

Ultimate Product of Society

Viktor I. Kulik^{a*}, Ivan V. Kulik^b, ^{a,b}Pacific National University,
Khabarovsk, Russia, E-mail: [a*Kulik.36@mail.ru](mailto:Kulik.36@mail.ru)

Problem statement: Nowadays, there is a search at all levels for a new path of economic development in Russia. We hope that our research will help it. **Research objective:** To show the main productive forces of society: capital and labour, workers and peasants. To recall that "the concept of value is the secret of capital", and the "concept of product is the secret of wealth", and to attract the attention of economists to this problem. **Research methods:** The research method is heuristic. We rely on the experience of our predecessors and the "labour theory of value and surplus value", "namely – basis" theory (K. Marx), built on the development of the economic process, driven by its own energy". **Research results:** The structure of a work day is considered from the point of "necessary and surplus product and its cost", two sections of social production, productive capital and social income, and the concepts of "productive force" and "labour productivity" are defined. "Profit law" and "Social production efficiency law" were given in details. Formulated the unknown "law of the proportional development of social production on the example of changing the structure of the final product of society". **Practical implications:** Considered: mediator between the natural world and humanity - the means of labour or "fixed capital" of society, as the productive force of social labour, and the mediator within society - value in the form of money, explaining labour productivity and structural changes in society.

Key words: *Labour, capital, production, two sections, exchange, distribution, consumption, consumer goods, means of labour, productive power, labour productivity.*

Introduction

1. Society and its assistants are *means of labour* (“capital”) in the form of machines and automatic lines (a *mediator* between nature and man) and value in the form of money (a *mediator* between different types of labour, scattered both in space and time in human society), as a single organism develops and improves both the metabolism between itself and the external nature, and between individuals and their groups. And the cause of all has become labour. Labour in this social movement or the labour process, by the inherent nature of the universal "law of reflection", leaves its mark on the subject, on the one hand, in the form of use value, on the other - in the form of value. In the first case, the objective world surrounding a person changes (according to the laws of beauty, harmony, etc.), and on the other hand, the form of communication of individuals as carriers of various types of labour. The diversity of products of nature and newly created products forms the natural basis of the social section of labour; due to the change of the natural conditions in which each new generation finds itself and in which a person has to manage his household, this diversity contributes to the multiplication of his own needs, abilities, means and methods of work and communication. A person *comes off* an object from nature (substance, energy...) and puts it in his labour process between him and the object of labour as a means by which he acts on another object.

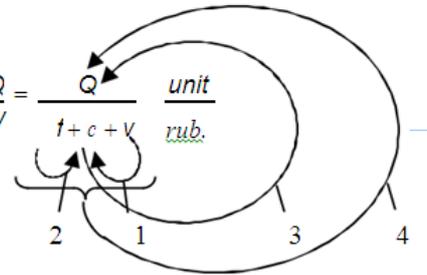
2. Cost” in the form of money or “capital” in all its developed forms, as an intermediary between people, functions only within the framework of the social form of movement in society itself. Cost - the most unique creation of human history, an instrument of coexistence and communication of various types of labour in a social organism - gave birth to science itself “political economy”. Capital, as materialized, past work is the wealth of society, but not its end in itself. Therefore, the predecessors left us with two important concepts: "productive force" and "labour productivity."

3. Productive power" is not determined today by the skill, experience, and fussiness of a person, but by car tire. Productive force is the amount of product produced per unit of time. (Kulik and Kulik, 2017; Shaumyan, 1973).

$$\text{Productive force} - Q; \frac{\text{product}}{\text{time}} = \frac{1}{T} \left(\frac{\text{unit}}{\text{minute}}; \frac{\text{unit}}{\text{hour}}; \frac{\text{unit}}{\text{turn}} \right)$$

4. Labour productivity - comparing the result of labour with labour costs, (Shaumyan, 1973). "The change in labour productivity is directly proportional to the change in the productive force of labour and inversely proportional to the change in the amount of labour that finds its realization in the product" (Marx, 1949).

$$\text{Labor productivity} - P_L = \frac{\text{Labor result}}{\text{Labor expenditure}} = \frac{Q}{W} = \frac{Q}{t+c+v} \frac{\text{unit}}{\text{rub.}}$$



where the productive forces of the labor process are:

1. **Labor power** T_g , "variable capital" V ;

2. **Means of labour, "fixed capital" K or T_p** – (the mediator between man and the "object of labour")

and in a general sense, between man and nature, as a productive force), where:

$$f = \frac{T_p}{n} \frac{\text{rub.}}{\text{year}}$$

"Annual labour cost of funds"; T_p – labour cost of funds; T_g – labour power – v ;

$$= \frac{K}{T_g} \frac{T_p \text{ ruble}}{\text{ruble/year}} = \frac{f \times n}{T_g} \left\{ \text{year} \right\} \quad \text{– coefficient of "technical weapons of labour power";}$$

n – life time, payback period of "means of labour", circulation period of "fixed capital";

3. **Process of product formation** (production process), in which living labour force v and its assistants, means of labour f , transform (technology!) elements of nature (i.e. "subject of labour" C) into product Q for their further life consumption;

4. **Process of cost product formation ("factory cost").**

The inverse of productivity is the cost – $C_T = 1 / P_T \quad \text{Ruble/unit}$

Work day structure and the ultimate product of society

If we take society in a specific period of time with a population of 150 million people and measure, in this case, the unit of value is not the cost of labour ($V = V_1 + V_2$), but the labour of society $V + M = (V_1 + M_1) + (V_2 + M_2)$, then its real value structure can be represented - see figure 1.

