Marx's Treatment of Pure Circulation Cost: A Note[*]

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Contents

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Abstract

Pure circulation costs arise from pure commercial activities such as buying and selling, bookkeeping, price-calculation, marketing, correspondence, fund management, means of circulation, etc. These are seen to be a deduction from surplus value in traditional Marxian literature. But how they are restored from the surplus value when commercial capitals are spent on them has not yet been made clear. This paper argues that they are restored, like a *social overhead cost*, from the deviations between the *nominal* value of and the real value of commodities, which spreads over all social members.

1. Introduction

Pure circulation costs arise from pure commercial activities such as buying and selling, bookkeeping, price-calculation, marketing, correspondence, fund management, the means of circulation, etc. (Marx, 1978, 207-214, 1981, 402). Such activities are seen in Marxian literature to be unproductive labors that add no value to commodities, and thus to form a deduction from surplus value. Such a loss is however socially necessary for a social metabolism, and so is expended as a part of social capital. As far as it functions as a part of social capital, the capital outlay spent for such activities should be recovered at the end of each turnover period. But from where can it be restored? In principle, in market economy, its direct beneficiary will have to pay and finance such a cost. But a problem is that no specific individual can be asserted to be its exclusive beneficiary. Because it benefits every commodity producer, no individual producer is willing to pay it for the other producers. Traditional Marxian economists, however, have presumed that such a cost is financed from the social pool of surplus value.

But Marx's own treatment of the pure circulation cost has been left unclear. In Volume II of *Capital* (1978, 225-6), he explained that all pure circulation costs formed '*a deduction of surplus value*'. But in volume III of *Capital* (1981, 394-416), he expounded them as financed from the *nominal value deviations* made on top of real commodity values. In the latter, Marx asserts that the pure circulation costs are recovered, not directly from surplus value, but from commercial margins: commodity values are nominally added by the amount of the pure circulation cost over and above their real values. This paper aims to show the above two statements of Marx's are not in conflict. But traditional Marxian economists have conceived Marx's latter statement in Volume III version to be illogical.

We shall discuss this issue in the following order. In Section 2, we define the pure circulation costs in the first place in relation to commercial capitals. In Section 3, we discuss how the pure circulation costs are related to the formation of commodity values. In Section 4, we demonstrate that Marx's aforementioned two statements simply reflect two different levels of

abstraction in his analysis, which would require a renovation in the traditional Marxian value concept. Finally in Section 5, we close this paper with a summary with concluding remarks.

2. Pure Circulation Cost and Commercial Capital

According to Marx (1978, 214-229 & 1981, 395-403), an actual production process consists of two distinct ones. One is the immediate production process in the sphere of production, the other is the belated or eventual production process inserted within the circulation sphere. Comprised in the latter are the commercial activities of dispatch, transport, distribution, storage and retailing. These elements are not unproductive operations but are contained in the circulation like a junction between production and circulation processes as in Figure 1.

Firgure 1: A Junction Between Production and Circulation
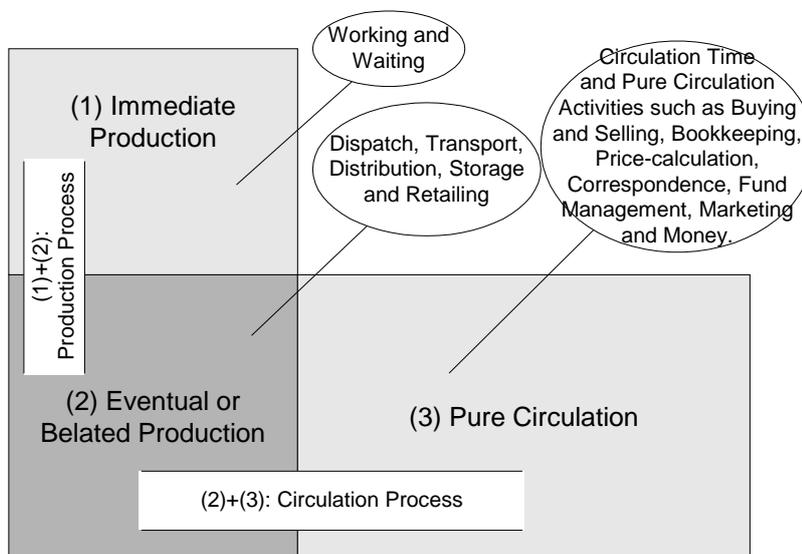
An actual circulation process contains many elements of productive operations. If we abstract all the productive elements from the actual circulation process, we obtain *pure circulation process*. This process alone constitutes the *pure circulation time* that creates no value. This *time* incurs no direct cost in itself but, as it is added to the turnover period of capitals, incurs an op-

