# On the Problem of "The Falling Rate of Profit"

Ian Brinkley 6/27/2018

## Introduction

Recently, I heard a few of the persons with whom I share company make reference to something about which I had never heard anything before: something called "the falling rate of profit problem". Consistent with the age of those by who made those references, it turns out that the "falling rate of profit" is a problem which arises in Marxian economic theory. Coincidentally, I happened to recently hear a lecture by Lyndon LaRouche from the 1970's on Marxian economics in which the "falling rate of profit" problem within a "capitalist economy" was presented. As I have never read a single page of any of the writings of Karl Marx, the treatment of the problem of the falling rate of profit which I give below should be viewed as a response to the problem as it was described by LaRouche in the referenced lecture.

I was immediately able to discern the flaw in the logic which produced the problem in the first place, as well as the invalidity of the problem even under the condition in which that basic flaw is ignored. I present my arguments below.

## A Summary of the "Falling Rate of Profit Problem"

Before we proceed, let us first summarize the problem (as I learned of it from the referenced lecture):

The Bar Diagram Model of Economic Production/Consumption

In an economic system, the process of the production and consumption of resources (also called "capital") can be represented by a bar diagram model. The bar diagram represents the total aggregate of useful resources available to the economy. This aggregate of resources is thought of as capable of being quantitatively compared with other aggregates of resources which a society might produce/consume. For instance, if a society produced an aggregate of resources which contained more or less resources than a previous aggregate, then a quantitative relation could be established between the aggregates, a relation which could, in turn, be represented by bar diagrams of different sizes which corresponded to each aggregate.

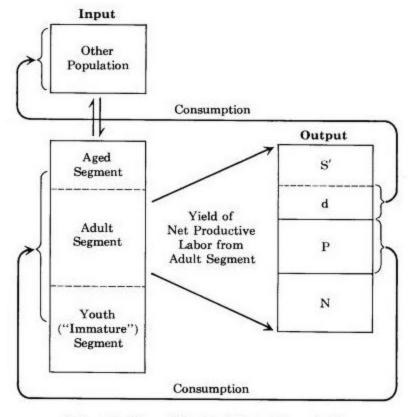


Figure 2 General Model of Social Reproduction

Economic consumption of aggregates of resources can thus be represented by one bar being consumed by the members of the society to the effect of producing another bar. If the bar representing the output is greater than that representing the input, this corresponds to the production of a greater mass of resources by a society than that mass of resources which the society consumed in order to produce those resources. Holding all other factors constant, such as population level, total labor expended, etc. the production of an aggregate of resources by a society larger than the aggregate of resources produced in a preceding interval of production could only be accomplished by the increase of the productivity of labor (as facilitated, for example, by technological or scientific progress). As the increase in productivity reduces the total amount of labor and resources required to produce the same amount of economic aggregate, the real economic cost of production, and corresponding to monetary cost, will be reduced. Assuming an economic system in which production is accomplished by a group of private business firms, an increase in productivity results in an increase in profit of those firms.

#### The Problem

However, it is claimed by the proponents of the "falling rate of profit" problem that this is not the end of the story. It is claimed that there is a batch of resources which is not included in the bar diagram representation; a batch of resources which is not being consumed as a part of the economic process. This batch of resources is called "fixed capital". Fixed capital is that batch of resources which is owned by the private business firms ("capitalists") but which is not consumed for productive purposes. The argument proceeds: Since these resources have a marketable value, or market price by which they might be sold at some time by the business firms which own them, the firms include the total marketable price value of the fixed capital resources which they are hoarding in the final tally of their wealth position. That is, they include in their total account of wealth the marketable value of wealth of their hoarded assets (fixed capital) in addition to the money profit which they procure through sale of goods.