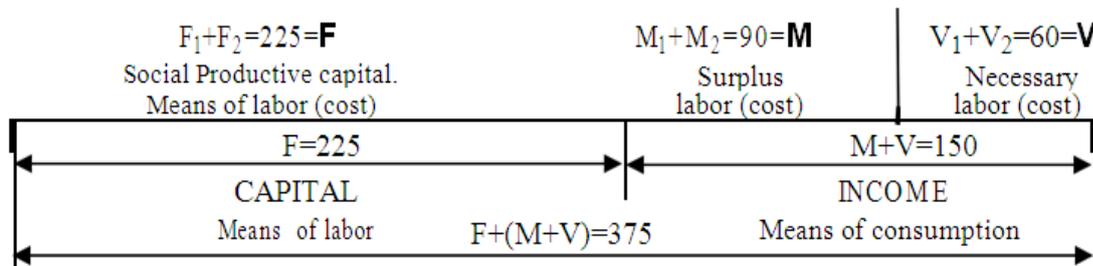
There are: $m_1 = 30$ million people younger generation (kindergartens, schools, technical schools and universities), $m_2 = 30$ million people - elderly people or disabled people (cripples, disabled people, retired people ...), $m_3 = 30$ million people working, but they don't work in the material production of society (artists, football players, police, army, the entire

military-industrial complex ...), and only 60 million people work in the material production of society and produce "social productive capital" F , and the "income of society" ($V + M$) - (consumer goods, intended for people).

Here, figure 1, the **surplus value** $M = (m_1 + m_2 + m_3) = (30 + 30 + 30) = 90$ million people, the **necessary cost** is $V = V_1 + V_2 = 60$ million people, and the **rate of surplus value in society** is $m' = M/V = 90/60 = 1,5 \rightarrow 150\%$. **The capital consumed by the company** is $F = F_1 + F_2 = 225$. In a developed, proportionally and harmoniously developing society, $V_1 + M_1 = F_2$ is always and proportions are formed:

Fig. 1. The aggregate annual ultimate product of society

$$\frac{M}{V} = \frac{V_1 + M_1}{V_2 + M_2} = \frac{F_1}{V_1 + M_1} = \frac{F_2}{V_2 + M_2} = \frac{F_1 + F_2}{(V_1 + V_2) + (M_1 + M_2)} = \frac{F}{V + M}$$



in the language of mathematics, it is now necessary to investigate the system of the following two equations, fig. 2

Figure 2. Structure of the product and cost work day

$$\left(\begin{array}{l} \mathbf{1} \\ \text{Work} \\ \text{day} \end{array} \right) = \left(\begin{array}{l} \text{Part of work day, when:} \\ \text{a) necessary work is done,} \\ \text{b) created:} \\ \text{recovery facilities} \\ \text{of productive population} \\ \text{society, those who live at the expense of} \\ \text{necessary labor, -} \\ \text{necessary product of society} \\ \text{c) variable cost is created:} \\ V_1 \text{ and } V_2 \text{ in sections 1 and 2,} \\ V_1 + V_2 = V \text{ in society,} \end{array} \right) + \left(\begin{array}{l} \text{Part of work day, when:} \\ \text{a) surplus labor is performed,} \\ \text{b) created:} \\ \text{reproduction facilities} \\ \text{of non-productive population} \\ \text{society, those who live at the expense of} \\ \text{surplus labor, -} \\ \text{surplus product of society,} \\ \text{c) surplus cost is created:} \\ M_1 \text{ and } M_2 \text{ in sections 1 and 2,} \\ M_1 + M_2 = M \text{ in society,} \end{array} \right)$$

$(\text{work day-as newly created cost}) = V + M$,

$$\left(\begin{array}{l} \mathbf{2} \\ \text{Work} \\ \text{day} \end{array} \right) = \left(\begin{array}{l} \text{Part of work day, when:} \\ \text{a) created new:} \\ \text{Final product of section 1,} \\ \text{Means of labor,} \\ \text{b) Cost of final product is reproduced} \\ \mathbf{1: } F_1 + V_1 + M_1 \\ \text{from the point of view of section 1} \\ \text{or equal: } F_1 + F_2 = F \\ \text{from the point of view of society,} \end{array} \right) + \left(\begin{array}{l} \text{Part of work day, when:} \\ \text{a) created new:} \\ \text{Final product of section 2,} \\ \text{Means of consumption,} \\ \text{b) Cost of final product is reproduced} \\ \mathbf{2: } F_2 + V_2 + M_2 \\ \text{from the point of view of section 2} \\ \text{or equal: } (V_1 + V_2) + (M_1 + M_2) = V + M \\ \text{from the point of view of society,} \end{array} \right)$$

(work day is like the replicated cost) = F + V + M .

As a result of the use of productive means of labour (increasing the productive force of labour!), Unit 2, first, processes a large mass of nature's substance over the year and thus creates a large mass of consumer goods, and, second, the value of product 2 increases by the value of the depreciation of these funds, by the amount for which section 2 cannot claim, but section 1 claims.