portunity cost for the extra time period for which capitals are tied not being used otherwise. This reduces the average rate of profit because the pure circulation time also claims the same average profit while creating no surplus value. The average profit is just to compensate the opportunity cost since the tied capital could have created an average profit if advanced other ways. The size of total surplus value itself does not vary with the extra time period, but the very existence of the pure circulation time itself has changed the average rate of profit, altering the distribution of surplus value among the capitalists.

Shortening this unproductive time would increase the average profit rate. Commercial activities for the shortening of the pure circulation *time* such as buying and selling, bookkeeping, price-calculation, correspondence, marketing, fund management and the means of circulation (1981, 213-4, 9, 395-6) surely contribute to the heightening of profit rates. These *pure commercial activities* cost monetary expenses (e.g. office expenses and commercial wages), which we should call *pure circulation costs*. This pure circulation cost is for the heightening of the average profit rate, not because they create surplus value but because they economize the pure circulation time.

Take as an example a commodity capital that is the product of a working period of 9 weeks, and whose value is $900. We abstract for the time being both from the fixed capital and from the surplus value created during the production process, so that the value of the product can be taken as equal to the value of the fluid (circulating) capital advanced for its production. This value is $900, so that the weekly outlay amounts to $100, assuming the amounts of capital that have to be laid out do not vary between different weeks. Let its circulation time be 1 week. Its total turnover period will then be 10 weeks. After 9 weeks elapse, the advanced productive capital of $900 is all transformed into commodity capital, and has to spend 1 week in the circulation sphere. The new cycle of production cannot begin again until the commodity capital of $900 returns in the form of money capital at the start of the 11th week. The production will have to be at a standstill for a week if we disregard all sorts of credit relations.

To continue production and pursue on the same scale each week, we need an extra fluid

(circulating) capital of $100 newly to be advanced, so that the continuity of production is not interrupted during the one week for which the capital advanced for the first working period exists in the form of commodity capital. One tenth of the total advanced capital is set free in the form of idle money in the first working period of 9 weeks, to renew production at the close of the first working period. This extra capital, $100, does not produce any additional value since the production scale is still $900. It works like a fixed capital. It is not spent, but is conserved throughout the turnover period in alternate forms of money capital, production capital, and commodity capital. So, *it constitutes no extra cost*. But it can claim an opportunity cost, as it deserves the same average profit as any part of the advanced capital. This average profit it claims does not reduce the surplus value but only alters its distribution among capitals.

If a merchant intervenes here with a commodity-dealing capital of $900 and buys the products of $900 from the industrial capitalist, the role played by the extra industrial capital of $100 is taken over by the merchant's commodity-dealing capital of $900. The turnover period of the industrial capital can be reduced to 9 weeks, and the additional industrial capital of $100 is no longer required. Since the merchant's capital of $900 turns over in one week, while the extra industrial capital of $100 does in 9 weeks, it can be said that the commodity-dealing capital of $900 is the sum of the nine units of the transformed form of extra industrial capital of $100. The commercial profit on a portion of the commodity-dealing capital of $100 can be seen as a transformed form of the average profit on the extra industrial capital of $100 (ignoring the economy of centralization in commercial activities). Marx explains this as follows:

> "Let us assume that the total industrial capital advanced during the year is $720c + 180v = 900$ (say in millions of pounds sterling), and that $s = 100\%$. The product is then $720c + 180v + 180s$. If we call this product or the commodity capital produced C, then its value or price of production (since the two coincide when we take the totality of commodities) = 1,080 and the rate of profit on the total capital of 900 is 20%. This 20%, as explained already, is the average rate of profit, since here we are reckoning surplus value not on this or that capital of particular

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composition, but rather on the total industrial capital with its average composition. So, C=1,080 and the rate of profit is 20%. But we are now going to assume that besides this industrial capital of 900 there is also a commercial capital of 100, taking the same proportionate share in profit according to its size. According to our assumptions, this is one-tenth of a total capital of 1,000. It thus takes a one tenth share in the total surplus value of 180 and gets a profit rate of 18%. The profit to be divided among the remaining nine-tenths of the total capital is now only 162, or similarly 18% on the capital of 900. Thus the price at which C is sold to the merchants by the holders of this industrial capital of 900 is $720c+180v+162s$ =1,062. If the merchant adds to his capital of 100 the average profit of 18%, he sells the commodities at 1,062+18=1,080, i.e. at their price of production, or, taking the commodity capital as a whole, at their value, even though he only makes his profit in and through circulation and only by the excess of his sale price over and above his purchase price. If he still does not sell the commodities above their value or price of production, this is precisely because he bought them from the industrial capitalists below their value or price of production."

[9, 398]

In the above, we must note two things. First, Marx talks about the commercial profit in the context of total industrial and commercial capitals. Otherwise, the industrial capital of \$900 will have to deal with not the \$100 but \$900 of commercial capital with nine to one turnover periods. For this reason, the products are aggregated and so their value is identical with their production price (there should be a single industrial capital in the aggregate). Second, Marx assumes that the total commercial capital works only for pure commercial activities: it is stripped of all the heterogeneous productive functions that may be linked to it (like those of dispatch, transport, distribution, storage, and retailing), and is confined to its pure commercial function of buying in order to sell dearer. In the latter sense, the commercial capital creates no (surplus) value. It is nothing but a form in which the additional industrial capital advanced for the continuity of production became autonomous. But the commercial capital too has a right to draw on the surplus

value produced by industrial capitals.[i] If the commercial capital cannot sell commodities above their values, however, the commercial profit is only available on the condition that the industrial capitalists sell their products below their values (or below their production prices). Will the industrial capitalists sell their products below their values (or below their production prices) in practice?

Two factors contribute to the reduction of the industrial capitalists' sale price. First, because the commodity-dealing capital has simply replaced the extra industrial capital required for the continuity of production, an average profit on the latter can well be switched to the commercial profit without lowering the industrial capital's profit rate. Second, the economy of scale in the centralization of commercial activities may reduce the required amount of commodity-dealing capital in comparison to the extra industrial capital to be replaced with the commodity-dealing capital. In combination of these two factors, the industrial capitalist can enjoy a higher profit rate even after a portion of the surplus value is allotted for the commercial profit. The overall result can be outlined as listed below.

(α) The commercial capital advances commodity-dealing capital with no expenses for commercial activities.

- Production price: 720c+ 180v+180s = 1,080

- Commercial capital (as commodity-dealing capital): 100

- Average rate of profit: $\rho = \dfrac{s}{K + B} = \dfrac{180}{900 + 100} = 18\%$ (K = industrial capital, B = commodity-dealing capital and s = surplus value).

- The merchants' purchase price: 720+180+(720+180)×18% = 1,062

- The merchants' sale price: 1,062+(100)×18%= 1,080

In the above computation, however, we have ignored the pure commercial activities such as buying and selling, bookkeeping, price calculation, marketing, correspondence, fund management, and the means of circulation. Monetary expenses on them acts like a fluid (circulating) capital as they are additionally to be spent in every period. The two categories can be

distinguished as Table 1 below.