The argument proceeds: Because an increase in productivity reduces the cost of production, the price of goods in the market will decrease. Thus, should an increase in productivity occur, a decrease in the marketable price value of the resources which the firms are hoarding will result. Under the assumption that the change in the total value of fixed capital holdings and the change in the profits of the firms are modified in the same proportion, the following conclusions hold: If the total value of fixed capital is less than the total value of goods sold, or "circulating capital", then an increase in productivity will result in a net increase of the total wealth position of the firms. If the value of fixed capital and the value of goods sold are equal, then an increase in productivity will result in no net change to the wealth position of the firms, as the decrease in the value of fixed capital will equal the increase in the profit derived from the selling of goods. If the value of fixed capital is greater than the value of circulating capital, then an increase in productivity will result in a diminution of the wealth position of the firms, since the total decrease in wealth by fixed capital devaluations would be greater than increases of profits resulting from productivity increase.

Since, apparently, in a capitalist economy, hoards of fixed capital are supposed to always increase faster than does real production (on account of "greedy capitalists"), the fixed capital value will inevitably move beyond the break-even point, and the total wealth position of firms will start to fall as long as there is productivity increase. Thus, it is supposedly demonstrated how it is that, in a capitalist economy, increases in productivity (a thing which might be called "objectively good") actually is undesirable for the "capitalist class". Thus, this problem is referred to as "the fundamental contradiction of capitalism".

Further, it is said that, as a result of this, firms must make recourse to charging higher prices in order to maintain a growing wealth position under conditions of increasing productivity. The

charge of higher prices results in inflation. Further, because the higher prices require more money in circulation to facilitate purchases, increases of the money supply occurs, which involves greater levels of debt accumulation. But, as the increase of debt is taking place to facilitate the same purchase of goods as before, there is no increase in the ability to pay back the debt, and , thus, a large mass of debt accumulates, and eventually collapses, prefaced, supposedly, by zooming inflation.

So much for the falling rate of profit problem and the "fundamental contradiction".

### Fallacies of the Theoretical Basis of the Problem Demonstrated

## An Illegitimate Idea

Because the problem of the falling rate of profit was born out of an illegitimate idea from the outset, the problem might be called a "pseudoproblem". What was the illegitimate idea which created this problem? The illegitimate idea is "fixed capital". There is no such thing as fixed capital, or resources which are not in the process of consumption by society. Thus, any theoretical constructions, such as the falling rate of profit problem, which result from an admission of the existence of fixed capital are meaningless and useless.

Where did the idea of fixed capital come from? It came from a flawed representation of the process of economic production and reproduction- the one described above as the "bar diagram model". I have provided a more detailed discussion of the shortcomings of the bar diagram model in another location

(https://www.findingprometheus.com/single-post/2018/02/11/A-New-Visual-Representation-of-t he-Process-of-Economic-Production-and-Consumption), but, in this location, I will briefly summarize the shortcoming which is the essential reason as to why this model was the cause of the development of the erroneous concept of "fixed capital".

Because the aggregates of resources available which are said to be produced and consumed by a society are represented as *discrete units*, as opposed to *continuously* consumed and generated flows of resources, the bar diagram must represent the mass of resources produced and consumed over some interval of time. Thus, resources which are not completed in their production and resources which are not completely consumed within the specified interval of time used for the bar diagram model will not be able to be considered as included in the bar diagram representation. Of course, the proper way to view the bar diagram model is to *imagine* that the total production and consumption of resources does occur within some definite time interval. The quantized representation of production and consumption is recognized as a useful *idealization* as it provides the basis for using the model to make rational judgments about the

total economic production/consumption cycle, and changes within it. But, if the bar diagram is not viewed in this way, then, it is inevitable that the person considering it must conclude that some resources are not represented in the diagram. Those resources which are viewed as not represented in the diagram are then called "fixed capital"- resources which are not in the process of consumption and production, but which simply sit hoarded away somewhere. Those resources which are included in the diagram are then called "circulating capital". Thus, we can see how it is that an artificial and arbitrary distinction of the resources of a society is made simply because of the way in which the model is misinterpreted and misapplied.

As a side note, it is true that extended storage and even hoarding do take place in an economy. However, it should be remembered that all resources have a finite lifespan, even in storage. Therefore, the remaining lifespan of existing resources is always decreasing, and, thus, all resources can be be said to always be under consumption, even if the rate of (non productive) consumption so happens to be that which is equal to the rate of decay of a commodity in storage.