As for the general norm of reproduction of means of labour:

Then it is also defined in society, as is the general rate of **surplus value**:

$$\frac{F}{V + M} = \frac{\text{time spent on the production of "fixed capital of society"}}{\text{time spent on the production of "social income"}}$$

V + M time spent on the production of "social income"

Then it is also defined in society, as is the general rate of **surplus value**:

$$\frac{M}{V} = \frac{\text{time spent on the production of "society's surplus product"}}{\text{time spent on the production of "necessary product of society"}}$$

Absolutely proportional and harmonious social production requires equality of the above relations, or the ratio of the above categories, the most important economic law of our time, has the following value expression:

$$\frac{F}{V + M} = \frac{M}{V} .$$

In the formulation of K. Marx (Marx, 1978) it reads as follows: "Within the capital production process itself, the working time spent on producing fixed capital is the same as the time spent on producing working capital, as *surplus working time refers to the necessary working time.*" At the same time, "the life fund represents working capital" (Marx, 1978). This is a scientific discovery! This is a law of paramount importance for socialism! This conclusion was made by K. Marx in his study of "social productive capital", but the conclusion of K. Marx went unnoticed (undeciphered) by all subsequent economic science.

Circulation of productive social capital. Exchange between two units

Social reproduction is, on the one hand, "a process between man and nature," on the other hand, "this process is a social metabolism." In the first case, K. Marx considers the process from the qualitative side, in the second case, from the movement of capital as value; he considers the process from the quantitative side.

If we summarize, mentally at once, all social production, distribution and consumption (the production units are denoted by the numbers 1 and 2, and the indices 1 and 2 denote the parameters related to the 1st and 2nd sections, respectively), we can propose schemes illustrating both the material and value content and the movement (circulation) of social labour of both “social capital” and its large section into two large sections; and the result of its operation is the *aggregate public end product*, fig. 3

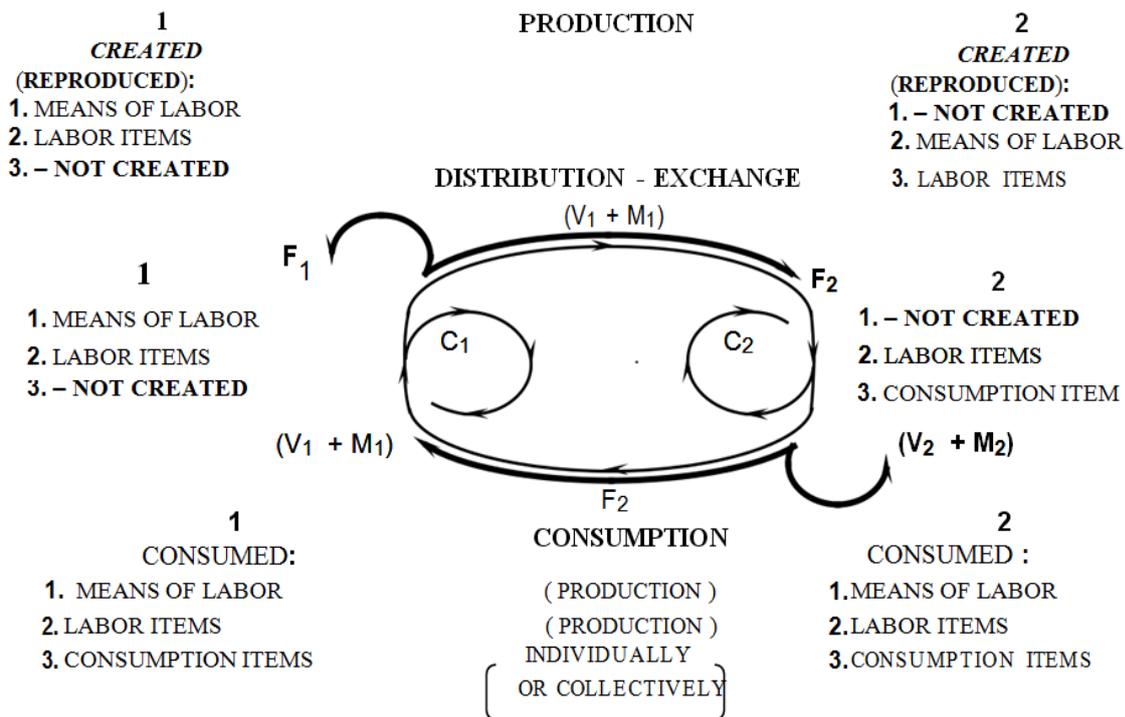


Figure 3. The cycle of productive social capital

In all the figures: inscriptions, lines, arrows and symbols determine the constituent parts and the movement of the constituent parts of the annual commodity value or the constituent parts of the total commercial product. The movement of value in the form of money occurs in the opposite direction to the movement of the product.

Production of means of production: the commodity value of $C_1 + F_1 + V_1 + M_1$, the final product $F_1 + V_1 + M_1$, existing in the form of means of labour.

Production of consumer goods: the commodity value of $C_2 + F_2 + V_2 + M_2$, the final product $F_2 + V_2 + M_2$, existing in the form of commodities.

If the products of both sections are brought together, then the entire annual marketable value or the whole year - the first commercial product will be $(C_1 + C_2) + (F_1 + F_2) + (V_1 + V_2) +$

$(M_1 + M_2)$, or $C + F + V + M$, and the entire annual final product $(F_1 + F_2) + (V_1 + V_2) + (M_1 + M_2)$, or $F + V + M$.