<Table 1> Pure Circulation Costs

Sources		Incurred Costs
(**I**) Pure Circulation Time	→	Profit Rates lowered
		(Extra monetary reserve for (**I**))
(**II**) Pure Circulation Activities	→	Additional Monetary Expenses
		(Extra monetary expense for (**II**))

The ignored pure circulation costs require additional monetary outlay unlike the other pure circulation costs. How this monetary expenditure is related to the formation of commodity values like in the categories of production price, average profit rate, the merchant's sale price, and the producers' sale price shall be discussed in the next section.

3. Pure Circulation Costs

As stated in the introduction, Marx explained the pure circulation costs as financed from *a deduction of surplus value* in Volume II of *Capital* (1978, 225-6). But in Volume III of *Capital*, he explained their replacement was financed from the *nominal value deviations* formed on top of real commodity values (1981, 394-416). We shall start from the latter version.

"If, in our above example, a further additional capital of 50 was advanced for the costs in question, besides the commercial capital of 100, the total surplus value of 180 would now be distributed between a productive capital of 900 and a commercial capital of 150, making a total of 1,050. The average rate of profit would thus fall to $17 \frac{1}{7}$ % . The industrial capitalist sells the commodities to the merchant at $900 + 154 \frac{2}{7} = 1,054 \frac{2}{7}$ and the merchant sells them for 1,130 (1,080+50 for expenses that he has to recover). It must be assumed that the division between commercial and industrial capital involves a centralization of trading costs

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and a consequent reduction in them." [9, 406]

His example in the above uses exactly the same one that we saw in the previous section, where $K=900$, $B=100$ and $s=180$, further assuming that an additional outlay of $b=50$ is spent for the pure commercial expenses (e.g. office expenses and wages for commercial employees). Following the formulation (α) in the previous section, the overall result in the above Marx's statement can be summarized as below.

(β) The 'b' is advanced as capital and is recovered from the commercial margin.

- Average rate of profit: $\rho = \dfrac{s}{K+B+b} = \dfrac{180}{900+100+50} = 17\frac{1}{7}\%$

- Commercial capital: $B+b = 100+50$

- Production price (merchant's purchase price): $900+900 \times 17\frac{1}{7}\% = 1054\frac{2}{7}$

- Commercial price (merchant's sale price)[ii] : $1054\frac{2}{7} +(100+50) \times 17\frac{1}{7}\% +50 = 1130$

- Real production price (merchant's real sale price): $1054\frac{2}{7} +(100+50) \times 17\frac{1}{7}\% = 1080$

When b works as capital, the commercial capital is equal to ($b+B$). Both elements of the commercial capital have an equal right to draw an average profit from the society. But a problem is in the commercial margin. If the law of value dictates that the merchants cannot sell commodities above their commodity value (or production prices), the commercial price could not exceed 1080 and in no case become 1130. There should be no room in the commercial margin to cover both the commercial profit of $\rho(b+B)$ and the pure commercial expenses of b. Can the law of value allow the commercial price be 1130?

Traditional Marxian value concept is not compatible with this. Usual understanding of the Marxian financial source of pure circulation costs has been presented as below.[iii]

(γ) The b is a part of social capital and is recovered from the total surplus value of the capitalists.

- Average rate of profit: $\rho = \dfrac{s-b}{K+B+b} = \dfrac{180-50}{900+100+50} = 12\dfrac{8}{21}\%$

- Production price (merchant's purchase price): $900 + 900 \times 12\dfrac{8}{21}\% = 1011\dfrac{3}{7}$

- Commercial price (merchant's sale price): $1011\dfrac{3}{7} + (100+50) \times 12\dfrac{8}{21}\% + 50 = 1080$

In the latter formulation, the commercial margin contains both the *b* and the commercial profit, $\rho(B+b)$ on condition that the industrial capitalists make a concession for the *b* in selling their products to the merchants. Marx's formulation in the above (*β*), however, did not make such a condition, but instead advances that the nominal value of $1130 is identical with the real value of $1080, and the difference between the commercial price of $1130 and the real value of $1080 is created by a *nominal* (not a *real*) value addition of $50.[iv] Which is plausible?

