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## What is Wrong With Heterodox Economics? Kalecki's Profit Theory as an Example

### Egmont Kakarot-Handtke

#### **Abstract**

Kalecki's profit theory has always been popular among heterodox economist as an alternative approach to solve the paradox of monetary profits. In the present paper his formula 'The workers spend what they get, the capitalists get what they spend' is scrutinized for its logical and factual implications. The analysis shows that Kalecki's alternative approach points in the right direction but unfortunately shares a crucial conceptual error with standard economics.

JEL B50, E12, E25, B22, B41

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Since Veblen satirized the marginalists' conception of man as a 'lightning calculator of pleasure and pain' heterodox economists have done thorough work in recovering and naming the weak spots of standard economics (see Pålsson Syll, 2010, for a topical overview). And there seem to be more than enough to fuel a thriving What-is-wrong-with-economics literature. This is commendable as far as it goes (Lawson, 2006). Yet as Blaug noted:

The moral of the story is simply this: it takes a new theory, and not just the destructive exposure of assumptions or the collection of new facts, to beat an old theory. (Blaug, 1998, p. 703)

What seems to be most needed is a profit theory. Efficiency is important but profit is essential for the functioning of the market system and it is rather surprising that the nature and magnitude of profit 'remains something of a mystery in contemporary economics' (Obrinsky, 1981, p. 491), see also (Bruun and Heyn-Johnsen, 2009, p. 22), (Keen, 2010, p. 2). More than that, since Walras standard economics is wedded to the idea that profit is zero in equilibrium. This is certainly a strong assertion, first, with regard to facts and, second, with regard to behavioral consistency. If capitalists or entrepreneurs really had rational expectations the prospect of zero profits would be paralyzing. It is widely admitted that the whole issue is 'one of the most convoluted and muddled areas in economy theory' (Mirowski, 1986, p. 234), see also (Desai, 2008). Profit theory therefore recommends itself as the most rewarding enterprise for a serious heterodoxy. As Schumpeter put it:

If we feel misgivings ..., all we have to do is to start appropriate research. Anything else is pure filibustering. (Schumpeter, 1994, p. 577)

As a matter of course heterodox schools reject the zero profit economy and build their models since Joan Robinson promoted Kalecki's approach in Cambridge (Asimakopolus, 1989) prevalently on the formula 'The workers spend what they get, the capitalists get what they spend' (e.g. Weintraub, 1979; Lavoie, 1992, p. 160; Graziani, 2003, pp. 97-98; Minsky 2008, p. 17). In the present paper this formula is scrutinized for its logical and factual implications because the nature and dynamics of profit cannot be ascertained by the exchange of worn-out arguments about exploitation, abstinence, waiting, risk taking, innovation, uncertainty, or the fair reward of the entrepreneur's factor input.

To proceed in the proper way we now move in two consistent logical steps from the simple to the complex.

#### **The Pure Consumption Economy**

The starting point is Kalecki's balance sheet of national income and expenditure (Kalecki, 1942, p. 259). For a radical simplification government, investment, and depreciation are taken out of the picture, hence there is no distinction between gross

and net. What remains is the balance sheet of the pure consumption economy which reads:

$$[i] Y = Y_W + Q \qquad [ii] Y = C_W + C_D \tag{1}$$

It is quite obvious that profit Q must be equal to the consumption expenditures of capitalists CD if the workers' consumption expenditures Cw are equal to their wage income Yw:

if 
$$C_W = Y_W \Rightarrow Q = C_D$$
 (2)

We are in accordance with Kalecki but we have merely done what Keynes has criticized as 'blind manipulation of symbols.' So let us see in more detail how profit comes about in the initial period. Profit, more precisely the hard core of profit that is entirely independent of questions of asset valuation, is given as the difference between the sales revenues – for the economy as a whole identical with consumption expenditures C – and costs – here identical with wage income Yw:

$$Q_1 = C_1 - Y_{W1} = (C_{W1} + C_{D1}) - Y_{W1}$$
(3)