If we now examine the exchanges required on the basis of *simple reproduction* (which is justified by the scope of the work), then, first of all, we will obtain the following essential points of support:

1) V_2 , the wages of workers, and M_2 , the surplus value of unit 2, must be spent on consumer goods. This part of the product - consumer goods - representatives of section 2 exchange within section 2. However, from the entire product $(V_2 + M_2)$, the type of consumer goods disappears;

2) $(V_1 + M_1)$ section 1 must also be spent on consumer goods, therefore, on the product of section 2. They must be exchanged for the rest of this product by the value F_2 consumed in production, the value transferred from the means of labour or fixed capital of the section 2 for the product of section 2. For this section 2 receives an equal amount in the form of new means of labour, a new product of section 1, intended for section 2, embodying the cost $(V_1 + M_1)$ of section 1. Thus, F disappears from the account 2 and $(V_1 + M_1)$;

3) F_1 , is the value transferred from the means of labour or the fixed capital of section 1 to the product of section 1. It lies in the means of production that can only be used in section 1 instead of those consumed in production. Therefore, the question of them is resolved through mutual exchange and consumption within section 1. This ends the distribution of the annual final product in kind and in cost between sections;

4) C_1 and C_2 - there are costs circulating throughout the year in the form of commodity intermediate products of production within each section. This is part of permanent working capital or, in the words of Karl Marx, "only apparent constant capital," value, "although it is included in the total (commodity) product, however, neither as part of value nor as consumption cost - is not included in the final product, and is reimbursed (in kind), remaining, all the time an integral element of production" in each section (Marx, 1978).

Explanation of the idea.

First of all, in each section, and in society as a whole, a certain mass of value circulates or circulates annually, which, ultimately, is a certain numerical value. The carrier of this circulating mass of value is a certain mass of commercial products.

Secondly, the intermediate commodity products of each section move in accordance with the section of labour, determined by technology and the historically established traditional conditions of production, only within the limits of each section. Consequently, part of the

cost associated with these products and their movement always remains within each unit. This is part of the "constant capital" of each unit, not subject to any exchange between units.

Thirdly, only part of the intermediate products during the year reaches the final, completed consumer form (the other part is in work in progress) and only part of the annual commodity value, i.e. the total circulating value, settles on the final product.

Fourthly, only the final product of each unit is subject to section between sections, with a part of its own final product remaining within the unit, and other parts of the final products of the unit are exchanged at the equal cost of these parts.

Fifthly, after the exchange, the capital value of each unit remains the same. We have touched on this so far only for a better understanding of the present and subsequent research.

Two sections. The structural formula of social production

Figure 1 can be explained in more details (Fig. 4) with $V + M = 150$ million people.

To build a "structural formula for the final product of society", it is enough to know the number of people in society and one of the above proportions, for example, the rate of social surplus value, or the rate of section of labour into sections *1* and *2* of social production, etc.

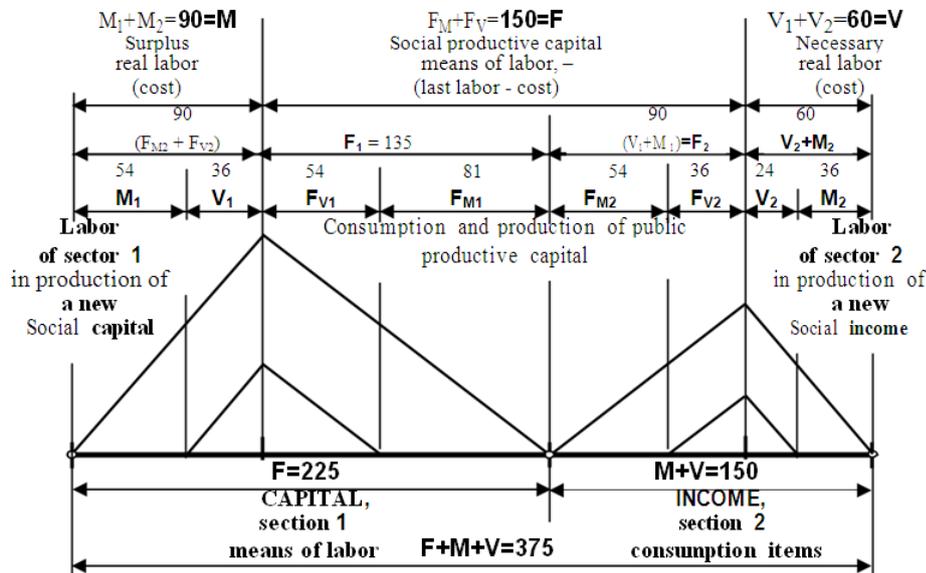
Really behind the historically, traditionally established section of labour (in which, (Marx, 1978)) "the result of labour of one forms the starting point of the labour of another"), the understanding that an industrial enterprise producing bauxite or iron ore entirely belongs to section 2, if all its products, ultimately, goes to the manufacture of aluminum or iron.

teapots, spoons, forks, baby strollers and other personal items? Grain \square flour \square dough \square ... - what kind of product is it, which, moving from one production phase to another, changing its consumer form and cost, moves to its final completion, \rightarrow cake? Flour, dough disappears ... and only the pie remains! Whose is the object of labour, and, in the end, the final product? Is it a product of section 1 or section 2?