In the one, the *b* is financed from the capitalist income, the surplus value. But in the other, it is financed from the income of all social classes. The former literally follows Marx's Volume II version while ignoring Volume III version. As usually known, however, Volume II assumes no division yet between commercial and industrial capitals, in the so-called abstraction level of *capital-in-general*. By contrast, however, Volume III makes a complete separation between the commercial and industrial capitals, in the so-called abstraction level of many capitals. Therefore, to see which formulation of the two, (*β*) and (*γ*), is more plausible, we shall first note how the *b* would have to be dealt with in case of no division between the commercial and industrial capitals.

In this case, real commodity value must be the same as before like 720c+ 180v+180s = 1,080. Additional industrial capital is particularly required for the continuity of production during the circulation time, which we denote as *B* = 100. Pure commercial expenses (*b* = 50) will be regularly spent as a part of normal capital outlay. The size of industrial capital will then be *K* (= *c+v+b+B*). Each element of this capital has a right to draw an average profit on itself. The average profit rate, however, varies depending on how the deduction of the *b* from surplus value is carried

out. We can deduct it either before the calculation of profit rate or thereafter.

(δ) The b is deducted from surplus value before the calculation of profit rate.

- Average rate of profit: $\rho = \dfrac{s-b}{c+v+B+b} = \dfrac{180-50}{720+180+100+50} = 12\dfrac{8}{21}\%$

- Production price: $c+v+b+\pi = 900+50+1050\times12\dfrac{8}{21}\% = 1080$, where π is the profit size.

(ε) The b is deducted from surplus value after the calculation of profit rate.

- Average rate of profit: $\rho = \dfrac{s}{c+v+B+b} = \dfrac{180}{720+180+100+50} = 17\dfrac{1}{7}\%$

- Production price: $c+v+\pi = 900 + (1050\times17\dfrac{1}{7}\%) = 1080$

Except the levels of the profit rates, the production prices are exactly the same in the two cases. One calculates the profit rate after the deduction of b. The other calculates it before the b deduction. Which is plausible? If the two formulations, (δ) and (ε), are in the context of aggregate capitals, the comparison is evidently meaningless, for the b is financed from the same source and the levels of profit rate are just of a mathematical operation (one must be a real profit rate and the other a nominal profit rate). But in the context of individual capitals, the two are crucially distinct. The one assumes that b comes from the individual income of the capitalist immediately involved in the commodity production, but the other presumes it does not come from the income of individual capitalists.

Marx's Volume II version on which the two formulations, (δ) and (ε), are based, however, is not on the context of individual capitals but that of aggregate capitals. We read:

"The general law is that *all circulation costs that arise simply from a change in the form of the commodity cannot add any value to it*. They are simply costs involved in realizing the value or transferring it from one form into another. The capital expended in these costs (including the labor it commands) belongs to the *faux frais* of capitalist production. The replacement of these costs must come from the surplus product, and, from the standpoint of the capitalist

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class as a whole, it forms a deduction of surplus value or surplus product, in just the same way as the time that a worker needs to buy his means of subsistence is lost time for him." (1978, 225-6, *italics are original*)

Clearly in the above, Marx indicates the deduction of *b* should not be from the income of certain individual capitalists but from the social pool of surplus value, in which case the formulation (ε) defies the other formulation (δ). If then, in the (δ) case, how is the *b* financed from the social pool of surplus value? As far as the production price cannot exceed 1080 under the law of value, there can be no way to finance the *b* from the sale price of commodities. How it can be financed under the law of equivalent exchanges is to be discussed in the next subsection, however.