The problem of representing the consumption/production of resources in an economy which does not involve either idealizing the production and consumption of all goods as occurring in a discrete time interval, or the notion of "fixed" capital deriving from a consideration of only those goods which fall within an arbitrary time interval as constituting "circulating capital", that problem, I say, has been taken up by me in the above cited report (https://www.findingprometheus.com/single-post/2018/02/11/A-New-Visual-Representation-of-t he-Process-of-Economic-Production-and-Consumption).

### Ignoring the Fundamental Error

Now that we have exposed the problem of the falling rate of profit as a pseudoproblem by virtue of the illegitimacy of the concept upon which it is based, let us *entertain* the notion of fixed capital (which we have already demonstrated as illegitimate) to see if the falling rate of profit problem is even valid under that accepted notion.

First: Increases in the productivity of the production of a certain commodity in the economy, while the productivity of the production of other commodities in the economy remains constant, will have no effect on the fixed capital value of any firm except for those firms which hoard significant amounts of that particular commodity. For instance, if the productivity of production for commodity X increases, while the productivity of production of all other commodities remains the same, the price of X, relative to all other commodities, will decrease. This decrease in the price of X will only reduce the fixed capital holdings of those firms which hoard commodity X as fixed capital. As firms which produce a specific commodity are generally not hoarders of that same commodity- always seeking to sell it as quickly as possible- increasing the

productivity of the production of X is not likely to have any significant impact on the fixed capital holdings of the firms which produced X. Thus, the so called "fundamental contradiction" does not really apply to individual firms which undergo increases in productivity, (unless those firms so happen to hoard significant stocks of their own product for some reason).

This only treats the falling rate of profit problem for an individual firm, or class of firms, under conditions of isolated productivity increases, as opposed to systemic increases in productivity. Let us examine whether or not systemic increases in productivity actually lead to the result claimed by proponents of the "falling rate of profit" problem.

Assume that the productivity of production of all goods in the economy increases, and that in equal proportion for all goods. This results in a proportionally equal reduction of the prices of all goods. The reduction in the prices of goods necessitates a decrease in the marketable price of fixed capital, no matter who it is that holds that fixed capital. However, the reduction in the marketable price of fixed capital does not necessarily mean that the real wealth of the holders of fixed capital will be decreased. For, as the price of each commodity held as fixed capital will decrease to the same degree as will the price of commodities constituting "circulating capital", the actual exchange value of the commodities held as fixed capital will be equal to what they were before the productivity increase. That is, although, after an increase in systemic productivity, the amount of money able to be procured through the sale of fixed capital commodities will be reduced, the price of all commodities in the "circulating capital" aggregate will also be reduced to the same degree. Thus, the sale of fixed capital commodities will result in the procurement of an amount of money which has equal purchasing power as the amount of money which would have been produced from the sale of fixed capital commodities before an increase in productivity had taken place.

How could so obvious a point have been overlooked? Again, an improper reading of the bar diagram model of economic production and consumption referenced above. This is further illustrated by the fact that one can never say, in the argument for the falling rate of profit summarized at the beginning, what the proportion of circulating capital to fixed capital is. Thus, one can never say if the point has been reached at which increases in productivity will result in decreases in the wealth position of firms. For, after all, the time interval which defines those commodities included in the fixed capital and circulating capital categories is completely arbitrary, and, thus, the time interval can be made as small or as large as one likes. In this way, the exact same economic conditions can be represented in two different ways, and, based on the difference in representation, one would arrive at completely opposite theoretical results regarding the falling rate of profit problem. That is, an interval of time defining the circulating capital resources could be chosen such that the ratio of fixed to circulating capital were small, or, one could choose an interval of time defining circulating capital such that the ratio of fixed capital to

circulating capital were large. These two different representations of the same exact economic process would lead to completely opposite theoretical results if we assumed a systemic increase in productivity: In the first case, no falling rate of profit would occur, and in the second, it would occur. Again, these two completely opposite theoretical results would result from the difference in an arbitrary factor within the model used to represent the same economic conditions. In a theoretical model, adjustments of arbitrary factors are not supposed to lead to any modification in the theoretical result.

So much for the problem of the "falling rate of profit" and the "fundamental contradiction" of "capitalist economies" (whatever those are).