All phases of production, or the entire social work (and in the terminology of Karl Marx - "all social capital"), diverted to the production of a particular product, from the very beginning belongs to the *1st* or *2nd* section, depending on the form of consumption the final product, or its final consumer form, or means of labour, or consumer goods.

So, in society there are only 150 million people, figure 4.

Figure 4. The aggregate end product of the company



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$$\text{The rate of surplus value in society } m' = \frac{M}{V} = \frac{m_1 + m_2 + m_3}{V} = \frac{30 + 30 + 30}{60} = 1,5 \rightarrow 150\% .$$

At the same time, in section 1, the working population $V_1 = 36$ million people create a surplus value the rate of

$$m_1' = \frac{M_1}{V_1} = \frac{54}{36} = 1,5 \rightarrow 150\% \text{ and feed themselves and another 54 million people, and in section 2 the work}$$

Population $V_2 = 24$ million people create surplus value, with the rate of $m_2' = \frac{M_2}{V_2} = \frac{36}{24} = 1,5 \rightarrow 150\%$

And “feed” themselves and another 36 million people. ("Every hundred capital requires an equal rate of profit", - K. Marx).

Section 1 annually consumes (*wears out*) the means of labour in the amount of $F_{V1} + F_{M1} = 54 + 81 = F_1 = 135$ million rubles and reproduces annually the means of labour ("public fixed capital") at a cost of $F = 225$ million rubles. The entire product of section 1 is $(V_1 + M_1) + (F_{V1} + F_{M1} = F_1) = 90 + 135 = 225$ million rubles. Here $(V_1 + M_1) = 90$ million rubles - this is the newly created value in unit 1, the new “means of labour” intended for section 2. Here $(V_1 + M_1) = F_2 = 90$ million rubles are the new “means of labour”, intended for section 2.

Section 2 consumes (*wears out*) the means of labour in the amount of $(V_1 + M_1) = F_{V2} + F_{M2} = 36 + 54 = F_2 = 90$ million rubles and reproduces consumer goods ("social income") in the amount of $M + V = 150$ million rubles. The entire product of section 2 is $(V_2 + M_2) + (V_1 + M_1) = 60 + 90 = 150$ million rubles. Here $(V_2 + M_2) = 60$ million rubles is the newly created

value in section 2, new products and "items of consumption" for people working in section 2 and living at the expense of section 2.

In social production, the equality $(V_1 + M_1) = F_2$ must be always fulfilled and equivalent exchange

$$(V_1 + M_1) \begin{matrix} \rightarrow \\ \leftarrow \end{matrix} F_2 \text{ at cost.}$$

When we say, "it consumes (*wears out*) the means of labour ...", this simultaneously means that we (and the means of labour increase the productive force of labour!) And *create it in kind* and *reproduce it by value*. By consumed capital included in the value of final products, it is necessary to understand only the consumed or worn-out part, which is here denoted by the symbol "**F**", as part of the existing *share capital* - "**F**"

If we consider the "great production process" as an immediate production process," notes Marx (Marx, 1978) "it consumes only the fixed capital. But consumption in the framework of the production process actually represents is *usage, wearing out*." Therefore, it is not necessary to distinguish between the concepts of reproduction (circulation) of fixed capital, which already exists and operates in production, from the notion of investment in fixed assets, which are only supposed to join the production process.

As for the movement of intermediate products of production and their value under the symbol "**C**", here we can only note the following.

On the material side, the new end product of society, to be divided between sections, does not include a single gram of raw or intermediate products of production. Any C_i is $F_i + V_i + M_i$, i.e. $C_i = F_i + V_i + M_i$, but $F_i / (V_i + M_i) = M_i / V_i = m'$. Look (Kulik, 1997; Kulik, 2013).

But not only this work of section 1, "the cost of which also breaks down into wages and added value $(V_1 + M_1)$, is realized in new means of production, reimbursing a fixed part of the capital F_2 spent on the production of consumer goods", but also That past work, the cost that is transferred to the product of section 1 itself, the value of F_1 , and representing the depreciation of the means of labour in section 1, is also realized in the new product. A worn machine is disposed of in scrap metal; a new one is being installed! In reality, the situation is as follows.

One part of the workforce of society, and, consequently, one part of the working day of society, annually reproduces product 2 (consumer goods), which represents all of the newly created living social labour of the society, i.e., variable value V and surplus value are presented M society. Another part of the workforce of society, and, consequently, another part of the working day of society, annually reproduces product 1 (funds



labour), which represents all of the past labour of society, consumed during the year, i.e., all the wear and tear of the means of labour is represented: in section **1** (value F_1), in section **2** (value F_2).

Surplus value changes and cost of the final product

"If we take the working population of a given size, for example, two million (in this example, we take the society, where $V + M = 150 = \text{const}$) and take further the duration and intensity of the average working day (and so on) for the values given, then the aggregate labour of these two millions, as well as their surplus labour, expressed in surplus value, constantly produces a value of the same magnitude ", (Marx, 1978).