4. Nominal Value and Real Value

Marx's answer to the treatment of *b* was already given like (β) in the previous section. As an overhead cost of commodity production, the pure commercial cost of *b* is financed from a *nominal* value addition to commodity values. Although the nominal and real values are not familiar with traditional Marxian value concept, Marx himself uses the 'nominal value' concept elsewhere as well in *Capital* I (1976, 263).

In the concepts of nominal and real values, however, it is implied that the units of value accounts are twofold so that a commodity value can be measured in two distinct terms: the nominal and real value terms. We shall show in this section that the nominal and real values are not in conflict with Marx's original value concept.

According to Marx (1976, 129), the magnitude of a commodity value is determined by the quantity of value-forming substance contained in the commodity. We are advised here to compute the quantity of the value-forming substance, the amount of labor, by its duration and on the particular scale of hours, days, etc. To do it, however, we must have a labor standard beforehand: we mean an intrinsic measure of value. Inefficient, unskilled, and lazy labors are all reduced to the standard labor along with the zealous, skilled, and disciplined ones. The content of

unitary standard labor, which has the character of a socially average labor, must change with time and place inasmuch as the socially average labor shall change its content. The intrinsic measure of value is not invariable, and that it is beyond our power.

Yet a change in the standard labor does not apply all at once but takes some time before being applied universally. Two distinct labor standard can simultaneously function as unitary labor. Even the same labor content can be valued in two different terms, as two different quantities in nominal terms. In such cases, we must say that the two nominally distinct values are identical in real terms. In our previous example, the nominal value of $1,130 is argued as identical with the real value of $1,080 as if the labor content of the unitary labor shrank to 1,080/1130 times its previous level. Nominal values are inflated at the rate of 1130/1080.

If then, on earth, why and how does such a change in the labor standard apply in a single stroke but partially? To answer this, let us take an example that a certain value-added tax (vat) is universally imposed on every commodity. Commodity producers pay the vat when they buy production materials. But they do not pay it from their own income. They can have it refunded by adding the vat to their sale price as if it were a part of production cost.[v] The vat is shifted onto their buyers. A value is transferred from the immediate buyers of their products to the commodity producers, the initial payers of the vat. In short, the vat is refunded. The buyers of their products can also shift the vat onto others if they resell the commodities or use them as input materials for other commodity productions. Only final consumers will be the actual payer of the vat. But there are no final consumers in the society of commodity producers, where every consumer is also a producer and every buyer is also a seller. Only non-producers such as the state, the church, the landlords, etc. who produce nothing and only one-sidedly purchase commodities can be the final consumers that actually pay the vat. But those non-producers do not belong to the society of commodity producers, as they are not producers by definition. So far as the commodity producers are concerned, accordingly, none is the final consumers and none pay the vat without shifting the tax burden onto others even in part. Then, who will be its actual payers if everybody shifts it onto

others? The answer should be that there has been a unilateral value transfer from the commodity producers as a whole to the outside of the producers' society (the state). This payment is based on two conditions. One is that equivalents are exchanged between commodity producers, and the other that no specific individual is its actual payer since every payer of it shifts the vat onto others. When these two conditions are observed, it can only be financed over the heads of commodity producers, from the deviation between the nominal and real values of commodities.

The pure circulation costs we questioned in the previous section will also have the same character. They occur outside commodity production, and do not make any change to real commodity values. But they incur a cost to any commodity production. Marx calls them 'false costs of production' (*faux frais de production*), as they are not proper costs of production (1978, 214). Since such costs have a social character by nature, they are financed from the social pool of surplus value. No specific individual pays it, but it is paid indirectly by the society. This presupposes a deviation between the nominal and the real values of commodities. In the payment of those social costs, not only the capitalists' personal income, but also the workers' real wages are reduced in the exchange process. The replacement of such costs must come from the surplus value procured for the industrial capitalist and the forced savings of the workers as well. A deduction of real wage caused by the nominal addition of commodity values increases the social pool of surplus value, but the surplus value thereby increased does not go to the capitalist but is spent unproductively on the pure circulation activities. So, in its ultimate analysis, it still forms a deduction of surplus value as Marx stated in *Capital* II.

