. The production of 'coal and steel' is as justified as production of bread if it is profitable. Consumption is the final aim and proof of a 'harmonious' but not of an 'antagonistic' regime.

It is this part of Tugan-Baranovsky's argument that I consider his lasting contribution to the analysis of functioning of capitalism in its various phases. It is worth noticing that the theory of Tugan is, despite his 'optimism', deeply anti-capitalistic: it is just the absurdity of capitalism that makes its development immune to the problem of finding markets for its products.

III

Let us go back, however, to our critique of the theory of Tugan-Baranovsky (which is equivalent to the statement of Rosa Luxemburg on the subject of this theory). Tugan considers the *possible* use of the national product created by full utilization of the productive forces as the actual fact—at least, if we disregard the business cycles. The following problem arises here: the approach is certainly faulty, but it does not follow that Tugan's theory is wrong, merely completely unfounded. Perhaps after all the problem of the markets does not really constitute an obstacle to expanded reproduction of a capitalist economy. In order to give a complete answer to this query, it is necessary to construct a theory of investment decisions such as it would cover all aspects of dynamics of capitalist economy and not only those relevant to the business cycle. This is not the place, however, to develop such a theory, which I always considered to be the central problem of the political economy of capitalism. Here I shall try to show that expanded reproduction—even in conditions much more favourable than were on purpose assumed by Tugan-Baranovsky is by no means obvious, and that it requires a certain supporting factor, for instance, a factor which would depend on innovations (and thus not necessarily Rosa Luxemburg's 'external markets').

Imagine the process of accumulation of capital, say 4% p.a. Let us assume that at the start capital equipment and labour are fully utilized. Let the depreciation amount to 3% p.a. so that gross investment is equal to 7% of capital. Let us also assume a constant share of gross profits (including depreciation) in the gross national product, and constant proportions in the distribution of gross profits between gross accumulation and capitalist consumption. Thus gross accumulation bears a constant relation to the national income. The

process of accumulation consists in the expansion of productive equipment at 4% p.a. due to investment, and since gross accumulation bears a constant relation (7%) to capital, gross accumulation also expands by 4% p.a. Given the constant share of gross accumulation in national income, income would also grow at the rate of 4% p.a. Thus full utilization of equipment continues, and the problem of effective demand does not seem to arise.

All right, but why should capitalists continue to invest at a level of 7% of capital? Simply because the process has been going for some time, this investment has been 'justified', and the capitalists do not anticipate any difficulties in selling their products with reproduction expanding at 4% p.a., and therefore they do not hesitate to continue their game.

Let us, however, consider a case when—for instance, as a result of a change in the social structure of the capitalist class—capitalists are prepared to invest only 6% of the capital p.a. (without changing the relative share of their consumption in gross profits). The problem of effective demand then immediately makes its appearance. The ratio of investment to the stock of capital falls by one-seventh, i.e. by about 14%. There arises thus the problem of over-production: because of the constancy of relation between accumulated and consumed parts of profits, the latter will also fall by 14% in relation to capital; through reduction of employment in investment goods industries and in industries producing consumer goods for capitalists, there will be also a reduction of demand for wage goods and reduction of employment in those industries—until working-class income also falls by 14% in relation to capital, so that the proportion between profits and wages is maintained as assumed. This general situation of over-production in turn adversely affects the investment decisions of capitalists. Now they are not willing to invest even 6% of capital, contributing thus to further deterioration of the situation.

Yes, somebody may say, this is a typical crisis which will be followed by a period of prosperity, and these fluctuations will just occur around the process of expanded reproduction described initially. There is, however, nothing to substantiate this argument. After a breakdown of the moving equilibrium, no trace of the 4% or 3% annual long-run increase was left in the economy. The economy may as well settle to a state of simple reproduction with cyclical fluctuations around it.

IV

We have moved one step forward: we have shown that the development of capitalism which does not encounter the problem of effective demand, even if it is possible, is unstable. However, a process of an unstable equilibrium ceases to exist if it is not supported by some stabilizing force. In relation to our problem it may be said that an expanded reproduction will take place if there exist factors that simply do not permit the system to remain in the state of simple reproduction (or stationary state): the initial state of simple reproduction leads to a level of gross investment exceeding depreciation.

Such a factor may be first and foremost the influence of technological innovations, discovery of new sources of raw materials, and the like, which opens new perspectives to the capitalists. The technical progress appears in this approach not merely as depreciating old plant, which leads to its replacement by new plant; it is also a stimulus for investment over and above that level, resulting

from the fact that capitalists investing 'today' think to have an advantage over those having invested 'yesterday' because of technical novelties that have reached them.

The above should not be construed in the sense that such a possibility of expanded reproduction—without 'external markets' is tantamount to the elimination of the influence of inadequate effective demand. Indeed, the rate of expanded reproduction resulting from this factor is by no means necessarily adequate to secure the full utilization of equipment, or even to keep the degree of this utilization at a constant level. Innovations break the impasse of a simple reproduction only to some extent, and they do not warrant the utilization of resources in Tugan-Baranovsky's sense.

From the last two sections it follows in any case: (i) as a result of the problem of effective demand, expanded reproduction is not a natural and obvious state of the capitalist system; (ii) nevertheless, such reproduction is not necessarily a result of 'external markets'. Thus, although these sections are meant primarily as a criticism of the theory of Tugan-Baranovsky, they constitute at the same time a starting-point for a discussion of the views of Rosa Luxemburg, with which we shall now deal.