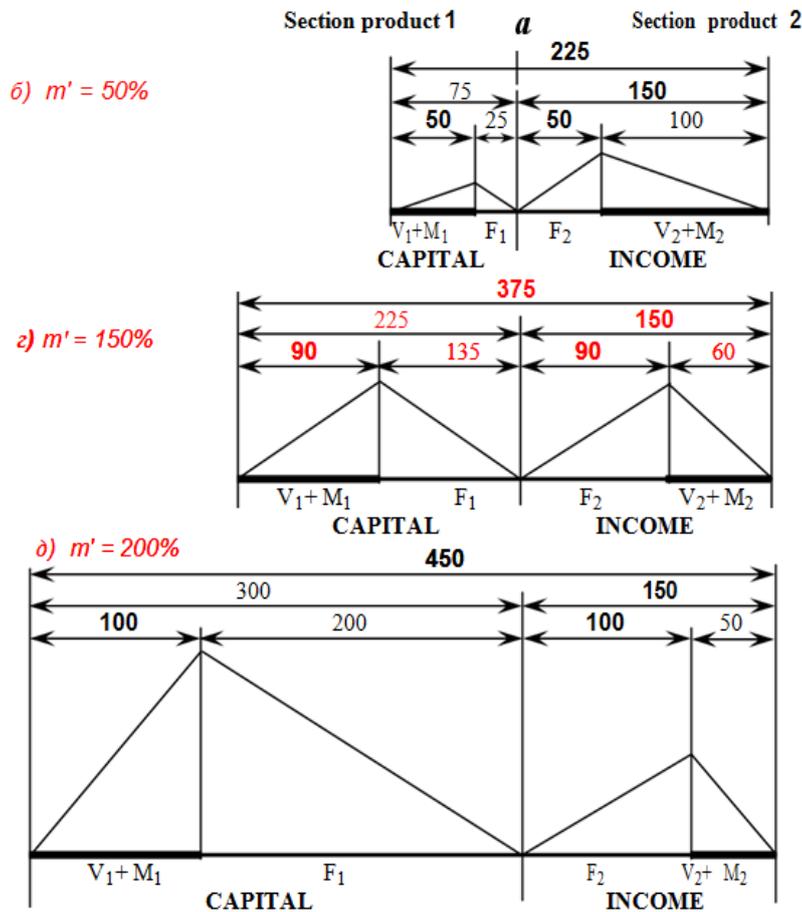


Fig. 6	m%	Section 1				Society				Section 2			
		M ₁	V ₁	F ₁	KP ₁	M	V	F	ÇKP	M ₂	V ₂	F ₂	KP ₂
(a)	25	6	24	7,5	37,5	30	120	37,5	187,5	24	96	30	150
(b)	50	16,(6)	33,(3)	25	75	50	100	75	270	33,(3)	66,(6)	50	150
(c)	100	37,5	37,5	75	150	75	75	150	300	37,5	37,5	75	150
(d)	150	54	36	135	225	90	60	225	375	36	24	90	150
(e)	200	66,(6)	33,(3)	200	300	100	50	300	450	33,(3)	16,(6)	100	150
(f)	400	96	24	480	600	120	30	600	750	24	6	120	150

Fig. 5. Historical change in the cost structure of the final product of society

In fig. 5 (a) the table shows the block diagram of the final product of the society, where the rate of surplus value is $m' = M/V = 1/4 = 0,25 \rightarrow 25\%$. If the productive force of society is such that each machine is equipped with a worker (manual machines), then with a reduction of workers twice, the number of working machines will also be reduced twice, since the worker is able to serve only one machine, and the mass of the produced product will also be reduced by half. It is clear that there is no possibility to increase M (non-productive population: teachers, actors, football players ...) by decreasing V (productive population: workers, peasants ...), because everyone will live twice as poor as per capita there will be a smaller amount of food consumption.

If the productive force doubles and now one worker can serve two semi-automatic machines at once, then the mass of the produced product will be also doubled, and now with a reduction in the productive population twice ($V/2$) the unproductive population can be increased by the value $V/2$.

So, if $V' = V/2 = 120/2 = 60$, then $M' = M + V/2 = 30 + 60 = 90$, and rate of surplus value will be:

$$m' = \frac{(M + V/2)}{V'} = \frac{M'}{V'} = \frac{(30 + 60)}{60} = \frac{90}{60} = 1,5 \rightarrow 150\% .$$

$$V - V' \quad V' \quad 120 - 60 \quad 60$$

The structural cost diagram of the final product is now displayed differently; see fig. 5 (g). But now, with a two-fold reduction in the productive population, the mass of the product produced will be halved, that is, if the productive force increases twice and the productive population simultaneously halves, the mass of the consumer product produced in society will remain the same. Now, the mass of the consumer product produced in society has remained the same, however, the organic composition of capital has changed and the ratio of the non-productive population to the productive $m'/m' = 1,5/0,25 = 6$ times.

Let's take another step. Let presented on fig. 5 (g) social production in a period of time, say, in 50 years, will increase its productive social force by 2 times. This means an annual increase in the productive social force of exactly two percent.

If now the productive population is reduced by 2 times and becomes equal $V'' = V'/2 = 60/2 = 30$, then the unproductive population will increase and become equal $M'' = M' + V'/2 = 90 + 30 = 120$, and the rate of surplus cost will be:

$$m'' = \frac{M''}{V''} = \frac{120}{30} = 4 \text{ (or 400\%)}, \text{ fig. 5e.}$$

$$V'' \quad 30$$

In this case, not only the organic structure of social capital will change, but also the structural cost formula of the final product of society, see fig. 6 (e) in the table. And in spite of the fact that the mass of the produced consumer product remained the same and the same mass of means of subsistence per capita is accounted for, the ratio of the non-productive population to the productive population increased, and the rate of surplus value

Increased in $m''/m' = 4/1,5 = 2,6(6)$ times in comparison with the condition of society according to the fig. 5(g) and compared with the tabular value of the state of society according to the fig. 5(a) – in $m''/m = 4/0,25 = 16$ times.