To recap, if all production prices are computed at the nominal profit rate of 25%, not at the real rate of 20%, no commodity purchasers will actually pay more than the real commodity values. In the final result, the profit rate will be manifested to be 20%. This is the so-called *nominal* value augmentation effect. In our previous case, however, a value transfer was created from the society of commodity producers to the outside of the society only because the nominal value augmentation did not occur at a single stroke but gradually and with time differ-

ence.

In practice, however, pure circulation costs may differ according as what sorts of commodities are traded by what sorts of merchants. If then, how can a general equilibrium be established? Would a permanent disequilibrium be inevitable? If we follow the (β) formulation, the nominal values will be surcharged in different proportions as below:

(1) The nominal and real value proportions: $\omega_i \equiv (p_i / \lambda_i)$.

(2) The nominal values: $p_i = \lambda_i$ + average social overhead cost in production sector i.

Here, p_i and λ_i each denote, respectively, the *nominal* value and the *real* value. The sum of the pure circulation cost in each sector of production will be $(p_i - \lambda_i) x_i$, where x_i stands for the output of commodity i's sector. If we assume the usual *Leotief technology* and ignore for the time being the so-called transformation problem, we can have the following value scheme, where a general equilibrium can be established balancing corresponding supplies and demands.

(3) Real values: [vi] $\lambda_{t+1} = p_t A + (1+e)p_t dl$.[vii]

Here, λ_t, p_t, A, e, d, and l each denote, respectively, the real value vector of (1 x n) at time t, the nominal value vector of (1 x n) at time t, the material input coefficient matrix of (n x n), the rate of exploitation as a scalar, the wage goods vector of (n x 1), and the homogeneous labor input co-efficient vector of (1 x n). The nominal values at time t in the vector form of p_t are converted into real values at time $t+1$, as they are directly used in calculating the real value vector λ_{t+1}.

If we take into account the value-price transformation, the real values are to be calculated like the following in the first place.[viii]

(4) The real values: $\lambda_{t+1} = p_t A + (1+e)p_t dl$.

Here, p_t is a nominal price vector of (n x 1) at time t. Nominal values and nominal prices are not discriminated but are conceptually derived differently like in (2) and (7) below. In (4), real values at time $t+1$ are determined by the sum of (i) the real values of production materials and (ii) the values newly added. The one, the real values of production materials at time $t+1$ are calculated by

using the nominal prices at time t of the production materials. And the other, the newly added values are determined by the amounts of direct labors expended during the time interval between t and $t+1$, which are measured with the nominal price of labor-power ($p_t d$) multiplied by $(1+e)$. This is in contrast with the real price scheme.

(5) The real prices: $\varphi_{t+1} = (1+\pi_{t+1}) (p_t A + p_t dl)$

(6) The nominal profit rate: $\pi_{t+1} = (e p_t d \Sigma l x_t)/\Sigma(p_t A x_t + p_t dl x_t)$

Here, φ_t is the real price vector of (n x 1) at time t. Here, too, nominal prices at time t are used in calculating real prices at time $t+1$. The (6) gives the nominal profit rate at time $t+1$, not the real profit rate at time $t+1$, since the real profits are obtainable only after the social overhead costs are deducted from the social pool of surplus value. It is defined as the aggregate nominal surplus values at time t ($= e p_t d \Sigma l x_t$)[ix] divided by the aggregate nominal capital values at time t ($= \Sigma(p_t A x_t + p_t dl x_t)$). The real profit rate can only be obtained after the settlement, after the nominal and real prices are determined, as it requires the social overhead costs to be deducted from the income of the capitalist class.