In the initial period we have only workers and according to Kalecki they spend what they get:

if 
$$C_{D1} = 0$$
 and  $C_{W1} = Y_{W1} \Rightarrow Q_1 = C_{W1} - Y_{W1} = 0$  (4)

Therefore profit is zero and the question arises, how capitalists can spend their profits on consumption when there are none. Moreover, if the workers stick to the Kalecki rule in all future periods, capitalists will never see any profits. For profit to come into existence workers' consumption expenditures must be greater than wage income, at least in one period<sup>1</sup>. It needs certainly no proof that a market system without profits cannot exist. By consequence one cannot subscribe to 'workers spend what they get'. In the pure consumption economy they have to spend *more* and this logically necessary *initial deficit spending* presupposes the existence of a banking system. Although his balance sheet is incomplete in this respect, Kalecki was well aware of the pivotal role of the banking sector for the process of profit generation (Foster, 1990, p. 418).

Firms and shareholders have to be kept analytically apart. Profit accrues to the *firm* and some individual or board is responsible to decide whether to distribute it to shareholders or to retain it (Ellerman, 1986, p. 46). Total income in the next period therefore consists of wage income and distributed profit:

$$Y_2 = Y_{W2} + Y_{D2} (5)$$

<sup>&</sup>lt;sup>1</sup> When the purchase of long lived consumption goods, e.g. houses, is correctly subsumed under consumption expenditures there arises no problem with regard to collateral for the banking industry and a sound credit expansion may proceed for an indefinite time.

Distributed profit YD2 in period<sub>2</sub> need not be equal to profit Q1 in period<sub>1</sub>. The amount that is distributed can be formally related in the simplest way to profit with the distributed profit ratio a, i.e. YD2=aQ1. The receivers of distributed profit on the other hand are free to spend the whole, a part or more than their current period income. The consumption expenditures of capitalists, or now more precisely of shareholders, can be formally related to distributed profit with the expenditure ratio  $\beta$ , that is:

$$C_{D2} = \beta Y_{D2} \tag{6}$$

According to eq. (3) profit in the second period is then given by:

$$Q_2 = C_2 - Y_{W2} = (C_{W2} + \alpha \beta Q_1) - Y_{W2}$$
(7)

Up to this point the ratios are neutral and do not entail any behavioral or causal assumption. It is important to note that behavioral assumptions are an *add-on* to the formalism and have to be justified on their own merits. Hence, if workers *in fact* always spend what they get they drop out of the equation and profit in the current period is now solely related to profit of the last period and on the expenditure and the distributed profit ratio:

$$Q_2 = \alpha \beta Q_1 \quad \text{if} \quad C_{W2} = Y_{W2} \tag{8}$$

If profit is *in fact* always fully distributed (a=1) and if distributed profit is always fully spent ( $\beta=1$ ) one gets for each subsequent period:

$$Q_t = Q_{t-1} \tag{9}$$

Profit then remains unaltered over time and is equal to distributed profit in each period. In this situation the question of whether capitalists get what they spent or spend what they get is empty. The salient point is that, due to the behavioral assumptions, profit becomes an economic perpetuum mobile. It is no longer necessary that the households incur a deficit to generate profits and to get the economy going in the right direction. And this means that households' bank liabilities do not have to rise further. This systemic configuration is in principle reproducible for an indefinite time. Although profits indeed have something to do with financial markets it is by no means so simple 'that monetary profit rest on an illusion that is created, maintained, and destroyed on financial markets' (Bruun and Heyn-Johnsen, 2009, p. 22). But eq. (9) is also too simple because it rests on several restrictive assumptions.