In fig. 5 shows three schemes of the final product "b", "g", "d", which can be considered as the result of the movement of the same social production from state "b" to state "g" and further to "d", or as one - temporarily existing three societies that are in various states.

The cost structure of the final product of society is a reflection of the cost structure of social productive capital.

Schemes in fig. 5 allow us to respond positively to the question: "Is it possible for expanded reproduction in society if the monetary value of income in society remains constant?" (As it was, we recall, in the USSR, where the prices of consumer products have not changed over the years).

Law of profit

"In its direct form, profit is nothing but the sum of **surplus cost**, expressed as a relation to the total cost of capital", (Marx, 1978).

When we explore the "life" of a separate industrial capital, we find, and there are many examples of this, both destructive failures and dizzying successes. The movement of social capital is different. When the rate of social surplus value increases, approaching 100%, then after it the rate of profit, fig. 6, **increasing**, approaching the value of 33.3(3) %. There is profit growth, pleasing everyone. When the rate of social surplus value increases by 100%, then after it the rate of profit, see fig. 6 **decreases** (and only for this state is the law, called by K. Marx "the law of the tendency of the rate of profit to fall"). For the capitalist, the fall in the rate of profit is a tragedy, for capital - development, for society - progress!

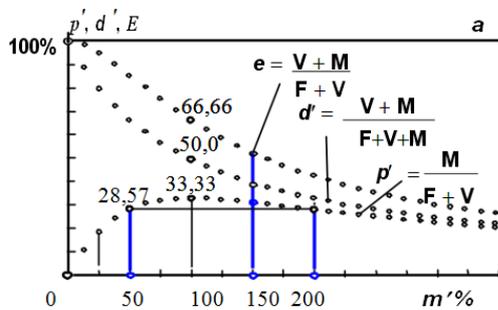


Fig. 6. Graphs of the some changes in the constituent parts of the final product cost

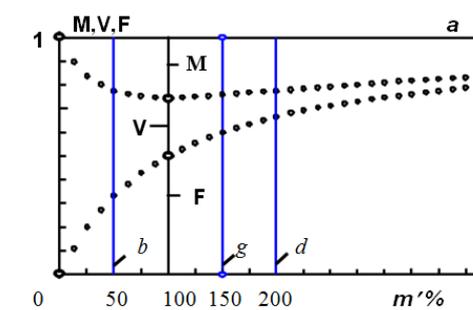


Fig. 7. Graphs of historical changes in the constituent parts of the final product cost

If the rate of public surplus value as a ratio $m' = M/V$ has no limits to its increase, the rate of return as a ratio $p' = M/(F+V)$ cannot be more than 33,(3) % for any era and any (English, French, Russian ...) society.

Law of "efficiency" of social production

Mathematically, the "economic efficiency" of social production is depicted as:

$p = \frac{V+M}{C+V}$, "in which the national income is given in the numerator ... (necessary and surplus product), and in the denominator is the cost of materialized and living labour. Both parts of the formula are expressed in terms of value"

[23 p. 252]. Second author [23 p. 242] sees movement from formula $p_1 = \frac{V+M}{C+V}$ to formula $p_2 = \frac{V+M}{(C+\Delta C)+(V-\Delta V)}$

The arguments given in (Kuzminov, 1974) of the authors mentioned are far from both mathematical rigor and real reality. Why, moving from the expression $p_1 = \dots$ to the expression $p_2 = \dots$ the author only in the denominator gives the increments ΔC and ΔV ?

General opinion of the authors is: "The growth of relationships $\frac{V+M}{C+V}$ evidence of increased efficiency

$$C + V$$

Social production", (Kuzminov, 1974). And the fact that this relationship with the development of social production, which goes simultaneously with the growth of the productive social force of labour, is continuously decreasing and should objectively decrease, remains unknown to many modern economists.

But let's "consult" again with K. Marx (Marx, 1978):

"If we take the working population of a given size, for example, two million and take further the duration and intensity of the average working day (*and so on*) for the values given, the total labour of these two millions, as well as their surplus labour, in surplus value, it constantly produces a value of the same magnitude "(in our examples it is assumed: $V + M = 150 = \text{const}$). And we recall that "... with the progress of accumulation, the ratio of the constant part of capital (part **F**) to variable (part **V**) changes in such a way that if initially it was 1:1, then it turns into 2:1, 3:1, 4:1, 5:1, 7:1, etc., so that, as capital rises, not $\frac{1}{2}$ of its total cost consistently turns into labour, but only $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{8}$ and etc., in the means of production - $\frac{2}{3}$, $\frac{3}{4}$, $\frac{4}{5}$, $\frac{5}{6}$, $\frac{7}{8}$, etc. "(Marx, 1978).