(7) The sum of pure circulation costs: $\Gamma \equiv \Sigma(p_i - \varphi_j) x_i$.

(8) The real profit rate: $\rho_{t+1} = [(e p_t d \Sigma l x_t) - \Sigma(p_i - \varphi_j) x_i]/\Sigma(p_t A x_t + p_t dl x_t)$

But the real and nominal prices at time t can only be computed after the determination of the nominal profit rate (6). To determine the nominal profit rate, we must obtain the aggregate capital value, $\Sigma(p_t A x_t + p_t dl x_t)$, which is based on the nominal prices at time t.

5. Conclusion

So far, we have discussed the relationship between the pure circulation cost and the commodity value formation. It formed a deduction from surplus value with a complex mechanism. Once it was from the person's own individual experience, as it was in the circumstances where the development of commodity production was at a primitive stage and the exchange of

commodities was accidental. When the commercial activities were socially organized and independent from industrial capitalists with the advent of commercial capital, it acted as capital and was financed from the income of the society. Its initial payment worked like an advancement of commercial capital to the extent that the society refunded it with an average profit on it. It was paid as a social overhead cost, not only from the capitalists' personal income but also from the workers' income and from the income of the non-producers in the sphere of commodity exchange. Seen this way, Marx's two versions of the pure circulation cost theory in the two volumes of *Capital* II and III can be seen as coming from two different levels of abstraction which could correspond to the two different stages of commodity production.

Lamentably, however, Marx's Volume III analysis of the pure circulation cost has been ignored in traditional Marxian literature, perhaps because the nominal and real value concepts were alien to usual Marx's value concepts. We introduced a different interpretation of Marx's value concept to throw a new light on this issue. We argued that surplus value could be extracted not only from the production sphere but even from the sphere of commodity circulation under the law of equivalent exchanges. The standard labor has changed its content with time and place and yet its change is not applied at a single stroke because the process of market operation takes time in order to universally apply the new labor standard. So at a certain point of time, we can always have two distinct labor standards but with identical designation. Even the same labor content, therefore, can be valued in two distinct nominal value terms, yet the two distinct nominal values are identical in real value terms. As a by-product, it has been made clear that the nominal and real values are not comprehensible unless we admit commodity values are of an intrinsic existence. Only the labor theory of value, which admits the existence of intrinsic value, can deal with these issues.

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[i]) "Since the circulation phase of industrial capital forms just as much a phase in the reproduction

process as production does, the capital that functions independently in the circulation process must yield the average profit just as much as the capital that functions in the various branches of production." (Marx, 1981, 395)

[ii]) The word, 'commercial price' is from Marx (1981, 399).

[iii]) The solution (γ) is actually presented in Fine & Leopold (1993, 281).

[iv]) "they [the circulation costs] always require on the part of the merchant, besides the money capital advanced in commodity purchase, an additional capital that is advanced in purchase and payment for these means of circulation. Insofar as this cost element consists of circulating [fluid] capital, it goes completely into the sale price of the commodities as an additional element, while insofar as it consists of fixed capital, it goes in according to the degree of its depreciation; but insofar as these are purely commercial costs of circulation, this element forms only a nominal value and not a real addition to commodity value. Whether circulating [fluid] or fixed, however, this entire additional capital goes into the formation of the general rate of profit." (Marx, 1981, 402, *brackets are added*)

[v]) The tax burden might not be shifted in full but in part if we allow elastic demand schedules. But we mean here that the supply schedules are shifted vertically by the amount of vat.

[vi]) The value and price schemes that follow are indebted to Lee (1993, 1998) and Ramos (2000), in expressing the input material values in nominal price terms.

[vii]) In principle, value schemes have nothing to do with physical and technological data. But in the above, the physical and technological data are nevertheless used in deriving the value scheme for the sake of communication with those who are accustomed to use the physical data.

[viii]) See Ramos (2000).

[ix]) Total amount of direct labor is given as $\Sigma l\, x_t$.