V

Rosa Luxemburg considers expanded reproduction in the long run without the existence of 'external markets' to be not only far from obvious but downright impossible. It should be noticed that she argues this point as naïvely as does Tugan-Baranovsky showing the irrelevance of the problem of effective demand for the development of capitalism. In her consideration of the taking of investment decisions by capitalists, she somehow implies that they are being taken by the capitalist class as a whole. And this class is frustrated by the knowledge that there is no final market for the surplus of goods corresponding to accumulation: so why invest?

Now capitalists do many things as a class, but they certainly do not invest as a class. And if that *were* the case, they might do it just in the way prescribed by Tugan-Baranovsky. But despite this error in her argument, it is valuable in being imbued with the spirit of scepticism with regard to the market for the surplus of goods corresponding to the accumulation. Even though following a different line of thought, we also have come to the conclusion that expanded reproduction is by no means a 'natural' phenomenon, and we have tried to find the source of expanded reproduction which is, though, by no means equivalent to permanent full utilization of equipment—in certain aspects of technical progress.

Rosa Luxemburg, as we have said, sees the possibility of finding the market for surplus goods merely *outside* the world capitalist system. She does not mean here underdeveloped countries only, but also the non-capitalist sectors of developed economies, e.g. peasant agriculture. Only the 'exports' from the capitalist system are the mainspring of development. Hence her pessimistic view of the future of capitalism: by undermining non-capitalist production and gradually pervading the world, capitalism at the same time eliminates the possibility of its further development.

To the quantitative overestimate of the role of 'external markets' Rosa Luxemburg contributes a fundamental mistake, which she perpetrates in the analysis of the impact of these markets on development of capitalism. She considers—in any case in the main current of her argument—that the

market for the surplus is created to the extent of *total* exports to the non-capitalist sector, and not only to the extent of the *excess* of exports over imports.

It is easy to show, however, that this approach is erroneous: the imported goods absorb purchasing power just like those home-produced, and thus, to the extent that exports are offset by imports, they do not contribute to the expansion of the markets for national product. Or, to approach it from a different angle, imports, like wages, are costs, and the part of disposal of profits is, alongside capitalist consumption and investment, solely the export surplus. And in order that this should be possible, export of capital is necessary. Only to the extent to which the capitalist system lends to the non-capitalist world (or the latter sells its assets) is it possible to place abroad the surplus of goods unsold at home. Only in this way do the 'external markets' solve the contradictions of the world capitalist system.

Obviously the net 'external markets' also played their role in the development of capitalism, but a much more modest one than would have been the case if really *all* the exports to the non-capitalist world contributed to the absorption of surpluses corresponding to accumulation.

VI

One of the most interesting elements of the theory of Rosa Luxemburg is taking into consideration in her 'external markets', alongside those mentioned above, the market created by government purchases and in particular by armament orders. She consistently, by the way, makes the mistake of treating the whole of government expenditure, for instance on armaments, without paying due consideration to its financing, as absorbing the surplus.

If, however, this expenditure is covered by taxes burdening the working class, they have no effect upon the absorption of national product because the new 'armaments markets' are offset by an equal curtailment of worker consumption.

If armaments are financed by the issue of government securities, then the surplus of goods is sold by capitalists in exchange for the money obtained in turn by the government through sale of their bills and bonds to the financial capitalists. The capitalists—taken as a whole—thus grant the government a credit with which to buy their surplus goods. Also, capital is here being 'exported' to the 'foreign market' created by the government (this operation may be transacted through the banking system the government sells bills to the latter using the amounts obtained to purchase armaments; while in the banking system there is an equal increase in deposits, representing the accumulation corresponding to armament production; as a result, the capitalists grant credits to the government through the medium of the banking system).

Finally, even when the armament expenditure of the government is covered by the tax on profits, it also constitutes a way of absorbing accumulation to this extent, but in a different way from the case of financing this expenditure by internal credits. Imagine that profits accumulated by capitalists as a whole as a result of armament orders are taken away by taxation rather than in exchange for government securities.

The profits do not increase, then, as a result of new armament orders, but the surplus is nevertheless absorbed by its expropriation by the government. The difference from the case considered previously consists in the fact that while there the capitalists granted credits to the government, they pay taxes in the case presently considered.

Thus Rosa Luxemburg rightly saw in the armament orders an `external market' which can absorb a part of accumulation—but she should have excluded from this type of 'external market' the case where armaments are financed by taxation of the workers.

It should be added still that Rosa Luxemburg does not treat the `external markets' created by the government as a problem of first-rate importance. Thus, while predicting the general crisis of capitalism caused by the exhaustion of non-capitalist markets, she does not anticipate the possibility of counteracting that crisis by the 'external market' of government purchases.

VII

It follows from what was said at the outset of this paper that the theories both of Tugan-Baranovsky and of Rosa Luxemburg in a sense find their confirmation in contemporary, in particular in American, capitalism. While perpetrating grave mistakes in their arguments, the authors show a striking perspicacity in the evaluation of certain basic elements of late-stage capitalism.

The 'external markets', in the broad sense of Rosa Luxemburg, in the form of armament orders and ancillary expenditure—in so far as they are financed by loans and taxation of capitalists—play today a leading role in the functioning of modern capitalism. It is true that Rosa Luxemburg did not anticipate the enormous role of this type of `external market' in the absorption of accumulation. But one way or another she maintained that capitalism is saved by 'external markets'. In her time it was no doubt exaggerated, but it has proved right today.

As for Tugan-Baranovsky, contemporary capitalism indeed put into focus his view of the paradoxical and absurd character of `antagonistic systems' whose main task is not catering to human needs. In his vision of future capitalism, machines were to produce machines for production of machines. But making the high level of employment and worker consumption dependent on production of the means of destruction is even more absurd.

Both, despite slips in their arguments, contributed to the understanding of the perverse world in which we are living.