For a complete generalization the workers' expenditures are formally related to their wage income with the expenditure ratio  $\gamma$ :

$$C_{W2} = \gamma Y_{W2} \tag{10}$$

Equation (7) now reads:

$$Q_2 = (\gamma - 1)Y_W + \alpha \beta Q_1 \tag{11}$$

Kalecki's result then becomes a limiting case if  $a=\beta=\gamma=1$ . It obviously suffices that one ratio is below unity, which certainly happens in the real world, then profits asymptotically approach zero in subsequent periods. The speed of convergence depends on how far the ratios are below unity. This tendency contributes to competitive stress. The details of price or employment adaptations can be left open here.

To start from Kaleckian premises and to arrive under realistic conditions at a neoclassical conclusion is somewhat perplexing. Therefore it is important to note that the confluence of results does not by implication vindicate the rationale of the neoclassical argument which rests on entirely different premises. The existence of total profit is not explicable by the marginal principle. Here we are exclusively occupied with the generalization of the Kaleckian approach. In this we have to advance one step further.

#### The Investment Economy

Having clarified the properties of the pure consumption economy we are now ready to take investment in  $period_2$  into the picture. From eq. (3) follows for the profit of the consumption and investment goods industry respectively:

$$Q_{C2} = C_2 - Y_{CW2}$$
 and  $Q_{I2} = I_2 - Y_{IW2}$  (12)

Profit for the economy as a whole is then given by:

$$Q_2 = C_2 + I_2 - Y_{CW2} - Y_{IW2} = C_2 - Y_{W2} + I_2$$
(13)

Analogous to (11) one arrives at the general relation:

$$Q_2 = (\gamma - 1)Y_{W2} + \alpha\beta Q_1 + I_2 \tag{14}$$

And this yields for Kalecki's special assumptions:

$$Q_2 = Q_1 + I_2$$
 if  $\alpha = \beta = \gamma = 1 \rightarrow C_{D2} = Q_1$  (15)

Profit in  $period_2$  is determined by investment expenditures and the consumption expenditures of the shareholders. Equation (15) is the formal counterpart of Kalecki's tenet. This, however, does not amount to a confirmation, as becomes clear when we look at the next period:

$$Q_3 = Q_1 + I_2 + I_3 \tag{16}$$

As time goes by profits rise progressively and this is no feature of the real world. Kalecki's three behavioral assumptions cannot hold simultaneously and this means

that his profit formula cannot hold either. It has to be replaced by eq. (14). While it is straightforward to generalize Kalecki's restrictive assumptions it has to be stressed that his definition of national income is unacceptable because it does not take into account the fundamental difference between profit and distributed profit. All models that are based on the collapsed definition total income = wages + profits are erroneous (including [i] in (1)), which in turn has obvious consequences for distribution theory (e.g. Kaldor, 1956, p. 95). Total income consists in the most elementary case of wage income and *distributed profits*. Profit and distributed profit is not the same thing. Hicks's notion of income (1939, p. 172) does not pertain to the elementary investment economy. The correct profit theory has therefore to be based on this fundamental income equation:

$$Y = Y_W + Y_D \tag{17}$$

Without any restrictions as to the behavior of workers or shareholders then follows from eq. (12) for total profit of the business sector in a period of arbitrary length:

$$Q = C + I - Y_W \Rightarrow Q = I - S + Y_D \text{ with } S = Y - C$$
 (18)

Profit is in the general case given by the difference between investment expenditures and household saving plus distributed profits. This elementary master equation, which becomes of course much more differentiated when additional sectors and the change of asset values are taken into account, obviates both standard and heterodox filibustering about human behavior. It depends logically on eq. (12) and (17). Equation (18) leads to the time-honoured question of the formal and factual relation of investment expenditures and household saving which, however, can be left open here (see Kakarot-Handtke, 2011, pp. 18-23).

#### Conclusion

Kalecki's profit theory, as it has been originally formulated, is too restrictive and reiterates the widespread error of conflating profit and distributed profit. Therefore it cannot be regarded as the heterodox solution of standard economics' perennial profit conundrum.

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