Therefore, the ratio of social *income* to the total *end product* of society $d' = \frac{(M+V)}{(F+V+M)}$ and the ratio of social *income* to social *productive capital* $e' = \frac{(M+V)}{(F+V)}$, see fig. 6, (which in the literature (Engels, 1955) ... - and this is the “product” of the “higher school of economics”?) Is called the “increase in the efficiency of social production” and even the “increase in the productivity of social labour”?) with a continuous increase in m' , the norms of social surplus value, with the continuous “growth of the productive power of social labour,” considered as value, according to all the rules of mathematics, logic, common sense, and economic essence, decrease. And there should be no talk about any increase in the “efficiency” of social production (in this sense!).

Historical trend of changes in the constituent parts of the total final product of the company.

According to K. Marx (Marx, 1978) - “capital ... is working on the decomposition of itself as a form, state-supportive of production”. The share of necessary labour, which is diverted by society to the reproduction of the vital means of society, decreases, and the share of surplus labour that society now spends on any other matter is increasing. So the whole military-industrial complex of society “*lives, works and creates its product*” precisely because of free public time ..., i.e., **M**.

All the mass of means of life created during the year is expressed in the mass of the value *created* during the year. The whole cost of the vital means of society is already equal to **V** + **M** because all the labour of society requires to divide this mass of value between those employed in productive **V** and non-productive **M** labour, or evenly among all members of society, or according to one or another principle: ...capitalist, socialist, communist..., namely:

V – decreasing	by the same	but in different proportions, depending “from the initial section that took place before the change in the <u>productive power of labor</u> ” [15, p. 524].
M – increasing	amount	

With the growth of productivity, a higher capital structure develops, the variable part of **V** decreases in comparison with the constant part **F**. At the same time, there is a change in the structure of social income, the necessary part of **V** decreases in comparison with the surplus part of **M**.

In fig. 7, the distance between the axis “ m' ”, where the rate of surplus value is set aside, and the upper line *a* is taken equal to one. This distance is divided into three parts so that the upper curve shows the change in **M** (from line *a*), and the lower curve shows the change in **F** (from m'), the distance between these lines shows the change in **V**. At this is always $F + V + M = 1$.

The whole history of the development of social production leads us to the following:

1) "... Human labour more and more recedes into the background before the labour of machines" (Lenin);

2) If "the development of science ... is ... one of the forms in which the development of the productive forces of man, that is, the development of wealth", then "the development of fixed capital is an indicator of the extent to which all-general public knowledge ... has become a direct productive force "in" ... organs of social practice, the real-life process ... ". More than 150 years ago, man already knew that "... the creation of actual wealth becomes less dependent on working time and on the amount of labour expended than on the power of those agents who ... depend, rather, on the general level of science and on the progress of technology, or from the application of this science to the production of "[see (Marx, 1949)] and even more so in our time, when "the domination of past labour over living becomes not only social truth ... but also, so to speak, technological truth" [see (Marx)];

3) Production of a surplus product, according to F. Engels (Marx) "... was and remains the basis of all social political and mental progress..."

4) "The country is richer, the smaller, with the same number of products, the productive population in relation to the unproductive ... "(Marx, 1978) i.e. the smaller the " necessary "labour of society - V in relation to the" surplus "labour is M .

From the point of view of capital, it "expands", progresses (*self-expanding*). But from the point of view of the society or individuals that make up this society, the correct answer can be given only taking into account the interests or goals pursued by society. If with a similar "progress" or "self-growth" of capital, the natural product and services decrease, i.e. instead of a loaf of bread a day, it now falls to half a man per person, then obviously this development of capital is not in the interests of members of society and is unlikely it can be called "*advanced*" or "*effective*". If the natural product and services per capita increase, then this development of capital goes in the public interest.

Conclusion

Our revolutionary ancestors on the emblem of the USSR established not a double-headed eagle, which looks in different directions, but the symbol "hammer and sickle" - as a statement that the material production of society is the **basis of life and the social form of the movement**, and therefore those who create "social productive capital" (section 1), and those who create "social income" (section 2), that is, "workers and peasants", those who create "a vital product of society" - those who by their work "feed and dress" all societies . And by performing its distribution function, the "State" with the help of all kinds of taxes "collects" the "necessary amount" of "public surplus value" and redistributes it in favour of



the part of society that is not working in material production, and lives through created by the "work force" of society - "workers and peasants."

Today, state economists frantically began to study, teach others and promote "bourgeois economics". But today, neither "Fisher's points" and other "points", nor the methodology for calculating the "gross national product - GNP", based on the "Keynesian approach" and adopted in some countries of the world for national accounts, on review the cumulative (and not the final!) social product does not give an exhaustive view of either the proportions of social capital in the cumulative *final product*, or the structure of the *cumulative final product of society*. Proportionality is found in the *final product* of society! And the productive force and labour productivity are the main categories and criteria for evaluating the innovative development of social production, (Kulik, 2013). It must always be remembered that "**the concept of value is the secret of capital**", and "**the concept of product is the secret of wealth**". This was already understood at the time of A.S. Pushkin, (Pushkin, 2015) and much earlier.

Recall the opinion of J. Schumpeter, who spoke about the economic theory of K. Marx, as "a theory built ... on the development of the economic process as such, driven by its own energy..." and that K. Marx "was ... the first to imagine that which still remains the economic theory of the future, for which we are slowly and persistently saving building material...". (Schumpeter, 1978).

"Only such an attitude towards our invaluable ideological heritage, - (Andropov, 1983) ... makes Marxism a true science and art of revolutionary creativity".

Today, at all levels, there is a search for a new path of economic development in Russia. We hope that our research will help it.



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